



SUBJECT	Brock Commons Phase 2 Mixed-Use Housing Development North Building, UBC Vancouver
SUBMITTED TO	Property Committee
MEETING DATE	September 8, 2021
SESSION CLASSIFICATION	Recommended session criteria from Board Meetings Policy: OPEN
REQUEST	Action requested - Approval IT IS HEREBY RESOLVED that the Property Committee recommends that the Board of Governors grant BOARD 3 approval for the Brock Commons Phase 2 Mixed-Use Housing Development North Building at UBC Vancouver as follows: <ul style="list-style-type: none"><i>i.</i> approval of final capital and operating budgets;<i>ii.</i> approval of final funding sources and financing of up to \$54 million at 5.75% annual interest with an amortization of 30 years, repaid by SHCS and UBC Central;<i>iii.</i> authorization to proceed to award construction contracts; and,<i>iv.</i> approval of final funding release of \$53,264,000.
LEAD EXECUTIVE	Peter Smailes, Vice-President Finance & Operations
SUPPORTED BY	Ainsley Carry, Vice-President Students Andrew Szeri, Provost and Vice-President Academic, UBC Vancouver Pam Ratner, Vice-Provost and Associate Vice-President Faculty Planning John Metras, Associate Vice-President Facilities Michael White, Associate Vice-President Campus & Community Planning Andrew Parr, Associate Vice-President Student Housing & Community Services Janine Benedet, Dean pro tem, Peter A. Allard School of Law Jennifer Sanguinetti, Managing Director, Infrastructure Development Yale Loh, Treasurer Aubrey Kelly, President & CEO, UBC Properties Trust

PRIOR SUBMISSIONS

The subject matter of this submission has been considered previously by the Property Committee on the following occasions:

1. [June 8, 2021](#) (OPEN SESSION) – Board 3 approval for the Brock Commons Phase 2 Mixed-Use Housing Development South Building, as follows:
 - i.* approval of final capital and operating budgets;
 - ii.* approval of final funding sources and financing of up to \$104.6 million at 5.75% annual interest with an amortization of 30 years, repaid by SHCS and UBC Central;
 - iii.* authorization to proceed to award construction contracts; and,
 - iv.* approval of final funding release of \$107,298,000.
2. [June 16, 2020](#) (OPEN SESSION) – Interim funding release of \$955,000 to complete design and in-progress swing space preparation work for the Brock commons Phase 2 Mixed-Use Housing Development Project, in advance of putting the project on temporary hold.

3. [September 24, 2019](#) (OPEN SESSION) – Board 2 approval with funding release of \$2,700,000. Action/Follow up: Issue a development permit, complete working drawings and tender documents, relocate electrical and life safety infrastructure from Brock Annex to Brock Hall and Buchanan Tower, award construction contracts.
4. [September 27, 2018](#) (OPEN SESSION) – Board 1 approval with funding release of \$1,000,000. Action/Follow up: Commence schematic design.

The following Executive Summary assumes familiarity with the prior submissions and provides a status update from the date of the most recent submission.

EXECUTIVE SUMMARY

In accordance with the [Capital Projects Policy](#), this Board 3 approval request for Brock Commons Phase 2 Mixed-Use Housing Development North Building is provided as part of the project management process for construction projects over \$5,000,000. The Board of Governors has delegated to the Property Committee the authority to make decisions on its behalf for construction projects of between \$5 million and \$20 million. The aggregate estimated value of Brock Commons Phase 2 Mixed Use Housing Development North Building is an additional \$53,264,000 to the approved value of the Brock Commons Phase 2 Mixed Use Housing Development South Building.

The Brock Commons Phase 2 project is a mixed-use student housing and academic development that has been designed as two stand-alone buildings to be constructed on either side of Walter Gage Road, immediately adjacent to East Mall. When completely built-out, it will house 600 student housing beds with associated support spaces and a number of academic and administrative spaces. Both the academic and student support functions to be located in the development are critically important.

The Brock Commons Phase 2 South Building received Board 3 approval in June 2021. At that meeting, the Board of Governors recognized the critical need for the North Building functions and the efficiency in recombining the two buildings into a single project, and signaled receptiveness for the North Building to be submitted for Board 3 Approval at the September 2021 Board of Governors meeting. The Administration recommends proceeding with Board 3 approval for the additional costs of delivering the North Building as part of a re-combined single North-South Buildings project.

The primary programs of the 130,785 gross square foot (12,150 gross square metres) North Building are Student Housing, including the Commons block for all of Brock Commons, the Peter A. Allard School of Law experiential learning clinics, and a commuter student collegium. Demand for student housing continues to be very high, well in excess of supply, and continued growth of self-funded student housing projects remains a priority for UBC. Completion of the North Building will increase the number of student residence beds being delivered in Brock Commons Phase 2 from 282 to 600. The Peter A. Allard School of Law Experiential Learning Suite will provide 2-3 new Law Clinic areas and further essential practice opportunities for Law students. Commuter collegia are very successful on campus and thus have long waitlists. This new collegium is needed to alleviate demand in this campus neighbourhood. It is important to note that none of these facilities are impacted by any remote work programs.

The team has maintained a restrained approach to building design in the interest of controlling the project budget, focusing design energy on performance and a few key high impact design moves, and will continue to search for opportunities for cost savings. The North Building has been re-tendered and, although costs continue to increase primarily due to delay-associated escalation and COVID-related supply chain issues, the total combined North-South budget is still less than the June 2021 projected cost to deliver two stand-alone building projects. Given ongoing market volatility, the cost to deliver the North Building will likely continue to escalate with further delay.

The current estimated cost to develop the two buildings together as originally envisioned is \$165,217,000. A budget of \$111,953,000 was previously approved for the South Building. The budget increase to deliver the North Building as part of a re-combined North-South Building project is \$53,264,000.

Project Scope	Board 2 (Sept 2019)	June 2021 budget	Board 3 South Bldg approved (June 2021)	Future North Bldg (June 2021)	Board 3 North Bldg (Sept 2021)	Total
Both buildings – single project (as of Sept. 2019)	\$156,404,000					\$156,404,000
Both buildings – single project (as of June 2021)		\$160,700,000				\$160,700,000
Separate projects (as of June 2021)			\$111,953,000	\$55,000,000		\$166,953,000
Both buildings – single project (as of Sept. 2021)			\$111,953,000		\$53,264,000 (additional budget requested)	\$165,217,000

The Capital Budget, Operating Costs and Funding Sources have been revised to reflect the updated areas and budget for the re-combined South and North Buildings project (*Refer to Appendix 4 – Brock Commons Phase 2 North-South Detailed Capital and Operating Costs, Appendix 5 – Brock Commons Phase 2 North-South Detailed Funding Information, and Brock Commons Phase 2 North-South Student Housing Pro Forma Scenarios*).

Funding & Financing

The funding sources for the recombined Brock Commons Phase 2 North-South Buildings project are shown in the following table:

Funding Source	\$ Amount
Student Housing & Community Services (SHCS) - Student housing, food services, child care	\$ 122,548,000
Faculty of Arts (FOA)	\$ 6,509,000
Central Budget (sponsored by VPS, VPA, Opinion Lab, General teaching spaces)	\$ 34,490,000
Peter A. Allard School of Law	\$ 1,670,000
Total	\$ 165,217,000

UBC will request a loan from the Provincial government for a large portion of the \$122.5 million funding required from SHCS for the combined Brock Commons North and South Buildings. Several financing scenarios have been presented in *Attachment 6 Brock Commons Phase 2 North-South Student Housing Pro Forma Scenarios*, including 1) where Provincial financing includes the Brock Annex replacement; 2) where Provincial financing includes the Brock Annex replacement plus child care / food services; and 3) where no Provincial financing is provided (fully funded through internal loans).

Based on current forecasts, the University projects sufficient liquidity to fund this project. As the project commences, liquidity required to fund construction under scenario 1 is estimated to be \$4.5 million in FY21, \$24.1 million in FY22 and \$80.3 million in FY23, before an increase in liquidity of \$49.5 million in FY24 if a Provincial loan is expected to be issued.

The Faculty of Arts has sufficient reserves in its operating budget and will not require an internal loan to finance its contribution. The Provincial and working capital loans assume a term of 30 years with interest rates of 3.5% and 5.75%, respectively. If a SHCS loan is issued through the Student Housing Financing Endowment (SHFE) instead of working capital, interest would increase marginally from 5.75% to 6%. In addition to the funding noted above, SHCS will pursue Provincial Child Care funding of up to \$2 million for the two daycare centres located in the South Building.

Scenario 3 - \$101m Province of BC Loan						
Liquidity Impact (In \$000s)	FY2021	FY2022	FY2023	FY2024	FY2025 - 2053	FY2054
Construction Costs ¹	(4,523)	(24,050)	(80,335)	49,515		
<u>Loans - Principal & Interest Payments</u>						
SHCS – Internal Loan (3.5%)				1,354	5,418	4,063
UBC Provincial Loan (3.5%)				(1,354)	(5,418)	(4,063)
SHCS / Central Internal Loan ²				960	3,841	2,881
Total	(4,523)	(24,050)	(80,335)	50,475	3,841	2,881

¹ Assumes Province of BC loan issued at the end of construction period are netted against construction costs

² Debt service amounts assume a SHCS WC loan at 5.75% interest; interest would increase to 6% should a SHFE loan be issued. Loan payments are 38% SHCS and 62% Central

Sustainability

The project is on track to achieve sustainability targets defined by Campus & Community Planning. Since both the North and South buildings are part of the same LEED boundary and will be a single LEED submission, the project is referencing a combined LEED Baseline. Embodied carbon reduction targets were not specified for this project and the proposed project’s performance is not available at this time, however this information will be provided with the Board 4 report. For future projects this information will be prepared for the Board 3 report.

	Metric	LEED Baseline*	UBC Target	Proposed Design North + South	Proposed Design (North only)	Proposed Design (South only)
Energy Use	TEUI (kWh/m ² /yr)	161	130 (residential) / 140 (academic)	114	116	115 / 113
GHG Emissions	GHGI (kgCO ₂ /m ² /yr)	13.6	N/A	2.23	2.37	2.44 / 2.03

*Baseline is the combined LEED Baseline for Brock 2 North + South buildings as they form part of the same LEED boundary. Baseline refers to a LEED Gold project (assumed to have 6 optimized energy points and 1 Building Life-Cycle Impact Reduction point)

TEUI is Total Energy Use Intensity and is a measure of the total amount of energy a building uses over the course of a year, per unit of building area. The metric considers all energy used in a building, including plug loads (e.g. lighting, appliances) and process loads (e.g. elevators, mechanical systems, fans). TEUI is measured and expressed in kWh/m²/year. Sample building design strategies for achieving TEUI targets:

- Consider occupant and unit density
- Optimize fenestration
- Increase airtightness
- Recover heat during ventilation
- Separate heating and cooling from ventilation.

GHGI is Greenhouse Gas Intensity and is a measure of the emissions intensity of a building’s emissions, measured and expressed in tonnes or kilograms of carbon dioxide equivalent per unit area over the course of a year (kg CO₂/m²/year).

APPENDICES

1. Brock Commons Phase 2 Site Plan
2. Brock Commons Phase 2 North Building program
3. Brock Commons Phase 2 North-South Schedule
4. Brock Commons Phase 2 North-South Detailed Capital and Operating Costs
5. Brock Commons Phase 2 North-South Detailed Funding Information
6. Brock Commons Phase 2 North-South Student Housing Pro Forma Scenarios

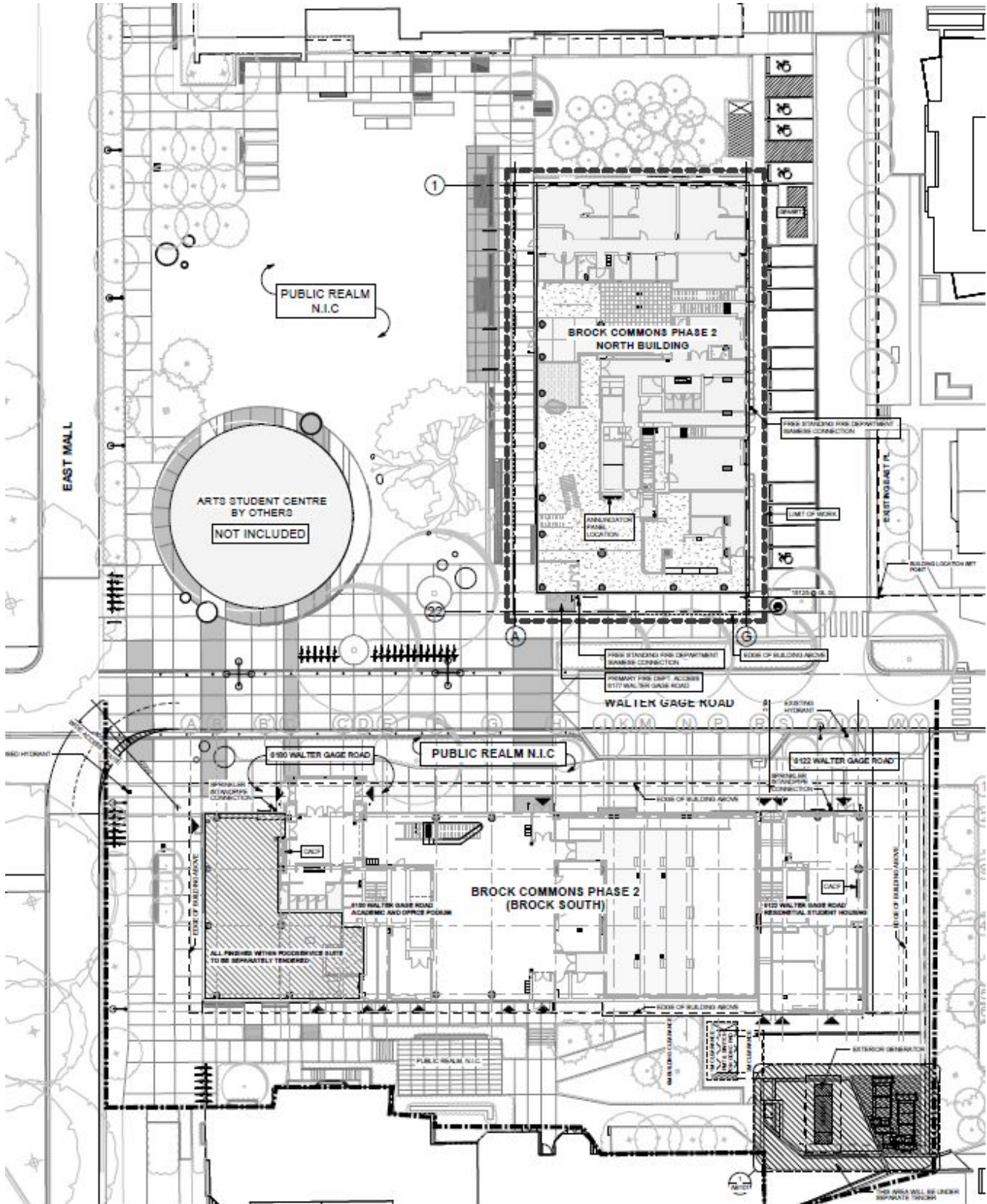
PRESENTATIONS

1. Brock Commons Phase 2 Mixed Use Housing Development North Building – Board 3 Approval

SUPPLEMENTAL MATERIALS (optional reading for Governors)

1. Images of Final Design
2. Brock Commons Phase 2 South Building Program

Appendix 1 – Brock Commons Phase 2 Site Plan



Appendix 2 – Brock Commons Phase 2 North Building Program

PROGRAM COMPONENT	AREA (Net Square Metres)	AREA (Net Square Feet)
Student Housing and Community Services (SHCS)		
Student Housing & Support		
Student residences	6,788	73,063
Manager's Suite	90	970
Shared residence support	649	6,990
SHHS offices and support	156	1,679
Building support (residential)	268	2,881
Subtotal	7,951	85,583
VP Students		
Collegium	148	1,596
Subtotal	148	1,596
Peter A. Allard School of Law		
Clinics	187	2,015
Subtotal	187	2,015
Building Support (Shared)		
Custodial	53	572
Bldg Service Spaces	238	2,559
Subtotal	291	3,130
TOTAL NET AREA	8,577	92,324
Building Gross-Up Factor	1.417	1.417
TOTAL BUILDING GROSS AREA	12,150	130,785

For reference, the 199,695 square foot (18,552 gross square metres) South Building Program is included in Supplemental Materials, *Attachment 1, Brock Commons Phase 2 South Building Program*.

Completion of the North Building will more than double the number of student residence beds being delivered to a total of 600. (Including Brock Tallwood House, the total bed count at Brock Commons will be 1,004.)

	No. of Units	No. of beds
North Building		
Student Residence Units – Studio	64	64
Student Residence Units – Shared	64	254
North Building Total		318
South Building		
Student Residence Units – Studio	218	218
Student Residence Units – Shared	16	64
South Building Total		282
TOTAL		600

Appendix 3 – Brock Commons Phase 2 North-South Schedule

Milestone	Target Date
Executive 1	Dec 2017
Executive 2	Mar 2018
PPAC/SABNC	Jul 2018
Executive 3	Aug 2018
Board 1	Sep 2018
Board 2	Sep 2019
Board Update – Project on hold due to COVID-19 uncertainty	Jun 2020
Board 3 – South Building	Jun 2021
Demolition Start – Brock Annex	July 2021
Board 3 – North Building	Sept 2021
Construction Start – North building	Oct 2021
Demolition complete/Construction Start – South Building	Nov 2021
Construction Completion – North building	Sept 2023
Occupancy – North Building	Oct 2023
Construction Completion – South Building	Dec 2023
Occupancy – South Building	Jan 2024
Board 4	Feb 2026

Appendix 4 – Brock Commons Phase 2 North-South Detailed Capital and Operating Costs**Detailed Capital Budget**

The combined Brock Commons Phase 2 North-South Buildings capital project cost estimate was prepared by UBC Properties Trust, based on tender results. This is a Class A estimate with an accuracy of +/-5-10%.

Project Capital Cost Breakdown	PROJECT
Construction Costs	
SHCS	79,019,000
Institutional	40,393,000
Swing Space	750,000
Art Work Removal + Reinstallation	900,000
Public Realm	3,000,000
Site Servicing	1,500,000
Brock Annex Demo / Brock Hall Changes	850,000
Legacy: Buchanan Backup Generator	450,000
Legacy: Loading Bay Closure	150,000
Contingency	5,056,000
Total Construction	132,068,000
Cash Allowances	
SHCS FF+E (FS Equip. carried in Construction)	2,508,000
Institutional FF+E	1,696,000
Municipal Services	350,000
UBC IT	1,650,000
Secure Access/Signage	380,000
SHCS AV	90,000
Academic AV	1,335,000
Total Cash Allowances	8,009,000
Soft Costs	
Consultants	10,099,000
IIC's	1,579,000
DCC's (new charges from B1)	1,093,000
Preconstruction/Permits	1,578,000
Total Soft Costs	14,349,000
Building Subtotal	154,426,000
Project Management	3,640,000
Building Total	158,066,000
GST	2,640,000
Construction Period Financing	4,950,000
IIC Public Realm Hub Contribution	(2,000,000)
Retained Risk	1,561,000
BROCK COMMONS TOTAL PROJECT	165,217,000
<i>Area (Square Feet)</i>	<i>330,480</i>
<i>Cost per Square Foot (\$/SF)</i>	<i>500</i>

Operations and Maintenance Costs

Based on the current design, the approximate annual operating and lifecycle costs for the recombined North-South Buildings project will be as follows:

		Fac of Arts	VPA/VPS ¹	SHCS ²	Law	TOTAL
Total Gross Area (sf)	\$/gsf	23,901	66,866	236,763	2,949	330,480
Brock Annex Demolition (gsf)		10,102				
OPERATIONS AND MAINTENANCE COSTS³						
Annual Operations + Maintenance	\$ 6.37	\$ 152,252	\$ 425,936	\$ 1,508,180	\$ 18,787	
Utilities	\$ 2.23	\$ 53,300	\$ 149,111	\$ 527,981	\$ 6,577	
Total O+M Cost	\$ 8.60	\$ 205,553	\$ 575,047	\$ 2,036,161	\$ 25,364	\$ 2,842,126
Less: Brock Demolition Credit ⁴	\$ 5.67	(\$57,278)				
Net O+M Cost		\$ 148,274	\$ 575,047	\$ 2,036,161	\$ 25,364	\$ 2,784,847
LIFECYCLE CAPITAL COSTS⁵						
Cyclical Maintenance	\$ 3.51	\$ 83,894	\$ 234,700	\$ 831,038	\$ 10,352	
Modernization / Upgrade	\$ 0.93	\$ 22,228	\$ 62,185	\$ 220,190	\$ 2,743	
Total Capital Renewal Cost	\$ 4.44	\$ 106,122	\$ 296,885	\$ 1,051,227	\$ 13,095	\$ 1,467,330

¹ VP Students (VPS) and VP Academic (VPA – includes General Teaching Space) Operations & Maintenance costs are covered by the UBC Operating Budget.

² Student Housing & Community Services (SHCS) will fund all operations and maintenance costs for the student housing portion of the facility out of housing rental revenue, as well as for child care, food service, and supporting spaces, and will manage the operation and associated costs of waste disposal and recycling for both student housing and the food outlet.

³ Final costs will be based on actual built areas and are subject to change pending final design and construction.

⁴ The Space Charge System was revised in July 2020: “For proposed new construction, no demolition credits will be offered for occupied, existing space as no payment has been made. All developments with proposed demolitions will be reviewed by Infrastructure Development on a case by case basis.” Since the Faculty of Arts developed Brock Commons Phase 2 financial planning prior to this change in policy, Infrastructure Development has recommended that a demolition credit be offered for Brock Annex space.

⁵ Lifecycle Capital Costs are covered by the UBC Operating Budget (Routine Capital program).

Appendix 5 – Brock Commons Phase 2 North-South Detailed Funding Source

Project Capital Cost Breakdown	PROJECT	SHCS - NORTH	SHCS - SOUTH	SHCS-CC	SHCS-FS	FOA	VPS	VPA	LAW
Construction Costs									
SHCS	79,019,000	41,633,000	31,027,000	3,798,000	2,561,000	-	-	-	-
Institutional	40,393,000	-	-	-	-	9,205,000	19,162,000	10,877,000	1,149,000
Swing Space	750,000	285,000	226,000	16,000	11,000	50,000	105,000	50,000	7,000
Art Work Removal + Reinstallation	900,000	342,000	271,000	20,000	13,000	60,000	126,000	60,000	8,000
Public Realm	3,000,000	1,139,000	902,000	66,000	42,000	204,000	420,000	200,000	27,000
Site Servicing	1,500,000	570,000	451,000	33,000	21,000	102,000	210,000	100,000	13,000
Brock Annex Demo / Brock Hall Changes	850,000	323,000	256,000	19,000	12,000	57,000	119,000	57,000	8,000
Legacy: Buchanan Backup Generator	450,000	171,000	135,000	10,000	6,000	31,000	63,000	30,000	4,000
Legacy: Loading Bay Closure	150,000	57,000	45,000	3,000	2,000	10,000	21,000	10,000	1,000
Contingency	5,056,000	1,920,000	1,520,000	111,000	71,000	343,000	708,000	337,000	45,000
Total Construction	132,068,000	46,440,000	34,833,000	4,076,000	2,739,000	10,062,000	20,934,000	11,721,000	1,262,000
Cash Allowances									
SHCS FF+E (FS Equip. carried in Construction)	2,508,000	1,255,000	994,000	109,000	150,000	-	-	-	-
Institutional FF+E	1,696,000	-	-	-	-	387,000	844,000	388,000	77,000
Municipal Services	350,000	133,000	105,000	8,000	5,000	24,000	49,000	23,000	3,000
UBC IT	1,650,000	650,000	500,000	25,000	25,000	100,000	200,000	125,000	25,000
Secure Access/Signage	380,000	75,000	25,000	10,000	10,000	75,000	100,000	75,000	10,000
SHCS AV	90,000	-	90,000	-	-	-	-	-	-
Academic AV	1,335,000	-	-	-	-	175,000	250,000	850,000	60,000
Total Cash Allowances	8,009,000	2,113,000	1,714,000	152,000	190,000	761,000	1,443,000	1,461,000	175,000
Soft Costs									
Consultants	10,099,000	3,025,000	2,299,000	383,000	257,000	946,000	1,968,000	1,102,000	119,000
IIC's	1,579,000	837,000	669,000	42,000	31,000	-	-	-	-
DCC's (new charges from B1)	1,093,000	335,000	607,000	10,000	7,000	32,000	66,000	32,000	4,000
Preconstruction/Permits	1,578,000	599,000	475,000	35,000	22,000	107,000	221,000	105,000	14,000
Total Soft Costs	14,349,000	4,796,000	4,050,000	470,000	317,000	1,085,000	2,255,000	1,239,000	137,000
Building Subtotal									
Building Subtotal	154,426,000	53,349,000	40,597,000	4,698,000	3,246,000	11,908,000	24,632,000	14,421,000	1,574,000
Project Management	3,640,000	1,382,000	1,095,000	80,000	51,000	247,000	510,000	243,000	32,000
Building Total	158,066,000	54,731,000	41,692,000	4,778,000	3,297,000	12,155,000	25,142,000	14,664,000	1,606,000
GST	2,640,000	1,002,000	794,000	58,000	37,000	179,000	370,000	176,000	24,000
Construction Period Financing	4,950,000	1,880,000	1,489,000	108,000	70,000	336,000	693,000	330,000	44,000
IIC Public Realm Hub Contribution	(2,000,000)	(759,000)	(601,000)	(44,000)	(28,000)	(136,000)	(280,000)	(133,000)	(18,000)
Retained Risk	1,561,000	593,000	469,000	34,000	22,000	106,000	219,000	104,000	14,000
BROCK COMMONS TOTAL PROJECT	165,217,000	57,447,000	43,843,000	4,934,000	3,398,000	12,640,000	26,144,000	15,141,000	1,670,000
Area (Square Feet)	330,480	123,601	97,016	7,233	4,661	22,448	46,291	22,029	2,949
Cost per Square Foot (\$/SF)	500	465	452	682	729	563	565	687	566
Brock Annex Replacement Adjustment		12,926,000	-	-	-	(6,131,000)	(3,454,000)	(3,341,000)	-
Total Project Cost by Funding Source		70,373,000	43,843,000	4,934,000	3,398,000	6,509,000	22,690,000	11,800,000	1,670,000

SHCS Beds	600
Cost / Bed (Cost = SHCS + HUB)	168,817
Cost / Bed (Cost = SHCS + HUB + FS + CC + Brock Replaceme)	204,247
Area per Bed	368

Guide to acronyms:

SHCS	Student Residences	FOA	Faculty of Arts
SHCS-CC	Child Care	VPS	VP Students
SHCS-FS	Food Services	VPA	VP Academic

Appendix 6 – Brock Commons Phase 2 North-South Student Housing Pro Forma Scenarios

Financing Scenario – Net Cash Flow (\$ Thousands)	2024	2025	2026	2027
1. \$122m Provincial Loan	\$1	\$135	\$268	\$405
2. \$114m Provincial Loan	(\$31)	\$59	\$193	\$329
3. \$101m Provincial Loan	(\$139)	(\$193)	(\$59)	\$77
4. \$122m Internal Loan	(\$805)	(\$1,752)	(\$124)	\$43

Scenario Description:

1. \$122.5m Provincial government debt at 3.5% over 30 years for all \$122.5m SHCS components and replacement costs
2. \$114.2m Provincial government debt at 3.5% over 30 years for the \$114.2m student residence and replacement costs portion, and \$8.3m internal loan at 5.75% for the remaining SHCS components
3. \$101.2 Provincial government debt at 3.5% over 30 years for the \$101.2m student residence portion, and \$21.2m internal loan at 5.75% for the remaining replacement costs and SHCS components
4. \$122.5m internal debt at 5.75% over 30 years for all \$122.5m SHCS components and replacement costs



Brock Commons Phase 2 North Building Board 3 Approval Request

September 8, 2021

John Metras, Associate Vice-President Facilities



Introduction and summary



- Part of mixed-use commons project with housing & academic uses
- South Bldg received B3 approval June 2021
- Remaining 318 housing beds to total 600 plus Law clinics, commuter student collegium and Brock Commons “Commons Block”
- Target completion of North Bldg – Oct 2023

Additional details



- North building costs reflect tendered values
- Cost has increased reflecting COVID-related market escalation
- Further delays will likely result in further cost escalation

Additional details



- Administration is continuing to pursue financing for both childcare and housing beds from Province
- Liquidity position better now than before
- Housing demand continues to outpace supply so provision of student housing remains a priority
- North and South buildings will be recombined into one project

Additional details



Project on track to meet sustainability targets:

	Metric	Baseline*	UBC Target	Proposed Brock 2 Design
Energy use	TEUI (KWH/m2/yr)	161	130/140	114
GHG emissions	GHGI(kgCO2/m2/yr)	13.6	NA	2.23

*

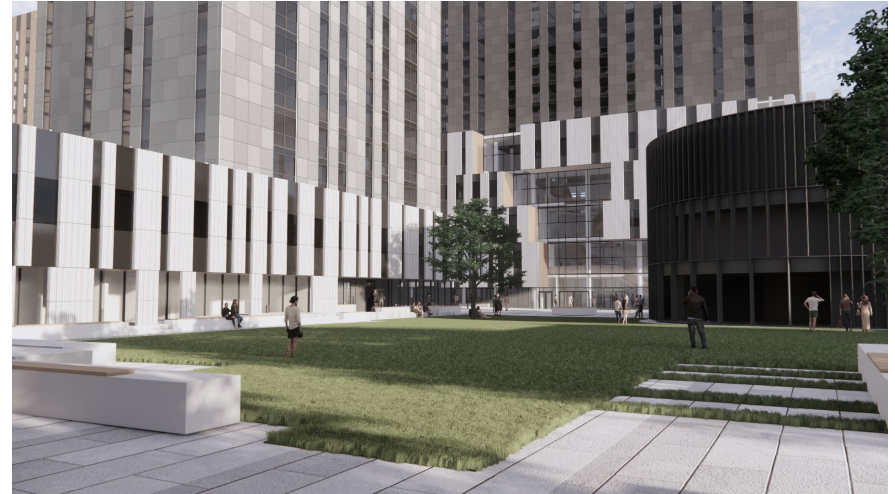
LEED Gold project (assumed to have 6 optimized energy points and 1 Building Life-Cycle Impact Reduction point)

Embodied carbon reduction targets were set well into design and will be reported for Board 4

Additional details – Final Renderings



View of Final Brock Commons Precinct



View of Brock North from Courtyard

Discussion and decision points



Board 3 approval request for the Brock Commons Phase 2

North Building project:

1. approval of final capital and operating budgets;
2. approval of final funding sources and financing of up to \$54 million at 5.75% annual interest with an amortization of 30 years, repaid by SHCS and UBC Central;
3. authorization to proceed to award construction contracts; and
4. approval of final funding release of \$53,264,000.

Supplemental Materials 1 – Images of Final Design



View of Built-out Brock Commons Precinct: Brock Commons Phase 2 South Building (right), Brock Commons Phase 2 North Building (left), Arts Student Centre (foreground), and Tallwood Residence (background)



View of Brock Commons Phase 2 North Building (left) from courtyard



View of Brock Commons Phase 2 North Building (background) looking east on Walter Gage Road

Supplemental Materials 2 - Brock Commons Phase 2 South Building Program

PROGRAM COMPONENT	AREA (Net Square Metres)	AREA (Net Square Feet)
Student Housing and Community Services (SHCS)		
Student Housing & Support		
Student residences	6,120	65,876
Shared residence support	122	1,313
SHCS offices and support	0	0
Building support (residential)	94	1,006
Common / General Use (SHCS Serviced)		
Childcare	395	4,252
Food Service	297	3,197
Subtotal	7,028	75,644
VP Academic (VPA)		
Classrooms & Executive Meeting rm	698	7,513
Graduation / general meeting Space	269	2,890
Emeritus College	120	1,292
FOA Opinion Lab/ DAE Call Centre	95	1,023
Subtotal	1,182	12,718
VP Students (VPS)		
Event Room	122	1,313
Accommodated Exams Centre	374	4,026
Collegium (2)	0	0
Multipurpose (Multifaith) space	155	1,668
Office of the VP Students	470	5,059
Student Development & Services	366	3,940
Centre for Accessibility	331	3,563
Sexual Violence Prevention & response Office	209	2,250
Equity & Inclusion	355	3,821
Subtotal	2,382	25,640
Faculty of Arts (FOA)		
Arts Academic Advising	540	5,813
Arts Coop	294	3,165
Arts Administration Suite	301	3,240
CEDaR Indigenization Lab	70	753
Subtotal	1,205	12,971
Shared Academic Meeting Rooms		
Meeting Rooms	88	947
Subtotal	88	947
Building Support (Shared)		
Lobby	397	4,273
End of Trip Facility & Bike Storage	113	1,219
Custodial Services	92	990
Bldg Service Spaces	555	5,974
Subtotal	1,157	12,457
TOTAL NET AREA	13,041	140,376
Building Gross-Up	1,423	1,423
TOTAL BUILDING GROSS AREA	18,552	199,695