

TO: University Affairs Board
FROM: John Bisanti
FOR: Meeting of April 30, 2002
DATE: April 23, 2002

ITEM IDENTIFICATION:

- **Capital Project - University College Residence**

SPONSOR:

- John Bisanti,
Chief Capital Projects Officer
Call 978-4322 for further information

JURISDICTIONAL INFORMATION:

Basis of Board's Jurisdiction

- Under the terms of reference and the Policy on Capital Planning and Capital Projects, the University Affairs Board is responsible for monitoring campus and student services. This includes level of service offered and providing advice to Governing Council on capital projects affecting student services.

PREVIOUS ACTION TAKEN

- The Project Planning Report for the University College Residence was submitted to the Planning & Budget Committee on April 8, 2002. The Committee recommended approval to the Academic Board on April 16, 2002.

HIGHLIGHTS

- The practice of the University of Toronto to guarantee residences for all 1st Year students requesting to live on campus requires the development of additional student housing. This capital project addresses the University's needs for new residences.
- The demand for residence places at the University of Toronto, especially places for 1st Year students, has grown steadily over the last few years. University College has the most critical need for student housing of all colleges on the St. George campus. It currently can only house 12% of its students. This compares unfavourably with similar colleges, notably Victoria, St. Michael's and Trinity, where the corresponding numbers are 24%, 24% and 36% respectively.
- University College's current residences - Whitney Hall and the Sir Daniel Wilson residence - together house approximately 450 students. The Project Committee has recommended the construction of 312 new residence places for undergraduate students, a number of which will bring the housing capacity at the College to slightly fewer than 20% of the College's full-time equivalent enrolment. In addition to student residence beds, the space program calls for two short-stay rooms, five dons suites and a Residence Life-Coordinator apartment.
- The current building site and design is to add a north/south wing to complete the eastern edge of the Sir Daniel Wilson residence quadrangle and also use an approved building site (Site 22). The Sir Daniel Wilson residence quadrangle is currently zoned UOS (University Open Space) in the City of Toronto zoning by-laws and as such will require rezoning before any building may occur on this site. Because of the sensitive nature of the University College Precinct lands, the College has been committed to examining all siting possibilities and considers that the current choice best meets UC needs and recognizes the historically sensitive position the College plays on the St. George campus. Numerous town hall meetings have taken place. College Council has unanimously approved both the need for residence and the current location and the University College Alumni Association and University College Committee have both unanimously recognized the need for a residence and support the location.
- The target date for completion is June 2004.

FINANCIAL IMPLICATIONS

- **Cost Estimate:**
The project is estimated to cost \$31.1 million.
- **Funding Sources**
Of the required \$31.100 million, \$6.685 million will be secured from University College donations in the amount of \$3.000 million, from University College Departmental contributions (derived from residence and food service operations) totalling \$2.385 million, and a contribution from the University Infrastructure Investment Fund in the amount of \$1.3 million directed to support the Drama Studies requirement of the project. The balance of approximately \$24.407 million required for the expansion program will be funded by a 25-year mortgage repaid from residence fees. There will be an increase in all residence fees to achieve this plan: 8% for 3 years and then adjusted annually to carry the cost of the construction and operation of the residence. This financial model has been reviewed by the Financial Services Department and is financially viable based on the assumptions it contains. These assumptions are:
 1. Implicit in the Planning & Budget Committee approval is the understanding that residence rates will be increased each year by no less than the percentages projected here in order to maintain the financial viability of the residence operation.
 2. In the event that the total project cost increased by \$2.0 million, the additional net revenues required to maintain the established financial targets would be \$195,000 per annum.
 3. The financial model is dependent on UC raising the necessary funds. Definition of the project and the approval of the project within the Governance of the University will certainly bring considerable focus and opportunity to raise the additional support required as defined within the financial model.

RECOMMENDATION:

THAT the University Affairs Board concur with the prospective recommendations of the Academic Board:

Subject to the understanding that the rates of the University College Residence Ancillary Operation will be increased sufficiently to ensure that the operation recovers its own cost,

- THAT the Project Planning Report for the University College Residence Expansion be approved in principle.
- THAT the project scope totalling some 10,708 gross square meters, allowing for the addition of a north/south wing to complete the eastern edge of the Sir Daniel Wilson residence quadrangle, and using an approved building site (Site 22) and an area currently zoned University Open Space requiring municipal approvals be approved.
- THAT the project cost of \$31,100 million be approved, with the funding sources as follows:
 - i. Donation from University College of \$3.0 million
 - ii. University College ancillary operation allocation of \$2.385 million
 - iii. University Infrastructure Investment Fund of \$1.3 million
 - iv. Financing in the amount of \$24.407 million to be repaid from residence fees over a 25 year amortization period.



UNIVERSITY OF TORONTO

Office of the Vice-Provost, Space & Facilities Planning

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April 8th, 2002.

MEMORANDUM

To: Planning and Budget Committee

From: Ron Venter, Vice-Provost, Space and Facilities Planning

Re: Project Planning Report for the University College Residence.

Item Identification

Project Planning Report for the University College Residence

Sponsor

Ron Venter, Vice-Provost, Space and Facilities Planning

Jurisdictional Information

The Committee considers reports of the Project Committee and recommends to the Academic Board approval in principle of projects.

Highlights

The demand for residence places at the University of Toronto, especially places for first year students, has grown steadily over the last few years. University College has the most critical need for student housing of all colleges on the St. George campus. It currently can only house 12% of its students. This compares unfavorably with similar colleges notably Victoria, St. Michael's and Trinity where the corresponding numbers are 24%, 24% and 36% respectively.

University College's current residences – Whitney Hall and the Sir Daniel Wilson residence – together house approximately 450 students. The Project Committee has recommended the construction of 312 new residence places for undergraduate students, a number which will bring the housing capacity at the College to slightly fewer than 20% of the College's full-time equivalent enrolment. In addition to student residence beds, the space program calls for two short-stay rooms, five dons suites and a Residence Life-Coordinator apartment.

In January 2000 a Project Committee [Users' Committee] was established. The Principal of University College chaired this Project Committee composed of students, faculty and staff. Key alumni also formed an informal advisory group to the Principal. Over the past two years the College has examined a number of potential building sites. These have included the western edge of the back campus and the current choice, i.e. adding a north/south wing to complete the eastern edge of the Sir Daniel Wilson residence quadrangle and also using an approved building site (Site 22). The Sir Daniel Wilson residence quadrangle is currently zoned UOS (University Open Space) in the City of Toronto zoning by-laws and as such will require re-zoning before any building may occur on this site. Because of the sensitive nature of the University College precinct lands, the College has been committed to examining all siting possibilities and considers that the current choice best meets UC needs and recognizes the historically sensitive position the College plays on the St. George campus. Numerous town hall meetings have taken place. College Council has unanimously approved both the need for residence and the current location

and the University College Alumni Association and University College Committee have both unanimously recognized the need for a residence and support the location.

The new residence wings will be built in a modified dormitory style, with washrooms and small common kitchens shared by “clusters” of single student bedrooms. Two bedrooms will be fully accessible, and the layout of all spaces will incorporate the principles of universal design. Additionally, to reduce costs to students, common space will be designed to have multi-purpose use. Increasing the residential capacity at University College will occur in two phases: in phase one, the College’s residence and dining facilities will be expanded; then, in phase two older facilities will be temporarily taken out of use for renovation and refurbishing. This Report deals with the first phase of the proposed residential development; phase two will be included as part of the College’s long-range planning for the capital renewal of its residence ancillary.

The design and detailing of the new residence will be of a good quality, particularly in its exterior finishes; it will be compatible with the historic buildings that surround it and will reflect their collegiate character. Site planning for the residence expansion program at University College anticipates the new residence wings will allow the creation of newly defined and improved green spaces within the University College precinct of the St. George campus.

Part of the addition to the Sir Daniel Wilson residence will eliminate the surface parking from Site 22, thereby allowing the creation of an improved east-west pedestrian walkway and sight lines connecting the Back Campus to St. George Street, adjacent to the University College Union building. The total number of parking spaces that will be lost from this site is 28; this change in parking spaces and location thereof will need to be considered within the parking ancillary of the University. The existing sunken rose garden south of the UC Union will be re-located and incorporated into the over-all University College landscape plan. In addition, a pedestrian loggia is suggested along one side of the new n/s wing to provide additional covered amenity along one of the most heavily trafficked pedestrian routes through the site.

Under the Policy on Capital Planning and Capital Projects, the Project Committee will continue through the implementation phase. The Working Executive of the Project Committee will comprise the lead User, a Planner and Implementer all of whom have been intimately associated with the project definition since its inception; this membership is:

User: Principal Paul Perron
Planner: Jennifer Adams
Implementer: Julian Binks

This Working Executive will expand to include a Project Manager, possibly external to the University. The role of the Working Executive is to ensure the successful completion of the project and to ensure that the user needs and concepts introduced into the Project Planning Report are addressed throughout the process of design and implementation which are carried out under the direction of the Chief Capital Projects Officer. It should also be noted, with this approval, that the architectural firm of A.J. Diamond Donald Schmitt and Company has been extensively consulted during the exploration of the current proposed siting for the UC Residence Expansion. It is therefore possible that A.J. Diamond Donald Schmitt and Company could be appointed as the consultants to develop the detailed design the UC Residence Expansion, however no formal commitment to secure their services has been made at this time.

Resource Implications

The space program for the UC Residence Expansion totals 10,708 gross square metres [GSM]. The major elements of the construction comprising 8,950 GSM for the residence, 1,140 GSM for the Dining Hall facilities and 650 GSM to accommodate the Drama Studies programs with

University College. The estimated cost of construction, including all furnishings and finance costs for 30 months (the length of time allowed for design and construction), is \$31.100 million.

Funding Sources

Of the required \$31.100 million, \$6.685 million will be secured from University College donations in the amount of \$3.000 million, from University College Departmental contributions [derived from residence & food service operations] totaling \$2.385 million and a contribution from the University Infrastructure Investment Fund [UIIF] directed to support the Drama Studies requirement of the project. The balance of approximately \$24.407 million, required for this expansion program, will be funded by a 25 year mortgage repaid from residence fees. There will be an increase in all residence fees to achieve this plan: 8% per year for 3 years and then adjusted annually to carry the cost of the construction and operation of the residence. This financial model has been reviewed by the Financial Services Department and is financially viable based on the assumptions it contains.

Included in the Project Committee Report is a review the UC Residence Expansion prepared by Financial Services [Appendix: Revenue and Expense Plan]. This material provides some assessment into the sensitivity and risk analyses and specifically draws attention to:

1. Implicit in the Planning and Budget Committee approval is the understanding that residence rates will be increased each year by no less than the percentages projected here in order to maintain the financial viability of the residence operation, and
2. In the event that the total project cost increased by \$2.0 million, the additional net revenues required to maintain the established financial targets would be \$195,000 per annum.
3. The financial model is dependent on UC raising the necessary funds. Definition of the project and the approval of the project within the Governance of the University will certainly bring considerable focus and opportunity to raise the additional support required as defined within the financial model. UC will be making every effort to secure all funds to secure the success of the project; this support is essential.

Recommendations

That the Planning and Budget Committee recommend to the Academic Board:

1. THAT the Project Planning Report for the University College Residence Expansion be approved in principle;
2. THAT the project scope totaling some 10,708 gross square metres, allowing for the addition of a north/south wing to complete the eastern edge of the Sir Daniel Wilson residence quadrangle, and using an approved building site (Site 22) and an area currently zoned University Open Space requiring municipal approvals be approved; and,
3. THAT the project cost of \$31.100 million be approved, with the funding sources as follows:
 - (i) Donation from University College of \$3.0 million,
 - (ii) University College ancillary operation allocation of \$2.385 million,
 - (iii) University Infrastructure Investment Fund [UIIF] of \$1.3 million, and
 - (iv) Financing in the amount of \$24.407 million to be repaid from residence fees over a 25 year amortization period.

**UNIVERSITY COLLEGE RESIDENCE EXPANSION
REPORT OF THE PROJECT COMMITTEE**

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EXECUTIVE SUMMARY

The demand for residence places at the University of Toronto, especially places for first year students, has grown steadily over the last few years. To cope with this growth, *Expanding Residence Capacity at the University of Toronto*, which was developed from the *Raising Our Sights* companion document *Student Housing: A Plan for the Next Phase*, called for the addition of 1935 places for undergraduate students at the colleges on the St. George campus.

University College is the founding college of the University of Toronto and as such plays a special role in the life of the University. It has a proud history of openness and diversity. UC alumni can be found among the leaders nationally and internationally in business, the arts, politics and academia. The development of additional residence spaces is a critical component of the current UC plan. In order to maintain its role as a leader in undergraduate education and attract and retain the best students, the College must have adequate housing facilities.

University College has the most critical need for student housing of all colleges on the St. George campus. It currently can only house 12% of its students. This compares unfavorably with similar colleges, Victoria (24%), St. Michael's (24%) and Trinity (36%), and consequences of this includes displacement of 2nd, 3rd and 4th year students, little housing for exchange, transfer or international students and most critically, diluting its ability to recruit and retain the best and brightest students.

University College's current residences – Whitney Hall and the Sir Daniel Wilson residence – together house approximately 450 students. Based on the guideline in *Student Housing: A Plan for the Next Phase* that the University should have the capacity to house ~25% of its student population, University College's residential capacity should be approximately 900 places. The Project Committee has recommended the construction of 304 new residence places for undergraduate students, a number which will bring the housing capacity at the College to approximately 20% of the College's full-time equivalent enrolment. In addition to student residence beds, the space program calls for two short-stay rooms, five dons suites and a Residence Life Coordinator apartment. Thus, the expansion program calls for the addition of 312 places to the College's housing stock.

In January 2000, the Principal of University College brought together a Project Committee composed of students, faculty and staff. Key alumni have also formed an informal advisory group to the Principal. Over the past two years the College has examined a number of potential building sites. These have included the western edge of the back campus and the current choice: adding a north/south wing to complete the eastern edge of the Sir Daniel Wilson residence quadrangle and using an approved building site (Site 22). The Sir Daniel Wilson quadrangle is currently zoned UOS (University open space) in the City of Toronto zoning by-laws and as such will require re-zoning before any building may occur on this site. Because of the sensitive nature of the University College precinct lands, the College has been committed to examining all siting possibilities and feels the current choice best meets UC needs and recognizes the historically sensitive position the College plays on the St. George campus. Numerous town hall meetings have taken place. College Council has unanimously approved both the need for residence and the current location and the University College Alumni Association and University College

Committee have both unanimously recognized the need for a residence and support the location.

The new residence wings will be built in a modified dormitory style, with washrooms and small common kitchens shared by “clusters” of single student bedrooms. Two bedrooms will be fully accessible, and the layout of all spaces will incorporate the principles of universal design.

Students will be grouped into 5 vertical “houses” of approximately 60 persons; each house will have a common room assigned to it. Two television rooms, a music room, a meeting room, two short-term stay rooms, and an updated existing laundry facility will be shared by all students. As much as possible, in order to reduce costs to students, common space will be designed to have multi-purpose use.

The new residence places will house a mix of first-year and upper-year students. Careful attention will be paid to security issues, especially in light of the expected lower age of direct-entry students as a result of the elimination of Grade 13 in Ontario. Increasing the residential capacity at University College will occur in two phases: in phase one, the College’s residence and dining facilities will be expanded; then, in phase two older facilities will be temporarily taken out of use for renovation and refurbishing.

This Report deals with the first phase of the proposed residential development; phase two will be included as part of the College’s long-range planning for the capital renewal of its residence ancillary.

The design and detailing of the new residence will be of a good quality, particularly in its exterior finishes; it will be compatible with the historic buildings that surround it and will reflect their collegiate character.

Site planning for the residence expansion program at University College anticipates the new residence wings will allow the creation of newly defined and improved green spaces within the University College precinct of the St. George campus.

Part of the addition to the Sir Daniel Wilson residence will eliminate the surface parking from Site 22, thereby allowing the creation of an improved east-west pedestrian walkway and sight lines connecting the Back Campus to St. George Street adjacent to the University College Union building. The existing sunken rose garden south of the UC Union will be re-located and incorporated into the over-all University College landscape plan. In addition, a pedestrian loggia is suggested along one side of the new n/s wing to provide additional covered amenity along one of the most heavily trafficked pedestrian routes through the site.

The space program for the residence expansion totals 6,088 net assignable square meters (10,708 gross square metres). The estimated cost of construction, including all furnishings and finance costs for 30 months (the length of time allowed for design and construction), is \$31.1 million. Of the required \$31.1 million, \$6.685 million will be secured from UC donations in the amount of \$3.00 million, from UC Departmental contributions totaling \$2.385 million and a contribution from the University Infrastructure Investment Fund [UIIF] of \$1.300 that will be directed to partially support the Drama Studies and the Substation requirements of the project. The balance of approximately \$24.407million, required for this expansion program, will be funded by a 25

year mortgage repaid from residence fees. There will be an increase in all residence fees to achieve this plan: 8% per year for 3 years and then adjusted annually to carry the cost of the construction and operation of the residence. This financial model has been investigated and approved by the Financial Services Department and conforms to University policy guidelines.

UNIVERSITY COLLEGE RESIDENCE EXPANSION: REPORT OF THE PROJECT COMMITTEE

I COMMITTEE MEMBERSHIP

Professor Paul Perron, Principal University College, Chair of UC Users Committee
Ms. Katherine Anne Boyd, Chief Administrative Officer, University College
Ms. Lyndsey Andersen, President, University College Residence Council (2001-02)
Ms. Agata Durkalcc, 3rd year biology, Peacc and Conflict Studies, residence user member of SAC. (2001-02)
Ms. Jessie Thomson, 3rd year Peace and Conflict student, member of Lit. (2001-02)
Mr. Sean Mullin, 3rd year computer science student, Lit, SAC member. (2001-02)
Ms. Jana Luker, Dean of Students, University College
Professor Sylvia Bashvekin, University College (2001-02)
Ms. Tillie Shuster, Executive Director, Alumni & Development, University College
Mr. Juan Su, President, University College Literary and Athletic Society (2001-02)
Professor Ron Venter, Vice Provost, Space and Facilities Planning
Mr. Julian Binks, Manager, Project Planning, PMDC
Ms. Jennifer Adams, Campus and Facilities Planning
Ms. Eugenia Chalambalacis, Environmental Protection Advisory Committee
Mrs. Elizabeth Sisam, Director, Campus and Facilities Planning, Office of the Vice-Provost, Planning and Budget

Other participants over the term of the Committee include:

Mr. Ben Bathgate, President, University College Literary and Athletic Society (1999-2000);
Professor John Browne, Director of Residence Development (1999-2001); Mr. Ashish Kabir,
Student Representative, (1999-2000); Professor David Rayside, University College; Mr. Marty
Williams, Student Activities; Mr. Jack Alexander, F&S.

II TERMS OF REFERENCE

1. Identify the preferred type of accommodation and form of the residence.
2. Make recommendations about a detailed space plan or program indicating how space and facilities should be organized.
3. Identify secondary effects to existing intramural athletic facility.
4. Identify equipment and movable furnishings necessary to the project.
5. Identify requirements for networking and other electronic and data communications.
6. Identify a site for the proposed residence.

7. Identify any staging requirements and transitional costs which may be necessary during the period of construction.
8. Identify all resource implications, including a preliminary estimate of capital costs, and projected increases to the annual operating costs of the College.
9. Identify a funding plan for capital and operating costs.
10. Report by April 15, 2000.

III BACKGROUND INFORMATION

The demand for residence space at the University of Toronto, especially places for first year students, has grown steadily over the last few years. To cope with this growth, *Expanding Residence Capacity at the University of Toronto*, which was developed from the *Raising Our Sights* companion document *Student Housing: A Plan for the Next Phase*, called for the addition of 1935 places for undergraduate students at the colleges on the St. George campus. The College's pressing need for a additional residence capacity has been clearly identified in this process: "University College and Woodsworth College are the least well served in terms of capacity of any of the St. George Colleges" (*Expanding Residence Capacity*).

When the Sir Daniel Wilson residence was completed in 1954, 450 residence places became available at University College for the 1200 students who were members of the College at that time. Today there are ~3700 students at the College, but the number of residence places remains unchanged. In 1954, the College was able to house 37% of its students; today it can house only 12%. The College thus has very few places for 2nd, 3rd or 4th year UC students, students from the professional faculties, exchange, transfer or international students.

The pressure on residence space in recent years has required the establishment of off-site satellite residence clusters, for example at Tartu College Residence at 310 Bloor Street West. The experience of students physically removed from the College is clearly a more disconnected one, despite the considerable steps taken to tie them to the rest of the residence system. The dislocating impact of off-site location, even at relatively modest distances, is a considerable concern for the College. The committee firmly believes that students in residences not located within the existing University College precinct would feel only minimally connected to other residence houses, and would find their attachment to the College itself seriously diluted. In addition, geographic distance complicates staffing and the use of shared facilities, thereby creating diseconomies of scale and inefficiencies in the use of space and personnel. The existence of the University College precinct – along with other college precincts, each with its own social, intellectual, and architectural character – is an essential component of the physical and social structure of the St. George campus. Incorporating new residence facilities into the existing University College precinct retains the kind of social proximity and historical precinct integrity which is desirable on the St. George campus, and in this specific case, indispensable to the College community.

The Committee is unanimously of the view that all the new residence places must be located as
University College Residence Expansion
April 08, 2002

close as possible to existing University College buildings. The Committee's view is supported by all of the students who have attended focus groups and other advisory meetings to discuss residence planning, and by the unanimous view of College Council and college alumni groups such as the University College Committee and UC Alumni Association. This collective view is also reflected in the historical development of the Sir Daniel Wilson Residence and Whitney Hall, both in their day constructed as close as possible to the main University College building.

An approved building site (Site 22) is located immediately adjacent to the Sir Daniel Wilson residence. However, even if this site were fully developed, the number of places which it could provide would fall well short of the number which the College needs for the growing number of undergraduates who are seeking housing at UC nor would it prove financially viable. For some time the Committee considered building a new residence adjacent to Whitney Hall along the western edge of the back campus. This option, paired with additional residence space built on Site 22 provided ~350 additional beds with appropriate amenity spaces and a new dining facility. This option also allowed the University to further principles set out in *Investing in the Landscape* by providing underground parking to replace spaces currently located around King's College Circle and an improved, properly graded and landscaped playing field east of the new residence. Underground servicing for the precinct was also included in this plan. The back campus site, zoned UOS by the City of Toronto, was perceived as being more sensitive to scrutiny by University College and was after a great deal of consideration dropped in favour of the current plan. The Committee has now concluded that additional new residence spaces should be attached to the current Sir Daniel Wilson residence - adding a north/south wing to the eastern edge of the Sir Daniel Wilson quad (also currently zoned UOS) in addition to building on the approved Site 22. The Committee proposes that the new building "wings" contain 304 residence places, appropriate don's rooms, short term stay rooms and a residence life coordinator space (an additional 8 beds) and shared and common spaces including a new dining hall. With this configuration, the College will begin to approach its housing goals.

IV ACADEMIC PLAN

As the founding college of University of Toronto, University College plays a special role in the history and life of UofT. The College began as part of the great 19th century movement towards universal public education and has over the years become known for its history of openness and for the strength and diversity of its community. Today, University College continues to aspire to be an active, fully-integrated academic community in the University of Toronto, attracting and sustaining highly capable students and illustrious faculty, offering innovative programs of high quality, and benefiting from the support of dedicated staff and ever-widening circles of committed alumni and donors.

The College consolidated its five academic programs prior to *Planning for 2000*. The College now houses seven college programs, including new programs in Aboriginal Studies and in Health Studies, the new Humanities Centre for the Faculty of Arts and Science, and the University of Toronto Art Centre. In conjunction with its student groups, the College has increased the number and the quality of its student activities. The transition to full responsibility for ancillary

operations has been completed and a large operational deficit has been eliminated in both the residence and the food service operations. The main College building is now completely wired for backbone connectivity, as are the Sir Daniel Wilson and Whitney Hall residences. Thus, most of the objectives of previous planning exercises have been met and the College is now prepared to consolidate its progress and pursue new initiatives which are in accord with its geographical and historical place in the centre of the St. George Campus and with the 2000-2004 planning exercise.

Raising Our Sights articulated clear goals for student recruitment, enhancing the learning environment of students, student residences and student life. The College supports and shares these goals with the University and the Faculty of Arts and Science. Two major obstacles, however, stand in the way of greater recruiting success at University College: scholarships and residence places.

The College has identified admission scholarships as a development priority, not just for excellent applicants generally but especially for those beyond Ontario's borders. In support of this initiative, the College proposes to create an International Student Residence Program, using scholarships to attract international students to its residences.

Whitney Hall and the Sir Daniel Wilson residence are an integral part of University College's academic community. They are very attractive to students because of the healthy academic atmosphere, the availability of single rooms, the mix of first- and upper-year students, the flexible meal plans, the central location, and the active student life initiated by residents and coordinated by the dons and staff. However, as previously discussed, spaces are limited in these residences allowing only 12% of the current UC population entry. Expansion of residence capacity is, therefore, the highest priority in the College's 2000-2004 plan.

V SPACE PROGRAM

The Committee proposes to increase the residential capacity of University College by 304 places, a number which will bring the College's housing capacity to approximately 20% of the its full-time equivalent enrolment. Six additional places will be created for five dons and one a residence life co-ordinator, and two smaller bedrooms will be designed for short-term/emergency stays. The total residence expansion program will, therefore, add 312 bedrooms to the College's housing stock.

Based on the current organisation of the existing University College residences and their crucial and successful contribution to the student experience at the College, the Committee formulated a number of principles that it believes should govern the design and space program of the residence expansion as follows:

- Residence design should encourage the development of a community that reflects the values held by University College: diversity, equity, openness, interaction, self-governance.
- In order to create and extend a strong College community, any new residence building must

be physically associated with the College.

- New structures should be high quality, respect the architecture and the heights of surrounding buildings, and their style should be compatible with the College, the streetscape and the surrounding milieu.
- Common rooms and other shared spaces should be physically located in the new residence wings in a manner which fosters the development of a strong residential community. With this goal in mind, the committee proposes a “layered” and multi-purpose approach to the layout and programming of common facilities: some will be unique to each house; some will be shared between several houses; some will be used by the entire residence and the College.
- To foster college identity, social functions should be held in the College.
- A new residence building must be co-educational.
- First and upper year students should interact as much as possible.
- Dons must play an important role in residence life. A ratio of dons to students, similar to that in current residences, should pertain (maximum 1:60).
- Adequate privacy and security must be maintained.
- Residence design should minimise operating costs.
- Residence design must make provision for students with disabilities. New construction should allow for retrofitting of selected spaces to increase the number of accessible areas/rooms/washrooms if the need arises.

Space Program

Space Program	Unit Nasm	Project Nasm	Comments
304 single bedrooms @ 12sq.m. including closet	12	3648	5 houses
2 guest bedrooms	11	22	
<i>1-Bed Units</i>			
1 bedroom @14sq.m. including closet	12		
1 bath	5		
1 living room /eat-in kitchen/ storage.	30		
1 circulation space within unit @ 10%	4.9		
	<u>51.9</u>	51.9	
<i>Studio Units</i>			
1 bath	5		
1 bedroom/living room/storage	20		
1 circulation space within unit @10%	2.5		
5	<u>27.5</u>	137.5	
<i>Shared Facilities</i>			
20 common washrooms	24	480	1 per 14 students
10 common kitchens	24	240	1 per 28 students
5 common rooms	40	200	1 per house

2 television rooms	34	68	
1 meeting/multi-purpose room	24	24	
1 music room	18	18	
<i>Administrative and Support Facilities</i>			
1 miscellaneous storage room	50	50	
4 linen rooms	2	8	
1 custodial storage closet	5	5	
1 central linen storage	10	10	
1 central garbage room	25	25	
Total NASM		4987.4	
subtract out circulation within units		17.4	
		4970	
Total Gross Sq.m. @ 1.8 net to gross ratio		8946	
Gross per bed		32	
<i>Non-Assignable Spaces</i>			
utility closets			
public w/c			
Garbage Rooms			
Recycling Areas			
Custodial Maintenance Room			
Network Closets, one per floor			
Elevator(s)			
mailboxes			
<i>Dining Room and Support</i>			
1 dining hall	400	400	
1 food access area	100	100	
1 food service manager's office	10	10	
1 kitchen/food preparation	100	100	
1 kitchen staff room	20	20	
1 dining hall storage room	40	40	
2 public w/c	10	20	
<i>Additional considerations</i>			
1 Senior Common Room	90	90	
1 public w/c linked to Senior Common Room	5	5	
1 Drama rehearsal space	240	240	separate entrance
2 public w/c linked to Drama	18	36	
1 Drama storage	40	40	
Total NASM		1101	
Total Gross Sq.m. @ 1.6		1761.6	

Space Program Summary

Total Program Area	
Residential Program NASM	4987
Non-Residential NASM	1101
Total Program Area NASM	6088
Residential Gross Area	8946
Non-Residential Gross Area	1761.6
Total Gross Project Gross Area	10707.6

VI FUNCTIONAL PLAN

The Committee envisions a “layered” functional relationship in the layout of the common spaces for the new residences. Some common spaces, such as shared bathrooms and kitchenettes and a common room will be directly associated with each house. Other common spaces, such as TV rooms, will be shared by a number of houses. Spaces such as the dining hall will be shared by the entire College. The committee recommends this layering in order to provide both small-scale spaces of a more intimate nature as well as spaces that can serve multi-purpose use, as well as provide for larger social interactions.

Student Residence Space

The new residence spaces will be constructed in a modified dormitory style, with washrooms shared by clusters of approximately 15 students and kitchenettes shared by clusters of approximately 30 students each. Students will be grouped into vertical houses of approximately 60 persons; design considerations may cause this number to vary, but houses should not be less than forty. Each house will have a common room. Television rooms, a music room and a meeting room will be shared by all students. The placement of shared features should promote horizontal as well as vertical movement through the building.

Because the new wings will be physically linked to Sir Daniel Wilson Residence, the Committee felt it was important that common spaces already in Sir Dan’s be examined to see if, with some minor renovations, they could accommodate additional students. For example, the current laundry room is quite large and with some renovations and additional machines could accommodate extra traffic. The plan, therefore, assumes renovated pre-existing laundry facilities will be made available to those students housed in the new wings. Similarly, one music room is already located in Sir Dan’s, therefore, one additional small music room is expected to properly serve the expanded residence community.

Each student will be accommodated in a single room. Bedrooms are planned to be approximately the same size as rooms in the current residences (12 nasm) with the smaller dimension of at least 2.74m (nine feet). Bedrooms should be well lit by both natural and artificial light, and designed and furnished to permit flexible use of the space. The committee suggested the College examine the use of modular (free standing) furniture to allow for maximum flexibility for residents including a moveable armoire replacing a built in closet. However, as furnishing costs are to be kept to a tight budget, at the beginning of the design phase, the architects should make recommendations regarding cost implications of including either a built in closet or a stand alone

armoire.

Communications linkages to the campus are described more fully later in this report. In general, each bedroom should be equipped with individual telephone, internet and television connections. Separate electrical circuits should be provided for each bedroom.

Good soundproofing between rooms is necessary. To assist with soundproofing, all hallways should have appropriate sound proof, low maintenance material on the floors. Particular attention should be given to attenuating street noise.

Careful attention must be paid to corridor lengths and widths to diminish the “apartment” feeling of the residence, and as much natural light as possible must be allowed to enter the rooms, hallways and common spaces.

Two bedrooms are included for short-term/emergency residence use or by paying guests. These could be built below grade or in otherwise limited-use space. All bedrooms will open directly on to a corridor, as in the current College residences, but the bathrooms which are normally “ganged” in a traditional dormitory will be distributed along the corridors to serve clusters of approximately 15 bedrooms and the and kitchen facilities will serve clusters of approximately 30 bedrooms.

The bathrooms should be designed to provide maximum privacy where possible. Shower and toilet stall walls are recommended to reach floor to ceiling. Fixtures should be chosen to reduce ongoing maintenance costs.

The small common kitchenettes are planned to incorporate eating, seating and preparation areas, a sink, a microwave, and a small stove. These kitchens are not meant to replace the need for cafeteria food service, but are included to allow flexibility particularly to upper year students with partial meal plans and for other students with particularly restricted diets.

The five Don units will be studios attached to each house with space provided for private counselling and washrooms (similar to current don units). Each don unit should be centrally located and ideally should be vertically distributed throughout the residence (c.g., on the first floor in House 1, on the second floor of House 2, etc.). The studios will be furnished. One larger one-bedroom suite is included for a Residence Life Co-ordinator. All Dons’ suites should be designed to permit accessibility.

All common spaces should be designed for maximum flexibility and to permit internet access. These rooms include house common rooms, shared TV rooms, the meeting room, the music room and the new dining room.

The Committee recommends two television rooms be distributed among the common space. These spaces could be located below grade in each wing. However, placement of these rooms should allow for maximum accessibility and ease of flow to ensure a feeling of inclusion for all students. Television rooms should be situated within equal proximity to the houses sharing them. One music room will be located sub-grade and will require proper soundproofing.

There will be one additional student common room/meeting room to serve as meeting space for

all students during the day and for resident use in the evening. The room could be used for study by individual residents but could also be booked for such things as meetings or study groups. The room could be located in a public area, secure from the residence to allow unrestricted access to all University College students during the day. The new dining room should also function as a multi-purpose meeting space.

An adequate amount of janitorial, storage space, a supplies room, linen closets for summer conference use, and public washrooms should be provided. A storage room for general residence use (e.g., for extra furniture) is necessary and is currently allocated space in the space program, but current storage facilities in Sir Dan's may be sufficient for this purpose and should be further investigated during the design phase for viability.

Careful consideration will need to be given to all entrances so that in-coming and out-going activity can be easily monitored to ensure security. The Committee envisions using the existing Porter's office in the Sir Daniel Wilson Residence as the central point of monitoring. Where possible, security should have a view to any open space, and to public areas and publicly accessible common space in the building. Because of the configuration of the existing and planned buildings, much of this monitoring will be done with security cameras. The location of the monitor/security person should be planned to allow the person to assume other responsibilities, such as mail sorting. The number of exits should be limited for security/safety reasons (such as the propping open of doors). It is suggested that each house contain one entrance/exit door, which would be time-alarmed and that various forms of electronic monitoring be examined as to their feasibility. In this entrance vestibule, student mailboxes will be accommodated.

The Committee recommends a computerized/card-entry security system for the new residence wings. This system should be capable of also securing the existing Sir Daniel Wilson residence when updated in phase two of the plan. Doors to each of the bedrooms should be individually keyed. A card system might also be used for laundry machines in order to eliminate coin handling (this card might also make the laundry room and bicycle storage room accessible to students from the addition to the Sir Daniel Wilson residence or from Whitney Hall). Attention will need to be paid to integrating this system with the one currently in use at Sir Daniel Wilson.

Additional capacity in the Sir Daniel Wilson bicycle storage space should be sufficient to accommodate the needs of residents in the new residence spaces.

Dining Facilities

This residence expansion program will require the demolition of the current dining hall and construction of new dining and kitchen facilities as follows:

The new eating area of the dining hall should accommodate 250 persons at tables seating approximately 10-12 (or smaller tables seating 5-6) people each. Tables should be flexible to allow for ganging, removal and storage (i.e. able to be put together for larger functions, perhaps made smaller for more intimate functions). The dining hall storage room should be located to facilitate easy changes to room use and furnishing allowing the hall to be convertible for multi-purpose use. Public washrooms should be immediately adjacent to the dining hall. The eating

area is envisioned as a space that maintains the tradition of the collegiate dining hall: higher than average ceilings, and attention to details such as the inclusion of large windows.

The food service/access area should be designed to have multi-purpose food “stations” or “platforms” of a style employed by many “Marchés”. This type of design promises to increase student satisfaction with the meal service offered by the College. There would be no single cafeteria line-up but a number of food stations serving both hot and cold selections, plus beverages. Subject to detailed consultation with food service consultants during the design phase, the Committee envisages six stations or platforms, each with food storage and “finishing” capabilities (grills, fryers, plate racks, etc.), and a beverage cooler having a walk-in access from behind (~2 X 4 metres). Up to three cashier stations might be required between the food service area and the main dining hall so as to permit monitoring but not congesting traffic. A manager’s office is needed, with sight lines to the food service area and the dining hall.

The general food preparation area would normally be located next to the dining hall, but it might also be located below grade. An adequate delivery area at grade will need to be provided adjacent to (or above) this space. Staff change rooms, washrooms, storage areas, and dishwashing facilities should be located in close proximity to the food preparation area. A device/mechanism such as a “dumb-waiter” for transporting food to the food service area for finishing, and dishes to the dishwashing area for cleaning, will have to be included in the final design of the food preparation area and must be situated to allow for ease of delivery as well as service and clean-up.

- The College encourages a “grab and go” approach so students could also take food out. If possible a small outdoor seating area will be incorporated. The dining hall will be located on Site 22 with the entrance from St. George to encourage walk-in traffic from St. George.

Other Common Space

The existing space under Howard Ferguson Hall which is now being used by the Drama Program requires replacement. Below grade space for the program should include a total of 240 nasm of practice space plus 2 washrooms, storage and modest changing space. Sound attenuation between these spaces and the rest of the residence is important, as is well circulating air. These spaces should be accessible externally, preferably through doors located close to the UC Union, but there should be no direct access from them to the residence.

A new senior common room is required to replace the existing room currently located in Howard Ferguson Hall. It will require a small private washroom and should be located at grade level with direct access where possible.

VII ENVIRONMENTAL IMPACT

Energy and water use in the new residence and in renovated or rebuilt spaces will be governed by the terms of the University of Toronto Environmental Protection Policy (see Appendix 3). Every effort will be made in the implementation phase to achieve efficiencies in utilities use in order to reduce operating costs. Other residences in the University have developed recycling and composting programs; these programs could form the basis for a similar program at University

College. Thus, provision should be made for recycling areas on each floor of the new residence wings.

The Committee supports the inclusion of gardens/greenery and of landscaping the areas surrounding the new facilities, as well as other College quads to affect a complementary college-wide/campus look. This support does, of course, depend on the overall cost of such features and their design implications, as well as on practicalities such as long-term maintenance and access.

VIII SPECIAL CONSIDERATIONS

Standards of Construction and Quality

"The UC community of students, alumni, staff and faculty all maintain a special attachment and bond to the UC campus. There is an overwhelming recognition of the importance of the new residence in ensuring UC continues to maintain a leadership role at the University. The new UC residence will be designed and built recognizing the historic importance and significance of surrounding UC and UofT buildings. Special attention will be paid to exterior finishes and to ensuring that UC "honours its past, while embracing its future". Interior furnishings and fittings will be consistent in quality to those residence projects currently underway on the University of Toronto campus.

Landscape Requirements

The proposed new buildings will allow the creation of newly defined green space/quads attached to the College, much like a Cambridge/Oxford community. The ease of pedestrian flow through these spaces should be maintained with pathways, gateways and portals. A proposed loggia along one side of the new n/s residence wing would provide added pedestrian amenity. In locating the n/s wing, every effort will be made to preserve and enhance the existing pedestrian pathways leading north/south between Hoskin Avenue and King's College Circle and also east/west along the south edge of the existing Sir Daniel Wilson residence from St. George Street. Particular attention will be paid to preservation of the view corridor from St. George Street leading to the unique University College Croft Chapter House.

The residence development envisaged in this report takes into account the importance of the UC Union, an integral part of the College's history. The Union, originally the Women's Union, played an important role in the incorporation of women into the University as a whole. In more recent years, the Union has served as a home for the UC Drama Program, and includes the Helen Gardiner Phelan Theatre as well as rehearsal and office space. The Union's common areas are frequently used by UC students, and for receptions hosted by the College and other divisions on campus. The Union is also an important part of the St. George streetscape, contributing to the human scale of the east side. Therefore, an improved east-west pedestrian walkway connecting the Back Campus to St. George Street will be created between the Sir Daniel Wilson residence addition and the Union building.

The existing sunken garden adjacent to the Union will be moved to an alternate location within

the University College precinct and will remain a significant feature of the landscaping. Approximately 7 existing mature trees, of the same stand of trees along the western edge of the Back Campus, will be removed by the current residence plan. University College is very sensitive to this matter. The architect will be directed to make every effort to maintain as many trees as possible within the residence expansion design. Where not possible, new trees will be planted as part of the landscape plan.

Accessibility and Personal Safety

The design of the residence, the dining facility and all other college facilities associated with this project must take into account accessibility by persons with disabilities. In addition to the requirements laid out in the Design Standards developed by Operations and Services, consultation with the University's Co-coordinator of Special Services for the Persons with Disabilities and a review by a barrier-free design consultant should be undertaken prior to finalization of the concept design. Two bedrooms on the main floor, and one set of common facilities (shared common room, shared kitchen, bathroom) should be fitted out to be completely wheel chair accessible. The design of several other bedrooms and bathrooms should permit the installation of appropriate assistive devices in the future.

Computing and Communications

Each bedroom will be equipped with internet, cable, and phone connections. The Committee recommends a six duplex outlets in each room. There should be a internet connection and roughed-in cable outlet in each common room. As noted earlier, internet connections should also be available in each study area.

The Committee feels that computer connections should be through UTORnet, giving all students access to all the University information services this provides; however, the possibility of using Bell Sympatico or another provider which has an association with the University, will be explored during the implementation stage of the project.

The Committee recommends that the Provost's Advisor on Computing be consulted during the implementation phase on all matters affecting the networking of the residence. Issues of particular importance include the fibre optic capacity to the site and the design and management of firewalls and other security measures.

Waste Disposal and Site Servicing

Servicing for garbage and recycling pick-up is anticipated by this plan to occur off of the existing Erindale Walk to the north of the University College Laidlaw wing. An enclosed, refrigerated garbage room with compaction unit should be considered in order to allow for minimum release of odours along the n/s pedestrian walk directly to the east of the new residence wings. This option should be further considered if feasible from a cost perspective in the design phase.

Appropriate paving will be necessary to allow trucks to access this area. Appropriate landscaping will also be necessary to maintain the area as currently zoned University Open Space. Deliveries for the dining hall are also expected to occur at this location.

Campus Planning Issues

The University College building we know today opened its doors on 4 October 1859 – 6 years after the College's founding in 1853. Subsequent building occurred in the form of the Women's Union building (now the University College Union) in 1885, the Whitney Hall Residence (1931) and later the Sir Daniel Wilson Residence in 1954. With the addition of each building, the University College precinct within the St. George campus developed in an open quadrangle form with significant landscaped courtyards as their fabric.

Two sites within the UC precinct are recommended here to accommodate 304 student residence beds, 8 don's and short stay beds and complementary common spaces. An approved building site (Site 22) is located immediately adjacent to the Sir Daniel Wilson residence and is identified here for residence development. A new dining hall and added student spaces will be located here in a new wing of 4-5 stories. This new building will be incorporated directly into the existing Sir Daniel Wilson façade to the north ending 15m south of the UC Union building to provide a generous pedestrian connection between buildings. The entrance to the dining hall will be off of St. George Street to encourage outside participation. Servicing of this wing will occur off of the Erindale walk immediately north of the University College Laidlaw wing.

The number of places that can be provided on Site 22 fall well short of the number which the College needs for the growing number of undergraduates who are seeking housing at UC. For some time the Committee considered building a new residence adjacent to Whitney Hall along the western edge of the back campus. This option, paired with additional residence space built on Site 22 provided ~350 additional beds with appropriate amenity spaces and a new dining facility. Underground parking to replace spaces currently located around King's College Circle, underground servicing for the precinct and an improved playing field east of the new residence were considered to further the principle's set out in *Investing in the Landscape*, the University's Open Space Master Plan, in this option. The site, zoned UOS by the City of Toronto, was perceived as being highly sensitive to scrutiny and was after a great deal of consideration dropped in favour of the current plan.

The Committee has now concluded that in addition to spaces provided on Site 22, additional new residence spaces should be attached to the current Sir Daniel Wilson residence - adding a four storey north/south wing to the eastern edge of the Sir Daniel Wilson quad. Following the historical development of the UC precinct on the St. George campus, a new building in this orientation and completing the Sir Dan's quad is proposed as a solution sensitive to its historic surroundings.

In support of the current plan, the *University of Toronto Heritage Conservation Study* (1993) summarizes the area's character as:

Clear and hierarchical assemblage of open spaces around buildings and buildings around open spaces, with three and four sided quadrangle complexes from different eras, sharing characteristics of plan, scale and skyline but diverging in organization, details and materials; generally low, even sprawling blocks with punctuating towers, usually implying or completely defining quadrangular courts and in turn forming complexes around three larger principal green spaces.

According to zoning and in addition to the fact that the Sir Daniel Wilson quad is designated UOS, City of Toronto By-law 12(2)310 states that only 5% additional area (to that which existed on June 3, 1997) above grade may be constructed on this site. As such, permissions will need to be sought for re-zoning to allow for the above construction. This process will formally be initiated following University of Toronto governance approvals.

IX RESOURCE IMPLICATIONS

Site Service Relocates

Both a University high voltage electrical service, and high pressure steam service supply the area. Presently located in the basement of Ferguson Hall are a high voltage switch room, serviced from the U of T grid, feeding several adjacent buildings, and the main steam to hot water heating plant for Sir Daniel Wilson. Therefore the plan at present is to first build a new substation and heating plant room that will end up as basement space in the new wing. New electrical services to adjacent buildings, and heating service to Dan Wilson will be established prior to full demolition of the existing infrastructure. A steam tunnel runs under the existing walk, and will have to be protected and maintained.

It is anticipated that the new structure will be served with water and gas from St. George Street. A stand alone chilled water system will be installed and rooms will be air conditioned to allow the College to make maximum use of the residence rooms for rental during summer months.

Infrastructure Upgrades in the Sector

It is believed that the existing steam and electrical infrastructure will support the building as presently conceived.

Assessment of Existing Building

Sir Daniel Wilson Residence, located at 73 St. George Street, incorporates six houses all built in 1953. The residence is also connected to a dining hall that services both Sir Daniel Wilson Residence and the Whitney Residence.

The exterior of the building is finished with brick and numerous details including a clock tower at the main entrance, keystones above all doorways, stone archways around exterior doors, copper flashing throughout the building, slate tile roofs over the residence buildings and copper roofs over the dining hall. Given the high turn around rate of students, the building requires constant upkeep. This building is not barrier-free accessible, however, washrooms at the ground floor level have been designed to accommodate basic needs.

Although maintenance over the years appears to have curtailed much of the requirements for major work, there are a number of items that, according to the F&S building assessment issued February 2001, require attention as follows:

- In the dormitory portion of the building, there is no fresh air supply and ventilation is provided only for the washrooms. Ventilation is poor in the residence and the replacement of the kitchen, washroom and dining room hall exhaust fans is recommended. Additional ventilation should be considered.
- Because of the age of the building, many of the mechanical system components can be expected to have increased maintenance requirements and increased probability of failure.

Other Costs: Secondary Costs, Construction Contingency, Demolition

It is possible that several rooms in the existing Sir Daniel Wilson Residence will be taken out of service to allow for as seamless a connection between the existing and new wings as possible, thereby reducing the total net new number of beds provided through this project.

Garbage bins for the existing Sir Daniel Wilson Residence and dining hall, and any new needed garbage containment will be relocated to an area off of the Erindale Walk north of the UC Laidlaw wing. Depending on cost premiums, an enclosure for these garbage and recycling containers may be warranted to eliminate unsightly garbage from view on the back campus.

Donor Recognition

The new residence project will be transformational for the College and the most important project undertaken in more than 40 years. Alumni leadership fully support the plan and are anxious to proceed. Opportunities for naming and donor recognition will be developed once the design phase is underway and participation from all parts of the UC community will be included in developing policies for honouring past supporters, as well as new donors.

Moving and Staging

Dining facilities, drama practice rooms and the Senior Common room will require temporary space elsewhere during construction. Student meals may be taken during this time at the Hart House Arbor Room. The Senior Common room and Drama will be accommodated within existing University College spaces.

Where connections are made between existing and new residence wings, several residence spaces will be affected – some will be taken out of service all together to provide linkages, others will be temporarily unavailable during construction. As such, the number of available beds to University College students will drop or additional spaces will have to be accommodated off site during construction.

No cost allowance has been allocated in the cost estimate to accommodate the above requirements.

X OTHER RELATED COSTS

25 parking spaces located on Site 22 will be lost from the University inventory due to the construction on this site. The annual income from this lot is ~\$48,000. It is anticipated that between 40 – 50% of the University’s parking customers will find other areas to park on campus, therefore it is estimated that parking ancillary revenues will be reduced by about \$28,800 annually.

XI FUNDING SOURCES AND CASH FLOW ANALYSIS

Monthly bed rates in year 1 and year 5:

	<u>2004-05</u>	avg annual <u>incr to Yr 5</u>	<u>2008-09</u>
existing	\$572	8.00%	\$778
new	\$625	5.75%	\$782
Blended rate*	\$574	7.10%	\$755

*using weighted average calculation

Meal Plans: Meal plans for the new residence beds will be similar to those currently in place: a mandatory full meal plan for first year students and a partial meal plan for upper level students.

Funding Sources for the project cost of \$31.100 million:

University College Contributions	\$3.000 million
University College Departmental contributions	\$2.385 million
UIIF contribution	\$1.300 million
External financing to be repaid from residence fees	\$24.7 million

XII SCHEDULE

From the College’s point of view, the need for the new residence is urgent. The College has not been able to accommodate demand for students particularly since the promise to house all first year students was made, with the result that over 100 University College students are being housed in more remote, off-campus sites.

University College has for the past two years given careful and considered attention to the selection of a site for additional residence beds. The goal is to be able to accommodate new residence students by September 2004. The project team will look at ways of achieving this,

however, recent experience on campus suggests that such a deadline would only be achieved if the design phase were collapsed to 6 months and all permissions were attained without contest. A more conservative schedule is, therefore, given below with occupancy in January 2005. Even this will be possible only if municipal approvals are forthcoming and a permit issued by the scheduled start of construction.

Schedule required in order to provide a January 2005 move-in date:

- Report to Planning and Budget – April 2002
- Business Board approval to hire Architect – May 2002
- Architect Selection: by end June 2002
- Design Phase: July 2002 – May 2003 (11 months)
- Tender for relocation of services – January 2003
- Main tender - June 2003
- Construction: July 2003 – December 2004 (18 months)

XIII RECOMMENDATIONS

That the Planning and Budget Committee recommend to the Academic Board:

1. THAT the Project Planning Report for the University College Residence Expansion be approved in principle.
2. THAT the project scope totaling some 10,708 gross square metres, will allow for the addition of a north/south wing to complete the eastern edge of the Sir Daniel Wilson residence quadrangle and will use an approved building site (Site 22) and an area currently zoned University Open Space, requiring municipal approvals.
3. THAT the project cost of \$31.100 million be approved, with the funding sources as follows:
 - (i) Donation from University College of \$3.0 million,
 - (ii) University College ancillary operation allocation of \$2.385 million,
 - (iii) University Infrastructure Investment Fund [UIIF] of \$1.3 million, and
 - (iv) External financing in the amount of \$24.407 million to be repaid from the residence fees over a 25 year amortization period.

APPENDICES

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Equipment and Furnishing:

Single Residence Life Coordinator	304
Don's - Studio Unit	1
Guest	5
	2
Total	312

Item	Unit Budget \$	#	Total
Bedrooms			
Captain's Bed (Single)	500	312	156,000
Desk (min.60wx30d) , keyboard,	500	310	155,000
Desk Chair	135	312	42,120
Bookshelf - 36w x 30H	200	310	62,000
Bedroom chair	40	310	12,400
Armoire	600	312	187,200
Bulletin Board	24	312	7,488
Mattress	115	312	35,880
Mattress cover	14	312	4,368
Blinds / Drapes (in constr budget)	0	0	0
Shower Curtain RLC + Dons	30	6	180
Table (Don's Rm) (Guest room)	300	7	2,100
Extra casual chair (dons)	400	10	4,000
chairs (dons)	135	20	2,700
sofa (dons)	1,100	5	5,500
			=====
		Subtotal / Rooms	676,936
Kitchen			
Residence Life Coordinator/Dons		6	
Common Kitchen		10	
Total		16	
Compact Refrigerator (RLC + Dons)	200	6	1,200
24" Oven	580	11	6,380
Fan Hood - Base Building	0	11	0
.9cuff. Microwave (inc RLC + Dons)	180	16	2,880
Garbage can	20	16	320
Dish rack	10	16	160
Recycling Bin	20	16	320
36"x48" Rectangular Table	300	1	300
36"x72" Rectangular Table	450	10	4,500
Chairs	135	64	8,640
			=====
		Subtotal	24,700

Living Rooms

Residence Life Coordinator, 1			
Common Room, TV room 5 + 2 seating 20 ea			
Lounge Arm Chair	400	42	16,800
Sofa 2-seat (1 RLC)	950	50	47,500
Sofa 3-seat (1 RLC)	1,100	1	1,100
Coffee Table 24x48 (1 RLC)	400	15	6,000
T.V.	600	2	1,200
Credenza	600	2	1,200
Area Rug	120	1	120
Floor Lamp	50	1	50
			=====
Subtotal /Shared Rooms/Living Room			73,970

Common Washrooms

Garbage Can 1 in RLC	20	41	820
			=====
Subtotal			820

Multi Purpose Room

Flex Boardroom Table for 12 (4 @ 60 * 30)	500	4	2,000
Boardroom Chairs	225	12	2,700
Credenza	600	1	600
			=====
Subtotal			5,300

Music Room

Samick Piano with Bench (assume by others)	0	1	0
Music Stands	0	4	0
42" dia Table	320	1	320
Straight Back Chair	150	4	600
			=====
Subtotal			920

Linen/Storage Rooms

Flexible Shelving Industrial 36wx4H	480	10	4,800
			=====
Subtotal			4,800

Dining Hall

Stacking Chairs / Poly	120	250	30,000
Dining Tables (32x60)	600	50	30,000
Custom Cabinets for Condiments etc.	1,500	1	1,500
Food Service Mgr. Office			
L-Shaped Desk Laminate with Keyboard	1,600	1	1,600
Tray and one Lateral File			
36w x 72h Laminate Bookcase	150	2	300
Task Chair	280	1	280
Visitor Side Chair	135	2	270
Side Table	180	1	180

Garbage Can	20	1	20
Recycling Bin	25	1	25
Dining Hall total			64,175

Sub total	851,621
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Contingency (5%)	42,581
escalation to late 2004, 9%	80,478
PST (8%)	77,974
GST (2.31%)	22,515

Total Budget (incl. taxes)	1,075,170
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Project Cost Estimate

Items	Total Project Cost estimate				
Construction Cost Note A	21,436,000				
Construction Contingency	2,143,700				
Applicable GST	544,800				
Total Construction Costs, incl taxes	\$24,124,500	\$0	\$0	\$0	\$0
Site Services, new	inc				
Infrastructure Upgrades in Sector	na				
Secondary Effects	na				
Demolition Note B	246,000				
Landscaping Note C	810,000				
Permits & Insurance	313,000				
Professional Fees Note D	2,644,000				
Computer Wiring & Telephone Terminations	103,500				
Moving & Staging	na				
Furnishings & Equipment see schedule. Note E	1,375,000				
Miscellaneous Costs [signage, security..]	196,000				
Donor Recognition	na				
Finance Costs see cashflow	1,288,000				
Project Cost Escalation [to 06/03]	inc				
Total Project Cost Estimate GST included	\$31,100,000			\$0	\$0

prepared 03 Apr 2002

jcb

Notes:

A for a building of 6,088 NASM, 10,708 GSM

based on a report from Curran McCabe 26th march 2002, plus escalation of 4% to June 2003.

B includes \$50k allow for asbestos.

C includes new E-W walkway, rebuilt N-S walkway relocated rose garden, and new courtyard at Sir

D includes allowances for separate tender, and rezoning costs.

E Furniture \$1.075.000 plus allow of \$300,000 for kitchen & servery equipment.

Preliminary Cashflow

Cash flow by quarter

Quarter	feb-apr 2002	may-jul 2002	aug-oct 2002	nov-jan 2002-3	feb-apr 2003	may-jul 2003	aug-oct 2003	nov-jan 2003-4	feb-apr 2004	may-jul 2004	aug-oct 2004	nov-jan 2004-5	feb-apr 2005	may-jul 2005	totals
Approval															
Design															
Construction															

1 ph 1 | ph 2

Funding:															
before & during proj.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 LT Finance					0				0				31,100	0	31,100
subtotal	0	0	0	0	0	0	0	0	0	0	0	0	31,100	0	31,100
Expenditure:															
proff fees & permits.	100	495	495	495	709	110	110	110	110	110	111	0	0	0	2,955
construction furn, equip, misc. land.	0	0	0	0	736	736	3,816	3,816	3,816	3,816	3,819	0	0	0	24,371
subtotal	100	495	495	1,231	1,445	3,926	3,926	3,926	3,926	3,926	6,416	0	0	0	29,812
net cash flow	-100	-495	-495	1,231	1,445	3,926	3,926	3,926	3,926	3,926	6,416	0	0	0	
open bal	0	-101	-600	1,106	2,358	3,842	7,840	11,889	15,988	20,138	24,348	31,100	0	0	
change	-100	-495	-495	-1231	-1445	3,926	3,926	3,926	3,926	3,926	6,416	0	0	0	
3 int exp @ 5.0%	-1	-4	-11	-22	-39	-73	-123	-173	-224	-276	-344	0	0	0	(1,288) est. project intr. expense.
close bal	-101	-600	1,106	2,358	3,842	7,840	11,889	15,988	20,138	24,348	31,100	0	0	0	4.32%

- Notes:**
- 1 phase 1 refers to construction of new substation & heating plant. Phase 2 refers to main contract.
 - 2 shows balance of funding required at completion of project.
 - 3 expect to pay money market rate plus 0.25% for short term financing.

Revenue and Expense Plan

Standard criteria:	
New Residence scheduled to open September 2004	
Number of beds	
existing	452
new-original	312
Total	<u>764</u>
Occupancy rates	98.00%
Mortgage terms:	
rate	8%
amortization-years	25
compounding (monthly)	12
Capital renewal to start in year:	
existing	1
new	6
and to be calculated at a rate of	1.50%
Breakeven target for total ancillary operation:	
annual (year)	2008-09
cumulative (year)	2011-12

Variables within various models:				
Project costs:				
		Building	Furn & Equip	Total
Residence		22,486,000	982,152	23,468,152
Substation		1,800,000		1,800,000
Dining Hall:	Residence	3,267,000		3,267,000
	Food Service	515,000	385,000	900,000
Drama		1,242,000		1,242,000
Senior common room		414,000		414,000
Construction costs for total project		<u>29,724,000</u>	<u>1,367,152</u>	<u>31,091,152</u>
Cost per bed (based on projects attributable to residence only):		Annual cost of external financing based on total cost (1):		
Residence (net of dining space)	\$80,988	\$2,202,747	-net of \$1.485 mil	
Residence (dining space)	10,471	\$57,701	-net of donations & UIIF	
Residence (total)	<u>\$91,459</u>	<u>\$2,260,448</u>		
Sources of funding:				
	Residence	Food Service	Drama/ Common	Total
Donations	2,644,000		356,000	3,000,000
Departmental contributions	1,485,000	900,000		2,385,000
UIIF support for the drama facility	0		1,300,000	1,300,000
Net funding (excl. financing)	4,129,000	900,000	1,656,000	6,685,000
External financing (1)	24,406,152			24,406,152
	<u>28,535,152</u>	<u>900,000</u>	<u>1,656,000</u>	<u>31,091,152</u>
Monthly bed rates in year 1 and year 5:				
	<u>2004-05</u>	<u>avg annual incr to Yr 5</u>	<u>2008-09</u>	
existing	\$572	8.00%	\$778	
new	\$625	5.75%	\$782	
Blended rate*	<u>\$574</u>	<u>7.10%</u>	<u>\$755</u>	
*using weighted average calculation				
Contribution margin per new bed:	39.05%			
Sensitivity analysis:				
1. If construction costs increased by \$2 million over the current cost estimates, then additional annual net revenues would be required to maintain the financial targets in the amount of \$194,498				

UNIVERSITY COLLEGE, Total Residence A

Variables:

	764	764	764	764	764	764	764	764	764	764	764	764	764	764	764	764
# of beds	764	764	764	764	764	764	764	764	764	764	764	764	764	764	764	764
avg rate/bed (caid based on bed rev)	1.103	1.136	1.17C	1.205	1.241	1.279	1.317	1.356	1.397	1.439	1.525	1.525	1.525	1.525	1.525	1.525
occupancy/winter	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
capital cost																
Downpayment from ancillary																
UIF support for Drama facility																
Mortgage rate																

WORKING SCHEDULE

	16	17	18	19	20	21	22	23	24	25	26	Net 26 year
Projected Income Statement:												
Revenues - Inflation rate used Y 4+ =												
Revenues-winter	6,528,197	6,724,043	6,925,764	7,133,537	7,347,543	7,567,989	7,796,008	8,028,658	8,266,724	8,517,816	8,773,351	169,644,352
Revenues-summer	1,832,049	1,881,011	1,931,441	1,983,384	2,036,866	2,091,992	2,148,752	2,207,215	2,267,431	2,328,454	2,390,338	39,514,313
Revenues-other	367,333	378,353	389,704	401,395	413,237	425,840	439,165	453,173	467,027	481,236	495,865	8,950,222
Deans & dons	301,239	310,338	319,648	329,237	339,114	349,288	359,766	370,559	381,676	393,126	404,920	7,341,937
Amount of subsidy needed	250	257	265	273	281	289	298	307	316	326	336	5,983
Net revenues	8,828,878	9,093,744	9,358,556	9,627,553	9,898,980	10,235,089	10,542,142	10,850,406	11,184,158	11,519,683	11,865,273	215,351,725
Expenses - Inflation rate used Y 4+ =												
Operating (General)	3,064,437	3,125,728	3,188,246	3,252,005	3,317,045	3,383,386	3,451,054	3,520,075	3,590,476	3,662,286	3,735,532	76,395,413
Dots	425,639	434,207	442,891	451,748	460,784	470,000	479,400	488,988	498,767	508,743	518,918	10,654,557
Major Maintenance	982,603	1,002,295	1,022,300	1,042,748	1,063,601	1,084,873	1,106,571	1,128,702	1,151,276	1,174,302	1,197,788	24,582,411
Mortgage principal & interest	4,172,733	4,562,188	4,853,432	4,947,500	4,941,430	4,938,289	4,937,024	4,937,765	4,937,765	4,937,765	4,937,765	5,452,237
Building depre'n (based on downpayment)	2,260,448	2,260,448	2,260,448	2,260,448	2,260,448	2,260,448	2,260,448	2,260,448	2,260,448	2,260,448	2,260,448	11,632,511
	215,400	215,400	215,400	215,400	215,400	215,400	215,400	215,400	215,400	215,400	215,400	5,385,000
Expenses before finance charges	6,346,581	7,038,036	7,129,276	7,222,348	7,317,278	7,414,107	7,512,872	7,613,612	7,716,367	7,821,178	7,927,519	173,528,703
Operating financing charges	(393,920)	(1,179,582)	(1,986,501)	(1,816,282)	(1,870,637)	(2,151,389)	(2,480,481)	(2,791,583)	(3,172,099)	(3,617,174)	(4,088,816)	(28,889,494)
Net expenses	5,954,661	5,858,453	5,142,775	5,606,066	5,446,641	5,262,718	5,052,391	4,813,029	4,544,269	4,242,004	2,208,604	144,829,208
Surplus (Deficit) before transfers & reserve transfer to operating (inc)/decr in investment in cap assets (inc)/decr in major mance reserve	2,874,217	3,235,291	3,823,776	4,014,487	4,490,338	4,972,371	5,489,751	6,044,777	6,539,889	7,277,879	9,656,670	70,522,517
	0	0	0	0	0	0	0	0	0	0	0	0
	215,400	215,400	215,400	215,400	215,400	215,400	215,400	215,400	215,400	215,400	215,400	5,385,000
	(233,764)	(214,112)	(194,067)	(173,621)	(152,766)	(131,494)	(109,797)	(87,665)	(65,091)	(42,065)	(18,580)	(5,903,562)
Surplus (Deficit) after transfers & reserve	2,255,853	3,238,579	3,645,111	4,038,266	4,552,972	5,086,277	5,596,354	6,172,411	6,780,188	7,451,013	9,709,890	68,999,155

Projected Balance sheet:

	16	17	18	19	20	21	22	23	24	25	26	Net 26 year
Cash	19,221,111	22,471,801	26,310,975	30,697,867	35,273,605	40,481,378	46,166,627	52,425,704	59,281,993	66,775,072	76,603,642	
Residence	37,212,638	37,453,238	37,893,836	37,634,438	36,975,038	36,915,638	36,856,238	36,796,838	36,737,438	36,678,038	36,618,638	
Accumulated Depreciation	(7,744,389)	(7,900,389)	(8,056,389)	(8,212,389)	(8,368,389)	(8,524,389)	(8,680,389)	(8,836,389)	(8,992,389)	(9,148,389)	(9,304,389)	
	48,689,361	51,724,651	55,348,425	59,289,917	63,680,255	68,482,628	74,342,317	80,389,754	87,027,043	94,304,722	103,981,392	
Mortgage payable & Equity in Res	27,191,152	27,191,152	27,191,152	27,191,152	27,191,152	27,191,152	27,191,152	27,191,152	27,191,152	27,191,152	27,191,152	
Funds committed for major maintenance	5,075,715	5,289,827	5,483,894	5,657,516	5,910,282	5,941,716	6,051,573	6,139,288	6,204,329	6,246,395	6,284,975	
Surplus (contributed)	2,010,400	1,795,000	1,579,600	1,364,200	1,148,800	993,400	716,000	502,600	289,200	7,800	0	
Surplus	14,212,094	17,448,672	21,093,783	25,171,048	29,730,021	34,786,298	40,381,652	46,554,164	53,344,362	60,785,275	70,505,265	
Net fund balance	21,298,208	24,633,499	28,157,277	32,198,768	36,689,103	41,661,474	47,151,225	53,186,022	59,835,891	67,113,570	76,770,240	
	48,689,361	51,724,651	55,348,428	59,289,911	63,680,255	68,482,628	74,342,317	80,389,754	87,027,043	94,304,722	103,981,392	

April 8, 2002

Residence Approval Document for Planning and Budget Meeting – University College

Business Case:

The capital project for University College, which is projected to cost \$31.1 million, will be funded as part of the residence operation. The financial analysis, which follows, addresses the ability of the combined residence operation to fund the new residence capital construction cost and ongoing operational costs while remaining financially healthy.

All U of T ancillary operations operate like businesses, receiving their revenues and having responsibility to cover all costs, including direct and indirect costs, costs of capital construction and costs of infrastructure maintenance. The four objectives for all ancillaries are:

1. to operate without a subsidy from the operating fund;
2. to provide for all costs of capital renewal, including deferred maintenance;
3. to generate sufficient surplus to cover operating contingencies; and, after the first three requirements have been met,
4. to contribute net revenue to operating budgets.

The need for residence expansion has presented a financial challenge, in that the costs of building new residences have risen faster than residence rates. To maintain room rates at an affordable level, changes have been made to the objectives for residence and conference ancillaries, as follows.

In the case of the first objective, the combined ancillary operation will be required to break even annually in year 5 and cumulatively in year 8.

In the case of the second objective, the normal capital renewal provision for new residence buildings will be deferred until the sixth year they are in operation.

The third objective will remain unaltered, i.e., the residence ancillary will continue to be responsible for funding operating and maintenance contingencies in the residences.

The first three objectives must be met before the fourth can be invoked, i.e., transfers from the residence and conference ancillaries to the divisional operating budget can only occur when the residence and conference ancillaries combined meet the first three objectives. During the current residence expansion program, the second and third objectives will only be met after

1. the annual 1.5% provision for capital renewal is being set aside; and
2. operating contingencies have been provided for by means of net surpluses.

The proposed residence will add 69% additional beds to the existing University College residence ancillary operation. The total project cost is budgeted at \$31,091,152. The financial viability of the combined residence ancillary operation, based on the total construction cost, has been evaluated against the modified objectives. Here are the key assumptions:

- 1) **Borrowing and repayment:** the total project cost, net of ancillary contributions of, \$2,385,000, donations of \$3,000,000 and University Infrastructure Investment Fund support of \$1,300,000, results in \$24,406,152 being externally financed, with annual principal and interest repayment projected at an annual rate of 8% over a 25 year amortization period.
- 2) **Operating costs:** the new residence operating costs would follow the trend of its existing residence costs using a pro rated calculation. Operating cost were compared to New College residence and found to be approximately \$273,000 less, mainly due to operational differences between the two residences.
- 3) **Residence revenue:** the UC residence will employ a two-bed rate system in the first five years of the new residence operation. The existing residence rates are projected to increase by 8% in the first five years, an increase over the SARG 2002/03 budget, which projected increases of 8% in 2004/05 followed by annual inflationary increases of 2%. This will bring the monthly bed rate in existing residences to \$572 rather than the \$567 as previously planned. The starting monthly bed rate in the new residence is \$625, with annual increases of approximately 6% for the first five years. In the sixth year of operation the bed rates of the new and existing residence will then be harmonized. The second phase to renovate and refurbish the existing residence is planned for the summer months and is not expected to impact summer revenues.
- 4) **Capital renewal allowance:** for the new residence it begins in the 6th year of operation at 1.5%. The capital renewal allowance for the existing residence is being built up for the planned phase two renovations.
- 5) Ancillary contributions of \$2,385,000 are comprised of \$1,485,000 from the UC residence ancillary and \$900,000 from the UC food ancillary. In both cases, these contributions will use up all of the unappropriated surplus anticipated in their current long-range plans. The residence ancillary expects to have \$533,000 remaining in its capital renewal reserve. This represents a risk factor in this proposal, particularly when combined with annual break-even for the combined ancillary in year 5 and cumulative break-even in year 8 and deferral of capital renewal contributions on the new residence until year 6.

A sensitivity analysis was performed in which additional construction and operational costs were introduced independently into the model to determine how much additional revenue, if any, would be required to maintain the financial targets within the model. Since the current model is at the breakeven mark, any variation from assumptions will require corrective action. If construction costs increased by \$2,000,000 over the current cost estimates, then additional net annual revenues of \$194,498 would be required to meet the financial targets.

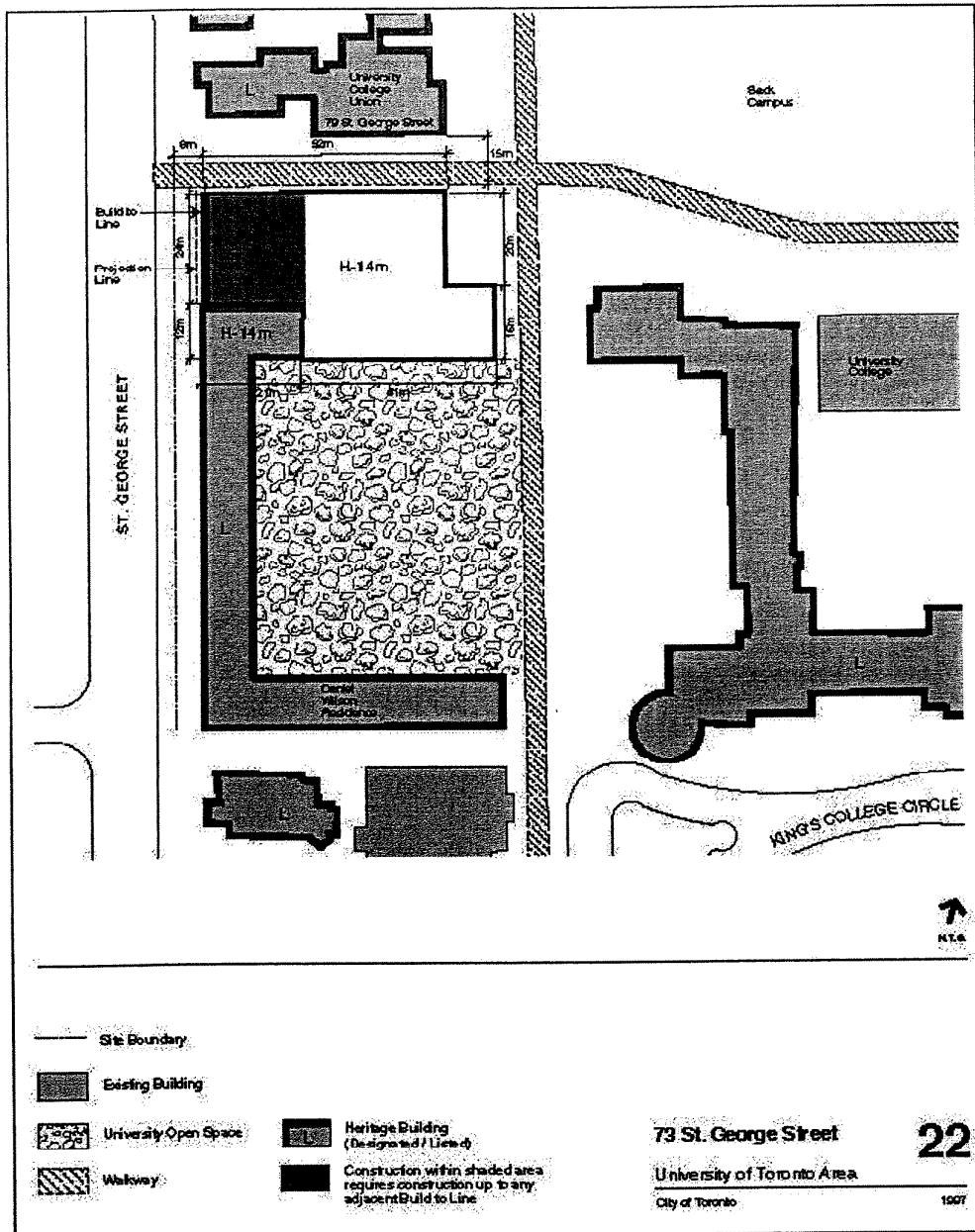
It is particularly important to note that the University College residence ancillary rates are approved annually by the University Affairs Board. Implicit in the Planning and Budget Committee approval is the understanding that residence rates will be increased each year by no less than the percentages projected here in order to maintain the financial viability of the residence operation.

Based on the above analysis, and evaluating against the modified objectives, the combined residence ancillary at University College is financially viable. It is projected to break even annually in year 5 and cumulatively in year 8 as required, with the capital renewal

allowance for the new residence commencing in year 6 and residence rate increases as described above. However, the financial viability of the residence is contingent on these underlying factors: \$1,300,000 of support from the University Infrastructure Investment Fund (UIIF), to cover a substantial part of the drama facility costs; \$3,000,000 in donations before the opening of the residence in 2004, of which \$1,500,000 has already been pledged.

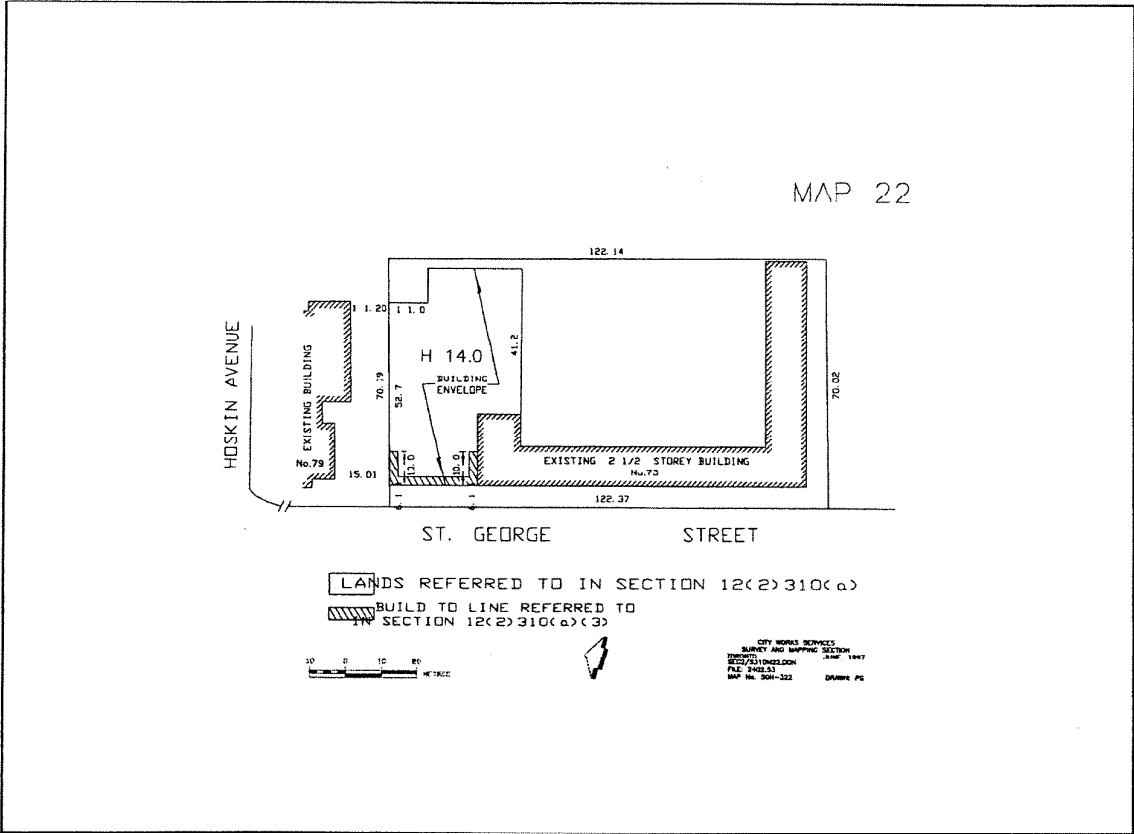
Site Plan Information

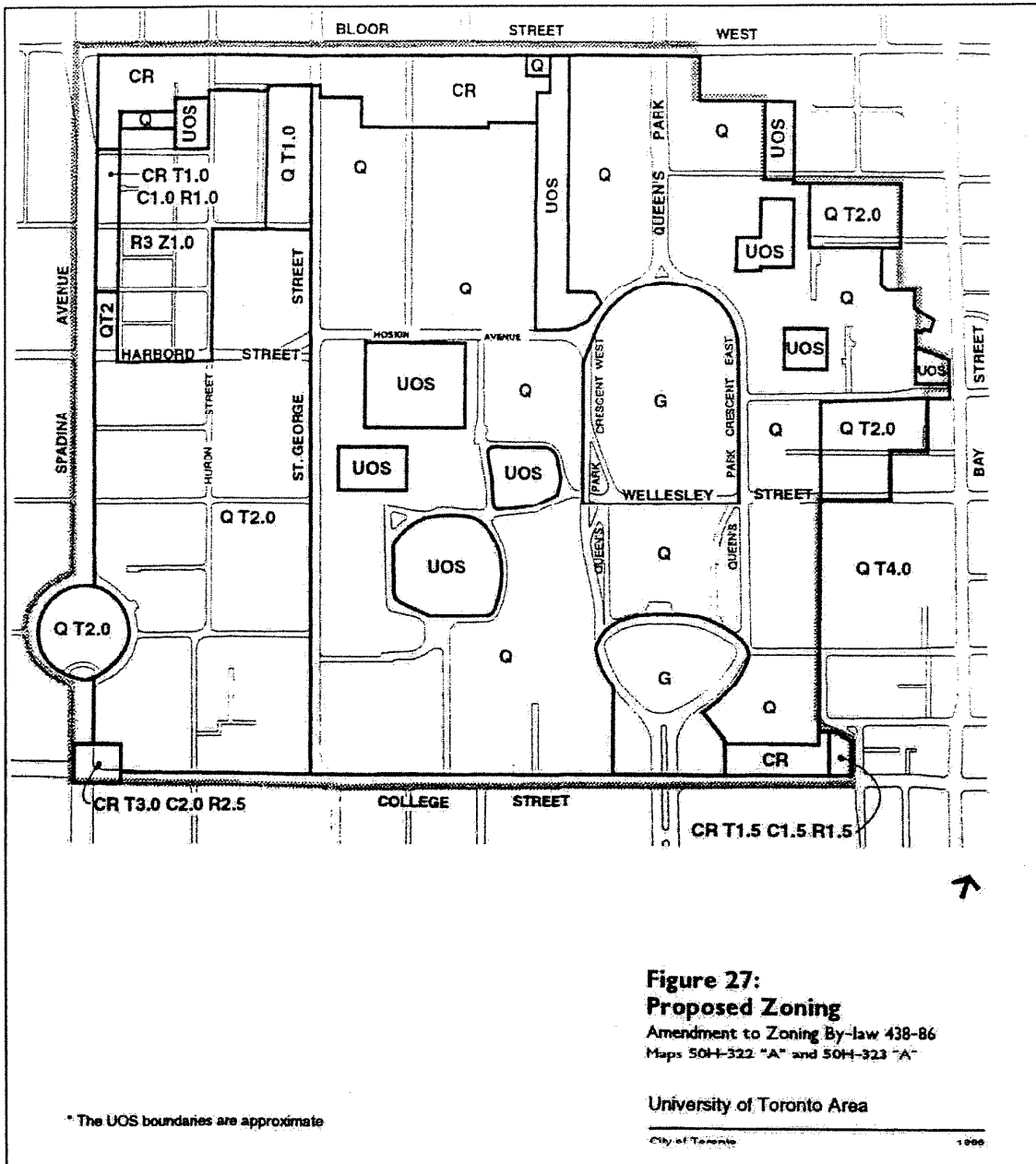
University of Toronto Development Sites



University College Residence Expansion
 April 08, 2002

CITY OF TORONTO BY-LAW
 No. 1997-0275





Environmental Impact

University of Toronto Environmental Protection Policy

PREAMBLE

The University of Toronto is committed to being a positive and creative force in the protection and enhancement of the local and global environment, through its teaching, research and administrative operations. Recognising that some of its activities, because of their scale and scope, have significant effects on the environment, the University as an institution, and all members of the university community, have the responsibility to society to act in ways consistent with the following principles and objectives:

FUNDAMENTAL PRINCIPLES

- Minimisation of negative impacts on the environment
- Conservation and wise use of natural resources
- Respect for bio-diversity

SPECIFIC OBJECTIVES

In adopting these fundamental principles, the University will be guided by ethical attitudes towards natural spaces, and will take all reasonable steps to meet the following objectives:

- Minimise energy use, through efficient management and practice
- Minimise water use, through efficient management and practice
- Minimise waste generation through reduction, reuse and recycling
- Minimise polluting effluent and emissions into air, land and water
- Minimise noise and odour pollution
- Minimise and where possible eliminate use of chemicals, including outdoor salt, pesticides herbicides and cleaning agents
- Include bio-diversity and environmental concerns in planning and landscape decisions
- Meet and where possible exceed environmental standards, regulations and guidelines

IMPLEMENTATION

To implement this Environmental Protection Policy:

- An Environmental Protection Advisory Committee (EPAC) will be established consisting of administrative staff, academic staff and student groups, to be chaired by a member of the University's academic staff. The Committee will provide advice to the Assistant Vice-President, Operations and Services, on programs to meet the environmental protection objectives. Membership of the committee will be made known to the community to ensure that new and existing initiatives are brought forward for consideration. The meetings of EPAC will be open.
- Facilities and Services, through the Waste Management Department will facilitate the development, implementation and evaluation of environmental protection programs, and will liaise with the EPAC and all three campuses on the programs.
- In this role Facilities and Services will:
 - Regularly review university policies to ensure consistency with this policy;
 - Carry out appropriate environmental audits and pilot projects;
 - Undertake education and training programs to inform the University Community about this and how its members, both personally and collectively, can best meet the objectives set forth in it;
 - Inform all contractors, service operations and users of University facilities that they must comply with the requirements of the policy;
 - Annually issue a report concerning the University's impact on the environment, summarising initiatives undertaken and identifying matters which require particular attention.

Approved by Business Board of the Governing Council on March 7, 1994.

Environmental Checklist for Users Committees (5/99)

1. General planning principles: Consideration of alternatives, Life cycle approach
2. Minimize Energy Use
 - a) Thermal Energy: Heating, Cooling
 - b) Lighting/Use of Natural Light
 - c) Ventilation/Windows
 - d) Machinery/Equipment
 - e) Orientation of Building - effect on building energy needs
 - f) Roof Design
3. Minimize Water Use (Maximize Reuse)
 - a) Flushing
 - b) Washing - hands and body
 - c) Building Cleaning
 - d) Drinking
 - e) Experimental/Labs
 - f) Equipment Cooling
 - g) Outdoor Vegetation - choice and watering (see #4)
4. Utilization and Diversion of Rainwater
 - a) Use of Roof Water
 - b) Porous Pavements
5. Waste Management (offices, classrooms, food outlets, outdoors, construction/demolition)
 - a) Reduction
 - b) Reuse
 - c) Recycling
 - d) Treatment and Disposal - possible on campus
6. Effluent and Emmissions (reduce, reuse, recycle, dispose)
 - a) Indoor (Air Toxity, Noise, Odours, Ventilation)
 - b) Outdoor Air - laboratory emissions
 - c) Water - Hazardous Wastes
 - d) Land
7. Reduce Harmful Chemicals
 - a) Outdoor Salts
 - b) Pesticides/Herbicides
 - c) Cleaning Agents
8. Outdoor Environment
 - a) Encourage Biodiversity (encourage and protection of species)
 - b) Landscaping/Shading - effect on building energy needs in summer and winter
 - c) Use of outdoor space (e.g. rest areas, roof gardens)
9. Monitoring and Metering of Use of Resources and Wastes
 - a) Water
 - b) Electricity
 - c) Heat
 - d) Wastes
10. Visibility of Environmental Concerns
 - a) Pilot Projects
 - b) Posters/Displays
11. Material Choice (Use of endangered/exotic materials, off-gassing)
 - a) Building Fabric
 - b) Fixtures and Furnishings

Room Specification Sheets

SECTION A:

Dormitory – Bedroom (single)

Rooms Required: 304 student @ 12nasm + 1 Residence Life Co-Ordinator in suite @ 14nasm.
NASM Required: 12 nasm of useable space each; width to be no less than 2.74m (9')

SECTION B:

- A. **Space purpose and type of activity:** students' private space for sleep and study
B. **Number of occupants, resident:** 1
C. **Number of occupants, transient:** 0
D. **Space relationship, proximity to other rooms/facilities:**
E. **Visual relationship, proximity to other rooms/facilities:**
F. **Furniture and equipment, fixed:**
coat hooks on inside face of door
bulletin board or white board fixed to exterior face of door
moulding or other hanging rail device placed for hanging of posters and pictures along one or more walls
G. **Furniture and equipment, moveable:**
single bed (Captain's bed model)
desk (minimum dim. 30"x60") with keyboard drawer
desk chair
casual chair
bookshelf (@ 3' wide, same height, depth and material as desk)
wardrobe, 60" with 4 drawers
bulletin board (2'x3' minimum)

SECTION C:

- H. **Lighting:** large insulated window(s) with operable component(s), non-removable screens, and blinds or heavy, fire-resistant blackout curtains. centrally located overhead light fixture with durable rheostat designed to provide maximum brightness and energy efficiency (no fluorescent tube or halogen lighting)
I. **Power requirements:**
one telephone line
one data drop
cable outlet
6 duplex receptacles - using split circuits between rooms
telephone connection capacity to Porter's office
J. **Special systems:**
card-key door hardware (room number engraved) or other locking system
individually adjustable 2-pipe heat/cool fan-coil unit
K. **HVAC:**
L. **Plumbing:**
M. **Special finishes:** durable, low maintenance flooring (wood preferred, or durable tile in non-uniform, mid-tones)
strong, durable furniture (solid wood recommended)
drywall wall finish preferred over cinder block

SECTION A:

Living Space – Don's Living Quarters – Studio Unit

Rooms Required: 5

NASM Required: 22.5 including kitchenette (an additional 5nasm allocation for w/c within unit is described in following pages)

SECTION B:

- A. Space purpose and type of activity:** private space for sleep and study
- B. Number of occupants, resident:** 1
- C. Number of occupants, transient:** 0
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - coat hooks fixed to inside face of door
 - white board or cork message board fixed to outside face of door
 - moulding or other hanging rail device placed for hanging of posters and pictures along one or more walls
 - kitchenette unit with cupboards above and below counter with sink, space for microwave and under counter bar fridge.
- G. Furniture and equipment, moveable:**
 - single bed (Captain's bed model)
 - desk (minimum dim. 30"x60") with keyboard drawer
 - desk chair
 - 2 casual chairs
 - bookshelf (@ 3' wide, same height, depth and material as desk)
 - wardrobe, 60" with 4 drawers
 - Table and chairs to seat 4 for meetings and/or counselling purposes
 - Sofa
 - bulletin board (2'x3'minimum)

SECTION C:

- H. Lighting:** large insulated window(s) with operable component(s), non-removable screens, and blinds or heavy, fire-resistant blackout curtains. centrally located overhead light fixture with durable rheostat designed to fluorescent tube or halogen lighting)
- I. Power requirements:**
 - one telephone jack
 - one data drop
 - cable outlet
 - 6 duplex receptacle - using split circuits between rooms
 - telephone connection capacity to Porter's office
- J. Special systems:** card-key door hardware with room number engraved or other system
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** durable, low maintenance flooring (wood preferred, or durable tile in non-uniform, mid-tones) strong, durable furniture (solid wood recommended) drywall wall finish preferred over cinder block

SECTION A:

Living Space – Residence Life Co-ordinator -- Kitchen

Rooms Required: 1 (coordinator of residence operations apt.)

NASM Required: included in nasm allocation for living space (following page)

SECTION B:

- A. **Space purpose and type of activity:** individual food preparation
- B. **Number of occupants, resident:** 0
- C. **Number of occupants, transient:** 0
- D. **Space relationship, proximity to other rooms/facilities:**
adjacent to main living space
- E. **Visual relationship, proximity to other rooms/facilities:**
open visual relationship between kitchen and living room recommended
- F. **Furniture and equipment, fixed:**
1 stainless steel double kitchen sink
counter space to fit (counter top surface durable, non-staining material/colour recommended)
cupboards with shelving above and below counter (durable, non-adjustable hinges, solid wood doors particularly at hinge points)
compact refrigerator
oven/stove with fan hood
- G. **Furniture and equipment, moveable:**
microwave (size to be specified)
kitchen table
2-4 kitchen chairs
dish drainer
garbage and recycling bins

SECTION C:

- H. **Lighting:** bright, energy efficient overhead light fixture
- I. **Power requirements:**
6 duplex receptacles including one special receptacle for stove (recommend separate circuits split top & bottom)
- J. **Special systems:**
- K. **HVAC:**
- L. **Plumbing:** as necessary to supply kitchen sink
- M. **Special finishes:** durable, low maintenance finishes (tile flooring and splash back)
- N. **Special Needs:** high contrast colours on counters/cabinetry

SECTION A:

Living Space – Residence Life Co-ordinator – Living Room

Rooms Required: 1 (coordinator of residence operations apt.)

NASM Required: 30 (includes space for kitchen as described on previous page)

SECTION B:

- A. Space purpose and type of activity:** living/entertaining space
- B. Number of occupants, resident:**
- C. Number of occupants, transient:**
- D. Space relationship, proximity to other rooms/facilities:**
 - adjacent to kitchen
- E. Visual relationship, proximity to other rooms/facilities:**
 - open visual relationship between kitchen and living room recommended
- F. Furniture and equipment, fixed:**
- G. Furniture and equipment, moveable:**
 - 1 sofa
 - 1 two person love-seat
 - 1 coffee table
 - area rug
 - floor lamp

SECTION C:

- H. Lighting:**
 - large window with operable compartment and non-moveable screen durable window blinds or durable, fire-resistant black-out curtains
 - bright, energy efficient overhead light fixture
- I. Power requirements:**
 - 6 duplex receptacles
 - telephone jack
 - cable outlet
 - data drop
- J. Special systems:**
 - telephone connection to front desk, if budget allows.
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:**
 - durable, low-maintenance flooring (wood flooring with tile at entrance and in kitchen/dining area preferred)
- N. Special Needs:**

SECTION A:

Living Space – Don's & RLC Living Quarters – Bathroom

Rooms Required: 6

NASM Required: 5 nasm each

SECTION B:

A. Space purpose and type of activity:

B. Number of occupants, resident: 0

C. Number of occupants, transient: 1-4

D. Space relationship, proximity to other rooms/facilities:

E. Visual relationship, proximity to other rooms/facilities:

F. Furniture and equipment, fixed:

bath/shower stall

standard toilet

hand wash basin in cabinet

one large mirror mounted above sink

towel and toilet paper fixtures

G. Furniture and equipment, moveable:

shower curtain

garbage can

SECTION C:

H. Lighting: natural light and ventilation desirable through operable window with blind
centrally located overhead light fixture

I. Power requirements:
1 GFI receptacle

J. Special systems:

K. HVAC: exhaust fan leading to exterior or as required by code

L. Plumbing: as necessary for shower, toilet and sink

M. Special finishes: durable, low maintenance (ceramic tile flooring and baseboard with waterproof sealant, cement board walls, water-resistant cabinetry recommended).

N. Special Needs:

SECTION A:

Shared Facilities – Common Kitchen

Rooms Required: 10

NASM Required: 24 each

SECTION B:

- A. Space purpose and type of activity:** casual food preparation
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 28
- D. Space relationship, proximity to other rooms/facilities:**
 - located centrally on each floor of each house (2 per house)
 - adjacent to or near garbage chutes and recycling if possible
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - 1 stainless steel double basin kitchen sink
 - counter space to fit (counter top surface durable, non-staining material/dark colour recommended)
 - cupboards above and below counters (durable, non-adjustable hinges, solid wood doors particularly at hinge points)
 - 24" oven/stove with fan hood
- G. Furniture and equipment, moveable:**
 - microwave (size to be specified)
 - dining table (3' x 6' minimum or equivalent round version)
 - 6 dining chairs
 - garbage can
 - dish drainer

SECTION C:

- H. Lighting:**
 - bright, energy-efficient overhead light fixture
- I. Power requirements:**
 - 4 duplex receptacles including one special for stove
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** as necessary to supply kitchen sink
- M. Special finishes:**
 - durable, low maintenance finishes
 - tile flooring and tile splash-back along all counter space
- N. Special Needs:**

SECTION A:

Shared Facilities – Common Washroom

Rooms Required: 20

NASM Required: 24 each

SECTION B:

A. Space purpose and type of activity:

B. Number of occupants, resident: 0

C. Number of occupants, transient: 14

D. Space relationship, proximity to other rooms/facilities:
central to cluster of bedrooms off residence corridor

E. Visual relationship, proximity to other rooms/facilities:

F. Furniture and equipment, fixed:
3 toilet stalls each with floor-to-ceiling lockable doors (one handicapped accessible per floor)
3 individual shower stalls each with floor-to ceiling enclosures and locking doors (one roll-in handicapped accessible unit per floor)
4 pedestal sinks
large mirror mounted full length of wall above sinks
1 hand dryer
ample hooks for clothing and toiletry items

G. Furniture and equipment, moveable:
2 garbage cans

SECTION C:

H. Lighting: overhead florescent
operable window desirable to provide natural light and ventilation

I. Power requirements:
4 GFI receptacles (1 at each sink)

J. Special systems:

K. HVAC:

L. Plumbing:
as necessary for above
easy access to plumbing for maintenance desired

M. Special finishes:
durable, low maintenance finishes (ceramic tile flooring and baseboard with waterproof sealant, cement board walls and water-resistant cabinetry recommended)

N. Special Needs:

SECTION A:

Shared Facilities – Common Room

Rooms Required: 5

NASM Required: 40 each

SECTION B:

- A. Space purpose and type of activity:** common social activities
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 56
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
visual access from primary corridor or entry space to facilitate interaction and promote safety (windows from corridor into space, double-hung doors recommended)
- F. Furniture and equipment, fixed:**
Bulletin board mounted on outside of door
- G. Furniture and equipment, moveable:**
lounges and straight back chairs (to seat, in combination with sofas, 15-20 students)
sofa(s)
2 coffee table(s)

SECTION C:

- H. Lighting:** large windows with operable component and non-removable screens
durable window blinds or fire resistant, black out curtains
overhead fixture(s)
- I. Power requirements:** cable outlet(s) roughed in
one data drop
telephone connection capacity to Porter's office
four 120V duplex receptacles
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** durable, low maintenance finishes (ceramic tile or low maintenance carpet recommended for flooring)
- N. Special Needs:** handicap accessible

SECTION A:

Shared Facilities – Television Room

Rooms Required: 2

NASM Required: 34 each

SECTION B:

- A. Space purpose and type of activity:** common social activities
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 140
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
visual access from primary corridor or entry space to facilitate interaction and promote safety (windows from corridor into space, double-hung doors recommended)
- F. Furniture and equipment, fixed:**
- G. Furniture and equipment, moveable:**
lounge and straight back chairs (to seat, in combination with sofas, 15-20 students)
sofa(s)
coffee table(s)
large screen television and VCR
credenza for television and VCR

SECTION C:

- H. Lighting:** large windows with operable component and non-removable screens
durable window blinds or fire resistant, black out curtains
overhead fixture(s)
- I. Power requirements:** cable outlet(s) - roughed in
two duplex receptacles
one data drop
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** durable, low maintenance finishes (ceramic tile or low maintenance carpet recommended for flooring)
- N. Special Needs:** handicapped accessible

SECTION A:

Shared Facilities – Meeting/Multi-Purpose Room

Rooms Required: 1

NASM Required: 24

SECTION B:

- A. Space purpose and type of activity:**
bookable space for group study or meetings
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 12
- D. Space relationship, proximity to other rooms/facilities:**
adjacent to public corridor, near public areas such as the main lobby
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
white board
coat hooks adjacent to entry
- G. Furniture and equipment, moveable:**
Flexible meeting table to seat 12
12 meeting room chairs

SECTION C:

- H. Lighting:** large window where possible with operable component, durable blinds
bright, energy-efficient overhead light fixtures with parabolic reflectors on
separate switches for sections of room
- I. Power requirements:**
two duplex receptacles
one data drop
telephone connection capacity to Porter's office
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:**
wood or durable carpet (for increased sound absorption) on floors
- N. Special Needs:**
acoustic isolation from adjacent rooms/corridors

SECTION A:

Shared Facilities – Music Room

Rooms Required: 1

NASM Required: 18 nasm

SECTION B:

- A. Space purpose and type of activity:**
Sound-proof room for music practice
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 4
- D. Space relationship, proximity to other rooms/facilities:**
adjacent to public corridor, removed from television/common room
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
black board or white board
coat hooks
- G. Furniture and equipment, moveable:**
4 straight back chairs
small table

SECTION C:

- H. Lighting:** large window where possible with operable component, durable blinds
bright, energy-efficient overhead light fixtures with parabolic reflectors
- I. Power requirements:**
2 duplex receptacles
intercom connection or telephone connection capacity to Porter's office
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:**
wood or durable carpet (for increased sound absorption) on floors
- N. Special Needs:**
acoustic isolation from adjacent rooms/corridors

SECTION A:

Miscellaneous – Guest/Short-term Room

Rooms Required: 2

NASM Required: 11 nasm of useable space each; width to be no less than 2.74m (9')

SECTION B:

- A. Space purpose and type of activity:** temporary space for sleep and study
- B. Number of occupants, resident:** 1
- C. Number of occupants, transient:** 0
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - coat hooks on inside face of door
 - bulletin board fixed to outside of door
- G. Furniture and equipment, moveable:**
 - single bed (Captain's bed model)
 - wardrobe, 60" with 4 drawers
 - Simple table to be used as desk
 - desk chair
 - bulletin board (2'x3'minimum)

SECTION C:

- H. Lighting:** insulated window(s) with operable component(s), non-removable screens, and blinds or heavy, fire-resistant blackout curtains. centrally located overhead light fixture with durable rheostat designed to provide maximum brightness and energy efficiency (no fluorescent tube or halogen lighting)
- I. Power requirements:**
 - telephone jack
 - data drop
 - duplex receptacle on each wall
 - telephone connection capacity to Porter's office
- J. Special systems:**
 - card-key door hardware with room number engraved or other locking system
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:**
 - durable, low maintenance flooring (wood preferred, or durable tile in non-uniform, mid-tones)
 - strong, durable furniture (solid wood recommended)
 - Wall construction in drywall preferred over cinder block
- N. Special Needs:**

SECTION A:

Miscellaneous – Storage Room

Rooms Required: 1

NASM Required: 50 nasm

SECTION B:

- A. **Space purpose and type of activity:**
storage of extra mattresses and miscellaneous house supplies, furniture, bedding, etc.
- B. **Number of occupants, resident:** 0
- C. **Number of occupants, transient:** 2
- D. **Space relationship, proximity to other rooms/facilities:**
adjacent to or near freight elevator
- E. **Visual relationship, proximity to other rooms/facilities:**
- F. **Furniture and equipment, fixed:**
flexible shelving
- G. **Furniture and equipment, moveable:**

SECTION C:

- H. **Lighting:**
overhead incandescent lighting fixture(s)
- I. **Power requirements:**
1 duplex receptacle
- J. **Special systems:**
- K. **HVAC:**
- L. **Plumbing:**
- M. **Special finishes:** durable, low-maintenance flooring, tile recommended.
- N. **Special Needs:**
- O.

SECTION A:

Basement – Bicycle Storage Room

Rooms Required: to be accommodated in existing space below grade within Sir Daniel Wilson Hall

NASM Required: tbd. Because dormitory style units, bicycle parking requirements may lessen. Note: The maximum required as per by-law is as follows: "bicycle parking". 0.75 spaces per unit. If more than 2000 GSM non-residential, then 6 bike parking spots. Of all these 80% occupant and 20% visitor, not more than 50% of occupant shall be parked in vertical position, not within dwelling, the occupant parking located in a secure room or area.

SECTION B:

- A. Space purpose and type of activity:**
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 280
- D. Space relationship, proximity to other rooms/facilities:**
adjacent to or within close proximity to elevator(s)
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
racks for bicycle locking fixed to floor (sizes horizontal 1.8M * 0.6M, vertical 0.6*1.2M.)
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** bright, energy efficient overhead florescent
- I. Power requirements:**
one duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:**
durable finishes
- P. Special Needs:**

SECTION A:

Miscellaneous – Linen Room

Rooms Required: 4
NASM Required: 3 nasm each

SECTION B:

- A. **Space purpose and type of activity:**
storage of linens for summer use
- B. **Number of occupants, resident:** 0
- C. **Number of occupants, transient:** 2
- D. **Space relationship, proximity to other rooms/facilities:**
- E. **Visual relationship, proximity to other rooms/facilities:**
- F. **Furniture and equipment, fixed:**
- G. **Furniture and equipment, moveable:**
flexible shelving

SECTION C:

- H. **Lighting:** 1 overhead light fixture
- I. **Power requirements:**
- J. **Special systems:**
- K. **HVAC:**
- L. **Plumbing:**
- M. **Special finishes:**
- N. **Special Needs:**

SECTION A:

Non-Assignable – Utility Closet

Rooms Required: tbd

NASM Required: 2 nasm each

SECTION B:

- A. Space purpose and type of activity:**
storage of minimal cleaning equipment and supplies, access to water for cleaning purposes
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
1 large sink/wash-basin
- G. Furniture and equipment, moveable:**
flexible shelving

SECTION C:

- H. Lighting:** 1 overhead light fixture
- I. Power requirements:**
1 duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** adequate to serve wash-basin
floor drainage provided
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Miscellaneous – Custodial Storage Closet

Rooms Required: 1

NASM Required: 5 nasm total

SECTION B:

- A. Space purpose and type of activity:**
storage of linen and minimal cleaning equipment and supplies, access to water for cleaning purposes
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:**
sub-grade
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
1 large sink/wash-basin
- G. Furniture and equipment, moveable:**
flexible shelving

SECTION C:

- H. Lighting:** 1 overhead light fixture
- I. Power requirements:**
1 duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** adequate to serve wash-basin
floor drainage provided
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Central Linen Storage

Rooms Required: 1

NASM Required: 12 nasm

SECTION B:

- A. **Space purpose and type of activity:** storage of linens for use during summer conferencing
- B. **Number of occupants, resident:** 0
- C. **Number of occupants, transient:** 3+/-
- D. **Space relationship, proximity to other rooms/facilities:** sub-grade near elevator
- E. **Visual relationship, proximity to other rooms/facilities:**
- F. **Furniture and equipment, fixed:**
Metal shelving to fit along two long walls
- G. **Furniture and equipment, moveable:**

SECTION C:

- H. **Lighting:** centrally located overhead light fixture
- I. **Power requirements:**
1 120V duplex receptacle
- J. **Special systems:**
- K. **HVAC:**
- L. **Plumbing:**
- M. **Special finishes:** durable finishes
- N. **Special Needs:**

SECTION A:

Dining Hall

Rooms Required: 1

NASM Required: 400

SECTION B:

- A. Space purpose and type of activity:** dining facilities to serve University College students – to replace existing Ferguson Dining Hall in the Sir Daniel Wilson Residence
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 250
- D. Space relationship, proximity to other rooms/facilities:** At grade with easy access from street and paths leading from other residence halls. Must be adjacent to or vertically connected with the Kitchen/Food Prep area, and adjacent to the Food Access Area. The Food Service Manager's office should have visual access to the dining area.
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
- E. Furniture and equipment, moveable:**
 - 25 tables (preferably stackable for maximum flexibility) to seat 10 students each or 50 tables to seat 5-6 students each
 - folding or stacking straight backed dining chairs to seat 250
 - cabinetry to hold cutlery, condiments, napkins, etc.

SECTION C:

- A. Lighting:**
 - May reuse chandelier's from existing dining hall or other appropriate lighting for dining purposes.
 - Natural light is essential. Large, operable windows to be located along, at minimum, one long wall.
- I. Power requirements:**
TBD
- J. Special systems:**
- K. HVAC:** as necessary for dining facility
- L. Plumbing:**
- M. Special finishes:**
 - Ceiling heights should be greater than corridors or other rooms - a double height room is desirable.
- N. Special Needs:** hall should be convertible for special events

SECTION A:

Food Access Area

Rooms Required: 1

NASM Required: 100 nasm (to be confirmed with food service provider)

SECTION B:

- A. Space purpose and type of activity:** Food stations – Marche-like – to be located here for student access to a variety of foods and preparation options
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 350
- D. Space relationship, proximity to other rooms/facilities:** Must be directly adjacent to the dining hall and adjacent or vertically connected with the kitchen/food preparation area.
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:** approximately 6 food station platforms to be determined by food service consultant in consultation with the College – each with food storage and 'finishing' capabilities
one rear walk-in refrigerator for cold drinks and other food items requiring refrigeration
2-3 cash register stations
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** overhead fluorescent
- I. Power requirements:**
As required for food preparation equipment
- J. Special systems:**
- K. HVAC:** venting as necessary by code for food preparation area
- L. Plumbing:** minimum one dual basin kitchen sink
- M. Special finishes:** durable, non-slip flooring
- N. Special Needs:** all food preparation stations to be handicapped accessible

SECTION A:

Food Service Manager's Office

Rooms Required: 1

NASM Required: 12

SECTION B:

- A. Space purpose and type of activity:** office for administration of food facility
- B. Number of occupants, resident:** 1
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:**
close to food preparation and dining facilities
- E. Visual relationship, proximity to other rooms/facilities:**
visual connection with food preparation area and dining facilities where possible.
- F. Furniture and equipment, fixed:**
One bulletin board approximately 2' x 3'
- G. Furniture and equipment, moveable:**
One L-shaped desk with computer station (minimum 6' x 6') and computer tray
one lateral filing cabinet
one three foot wide, full-height metal bookshelves with adjustable shelving
one ergonomic desk chair on castors
two visitors' chairs with arms
one side table
garbage and recycling bins

SECTION C:

- H. Lighting:** natural light is desirable
Bright, centrally located energy efficient overhead fluorescent lighting
with parabolic reflectors
- I. Power requirements:**
four 120V duplex receptacles
one telephone line
one data link
intercom connection or telephone connection capacity to porter's desk
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** side vision panel at doorway fitted with blind for privacy
- N. Special Needs:**

SECTION A:

Kitchen/Food Preparation

Rooms Required: 1

NASM Required: 100

SECTION B:

- A. Space purpose and type of activity:** for cooking and some preparation of food for dining facility
- B. Number of occupants, resident:** 2-4
- C. Number of occupants, transient:** 4
- D. Space relationship, proximity to other rooms/facilities:** adjacent to or vertically connected through elevator or dumb-waiter system with Food Access Area
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:** to be determined by food service consultant
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** overhead fluorescent
- I. Power requirements:**
As required for kitchen equipment to be determined by kitchen expert
- J. Special systems:**
- K. HVAC:** venting as required by code for kitchen
- L. Plumbing:** as required for kitchen sink and dishwashers
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Kitchen Staff Room

Rooms Required: 1

NASM Required: 20

SECTION B:

- A. Space purpose and type of activity:** for storing of kitchen staff belongings/ to be split into two area to serve both as changeroom and lounge
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 8
- D. Space relationship, proximity to other rooms/facilities:** near kitchen and food access area
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
 - 10 full length lockers along one wall
 - one mirror affixed to wall
- G. Furniture and equipment, moveable:**
 - one table
 - 8 chairs
 - small kitchenette with space for bar fridge, microwave, coffee maker, kettle and some cabinetry

SECTION C:

- H. Lighting:** overhead fluorescent
- I. Power requirements:**
 - 3 duplex receptacles including one GFI
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:** one kitchen sink
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Dining Hall Storage Room

Rooms Required: 1

NASM Required: 40

SECTION B:

- A. Space purpose and type of activity:** to provide room for storage of approximately half of all tables and chairs in dining hall when hall used for other functions
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 2
- D. Space relationship, proximity to other rooms/facilities:** adjacent to dining hall
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** centrally located overhead fluorescent lighting
- I. Power requirements:**
One 120V duplex receptacle
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Drama Rehearsal Space

Rooms Required: 1

NASM Required: 240

SECTION B:

- A. **Space purpose and type of activity:** UC drama program performance and practice space
- B. **Number of occupants, resident:** 0
- C. **Number of occupants, transient:** 30
- D. **Space relationship, proximity to other rooms/facilities:** below grade - to be easily accessible through dedicated entrance near UC Union if possible
- E. **Visual relationship, proximity to other rooms/facilities:**
- F. **Furniture and equipment, fixed:**
Sprung floor
- G. **Furniture and equipment, moveable:**
No furnishings required

SECTION C:

- H. **Lighting:** appropriate for drama practice – to be determined by drama program and within budget parameters
- I. **Power requirements:** as necessary for equipment and lighting necessary for drama program
- J. **Special systems:**
- K. **HVAC:**
- L. **Plumbing:**
- M. **Special finishes:**
- N. **Special Needs:**

SECTION A:

Large Drama Storage Room

Rooms Required: 1

NASM Required: 40

SECTION B:

- A. Space purpose and type of activity:** storage of equipment necessary for drama programme
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 40
- D. Space relationship, proximity to other rooms/facilities:** adjacent to drama performance/practice rooms
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
Adjustable metal storage shelving
- G. Furniture and equipment, moveable:**

SECTION C:

- H. Lighting:** overhead fluorescent
- I. Power requirements:** 4 duplex receptacles
- J. Special systems:**
- K. HVAC:**
- L. Plumbing:**
- M. Special finishes:**
- N. Special Needs:**

SECTION A:

Senior Common Room

Rooms Required: 1

NASM Required: 90

SECTION B:

- A. Space purpose and type of activity:** alumni events room
- B. Number of occupants, resident:** 0
- C. Number of occupants, transient:** 50-60 standing/18-20 seated
- D. Space relationship, proximity to other rooms/facilities:** adjacent to dedicated w/c
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Furniture and equipment, fixed:**
- G. Furniture and equipment, moveable:**
 - Table and chairs to seat ~18 for meetings
 - Couches and upholstered chairs to be re-used from existing Senior Common Room

SECTION C:

- H. Lighting:** natural light & overhead architectural lighting
- I. Power requirements:**
 - 4 quad receptacles – one on each wall
- J. Special systems:**
- K. HVAC:** individually adjustable 2-pipe heat/cool fan-coil unit
- L. Plumbing:**
- M. Special finishes:** high level of finish
- N. Special Needs:**