



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

REPORT TO THE BOARD OF GOVERNORS

SUBJECT ORCHARD COMMONS MIXED-USE STUDENT HOUSING
DEVELOPMENT

MEETING DATE FEBRUARY 4, 2014

Forwarded to the Board of Governors on the
Recommendation of the President

**APPROVED FOR
SUBMISSION**

A handwritten signature in black ink, appearing to read 'Stephen J. Toope'.

Stephen J. Toope, President and Vice-Chancellor

Presented By David Farrar, Provost and Vice-President Academic
Louise Cowin, Vice-President Students
Pierre Ouillet, Vice-President Finance, Resources & Operations
Andrew Parr, Managing Director, Student Housing & Hospitality Services
James Ridge, Principal, UBC Vantage College
John Metras, Managing Director, Infrastructure Development
Lisa Colby, Acting AVP, Campus + Community Planning
Peter Smailes, Treasurer
Al Poettcker, President & CEO – UBC Properties Trust

Report Date January 15, 2014

DECISION REQUESTED **IT IS HEREBY REQUESTED** that the UBC Board of Governors approve
BOARD 2 for the Orchard Commons Mixed-Use Student Housing Development,
with authorization to issue the development permit, and for a \$2,500,000 funding
release to complete working drawings and tender documents.

Capital Budget:	\$125,873,500
Operating Budget	Included in report
Schedule	
Program	
Authorization to Issue Development Permit	
Proceed to Working Drawings	
Funding Release	\$2,500,000

Information

Expenses to Date:	\$523,344
Funding Released to Date:	\$700,000

EXECUTIVE SUMMARY

Orchard Commons will be the physical home for the UBC Vantage College Program and will include academic and administration space as well as student residence beds for the College. UBC Vantage College (VC) has been established to enable students from a wide variety of international school systems and with diverse linguistic and cultural backgrounds to have the opportunity to transition into UBC degree programs upon successful completion. This is critical to the University's goal to expand international student enrolment and thus create a diverse campus community with enriched learning and engagement opportunities for all students.

Vantage College will also contribute to the overall financial sustainability of the University through revenue growth and diversification, summer use of campus and contribution to infrastructure renewal and expansion.

Orchard Commons will be located on the northeast corner of West Mall and Agronomy Road, on the site identified as a "Mixed Use Hub" in the Vancouver Campus Plan (see Attachment 1). The development will provide 1,048 residence beds, office space for UBC Vantage College administrators and faculty; and flexible classrooms to serve Vantage College academic program requirements.

Various amenities will be provided to serve both the Vantage College Program and the wider campus community. These include informal learning spaces, 450-seat dining hall and food/catering production centre, event/activity space, convenience store, infant / toddler child care facility and end-of-trip facilities for cyclist commuters.

Orchard Commons is the second of five mixed use academic/student housing hubs (Ponderosa Commons was the first) designated in the Vancouver Campus Plan to animate the main campus at a local level by providing vibrant centres in which students can live, study, socialize and access services to meet their daily needs and thus enhance the overall student experience at UBC.

The capital cost for the project is still estimated at \$125.9 million, as reported at Board 1. This includes the cost to relocate the occupants of Orchard House, a small two-storey office building, which will be demolished to make way for the project. Student Housing & Hospitality Services (SHHS) will contribute \$102.25 million to fund the project and UBC Vantage College to contribute \$22.63 million. Up to \$1.0 million will be contributed from Infrastructure Impact Charges (IICs) to fund the design and construction of the outdoor commons (main gathering space) landscape. All other project landscaping will be funded from the main project budget.

The project requires debt financing of \$124.9 million (\$125.9 million capital cost less \$1.0 million in IIC funding) with \$100 million sourced from the Endowment through the UBC Foundation and the remaining \$24.9 million financed internally. Debt service will be paid from UBC Vantage College revenues and student housing rents, proportionate to the respective funding contribution required from each group. Sufficient liquidity is anticipated to be available for the internal financing. Endowment borrowing terms and structure are being finalized by UBC, IMANT and the UBC Foundation. In order to provide greater transparency, the required financing from IMANT will be issued to the UBC Foundation who will own the facility and lease it to UBC.

This project received Board 1 approval on June 4, 2013. Perkins & Will were subsequently selected as the architectural consultant. UBC Properties Trust is the project manager. Schematic design has been completed and received conditional support from the Advisory Urban Design Panel (AUDP) on December 5, 2013. The project was reviewed by the Development Review Committee on December 12, 2013, when the utility re-location, tree-preservation, siting of the future building and the dispersal of air emissions from the neighbouring Coal & Mineral Processing Lab were considered. A public open house will be held on January 20, 2014.

Campus & Community Planning has confirmed that the reviews have been substantially completed to allow issuance the Development Permit, with conditions. Board 2 approval is sought at this time to authorize issuance of the Development Permit and completion of working drawings. Board 3 is targeted for June 2014. Overall project completion is targeted for July 2016.

Place and Promise COMMITMENT(s) **Student Learning:** The University provides the opportunity for transformative student learning through outstanding teaching and research, enriched educational experiences, and rewarding campus life. *Goal:* Enhance the quality and impact of teaching for all students.

International Engagement: The University creates rich opportunities for international engagement for students, faculty, staff, and alumni, and collaborates and communicates globally. *Goal:* Increase the capacity of UBC students, staff, and alumni to engage internationally.

Place and Promise ACTION(s) Review and revise curricula and pedagogy to ensure that they are informed by leading edge research on how people learn. *Portfolio Action:* Build an effective English language pathways program for incoming international students.

Foster student participation in learning and service abroad. *Portfolio Action:* Enhance and expand welcome and service space for international students.

Description & Rationale **UBC Vantage College Program**

The UBC Vantage College Program will provide international students graduating from a senior secondary school, who would not be directly admissible to a UBC direct-entry undergraduate degree program, with the opportunity to enter a first-year-equivalent program that will prepare them for study at Year 2 of a UBC degree. UBC Vantage College Program students will be UBC students.

The UBC Vantage College Program has been designed for international secondary school students who demonstrate a strong potential to succeed in university, but who may benefit from English language supports and supports that enable them to transition into a North American style of university education. Students will form a cohort within UBC Vantage College's 12-month program (depending upon the applicant's proficiency in the English language and level of academic preparation) that includes academic language preparation and the completion of first-year coursework. Upon successful completion of the International Program, students will have completed a minimum of 24 credits of first-year course work applicable to a degree program and may apply for admission into the second year of study toward a UBC bachelor degree.

Current planning for the College's International Program projects 4 streams of approximately 75 students each in 2014-15 (300 students), 8 streams in 2015-16 (600 students) and a total of 13 streams in 2016-17 (1,000 students in steady-state).

Each stream will start with an intense "Jump Start"-type orientation. These full-time orientation programs will be up to 2.5 weeks in length, occurring prior to the onset of the program during the month of August and will incorporate Academic English and student assessment.

By providing an additional opportunity for entry into UBC, the Vantage College Program expands the base of potential international student applicants from a broader range of countries and high school curricula, and supports the University's goal to expand international student enrolment, thus helping to create a diverse campus community with enriched learning and engagement opportunities for all students.

Vantage College will also contribute to the overall financial sustainability of the University through revenue growth and diversification, summer use of campus and contribution to infrastructure renewal and expansion. See Attachment 8 for Vantage College proforma.

Functional Program for the Facility

- The following is an overview of the functional program for Orchard Commons. Consistent with the Mixed Use Hubs model in the Vancouver Campus Plan (VCP sec 3.5.1 (a)), the development will consist of student housing, academic space and common use facilities. Learning space and office space for the UBC Vantage College forms the academic component of the project. Until Orchard Commons is completed in July 2016, UBC Vantage College students will reside in dedicated houses format with two units (one bed each) sharing a single bathroom; no in-suite kitchen facilities)
- Six 1-bedroom apartments for residence coordinators
- Two 2-bedroom apartments for residence life managers
- Bicycle storage incorporated into all residence units
- 12 interconnected floor lounges, each connecting 3 residence floors
- Two house lounges
- A “Sky Lounge” in the south tower for Vantage College and other events

Laundry facilities within existing 1st year residence complexes. Further study will be undertaken to determine whether they will be fully integrated with other 1st year students or housed together once Orchard Commons is completed. However that choice does not impact the number of residence rooms in this plan or their design.

Student Housing and Related Support

- 1,038 student beds including 26 accessible units and units for residence advisors (modified traditional)
- Six 1-bedroom apartments for residence coordinators
- Two 2-bedroom apartments for residence life managers
- Bicycle storage incorporated into all residence units
- 12 interconnected floor lounges, each connecting 3 residence floors
- Two house lounges
- A “Sky Lounge” in the south tower for Vantage College and other events
- Laundry facilities

UBC Vantage College

- Two 75-seat classrooms
- One 75-seat classroom with computer lab capability
- Twelve 26-seat classrooms
- Eight 16-seat classrooms
- Writing centre including support office space
- Administration office space for 26 people
- 35 faculty offices
- 40 shared workstations for sessionals and graduate teaching assistants

Common-Use Facilities

- Residence support (reception, SHHS offices, fitness, games room, music practice)
- 450-seat dining hall with production kitchen, providing service to residents and the broader campus community
- Convenience store
- Activity/events space, adjacent to the dining room, for up to 200 people that can accommodate a broad range of activities for residents, College attendees and the broader campus community to meet the requirements of VCP Policy 14.
- Multi-use lobby incorporating informal learning spaces, queuing capacity for high-volume periods, and study areas
- Two inter-connected Child Care Centres with 24 total spaces for 12 infants (4-18 months) and 12 toddlers (18-36 months) to meet requirements of VCP Policy 15.
- End of trip facilities for cyclists (showers, change rooms)
- Building support (housekeeping, waste/recycling, storage)

A map of the Orchard Commons site is included in Attachment 2. A summary of total building areas is provided in Attachment 3.

Schematic Design

The development will consist of two residence towers, 17 and 18 storeys respectively, and a 4-storey podium/commons building containing Vantage College offices and learning spaces as well as common-use facilities (reception, dining hall, activities/events space, convenience store, informal learning space, and child care). The buildings have been laid out efficiently on the site allowing space for a future in-fill development to accommodate future growth of Vantage College and/or student housing. Schematic design renderings of the building complex are provided in Attachment 4.

COSTS

Capital &
Lifecycle Operating

Capital Budget

The following capital budget was prepared by UBC Properties Trust based on experience with previous student housing and academic projects. The budget is unchanged from Board 1 in June 2013.

	Total	\$/SF
Construction Costs		
Construction	\$90,725,000	\$202
Construction Contingency	\$3,634,000	
Cash Allowances		
Public Realm	\$1,000,000	
Site Servicing	\$2,000,000	
Demolition	\$202,000	
Swing Space Cash	\$1,818,000	
Escalation ¹	\$0	
Kitchen Equipment	\$1,919,000	
FF+E	\$3,636,000	
UBC IT and Secure Access	\$1,768,000	
Audio Visual	\$1,414,000	

Soft Costs

Consultant Budget	\$5,455,000	
Project Management	\$2,879,000	
Moving / Commission / Inspections	\$455,000	
IIC, Permits, PO Charges, Insurance and Legal	\$3,132,000	
Building Subtotal	\$120,037,000	\$268
GST	\$1,897,000	
Project Sub-total	\$121,934,000	\$272
Retained Risk	\$908,500	
UBC Finance Charges	\$3,031,000	
Project Total	\$125,873,500	\$281

1 – Costs shown assume construction start in Summer 2014.

A detailed breakdown of the capital budget between the project components (i.e. residence, dining hall, common use, child care, Vantage College) is provided in Attachment 6.

Preliminary Operating Budget

Operating and maintenance costs for the building will be covered by SHHS and UBC Vantage College. SHHS will manage all operating costs for SHHS-managed spaces. UBC Vantage College will be charged for all academic space, including office areas and teaching spaces, at the standard space charge rate (currently \$12/net sf). SHHS and UBC Vantage College will pay operating and maintenance costs for shared amenities on a prorated basis. The SHHS and UBC Vantage College operating budgets, including debt servicing, are provided in Attachments 7 & 8.

FINANCIAL Funding Sources

Funding Sources,
Impact on Debt Ratios

The proposed funding breakdown is as follows, based on an estimated 60/40 cost split for Common Use and Building Support space between SHHS and UBC Vantage College Program:

Funding Source Space Use	SHHS		Vantage College		IIC		Total
	\$	%	\$	%	\$	%	\$
Student Residences	\$81,992,410	100%					\$81,992,410
Dining & Events	\$14,355,190	100%					\$14,355,190
Child Care	\$1,447,250	100%					\$1,447,250
Common-Use	\$4,044,910	60%	\$2,696,610	40%			\$6,741,520
Building Support	\$408,740	60%	\$272,500	40%			\$681,240
Vantage College			\$19,655,890	100%			\$19,655,890
Public Realm					\$1,000,000	100%	\$1,000,000
Total Project Cost	\$102,248,500	81.2%	\$22,625,000	18.0%	\$1,000,000	0.8%	\$125,873,500

Total Beds 1,048

Residence \$/Bed \$78,237

The nearest cost comparison is the Totem In-Fill project (567 beds) completed in 2011 for \$72,000/bed. Orchard Commons has “modified traditional” dorm style rooms with no in-suite kitchen facilities. This is similar to Totem In-Fill except Orchard is in a high rise format, which achieves higher land use density. The cost/bed difference between the two projects is due primarily to construction cost escalation. Totem In-Fill was tendered at a low point in the market and came in under original budget.

Residence + Dining Hall \$/Bed \$91,935

Financing

The Orchard Commons project requires debt financing of \$124.9 million (\$125.9 million capital cost less \$1.0 million in IIC funding). The project has been factored into internal working capital projections but assumes a \$100 million investment by the Endowment will be available to finance the majority of the project. Treasury, IMANT and the UBC Foundation have agreed on the terms of the transaction and are working through legal documents required to document the financing.

The investment by the Endowment was originally intended to be in two tranches, one \$60 million and the other \$40 million but in working through the details of the transaction an issue with GST arose. The cost for the UBC Foundation to construct the building would be higher due to less favourable GST treatment than having the University construct the building and then transfer it to the UBC Foundation upon completion. The loan from IMANT to the UBC Foundation will therefore be issued at the date of transfer from UBC to the UBC Foundation. Instead of a \$40m and a \$60m tranche issued over two years, the two tranches will remain separate for the purposes of the loan but will be funded together as one \$100m payment.

Sufficient liquidity is available to permit this finance timing change. All other terms are the same including the interest rate of 4.15% plus inflation (the overall rate would currently be approximately 6.15%) for a period of 30 years for the \$60m tranche and 25 years for the \$40m tranche. Security for the investment will include assignment of rents and a mortgage on the buildings.

The remaining \$24.9 million will be financed internally at a rate of 5.75% over 30 years. All debt service will be paid from UBC Vantage College revenues and student housing rents, proportionate to the respective funding contribution required from each group. Breakeven for the SHHS proforma is estimated at 11 years. Negative SHHS cashflow for the project in the first 10 years can be absorbed in the overall SHHS operating budget. Sufficient liquidity capacity is available for internal financing after incorporating the \$100 million Endowment financing.

The key elements of the Endowment financing transaction are:

- (a) The University will build Orchard Commons.
- (b) At completion, the building will be transferred to the Foundation. The loans from the Endowment will be directed to the Foundation and then on to the University to pay the construction cost of the building.
- (c) The Foundation will provide security to IMANT by granting to IMANT an assignment of rents, and a mortgage over the Orchard Commons building and ground lease.
- (d) The University will grant security to IMANT by guaranteeing the loan to the Foundation through lease payments payable by the University to the Foundation, and providing an agreement to at no time use funds from the TREK Endowment other than in accordance with the terms of the Endowment Management Policy of the Board of Governors of the University.
- (e) The Foundation will repay the loan with rents received from Student Housing and Hospitality Services and Vantage College.

The Foundation is a separate entity from the University, so by involving the Foundation and placing ownership of Orchard Commons with the Foundation, the investment by the Endowment in Orchard Commons is protected in the unlikely event the University becomes insolvent. This separation provides transparency and is easily explained to donors.

Endowment borrowing legal terms and structure are being finalized by UBC, IMANT and the UBC Foundation and will be ready for final approval at the June 2014 Board when the project seeks Board 3 approval.

SCHEDULE	Board 1 – June 2013
Implementation	Advisory Urban Design Panel – December 2013
Timeline	Public Open House – January 2014
	Board 2 – February 2014
	Board 3 – June 2014
	Construction Start – July 2014
	Completion – June 2016
	Occupancy – July 2016
	Board 4 – January 2018

The schedule is unchanged from Board 1 in June 2013.

RISKS	Enrolment Targets: There is a risk that enrolment targets will not be met within the anticipated timeline, however, UBC Vantage College and ISI (International Student Initiative) have developed a coordinated recruitment and enrolment plan. There are currently (as of Jan 2014) 425 applications to Vantage College in progress or submitted from 65 countries. Review is also underway of students who applied to Direct Entry but are not eligible due to their language profile. This pool will likely generate about 50-60% of the Vantage College student body in its first year. If Vantage College enrolment targets cannot be met this risk is partially mitigated in that there is 8-month demand for this style of residence from other 1 st and 2 nd year students.
Financial, Operational & Reputational	

Financing Capacity: The latest liquidity estimates from Treasury indicate that sufficient capacity is available to deliver the project.

Child Care: This facility is proposed to provide care for 12 infants (4-18 months) and 12 toddlers (18-36 months). There is potential for some level of incompatibility between 1st year residents (aged 17-19) and users of a child care centre such as this. Thoughtful design has been undertaken to mitigate this risk by developing the child care facility in an accessible but separate area of the building complex.

BENEFITS	The anticipated benefits of the Orchard Commons project include:
Learning, Research, Financial, Sustainability & Reputational	<ul style="list-style-type: none"> • Integration of domestic and international students for an enhanced experience for all students. • Provision of common use amenities such the dining hall, activities/events space, informal learning space and child care which will benefit the entire campus community. • Enhanced summer use of campus as the VC program is a 49 week program. Therefore 1,000 more students will be living and studying on campus in May, June and part of July and August.

- Revenue growth for UBC via student housing and meal plan fees and international tuition rates.
- Creation of a LEED Gold certified sustainable facility for the new UBC Vantage College will help promote UBC's international reputation as a world-class institution that integrates sustainability at all levels, and will aid in recruitment for the new UBC Vantage College International Program.

For UBC, the VC International Program will achieve three goals:

- Increase diversity and number of international students,
- Provide a forum for pioneering and assessing best practice pedagogical methods,
- Enhance UBC's financial sustainability.

CONSULTATION

Relevant Units,
Internal & External
Constituencies

The functional program was developed in close consultation with SHHS and UBC Vantage College, with input at key review points from Campus & Community Planning (including the University Architect and Sustainability Office) and the Provost's Office.

As with all UBC major capital projects, a working committee has been established comprised of the UBCPT development manager, the design consultants, the facility users and key planning and operational stakeholders. This committee has engaged stakeholders and neighbours through the schematic design stage of the project

Schematic design has been completed and received conditional support from the Advisory Urban Design Panel (AUDP) on Dec 5, 2013. The AUDP identified some outstanding design issues to be resolved (see Attachment 5 for meeting notes). These design items include the relationship of the north tower to the open space and the future building site; managing solar gain; and design refinements to the daycare open space. The project was reviewed by the Development Review Committee on December 12, 2013 when the utility re-location, tree-preservation, and the dispersal of air emissions from the neighbouring Coal and Mineral Processing Lab were considered. A public open house will be held on January 20, 2014. Campus & Community Planning has confirmed that the development reviews have been substantially completed to allow issuance the Development Permit with conditions.

Previous Board History:

Previous Report Date June 4, 2013

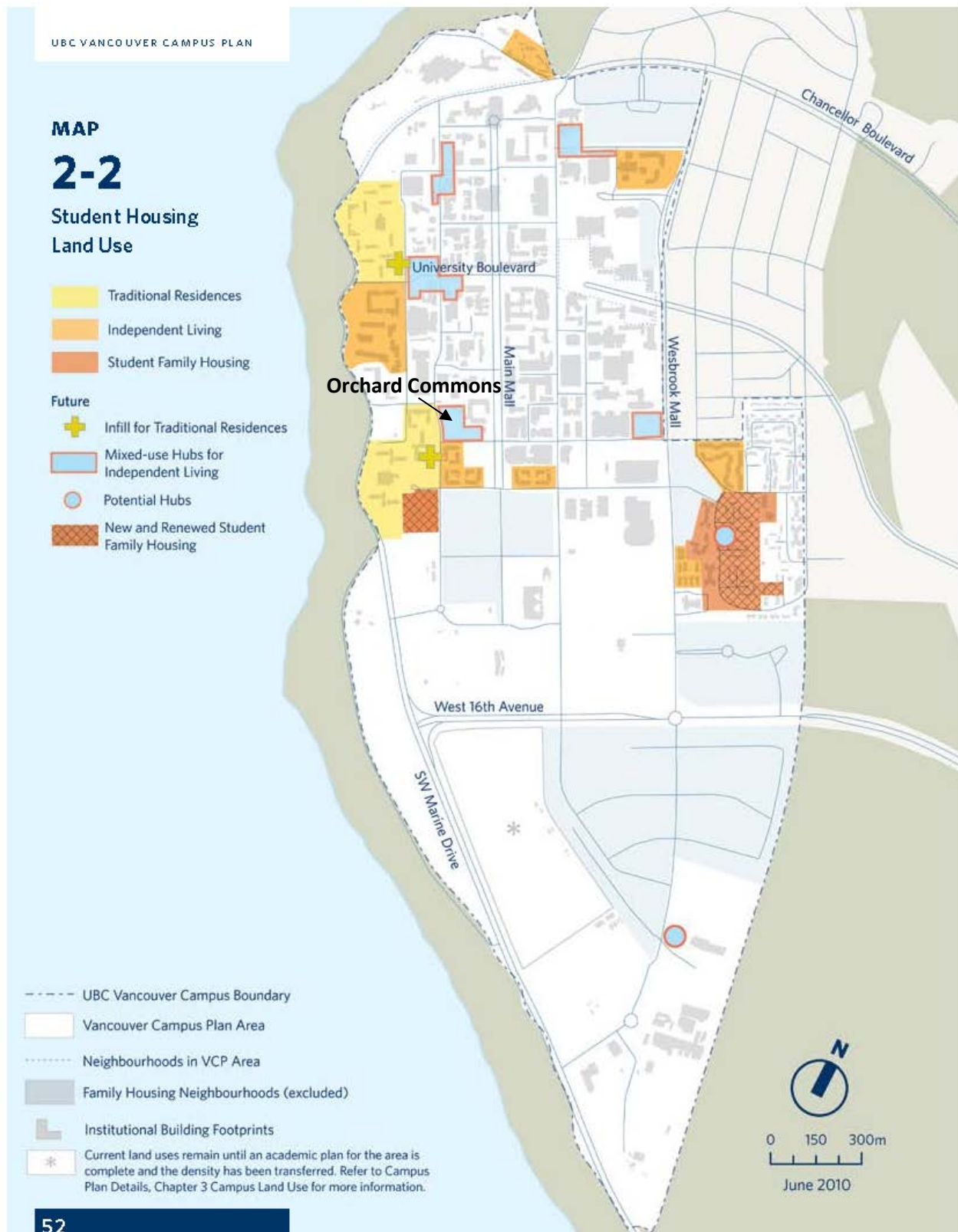
Decision Board 1 Approval
Funding Release: \$700,000

Action / Follow Up Finalize consultant selection. Commence schematic design.

Attachments

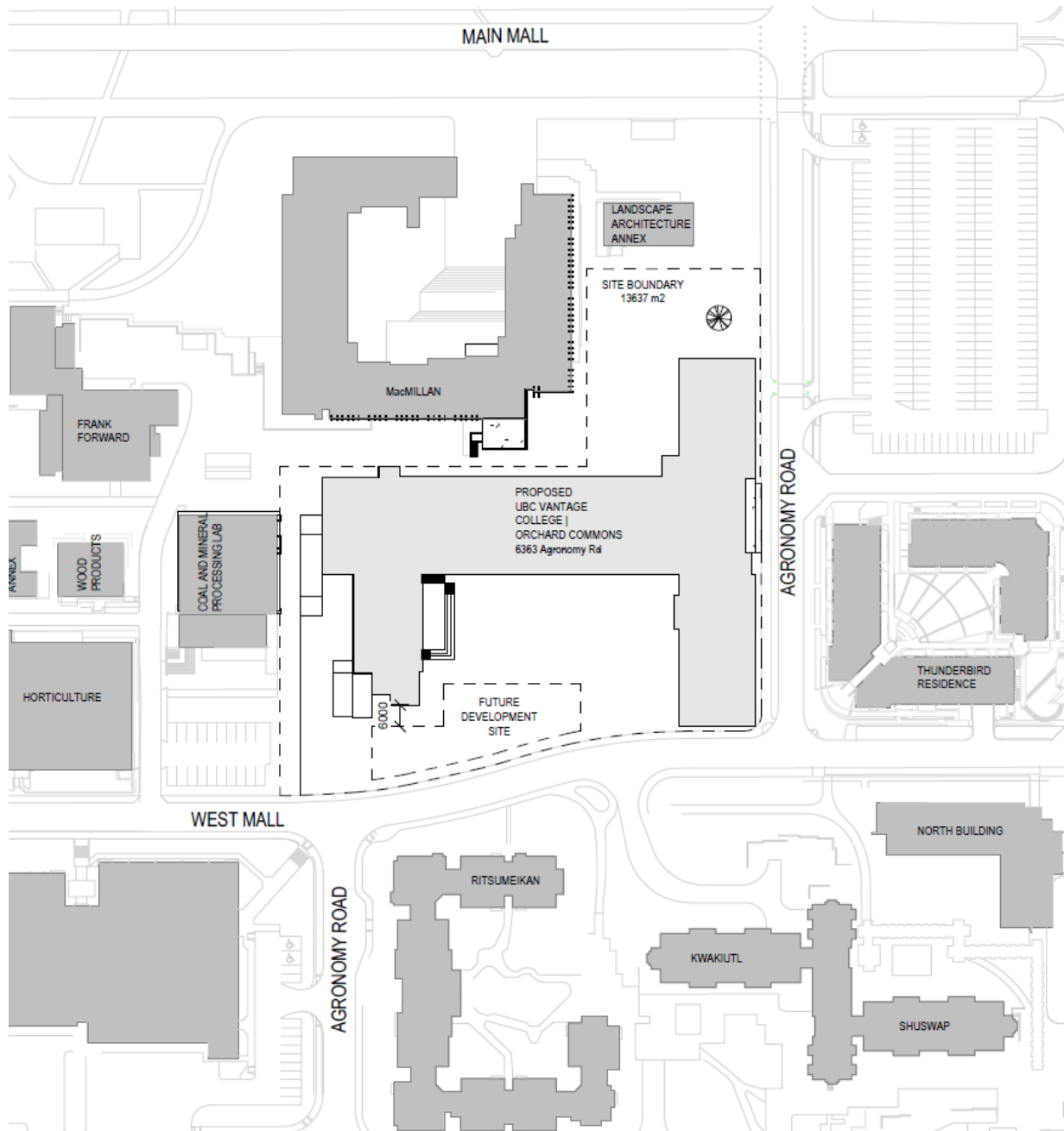
- 1) Map 2-2 from UBC Vancouver Campus Plan Part 2
- 2) Orchard Commons Site
- 3) Orchard Commons Master Program Summary
- 4) Orchard Commons Schematic Design
- 5) Advisory Urban Design Panel Meeting Notes (Dec. 5, 2013) Re: Orchard Commons
- 6) Orchard Commons Capital Budget Detail
- 7) Orchard Commons / SHHS Operating Budget Summary
- 8) UBC Vantage College Operating Budget Summary
- 9) Capital Project Accountability Scope & Planning
- 10) Capital Project Accountability Budget & Funding

Attachment 1 – Campus Plan Map 2-2



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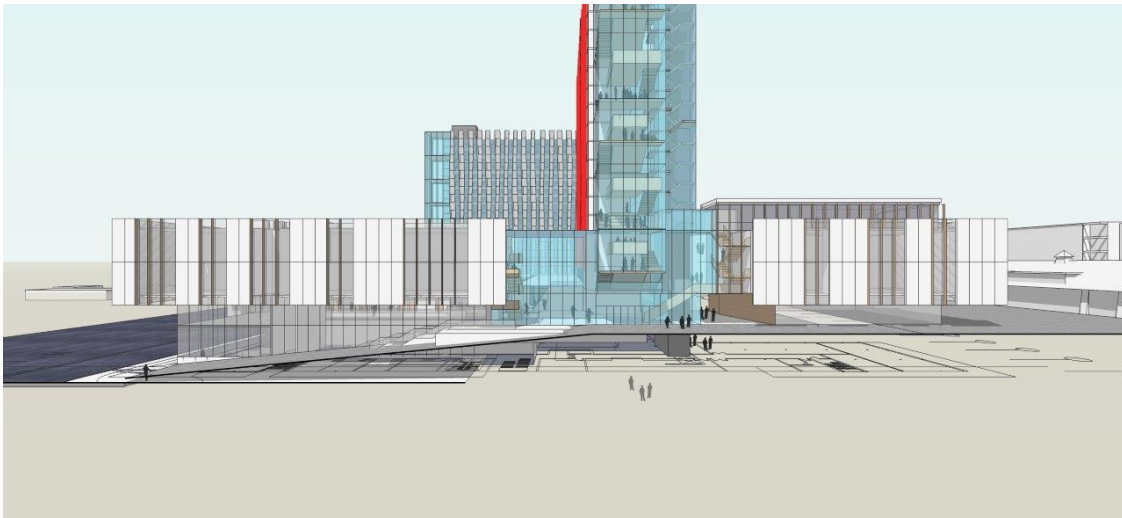
Attachment 2 – Orchard Commons Site



Attachment 3 – Orchard Commons Master Program Summary**ORCHARD COMMONS FUNCTIONAL PROGRAM: TOTAL AREA SUMMARY**

TOTAL AREA	NSM	NSF	GSM	GSF
ORCHARD COMMONS: STUDENT HOUSING & SUPPORT				
1 .0 Student Housing Units	17,813.0	191,733	27,374	294,650
2 .0 Housing Support Areas	2,539.0	27,333	3,902	42,005
3 .0 Building Support (SHHS)	222.0	2,390	311	3,345
TOTAL STUDENT HOUSING & SUPPORT	20,574.0	221,456	31,587	340,000
ORCHARD COMMONS: COMMONS BLOCK				
4 .0 Residence Support Facilities	349.0	3,756	558	6,010
5 .0 Dining & Event Facilities	2,037.0	21,923	2,546	27,403
6 .0 Common-Use Facilities	1,370.0	14,746	2,014	21,677
7 .0 Building Support (Shared)	151.0	1,625	211	2,275
TOTAL COMMON AREAS	3,907.0	42,050	5,329	57,365
ORCHARD COMMONS: UBC VANTAGE COLLEGE				
8 .0 Teaching Spaces	1,962.0	21,113	3,236	34,837
9 .0 Office Spaces	957.0	10,303	1,531	16,484
TOTAL INTERNATIONAL PROGRAM	2,919.0	31,416	4,767	51,321
TOTAL	27,400.0	294,922	41,683	448,686

Attachment 4 – Orchard Commons Schematic Design



Attachment 5 – Advisory Urban Design Panel Meeting Notes (Dec. 5, 2013) Re: Orchard Commons

Advisory Urban Design Panel (AUDP) reviewed the application on December 5, 2013. It supported the schematic design on the condition of a report back to the Panel with revisions that:

- allow the students from the north tower to exit out directly into the main public areas of the outdoor commons;
- ensure the north tower can receive the future infill building that will abut it to the west;
- screen the loading bay area from West Mall;
- effectively manage solar gain throughout the project;
- include an interim landscape design for the future infill building site; and
- augment sunlight access to the daycare openspace.

Staff are confident that they can work with the design team to address these outstanding issues to the Design Panel's satisfaction.

In addition, the application needs to adequately address the following sustainability goals that were set out in projects Design Brief:

- complete an interactive energy modeling charrette and the Sustainability Process Report to document how the Design Brief goals will be met and tracked through the project design, construction and post occupancy analysis (Board 4 report).
- reduce the amount of glazing in the public areas and student lounges. The emphasis on transparency, daylight and views are important design elements, however they need to be carefully balanced with sufficient solid wall to produce a high performance envelope and achieve the project energy targets.
- Related to this, the application needs to clarify the extent and type of solar shading, important in reducing the energy load and ensuring occupant comfort.

Project Cost Estimate

Orchard Commons - Submitted for Board 1 (Re-submitted with no change for Board 2)
07-May-13

1048 Beds
324 Gross Area per Bed

6010

		Orchard		Residential		Dining/Lobby		Common Use		Childcare		Bldg Support		Vantage College		Public Realm		Total
		448,686	Percent	Cost/SF	340,000	76%	33,413	7%	18,077	4%	3,600	1%	2,275	1%	51,321	11%	-	448,686
Construction	Construction (includes GC's and CM Fee)	\$ 90,725,000	72%	\$ 202.2	\$ 58,500,000	\$ 172	\$ 10,000,000	\$ 299	\$ 5,500,000	\$ 304	\$ 1,200,000	\$ 333	\$ 525,000	\$ 231	\$ 15,000,000	\$ 292		\$ 90,725,000
	Project Contingency	\$ 3,634,000	3%	\$ 8.1	\$ 2,753,730	\$ 8	\$ 270,619	\$ 8	\$ 146,409	\$ 8	\$ 29,157	\$ 8	\$ 18,426	\$ 8	\$ 415,659	\$ 8		\$ 3,634,000
Cash Allowances	Public Realm Allowance	\$ 1,000,000	1%	\$ 2.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ 1,000,000
	Site Servicing Allowance	\$ 2,000,000	2%	\$ 3.0	\$ 1,515,536	\$ 4	\$ 148,937	\$ 4	\$ 80,578	\$ 4	\$ 16,047	\$ 4	\$ 10,141	\$ 4	\$ 228,761	\$ 4		\$ 2,000,000
	Demolition Allowance	\$ 202,000	0%	\$ 0.4	\$ 153,069	\$ 0	\$ 15,043	\$ 0	\$ 8,138	\$ 0	\$ 1,621	\$ 0	\$ 1,024	\$ 0	\$ 23,105	\$ 0		\$ 202,000
	Replacement Space Cash Allowance	\$ 1,818,000	1%	\$ 4.1	\$ 1,377,623	\$ 4	\$ 135,384	\$ 4	\$ 73,245	\$ 4	\$ 14,587	\$ 4	\$ 9,218	\$ 4	\$ 207,944	\$ 4		\$ 1,818,000
	Escalation	\$ -	0%	\$ -														
	Kitchen Equipment	\$ 1,919,000	2%	\$ 4.3			\$ 1,919,000	\$ 57										\$ 1,919,000
	FF&E	\$ 3,636,000	3%	\$ 8.1	\$ 2,755,245	\$ 8	\$ 270,768	\$ 8	\$ 146,490	\$ 8	\$ 29,173	\$ 8	\$ 18,436	\$ 8	\$ 415,888	\$ 8		\$ 3,636,000
	UBC IT and Secure Access	\$ 1,768,000	1%	\$ 3.9	\$ 1,339,734	\$ 4	\$ 131,660	\$ 4	\$ 71,231	\$ 4	\$ 14,185	\$ 4	\$ 8,964	\$ 4	\$ 202,225	\$ 4		\$ 1,768,000
	Audio Visual	\$ 1,414,000	1%	\$ 3.2	\$ 141,400	10%	\$ 141,400	10%							\$ 1,131,200	80%		\$ 1,414,000
				\$ -														
Soft Costs	Consultant Budget	\$ 5,455,000	4%	\$ 12.2	\$ 4,133,626	\$ 12	\$ 406,226	\$ 12	\$ 219,775	\$ 12	\$ 43,768	\$ 12	\$ 27,659	\$ 12	\$ 623,946	\$ 12		\$ 5,455,000
	Project Management	\$ 2,879,000	2%	\$ 6.4	\$ 2,181,615	\$ 6	\$ 214,395	\$ 6	\$ 115,991	\$ 6	\$ 23,099	\$ 6	\$ 14,598	\$ 6	\$ 329,302	\$ 6		\$ 2,879,000
	Moving / Commission / Inspections	\$ 455,000	0%	\$ 1.0	\$ 344,785	\$ 1	\$ 33,883	\$ 1	\$ 18,331	\$ 1	\$ 3,651	\$ 1	\$ 2,307	\$ 1	\$ 52,043	\$ 1		\$ 455,000
	IIC, Permits, PO Charges, Insurance and Legal	\$ 3,132,000	2%	\$ 7.0	\$ 2,373,330	\$ 7	\$ 233,236	\$ 7	\$ 126,184	\$ 7	\$ 25,129	\$ 7	\$ 15,880	\$ 7	\$ 358,240	\$ 7		\$ 3,132,000
Building Subtotal		\$ 120,037,000	95%	\$ 267.5	\$ 77,569,693	\$ 228	\$ 13,920,550	\$ 417	\$ 6,506,373	\$ 360	\$ 1,400,417	\$ 389	\$ 651,653	\$ 286	\$ 18,988,314	\$ 370	\$ 1,000,000	\$ 120,037,000
GST (UBC Cost Value)		1.67%	\$ 1,897,000	2%	\$ 1,437,486	\$ 4	\$ 141,267	\$ 4	\$ 76,428	\$ 4	\$ 15,220	\$ 4	\$ 9,618	\$ 4	\$ 216,980	\$ 4		\$ 1,897,000
Project Total		\$ 121,934,000	97%	\$ 271.8	\$ 79,007,179		\$ 14,061,817	\$ 421	\$ 6,582,801	\$ 364	\$ 1,415,638	\$ 393	\$ 661,271	\$ 291	\$ 19,205,295	\$ 374	\$ 1,000,000	\$ 120,518,362
Retained Risk		\$ 908,500	1%	\$ 2.0	\$ 688,432	\$ 2	\$ 67,655	\$ 2	\$ 36,602	\$ 2	\$ 7,289	\$ 2	\$ 4,606	\$ 2	\$ 103,915	\$ 2		\$ 908,500
Finance Charges by UBC		\$ 3,031,000	2%	\$ 6.8	\$ 2,296,796	\$ 7	\$ 225,714	\$ 7	\$ 122,115	\$ 7	\$ 24,319	\$ 7	\$ 15,368	\$ 7	\$ 346,688	\$ 7		\$ 3,031,000
Project Sub Total		\$ 125,873,500	100%	\$ 280.5	\$ 81,992,407	\$ 241	\$ 14,355,186	\$ 430	\$ 6,741,518	\$ 373	\$ 1,447,246	\$ 402	\$ 681,246	\$ 299	\$ 19,655,897	\$ 383	\$ 1,000,000	\$ 125,873,500
					65.1%		11.4%		5.4%		1.1%		0.5%		15.6%			

Construction Cost per Bed	\$ 55,821	
Residential Cost per Bed	\$ 78,237	* Comparable to Totem Infill
Residential Plus Dining Hall per Bed	\$ 91,935	

SHHS Application	
\$ 81,992,407	Residential
\$ 14,355,186	Dining Hall
\$ 1,447,246	Childcare
\$ 4,453,658	Common Amenities 60%
\$ 102,248,497	TOTAL FUNDING COMMITMENT BY SHHS

Vantage College Application	
\$ 19,655,897	Academic
\$ 2,969,106	Common Amenities 40%
\$ 22,625,003	TOTAL FUNDING COMMITMENT BY VC

\$ 1,000,000	TOTAL FUNDING COMMITMENT BY IIC - PUBLIC REALM
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Space Use	Funding Source		SHHS		International College		IIC		Total
			\$	%	\$	%	\$	%	\$
Student Residences			\$81,992,410	100%					\$81,992,410
Dining & Events Facilities			\$14,355,190	100%					\$14,355,190
Child Care			\$1,447,250	100%					\$1,447,250
Common-Use Facilities			\$4,044,910	60%	\$2,696,610	40%			\$6,741,520
Building Support Facilities			\$408,740	60%	\$272,500	40%			\$681,240
International College					\$19,665,890	100%			\$19,665,890
Public Realm							\$1,000,000	100%	\$1,000,000
Total Project Cost			\$102,248,500	81.2%	\$22,635,000	18.0%	\$1,000,000	0.8%	\$125,883,500

Total Bed Count 1,048
Residence Cost/Bed \$78,237 Nearest comparison is Totem In-Fill at \$72,000/bed
Residence + Dining Hall Cost/Bed \$91,935 Nearest comparison is Marine Drive Phase 2 at \$96,000/bed

Space Type	Project Cost	
Student Residences	\$81,992,410	\$ 81,992,407
Dining & Events Facilities	\$14,355,190	\$ 14,355,186
Child Care	\$1,447,250	\$ 1,447,246
Common-Use Facilities	\$6,741,520	\$ 6,741,518
Building Support Facilities	\$681,240	\$ 681,246
International College	\$19,665,890	\$ 19,655,897
Public Realm	\$1,000,000	\$ 1,000,000
Total Project Cost	\$125,883,500	\$ 125,873,500

	Total	\$/SF
Construction Costs		
Construction	\$90,725,000	\$202
Construction Contingency	\$3,634,000	
Cash Allowances		
Public Realm	\$1,000,000	
Site Servicing	\$2,000,000	
Demolition	\$202,000	
Swing Space Cash	\$1,818,000	
Escalation	\$0	
Kitchen Equipment	\$1,919,000	
FF+E	\$3,636,000	
UBC IT and Secure Access	\$1,768,000	
Audio Visual	\$1,414,000	
Soft Costs		
Consultant Budget	\$5,455,000	
Project Management	\$2,879,000	
Moving / Commission / Inspections	\$455,000	
IIC, Permits, PO Charges, Insurance and Legal	\$3,132,000	
Building Subtotal	\$120,037,000	\$268
GST	\$1,897,000	
Project Sub-total	\$121,934,000	\$272
Retained Risk	\$908,500	
UBC Finance Charges	\$3,031,000	
Project Total	\$125,873,500	\$281

Attachment 7 – Orchard Commons/SHHS Operating Budget Summary

Showing Breakeven in 2026/27 (Year 11)

	2016/17	2025/26	2026/27
Revenue			
Rental Income ¹	\$8,442,000	\$ 10,088,971	\$ 10,290,751
Meal Plan Income ²	\$6,759,600	\$8,078,348	\$8,239,915
Conferences Income ³	-	\$ -	\$ -
Rental Vacancy @ 1.5%	\$ (126,630)	\$(151,335)	\$(154,361)
Total Revenue	\$15,074,970	\$18,015,985	\$18,376,304
Expenses			
Less Residential Operating Costs @ 40%	\$3,376,800	\$4,035,589	\$4,116,300
Less Food Delivery Costs @ 82%	\$5,542,872	\$6,624,245	\$6,756,730
Less Conferences Operating Costs @ 40%	\$ -	\$ -	\$ -
Total Direct Expenses	\$8,919,672	\$10,659,834	\$10,873,030
Net Operating Income	\$6,155,298	\$7,356,151	\$7,503,274
Debt Service⁴	\$7,475,120	\$7,475,120	\$7,475,120
Total Cash Flow	\$(1,319,822)	\$(118,969)	\$28,154

1 - 12-month academic rental period rate for 1,005 Modified Traditional units is \$700/month in 2016/17. Rental increase is 2% per annum thereafter. Note that 43 of the 1,048 beds are dedicated to Residence Advisors, Residence Coordinators and Residence Life Managers who receive free rent as compensation for the services they provide.

2 - For Year 1 the average Residential Meal Plan price is assumed at \$6450 for the 12-month term (Equivalent to \$4300 for 8-month term). Meal Plan increase is 2% per annum thereafter.

3 - Assumes no summer conference occupancy based on 12 month Vantage College term.

4 - Assumes financing at a net effective rate of 6.15% amortization over 30 years.

The full proforma spreadsheet is provided separately in an MS Excel file.

Attachment 8 – UBC Vantage College Operating Budget

International Program CENTRAL CONTRIBUTION	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
		<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Year 6</i>	<i>Year 7</i>
International Program tuition	n/a	\$9.0	\$18.5	\$31.8	\$32.8	\$33.8	\$34.8	\$35.8
Program Design & Teaching Costs (incl. 1 FTE Curric Mgr)	(\$0.7)	(\$2.8)	(\$5.0)	(\$7.5)	(\$7.6)	(\$7.7)	(\$7.8)	(\$7.9)
Student Financial Aid Contribution (7%)	n/a	(\$0.6)	(\$1.3)	(\$2.2)	(\$2.3)	(\$2.4)	(\$2.4)	(\$2.5)
Recruitment / Marketing (incl. 2 FTE)	(\$0.7)	(\$1.2)	(\$1.8)	(\$1.8)	(\$1.8)	(\$1.8)	(\$1.8)	(\$1.8)
Admissions (incl. 3.7 FTE AOs)	(\$0.4)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)
Student Support Programs (incl. 1 FTE SSP)	(\$0.1)	(\$0.7)	(\$1.4)	(\$1.8)	(\$1.8)	(\$1.8)	(\$1.8)	(\$1.8)
Principal, 2 Directors, Admin Support	(\$0.4)	(\$0.6)	(\$0.6)	(\$0.6)	(\$0.6)	(\$0.6)	(\$0.6)	(\$0.6)
Operational Supplies & Expenses	(\$0.1)	(\$0.2)	(\$0.4)	(\$0.5)	(\$0.6)	(\$0.6)	(\$0.6)	(\$0.6)
Start-up Contribution	\$0.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Orchard Commons Building Operating Costs	n/a	n/a	n/a	(\$0.6)	(\$0.6)	(\$0.6)	(\$0.6)	(\$0.6)
Internal Contingency	n/a	(\$1.4)	(\$1.2)	(\$0.2)	(\$0.2)	(\$0.3)	(\$0.4)	(\$0.6)
University Infrastructure: <i>Chemistry lab reno (Copp), one-time</i>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
University Infrastructure: <i>Orchard Commons*</i>	\$0.0	\$0.0	\$0.0	(\$1.8)	(\$1.8)	(\$1.8)	(\$1.8)	(\$1.8)
University Infrastructure: <i>Global Student Centre (Old SUB)*</i>	\$0.0	\$0.0	\$0.0	(\$3.8)	(\$3.8)	(\$3.8)	(\$3.8)	(\$3.8)
University Infrastructure: <i>Undergrad teaching labs*</i>	\$0.0	\$0.0	\$0.0	\$0.0	(\$3.0)	(\$3.0)	(\$3.0)	(\$3.0)
Re-payment of start-up funding	\$0.0	(\$1.0)	(\$1.0)	n/a	n/a	n/a	n/a	n/a
Contribution to the University as a whole**	<u>\$0.0</u>	<u>\$0.0</u>	<u>(\$5.3)</u>	<u>(\$10.5)</u>	<u>(\$8.2)</u>	<u>(\$8.9)</u>	<u>(\$9.6)</u>	<u>(\$10.3)</u>
TOTAL International Program Costs	(\$2.0)	(\$9.0)	(\$18.5)	(\$31.8)	(\$32.8)	(\$33.8)	(\$34.8)	(\$35.8)
NET International Program INCOME	(\$2.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.0)


*Subject to Board approval

**Includes IT, Library, Utilities, Indirect Costs, etc

Attachment 9 - Capital Project Accountability Scope & Planning

PROJECT NAME			CURRENT APPROVAL STATUS			
Project Name:	Orchard Commons / UBC Vantage College			Level	Approval Date	
Department/Unit:	SHHS, UBC Vantage College		Executive:	3	18-Apr-13	
Sponsor:	L. Cowin, VPS; J. Ridge, Vantage College		Board:	1	4-Jun-13	
PROJECT DESCRIPTION			FUNCTIONAL PROGRAM			
Development Type:	Expansion	Space Type	Net SM	Net SF	Gross SF	
Facility Type:	Mixed Use Student Housing	Student Housing + Supp	20,574	221,456	340,000	
Gross Building Area:	448,686 gsf (41,683 gsm) program	Commons Block	3,907	42,050	57,365	
Capital Cost:	\$125,873,520	Vantage College	2,919	31,416	51,321	
Location/Site:	UBC Vancouver - West Mall & Agronomy	Total	27,400	294,922	448,686	
Primary Users / Tenants:	SHHS, UBC Vantage College					
PROJECT RATIONALE & BENEFITS						
Learning & Research Environment	Learning spaces and writing centre for Vantage College; Integration of domestic and international students					
Student Amenity	Informal learning space, dining hall, end of trip facilities, fitness room, games room, music practice					
Community Amenity	Dining hall, convenience store, activity/events space, daycare					
Other Benefits:	Creation of a sustainable facility for the new Vantage College will help promote UBC's international reputation as a world-class institution that integrates sustainability at all levels, and will aid in recruitment for the new Vantage College program					
SCHEDULE			SUSTAINABILITY GOALS			
		Target	Actual	Indicator	Target	Actual
Board 1		Jun-2013	Jun-2013	Certification:	LEED Gold	
Board 2		Feb-2014		Energy Efficiency Level:	TBD % better than MNECB	
Board 3		Jun-2014		Energy Use Intensity:	111 kWh/m2/yr	
Construction Start		Jul-2014		GHG Reduction:	TBD % better than standard	
Substantial Completion		Jun-2016		Const Waste Recycling	TBC % recycling rate	
Occupancy		Jul-2016		Water Use Efficiency	TBD % better than standard	
Board 4		Jan-2018		Innovative Features:		
DEVELOPMENT PROCESS						
Project Manager	UBC Properties Trust		Construction Manager	Stuart Olson		
Architect	Perkins + Will		Infrastructure Development Rep	Ana Policzer		
	Date	Comments				
AUDP Review	Dec-13					
Dev. Review Committee	Dec-13					
Public Open House	Jan-14					
Development Permit	Feb-14					
Building Permit	Jul-14					
CAMPUS & COMMUNITY PLANNING COMMENTS						

Attachment 10 - Capital Project Accountability Budget & Funding

 PROJECT NAME Project Name: Orchard Commons / UBC Vantage College Department/Unit: SHHS, UBC Vantage College Sponsor: Louise Cowin, VPS; James Ridge, Vantage									
CAPITAL BUDGET (\$000s)				SHHS OPERATING PROFORMA					
Capital Development Cost (Phases 1+2)		\$000s	\$/GSF		2016/17	2025/26	2026/27		
Construction		\$ 90,725	\$ 202	Revenue					
Construction Contingency		\$ 3,634		Rental Income	\$ 8,442,000	\$ 10,088,971	\$ 10,290,751		
Public Realm Allowance		\$ 1,000		Meal Plan Income	\$ 6,759,600	\$ 8,078,348	\$ 8,239,915		
Site Servicing Allowance		\$ 2,000		Conferences Income	-	-	-		
Demolition Allowance		\$ 202		Rental Vacancy @ 1.5%	(126,630)	(151,335)	(154,361)		
Replacement/Relocation Allowance		\$ 1,818		Total Revenue	\$ 15,074,970	\$ 18,015,984	\$ 18,376,304		
Kitchen Equipment		\$ 1,919		Expenses					
FF&E		\$ 3,636		Res Op Costs @ 40%	\$ 3,376,800	\$ 4,035,589	\$ 4,116,300		
UBC IT and Secure Access		\$ 1,768		Food Delivery Costs @ 8%	\$ 5,542,872	\$ 6,624,245	\$ 6,756,730		
Audio Visual		\$ 1,414		Conf Op Costs @ 40%	\$ -	\$ -	\$ -		
Design Consultant Budget		\$ 5,455		Total Direct Expenses	\$ 8,919,672	\$ 10,659,834	\$ 10,873,030		
Project Management		\$ 2,879		Net Operating Income	\$ 6,155,298	\$ 7,356,150	\$ 7,503,274		
Moving / Commissioning / Inspections		\$ 455		Debt Service	7,475,120	7,475,120	7,475,120		
IBC, Permits, BO Charges, Insurance & Legal		\$ 3,132		Total Cash Flow	\$ (1,319,822)	\$ (118,970)	\$ 28,154		
GST (1.67%)		\$ 1,897		Operating Budget Notes:	SHHS is cashflow positive starting in Year 11.				
Subtotal		\$ 121,934	\$ 272						
Retained Risk		\$ 909							
Construction Period Financing Cost		\$ 3,031							
Total Project Budget		\$ 125,874	\$ 281						
Capital Budget Notes:		Assumes 1,048 beds 448,686 gsf							
FUNDING AGREEMENTS (\$000s)				FINANCING AGREEMENTS (\$000s)					
Funding Source	Liability with:	Committed	Secured*	Debt Serviced By:	Loan Amt	Amort.	Int.	Ann. Payment	
SHHE	SHHS	\$ 102,249		See financing structure outline in report.					
UBC Vantage College	Vantage College	\$ 22,625							
ICs		\$ 1,000	\$ 1,000						
Total		\$ 125,874	\$ 1,000	Total	\$ -			\$ -	
* Funding paid or firmly committed to be paid before end of construction									
Funding Notes:		On-going revenues from Vantage College and student housing will support the necessary debt financing for the project.		Debt Capacity Impact:		Endowment to provide \$100m in financing, with balance from working capital. Sufficient liquidity is available for the loan from working capital.			
PROJECT REQUIREMENTS CHECKLIST & SIGN-OFF									
CHECK	REQUIREMENT	NAME	SIGNATURE	DATE					
	Academic program need and benefit	UBC Vantage College Principal	James Ridge	7-May-13					
	Housing, food service, daycare program need and benefit	Student Housing & Hospitality Services Managing Director	Andrew Parr	7-May-13					
	Project scope and budget	Infrastructure Development Managing Director	John Metras	6-May-13					
	Project site Development review process Sustainability measures	Campus & Community Planning Associate Vice President	Nancy Knight (per Joe Stott)	8-May-13					
	Funding & financing agreements Debt capacity	Treasury Treasurer	Peter Smailes	8-May-13					
	Fundraising plan	Development Office AVP, Development Services	Not applicable						
	Life-cycle operating costs	Student Housing & Hospitality Services Managing Director	Andrew Parr	7-May-13					
ATTACHMENTS									