

University of Waterloo
Board of Governors
BUILDING & PROPERTIES COMMITTEE
Notice of Meeting

Date: Wednesday 18 May 2022

Time: 1:00-3:00 p.m.

Place: via MS Teams

*material attached

**material to be distributed

Action

OPEN SESSION

- | | |
|--|-------------|
| 1. Declaration of Conflicts of Interest | Declaration |
| 2. Minutes of the 12 January 2022 Meeting* [Murray] | Decision |
| 3. Business Arising from the Minutes | Information |
| 4. Capital Financing Commitments and Construction Status [Huber] | Information |
| (a) Building & Properties Finance Summary – May 2022* | |
| (b) Construction Status Report – May 2022* | |
| (c) Capital Financing Commitments – April 30, 2021* | |
| 5. Maintenance Program and Energy Conservation Efforts* [Huber] | Information |
| 6. Statutory Compliance Report * [Raynard] | Information |
| 7. Orientation/tour of campus [Murray/Huber] | Information |
| 8. Execution Against the Work Plan* [Murray] | Information |
| 9. Other Business | Information |
| 10. Proceed into Confidential Session | Information |

Next Meeting: Wednesday 5 October 2022, 1:00-3:00 p.m., via MS Teams

11 May 2022

Alice Raynard
Associate University Secretary

University of Waterloo
Board of Governors
BUILDING & PROPERTIES COMMITTEE
Minutes of the 12 January 2022 Meeting
[in agenda order]

Attendees: Peter Barr, Anne Bordeleau, Martha George (chair), Tony Giovinazzo, Alice Raynard (secretary), James Schlegel, Matthew Schwarze

Administration: Stepanka Elias, Vivek Goel, Dennis Huber, Rob Hunsperger

Guests: Murray Gamble

Regrets: Naima Samuel, James W. E. Rush

Organization of Meeting: Martha George took the chair and Alice Raynard acted as secretary. The chair welcomed members to the meeting. The agenda was approved by consensus as circulated. The secretary advised that quorum was present.

OPEN SESSION

1. DECLARATION OF CONFLICTS OF INTEREST

No conflicts of interest were declared.

2. MINUTES OF THE 29 SEPTEMBER 2021 MEETING

A motion was heard to approve the minutes of the meeting as distributed. Schlegel and Bordeleau. Carried.

3. BUSINESS ARISING FROM THE MINUTES

There was no business arising.

4. CAPITAL FINANCING COMMITMENTS AND CONSTRUCTION STATUS

- a. Building & Properties Finance Summary – January 2022.** The report was received for information.
- b. Construction Status Report – January 2022.** Hunsperger provided an overview of the projects listed, noting: the 3rd hydro feed is close to completion; challenges in market conditions for the Health Innovation Area and budget; Math 4 schematics underway; challenges with cost estimates on WEI project.
Members discussed: supply chain issues; meaningfulness of decisions when approval by Board of Governors and changes of scope happen; approval thresholds indicated in Committee's terms of reference; development of projects in phases and role of B&P and PACOD; general cost increase above pre-pandemic levels; funding model of WEI project being revisited due to change in funding; involvement of PACOD in those broader projects; PACOD to be examined in the coming months; request for the Health Innovation complex arena project to be brought back to the B&P Committee.
 - i. Project Listing of Original Budget vs Post-Tender Budget Since 2016.** Huber spoke to the document, requested by the Committee, providing a brief overview of major capital projects tendered since 2016.
- c. Capital Financing Commitments – 30 April 2021.** Huber spoke to the document, noting the University was well within its capital debt guideline.

5. University of Waterloo Real Estate Holdings

Huber indicated that the record was the same as last year's, with only minor changes, such as the rental on Glasgow Street. The Cambridge parking lot is being lease from GRCA, through the City of Cambridge.

6. WORK PLAN FOR NEXT FISCAL YEAR; ORIENTATION/BRIEFING REQUIREMENTS

George referred the Committee to the document. There were no questions.

7. EXECUTION AGAINST THE WORK PLAN

George referred the Committee to the document. The annual Statutory Compliance is being deferred to March. There were no questions.

8. OTHER BUSINESS

There was no other business.

9. PROCEED INTO CONFIDENTIAL SESSION

The Committee convened in confidential session.

The Committee is scheduled to meet on Wednesday 9 March January 2022, 1:00-3:00 p.m. via Teams.

26 February 2022

Alice Raynard
Associate University Secretary

Report to the Building & Properties Committee
Capital Financing Commitments
May 2022

The Building & Properties Committee (B&P) reviews the summary of Capital Financing Commitments at each meeting.

Summary:

- Contributions to capital projects made fiscal year to date total \$42.8M
- The University remains well within its approved policy limits and below the 4.0% of annual gross revenue maximum for principal and interest payments
- The financing position for each project as of April 30, 2021, is attached

Highlights during 2021/22:

New in 2021/22:

- The Faculty of Math has contributed an additional \$10M from operating funds towards the future construction of Math 4 (total \$57.5M contributed to date)
- Scheduled principal and interest payments of approved student fees for the PAC/SLC addition and for the Health Services addition continued and the University continued to receive donations for capital projects

Earlier in 2021/22:

- The Faculty of Engineering has repaid \$2M from operating funds to the DWE C Wing Renovation
- The Faculty of Health has repaid \$0.66M from operating funds to the addition to BMH
- The Faculty of Math has contributed \$17.5M from operating funds to the future construction of Math 4 (total \$47.5M contributed to date)
- The Faculty of Science has contributed \$0.40M from operating funds to the Waterloo Eye Institute project
- The University has allocated \$9.7M to capital projects as follows:
 - East Campus 5 - \$2.5M
 - Engineering 7 - \$1.2M
 - Health Addition to BMH - \$2.3M
 - PAC/SLC - \$2.7M
 - Fieldhouse \$1M
- Scheduled principal and interest payments were made by applying approved student fees for the PAC/SLC addition (\$1.09M fiscal YTD) and for the Health Services addition (\$0.72M fiscal YTD)
- The University has received \$0.74M in donations for capital projects since May 2021
- Repayments by ancillary enterprises (Housing, Food Services and Parking) on internal loans were deferred for 2 years (2020/2021 and 2021/2022) due to the impact of the pandemic on ancillary unit operations and their revenue-generating activity

Dennis Huber

Construction Status Report
May 2022
 \$000s

Projects	Original Budget	Current Approved Budget	Procurement Method	Contractor	percent complete	Original Schedule	Estimated Completion	Risks/Status
<u>In-Progress</u>								
Earth Science Chemistry (ESC) Third Floor Renovations	17,500	22,140	TBA	TBA	12%	2022	2024	Design Development phase approximately 60% complete Pre-requisite project required to relocate researchers off the 3rd floor. Pre-requisite project scheduled for bid June 2022, with construction complete Jan 2023 Third floor renovations dependent upon completion of pre-requisite project Estimated Construction: February 2023 - July 2024
	17,500	22,140						

Projects	Original Budget	Current Approved Budget	Procurement Method	Contractor	percent complete	Original Schedule	Actual Completion	Risks/Status
<u>In-Progress</u>								
Health Innovation Arena 280 Joseph Street Kitchener	30,000	34,400	TBA	TBA	18%	2023		Site Plan Approval application submitted to the City of Kitchener Substantial Value Engineering effort completed. Clerestorey glazing is now an optional price, removed windows to future ground floor suite, removed stair access to roof. Air source heat pump system deleted. Gas fired boilers added to project. Net Neutral Carbon strategy relies on future City of Kitchener District Energy Loop. Contractor prequalification advertisement currently being drafted Schedule anticipates bidding project in order to have bids ready for recommendation at October 2022 B&P meeting. Market conditions continue to place budgetary challenges on all projects. Substantial Completion anticipated for October 2023
	30,000	34,400						

Projects	Original Budget	Current Approved Budget	Procurement Method	Contractor	percent complete	Original Schedule	Actual Completion	Risks/Status
<u>In-Progress</u>								
Math 4	90,000	90,000	TBA	TBA	9%	2024		35% design development (DD) report complete interim cost estimate complete based on 35% DD milestone progress set cost estimate over established budget and options are being explored design review ongoing with goal of presenting at October 2022 Building & Properties meeting Presidents Advisory Committee on Design (PACOD) to be convened at end of Design Development once budget is confirmed.
	90,000	90,000						

Projects	Original Budget	Current Approved Budget	Procurement Method	Contractor	percent complete	Original Schedule	Actual Completion	Risks/Status
<u>In-Progress</u>								
Optometry - Waterloo Eye Institute	45,250	45,250	TBA	TBA	15%	2023		100% Design Development milestone achieved Design Development estimate completed, and being evaluated Class C Construction Estimate = \$42.5M up \$7.23M from Class D Estimate of \$35.2M \$2.5M attributable to market conditions with remainder due to design development Contract Documents tentatively scheduled to commence in May. Budget still under review. Value Engineering to be undertaken.
	45,250	45,250						

Projects	Original Budget	Current Approved Budget	Procurement Method	Contractor	percent complete	Original Schedule	Actual Completion	Risks/Status
<u>In-Progress</u>								
Biology 1/Biology 2 Lab Renovation	6,800	6,800	Stipulated Sum (CCDC2-2008)	Harbridge & Cross (\$5.196M)	100% Design 70% Construction	Jun-22		Interferences & relocation of services completed. Painting completed Epoxy floor throughout completed by mid May. Ductwork in labs and hallway complete. Work ongoing in impacted rooms. Vertical shaft removal and replacement complete. Roof work/install of exterior duct shafts and enclosure to be completed by end of June 2022. Chilled Beams delayed 3 months. Expected delivery-mid June. DOA units delivery delayed 1 month. Expected delivery end of May Carpenters Union Strike has delayed progress to finishing millwork, ceilings and stairwell drywall ceiling. Change Orders to date in the order of \$280K Construction +/- 70% complete Supply chain and labour related issues continue to burden the schedule. 3-4 month delay anticipated.
	6,800	6,800						

University of Waterloo
Capital Financing Commitments
April 30, 2021
(\$000s)

Capital Project					Currently Internally Financed	Estimated Amortization Period	Comments	
Construction Completed								
Residence - UWP and MKV					12,687	8 years*	Recovery through student residence fees	
Engineering 7					21,641		Pledges of approximately \$33 million against these Engineering buildings, Engineering has committed to funding any unrealized pledges	
Other Engineering (including 5, 6, and DWE)					10,337			
Health Services Addition/Renovations					2,403	4 years	Compulsory undergrad and grad student fees; donations	
Blackberry Buildings (5)					2,899	4 years	Operating funds, (\$400k from Parking (\$100K/year)*)	
Applied Health Sciences Addition					9,199		Faculty, operating funds; donations	
Student Residence - Claudette Millar Hall					26,243	< 15 years*	Residence fees and Food Services revenues	
North Campus Field House					16,880	10 years	\$16.9M from operating funds	
Completed Total					102,289			
	Expenses to Date	Total Budget	Funding On-hand	Committed Future Funding	Currently Unfunded	Currently Internally Financed	Project Completion Date	Comments
In-Progress								
Student Life Centre and PAC Addition	46,530	46,530	3,098	43,432	-	43,432	2021	\$24 million compulsory undergrad and grad student fees; \$19.4 million operating funds
Recently Approved								
Health Innovation Arena	180	30,000	300	17,200	12,500	-		\$8.5m commitment from City of Kitchener, \$7.5m commitment from University operating funds, \$1.2m pledge
Math	113	90,000	30,000	15,000	45,000	-		\$30m contributed from Math and \$15m commitment from University operating funds
Earth Sciences & Chemistry	121	22,700	-	22,700	-	121		50% to be funded from Science and 50% from University operating funds
Optometry Eye Institute	395	45,250	1,364	15,000	28,886	-	969	\$8.8m in donations, a \$2.2m UW contribution plus a further \$4 million University commitment to match a potential major donation
In-Progress and Recently Approved Total						42,584		
Total Internal Financing Commitments						144,873		

Debt Policy: Annual Principle & Interest Payments must be < 4% of annual gross revenue (currently approximately \$48 million)

Conclusion: Required annual P&I payments to service this debt are < 4% of annual gross revenue

Notes:
There is a \$22 million lease-back financing commitment until 2053 for Columbia Lake Village Townhouses, with minimum \$7 million lease commitments being recovered through student residence fees.

* Repayments have been suspended for 2 years due to the impact of covid on operations in the ancillary units

Summary:

- Annual total electricity expense approx. \$16.4m (~1.5% of total annual expenses)
- In the Province of Ontario, electricity costs remain a controversial issue with historic costs moving between the tariff rates and the general tax base
- Annual total natural gas expense approx. \$3.8m (~0.4% of total annual expenses)
- Natural gas originates from Alberta and is selling at substantially higher prices in 2022. It is forecasted to trade in the same range as experienced during the 2003-2008 period (with the advice of our energy consultant, the University's has hedged 50% of the commodity price at \$3.20/GJ. Over the mid-term, future commodity prices are forecasted to stabilize at \$5.40/GJ.) The commodity price is approx. 50% of the total cost delivered at the burner tip. The balance of the cost relates to delivery charges, inventory charges (injection/withdrawal), and taxes.
- Based on the standard greenhouse gas emissions reporting under Ontario Regulation 397-11 (2011-2016) by the U6 (research intensive universities in Ontario), the University of Waterloo is below the U6 average and third lowest
- A 2020 energy audit undertaken on 64 individual university buildings identified:
 - \$1m of energy conservation projects with <5-year simple payback
 - i.e., Steam traps; fan optimization; HVAC upgrades
 - \$3m of energy conservation projects with a 5–10-year simple payback
 - i.e., controls optimization; HVAC controls
- Multi-year \$875k LED lighting retrofit currently underway; 65% complete; work continues in 2022/23 and will focus on remaining fixtures with hazardous ballasts
- Multi-year steam trap retrofit program currently underway
- Multi-year upgrade to Building Automation System continues with completion scheduled for 2025/26
- Pursuing external funding opportunities for a \$2.5m heat recovery project related to the Graham Data Centre located in the Math & Computer Building. If UW's application for funding is not successful, a business case to allocated operating funds is likely to be approved
- During the pandemic period, increased ventilation rates have reduced opportunities for implementing some traditional energy conservation measures

Vice-President,
Administration & Finance

University of Waterloo
Board of Governors
BUILDING & PROPERTIES COMMITTEE
9 March 2022

FOR INFORMATION

Statutory Compliance

Terms of reference provide for the Building & Properties Committee “To ensure that the university complies with all building codes, fire codes, safety regulations and statutory and regulatory provisions, as appropriate, in its building and properties program, and to review compliance annually.”

The following provincial statutes and municipal bylaws have been identified by the Secretariat as those which would pose the greatest potential risk for the university in the event of non-compliance.

Assessment Act
Building Code Act
Commercial Tenancies Act
Construction Act
Environmental Protection Act
Fire Protection and Prevention Act
Green Energy Act
Occupational Health and Safety Act
Ontario Water Resources Act
Residential Tenancies Act

Bylaws in force in the various municipalities in which the university owns real property

Staff responsible for institutional compliance have reviewed these statutes, bylaws and regulations, and each has signed a declaration indicating that there are no issues of material non-compliance related to their areas of responsibility as at the date of their signature. Copies of the declarations of staff are kept in the Secretariat and are available for inspection upon request.

Managers sign off statutory compliance declarations to the extent of their responsibility and to the best of their knowledge.

It was noted that in two areas Plant Operations has only partial authority and that others should be added to accurately reflect the accountability and compliance:

- Environmental Protection Act, R.S.O. 1990, c. E.19 - the use and discharge of contaminants used in teaching and research are controlled by academic divisions;
- Fire Protection and Prevention Act, 1997, S.O. 1997, c. 4 - Residence maintains their own inspection as related to means of egress, materials, and decorations.

Management will follow up on the implementation of those suggestions.

Alice Raynard
Associate University Secretary

University of Waterloo
Board of Governors
BUILDING & PROPERTIES COMMITTEE
Work Plan Execution

Task	Frequency	<i>canceled</i>													
		18/01/2019	08/03/2019	15/05/2019	02/10/2019	15/01/2020	03/04/2020 and 5/13/2020	30/09/2020	13/01/2021	10/03/2021	12/05/2021	29/09/2021	12/01/2022	09/03/2022	18/05/2022
Campus Master Plan (as needed)	annual					•			•						
Capital financing commitments and construction status	each meeting	•	•	•	•	•		•	•	•	•	•	•		•
Committee self-assessment survey results	annual		•		•			•		•		•			
Environmental sustainability practices	annual				•						•	•			
Maintenance program and energy conservation efforts	annual				•						•				•
Orientation/tour of campus	as required			•							•				•
Development projects five-year plan															
Committee terms of reference	annual	•			•			•				•			
Statutory compliance	annual	•				•			•						•
University of Waterloo real estate holdings	annual	•				•			•				•		
Committee work plan/special topics; orientation/briefing requirements	annual	•				•		•					•		