

PROJECT PLANNING REPORT
FOR
BALCONY ENCLOSURES
AT
THE UNIVERSITY OF TORONTO SCARBOROUGH

23 AUGUST 2007

TABLE OF CONTENTS

- I. EXECUTIVE SUMMARY
- II. MEMBERSHIP AND TERMS OF REFERENCE
- III. BACKGROUND INFORMATION
- IV. ACADEMIC PLANS
- V. EXISTING SPACES AND PROPOSED SPACE PROGRAM
- VI. FUNCTIONAL PLAN
- VII. SPECIAL CONSIDERATIONS
- VIII. RESOURCE IMPLICATIONS
- IX. FUNDING SOURCES
- X. SCHEDULE

Appendices

- Appendix 1: Project Cost Estimate
- Appendix 2: Room Data Sheets

I. EXECUTIVE SUMMARY

It is proposed that two S-Wing balconies at S-421 and S-427 be enclosed to create faculty and staff offices required to accommodate increased needs associated with the creation of new Departments and with growth in graduate enrolment and faculty complements.

The need for these offices is urgent because the former Department of Life Sciences has divided into two departments: Biological Sciences and Psychology, effective July 2007 and will require reorganization of existing facilities and the creation of new academic administrative facilities. The Balcony Enclosures will provide each of the new Departments with a distinctive, high quality departmental office area.

In addition, there are insufficient offices and related spaces for faculty and graduate students to permit any growth in the Sciences at Scarborough. The Balcony Enclosure project will create eight additional academic offices. Until July 2008 when the project is complete, double occupancy of several offices will occur.

Limited renovation of existing space will be required to achieve maximum efficiency of the area. The total area to be renovated and enclosed is about 455 gross square metres (gsm), of which 307 gsm is currently in the area of the balconies.

The renovations will result in a total of 16 offices, including two offices for departmental chairs, plus reception areas, storage and support facilities with the total project cost estimated to be \$3,614,900, including all fees and contingencies. Funding is to be provided from UTSC operating funds. No borrowing is required.

II. MEMBERSHIP AND TERMS OF REFERENCE

A. Members of the Project Committee:

John Coleman (Chair)	Vice-Principal, Research and Graduate Studies, UTSC
Kim McLean	Chief Administrative Officer, UTSC
Gail Milgrom (Secretary)	Managing Director Campus and Facilities Planning
Julian Binks	Manager, Capital Projects Planning
Jim Derenzis	Director, Facilities Management, UTSC
Jeevan Kempson	Senior Special Projects Officer, UTSC
John Bassili	Chair, Department of Psychology, UTSC (July 07)
Greg Vanlerberghe	Interim Chair, Department of Biological Sciences, UTSC (July 07)
Mark Schmuckler	Professor, Department of Psychology, UTSC
Rene Harrison	Professor, Department of Biological Sciences, UTSC
Lucy Pickering	Administrative Assistant, Department of Biological Sciences, UTSC
Michelle Hilscher	Graduate Student, Department of Psychology

B. Terms of Reference:

1. Identify demands for the space, especially for offices, that is provided by potential balcony enclosures in the Sciences Wing, University of Toronto Scarborough.
2. Make recommendations about a detailed space plan or program indicating how space and facilities should be organized, including spaces adjacent to the balconies that can be appropriately included in the renovation.
3. Demonstrate that the proposed space program will take into account the Council of Ontario Universities' space standards.
4. Identify all secondary effects and phasing impacts.
5. Identify equipment and movable furnishings necessary to the project and their estimated cost.
6. Identify design implications of the balcony enclosures and make proposals about an appropriate strategy for dealing with those implications, including consultation with the Design Review Committee.
7. Identify all resource implications, including a preliminary estimate of the total project cost, and projected increases to the annual operating costs of the University of Toronto Scarborough.
8. Identify a funding plan for capital, furnishing and operating costs.
9. Report by August, 2007.

III. BACKGROUND INFORMATION

Since 1997-98 FTE (undergraduate and graduate) enrolment at the University of Toronto Scarborough has grown from 4,305 to 8,373 in 2006-07. The enrolment plans developed in 2003 that have directed this growth indicated that FTE undergraduate enrolment should stabilize in 2010-11 at about 8,220 FTE, but this number has already been exceeded. In terms of headcount, this has risen from 5,289 to 10,163, an increase of 4,874. The graduate student headcount, which was 35 in 1997-98 is planned to increase to over 190 in 2008-09.

Since 2001 five new buildings have been completed on the Scarborough campus, and another, the Science Research Building, is under construction. Two of the new academic buildings, the Academic Resource Centre and the Student Centre, were needed to meet space shortages existing prior to enrolment growth, leaving only the Management and Arts & Administration buildings that were specifically planned to address enrolment growth. The Science Research Building will provide laboratory facilities, another large classroom and faculty offices to help to relieve some of the pressures of enrolment growth.

TABLE 1: FALL/WINTER FTE INCREASES AT UT SCARBOROUGH 1997-2007

	1997-98	2006-07	% Incr	FTE incr
Undergrad	4,270	8,267	93.6	
Graduate	35	107	205.1	
Total	4,305	8,373	94.5	4,068

TABLE 2: HEADCOUNT INCREASES AT UT SCARBOROUGH 1997-2007

	1997-98	2006-07	% Incr	Headcount incr
Undergrad	5,254	10,041	91.1	
Graduate	35	122	248.0	
Total	5,289	10,163	92.3	4,874

TABLE 3: NASMS/FTE AT UT SCARBOROUGH

	NASM	FTE Enrolment	NASM/ FTE
Totals 1997-98	31,803	4,305	7.4
Demolition Portion of Bladen for ARC, est.	-2,211		
Academic Resource Centre	5,793		
Student Centre	2,387		
Management Building	2,325		
Arts & Administration Building	2,761		
Demolition of Portables, Soil Erosion, Sprung Structure	-1,212		
Totals 2007-08 (enrolment as 06-07))	41,646	8,373	5.0
Science Research Building - occupancy Sept 2008	2,982		
Totals 2008-09 (enrolment as 06-07)	44,628	8,373	5.3

The University of Toronto Scarborough continues to have space shortages, in spite of the construction of several new buildings. In 1997-98 UTSC had about 7.4 nasms per FTE student, by 2004-05 (the most recent COU survey) this had dropped to 5.0 nasms per FTE student, and the construction of the Science Research Building will bring this number up only marginally to 5.3 nasms per FTE student. While the most acute shortages are in classrooms and university support facilities such as cafeterias, there are space shortages in almost every category of activity, including offices, storage, and meeting rooms. Furthermore, some of these shortages are exacerbated because the original poured concrete buildings on the campus, while architecturally spectacular, are almost impossible to reconfigure. Spaces that may have been perfectly configured for the needs of the 1960s are difficult to renovate to meet the needs of the early 21st century.

This inflexibility of design is especially important in the Science Wing. This is the largest structure on the campus, accommodating four departments - Computer and Mathematical Sciences, Psychology, Biological Sciences, and Physical and Environmental Sciences. These are successful departments, attracting large numbers of undergraduates, and also increasing numbers of graduate students to work with faculty in their research facilities. The Science Wing has faculty and administrative offices, teaching and research laboratories, and classrooms. With enrolment growth and associated increases in faculty complement and administrative needs, more people and activities have been squeezed into limited space. The Science Research Building will resolve some of this pressure, but by no means all of it. In particular, there is a need to find appropriate space for graduate programs that have expanded faster than was anticipated and also for the administration of new departments that have been created by the division of the former Department of Life Sciences.

The original 1964 building of the Sciences Wing includes four balconies, two on the fourth level and two smaller ones on the fifth level. Situated at key points – the knuckles of the long sinuous building - these appear to have been intended as areas that were related to staff and faculty lounges, where people could gather and look out at Highland Creek Valley. The balconies were, however, scarcely if ever used – being too hot in summer and too cold and exposed in the winter. Furthermore, all but one of the lounges adjacent to them has been converted to other uses. This report proposes that they be enclosed and that the useful space created by this be used for essential administrative and faculty offices in order to relieve some of the acute space pressures in the Sciences Wing.

IV. ACADEMIC PLANS AND DEMAND FOR SPACE

The Phase III Enrolment Growth plan prepared by the Planning and Budget Office of the University in 2003 indicated growth in enrolment on the campus from 5,752 undergraduate headcount in 2000-01 to a peak of 9,715 in 2006-07, declining to a steady-state headcount of 9,527 by 2010-11. There were no firm targets for faculty and administrative staff associated with these enrolment projections, but for space planning purposes it was assumed that there would be about 285 FTE faculty requiring offices at steady-state and about 320 administrative and other staff, of whom 230 would require offices. Of these it was expected that about 54 faculty and staff requiring offices would be in Life Sciences and 42 would be in Physical and Environmental Sciences; these are the two departments most directly affected by a need for offices in the Sciences Wing close to the research facilities and laboratories. In 2000 the Provost had set a target of 185 for graduate students based at Scarborough, and this figure was rolled into the growth plans.

It is expected that an updated and comprehensive academic plan for UT Scarborough will be developed in the next two years. Until then it is necessary to assume that the Phase III targets still apply, with the following provisos:

1. The undergraduate enrolment target has already been exceeded. In 2006-07 the undergraduate FTE count is 8,267 or 916 above what was in the Phase III plan. These enrolment totals are not expected to decline.
2. In 2006-07 there is a headcount of 122 graduate students with a formal affiliation to Scarborough, though the number of graduates who spend the majority of their time on the campus is probably 50 more than that. This number is expected to grow well beyond 185 by steady state because of initiatives to introduce graduate programs consistent with the goals expressed in Stepping Up in 2004, and the expansion of existing doctoral student numbers on campus who are being supervised by new faculty based at UTSC. The very successful professional Masters of Environmental Science program, with a current enrolment of 43 students, is expected to grow to 90 students in 2008-09.
3. A conservative approach to making faculty appointments has had the consequence that in 2006-07 only 247 FTE faculty are based at Scarborough, with an additional 14 FTE planned positions to be filled, for a budgeted total of 261 positions, or 24 fewer positions than were anticipated in 2003. If there is some success in increasing faculty complement to the planned level of 2003, this has substantial consequence because there are insufficient offices for the current 247 faculty and sessional appointees on campus. Every department except Management will have some offices with double occupancy in 2007-08.
4. In 2006-07 there are 324 administrative staff FTEs at Scarborough. It is reasonable to suppose that any additional increases in undergraduate and graduate enrolment will require an increase in administrative appointments and offices.

In addition, it should be noted that these planned changes impact particularly on Life Science and Physical and Environmental Sciences, because these are the Departments with the largest numbers of active graduate students on campus, with the majority of faculty doing research in laboratories on the campus, and with administrative needs that have to be met on campus.

Furthermore, as of July 2007 the former Department of Life Sciences is separating amicably into two smaller departments of Biological Sciences and Psychology, each of which will require its own administrative staff and facilities. It should be noted that the previous arrangements for the Life Sciences Departmental Office were very inefficient. The main office did not permit it to be expanded contiguously (except by means of a balcony enclosure), so two staff, the mail room and other support facilities were in a separate space on another floor. This will be taken over by Biological Sciences, which will inherit the awkward configuration. The Psychology Departmental Office will be based in a converted faculty office, situated along a corridor of faculty offices. These arrangements are scarcely commensurate with the profile of two of the most prestigious departments on the campus, nor do they facilitate the possibility of expansion or other changes, nor do they promote administrative efficiency.

V. EXISTING SPACES AND PROPOSED SPACE PROGRAM

The 2004-05 COU space inventory suggests that UTSC is close to the space required for academic offices – at 97% of the generated figure. However, this is deceptive. The 1960s buildings have about 280 of the 400 offices on campus, and the average size of these offices is almost 16 nasms, compared with the standard office size of 12 nasms assumed for COU calculations. The result is that, while there is theoretically adequate office space, there are, in fact, insufficient offices for individual faculty and administrative staff, and for graduate students. This shortage is corroborated by the requests of Department chairs in 2007 for additional offices. It appears that there will have to be double occupancy in at least 20 faculty offices on campus in 2007-08, for full-time tenure stream and contract appointments – stipendiary appointments already share offices. This shortage is compounded in the Sciences Wing, where the massive concrete structure has made it impossible to renovate and subdivide existing offices, new graduate programs have claimed some space that might otherwise have been allocated to offices, and some offices have had to be converted to laboratories, for instance for new appointments in developmental psychology.

The current space occupied by the Department of Life Sciences is shown in Table 4, broken down in the categories of Biological Sciences and Psychology. The existing spaces designated in the inventory as Life Science are shown separately because there is no simple way of dividing them without a space by space assessment. Life Sciences includes the space for the former Departmental Office. Table 5 shows the Departmental profile for Life Sciences.

Table 4: Current Space Allocations in Life Science

COU Category	Biological Sciences	Psychology	Life Sciences	Total Nasms
Ugrad Teaching Lab	326		911	1,237
Ugrad Teaching Lab Support	157		267	424
Research Lab	1,045	691	128	1,864
Research Lab Support	391	141	799	1,330
Faculty Office	226	273	27	526
Other Academic Office	92	29	9	129
Grad Student Office	116	260	15	391
Dept Admin Office			70	70
Dept Office Support	2		28	30
Total	2,354	1,394	2,254	6,001

Table 5: Life Sciences Departmental Profile

	2006-07 Biol Sci	Additional for 15% Ugrad Enrol Growth & Grad Stu Expansion ²	Total Biol Sci	2006-07 Psych	Additional for 15% Ugrad Enrol Growth & Grad Stu Expansion ²	Total Psych
FTE Academics ¹	22.00	1.0	23.00	22.99	1.0	23.99
Post Doc Fellows	10	5	15	2	1	3
Professor Emeriti, active	0	-	0	0	-	0
Stipend Crs per term	5.0	2.0	7.0	7.0	3.0	10.5
FTE Non-Academic Staff	14.00	1.00	15.00	4.50	1.00	5.50
FTE PHD Students	19	19	38	12	12	24
FTE Masters Students	19	19	38	5	5	10
FT TAs Stations	13	2	15	9	1	10

1. FTE academics show budgeted positions as of 2007-08 for both Biological Sciences and Psychology. Biological Sciences also includes 2 TBA positions approved for 2008-09.

2. FTE academics and FTE non-academic staff were increased over the current budgeted complement in response to anticipated undergraduate enrolment increases.

FTE graduate students were increased over current levels in response to planned graduate expansion.

FT TA stations were increased by 15% over current levels in response to anticipated undergraduate enrolment increases.

Two balconies have been considered for possible enclosure. These enclosures will require renovation of immediately adjacent spaces to achieve greater efficiencies in the allocation of new spaces. Since the balconies are not included in COU space inventories they have been measured independently, and the adjacent spaces have been included as gross square meters. When a final and detailed design is available it will be possible to calculate net assignable square meters.

Balcony 1 is adjacent to S-421 and includes three existing rooms, for a total area of about 248 gross square meters.

Table 6: S-421 Balcony Areas

Room	Use	Area in sq metres
S-421A	Staff Office –	20.87
S-421B	Chair's Office	27.22
S-421C	Faculty Office	41.54
Balcony 1	No current use	149.00
Other – corridor etc.		9.12
		247.75

Balcony 2 is adjacent to S-427 and includes two adjacent rooms, for a total area of about 207 gross square meters.

Table 7: S-427 Balcony Area

Room	Use	Area in Sq Metres
S-427B	Faculty office	25.00
S-427C	Faculty Office	15.00
Balcony 2	No current use	158.00
Other – corridor etc.		9.12
		207.12

The total area considered for enclosure and renovation is shown in Table 8. The enclosure of both balconies will incur the loss of 1 administrative office and 4 faculty offices; one of the faculty offices is a multi-station space of 42 nasms and another is the Chair's office for Life Sciences/Biological Sciences. All of these facilities will have to be replaced in the renovation. The total space involved will be 454.87 square metres, and the net space gained will be about 307 square metres.

Gross square meters rather than nasms are reported here because all of the existing spaces, including corridors will be reconfigured. All these rooms and the balcony are irregularly shaped, and the balcony area is from a direct measurement rather than the space inventory, so these numbers may not be precise.

Table 8: Total Areas to be Enclosed and Renovated

Space	Currently Used areas sq metres	Total Area for Renovation	Net Space Increase
Balcony 1	98.75	247.75	149.00
Balcony 2	49.12	207.12	158.00
Totals	147.87	454.87	307.00

The proposed space program for the enclosure of the two fourth-floor S-Wing balconies is shown in Table 9 below. This program has been developed in the context of preliminary designs for office layouts, and it is intended to maximize numbers of offices while providing a flexible layout that could accommodate the offices for administrative staff and support areas that will be required.

Table 9: Proposed Space Program

	Item	Number	Unit Area Nasms	Total Nasms	
Balcony 1					
	Chair's Office	1	24	24	Space for small meeting table
	Recep./Sec. Office	1	15	15	For secretary/receptionist
	Waiting Area	1	20	20	
	Display Area	1	6	6	Interior space
	Photocopy	1	6	6	For general use
	Admin Offices	2	12	24	For Business officer and Admin.
	Faculty Offices	4	12	48	
				143	
Balcony 2					
	Chair's Office	1	24	24	Space for small meeting table
	Recep./Sec. Office	1	15	15	For secretary/receptionist
	Waiting Area	1	20	20	
	Display Area	1	6	6	Interior space
	Photocopy	1	6	6	For general use
	Admin Offices	2	12	24	For Business officer and Admin.
	Faculty Offices	4	12	48	
				143	

The total program area would be 286 nasms. Compared with the total combined area of 455 gsm for the two balconies, providing for a gross-up of 1.59.

The program generates 16 offices, and 2 small support spaces for photocopying and 2 reception/waiting areas. Five offices will have to be replaced for a net total addition of 11 offices.

VI. FUNCTIONAL PLAN AND SITE CONSIDERATIONS

The main relationships to be considered in the functional plan are as follows:

1. There should be some provision made to ensure that at least one internal corridor terminates with a view over Highland Creek Valley.
2. As many offices as possible should be provided with windows, and where there are interior offices the design should use interior glazing as appropriate to allow natural light to penetrate into them.

VII. SPECIAL CONSIDERATIONS

A. Accessibility and Personal Safety

All the balcony enclosures should be accessible and appropriate measures taken in design to ensure personal safety, including connection to the campus security backbone.

B. Campus Planning Issues

The Balconies are on the south face of the Sciences Wing in a prominent location of this significant building. The design of the exterior of these balcony infills needs to be compatible with the architecture of the original building. Preliminary concepts have been reviewed by the Design Review committee of the University. The Design Review Committee has recommended a sustainable roofing system rather than a green roof which would draw attention to the intervention to the building, and supports this proposal.

C. Computing, Telecommunications

The new offices should be connected to the campus and University fibre network and should also have wireless nodes.

D. Environment

Attention needs to be given to the fact that these balconies face south, and will be exposed to radiation for much of the day. This will pose problems both of keeping the offices cool and of ensuring that they are sufficiently dark for computer screens to be easily read. Appropriate glazing is essential, combined with blinds that will block at least 95% of light.

E. Parking

The Balcony Enclosures will add about 307 gross square metres to the space inventory of UTSC. The parking by-law requires 2.15 spaces per 100 gsm, so the enclosures will require 7 additional parking spaces. The existing parking lots provide this as there is excess capacity to the by-law requirements.

F. Sustainability

The renovations should ensure that all possible measures to increase sustainability are taken into consideration, including T8 light fixtures, low E double glazing, sustainable roofing membrane, and the use of other materials from local and sustainable sources.

G. Phasing and Secondary Effects

The balcony enclosures need to be completed as soon as possible in order to ensure that there are offices available for faculty who will be appointed 1 July 2008, and also to provide high quality administrative space for the two new departments of Biological Sciences and Psychology that were created July 2007. These departments will be able to manage in existing space for a year, but further delay will pose complications and create administrative inefficiencies. A particular consideration is that the renovation and infill of Balcony 1 (S-421) will require that the existing Departmental Office be relocated for the duration of the renovation. Three faculty offices will also be significantly impacted by the enclosures, and alternative arrangements will be made to accommodate these faculty members.

VIII. RESOURCE IMPLICATION INCLUDING SECONDARY EFFECTS

A. Total Project Cost

A preliminary estimate for enclosing the two balconies has been provided by Curran, McCabe Ravindran Ross. The estimated total project cost, including all taxes, contingencies, secondary effects, permits and professional fees, furnishings and equipment, is \$3,614,901. The details are shown in Appendix 1.

B. Operating Costs

The maintenance, operating and utilities cost of the balcony enclosures is estimated at \$100 per net assignable square meters at 2003 costs. The total will be about \$30,000 per year. This will be paid for through the UTSC utilities and operating budgets.

IX. SOURCES OF FUNDING AND CASH FLOW ANALYSIS

This project will be funded from UTSC operating funds. The funds are in hand. No borrowing is required.

X.	SCHEDULE	
	Governance Approval	Early October 2007
	Tendering	Early January 2008
	Construction	March – August 2008
	Completion	August 2008

APPENDIX 1

PROJECT COST ESTIMATE

PROJECT NUMBER: PROJECT MANAGER: Jim Derenzis
 PROJECT NAME: S-Wing Balconies Infill
 TOTAL PROJECT COST (TPC)

Number	Item	Remarks	Base Cost	GST (1.98%)	Cost
CONSTRUCTION					
835730	Construction: Main Contract	as per CM2R costing 13 June 2007 adjusted per note 1	2,556,000	50,609	2,606,609
835752	Construction: Other Contract	escalation to January 2008 tender	76,680	1,518	78,198
835754	Secondary Effects	3%	-	-	-
835757	Construction Contingency	12%	315,922	6,255	322,177
835762	Hazardous Waste Removal	na	-	-	-
835765	Demolition Services	Included in Main Contract	-	-	-
835768	Site Preparation		-	-	-
Total Construction					\$3,006,984
LANDSCAPING					
835755	Landscaping Services	na	-	-	-
Total Landscaping					\$0
PERMITS, INSURANCE					
835400	Licences / Permits	\$25 per GSM 495 GSM Calculated at 0.30% of Main Contract	12,375	-	12,375
836700	Insurance		7,668	152	7,820
Total Permits/Insurance					\$20,195
PROFESSIONAL FEES					
835200	Consulting Consultants:	as per BSN proposal 27 June 2006 + 5%	211,050	4,179	215,229
835201	Disbursements	5% of fees	10,553	209	10,761
835204	Construction Management Fees		-	-	-
835206	Other Consultants	cost, code, roof, inspection, etc	20,000	396	20,396
835210	Legal Services		-	-	-
835721	External Project Manager		-	-	-
895720	Design Fees: In House		-	-	-
895721	Design: Disbursements	Meals, parking, mileage, printing	-	-	-
835723	Project Disbursements	Meals, parking, mileage, printing	-	-	-
895725	Project Management: Fees	3.50%	106,666	-	106,666
Total Professional Fees					\$353,052
SERVICES TO SITE					
835700	Site Services and Infrastructure	City charges	-	-	-
Total Site Services					\$0
COMPUTER WIRING AND TELEPHONES					
821110	Equipment: Computing: Purchase	Wireless hardware	2,000	40	2,040
835010	Telephone Line Service		-	-	-
Total Computer Wiring & Telephones					\$2,040
MOVING AND					

STAGING					
837100	Moving	allowance	10,000	198	10,198
837101	Staging	allowance	20,000	396	20,396
Total Moving and Staging					\$30,594
FURNISHINGS AND EQUIPMENT					
820010	Furniture: Purchase	allowance, no schedule	60,000	1,188	61,188
821010	Equipment: Purchase	na	-	-	-
821510	Equipment: Audio / Visual: Purchase	na	-	-	-
821610	Equipment: Research: Purchase	PST is not applicable	-	-	-
Total Furnishings and Equipment					\$61,188
OTHERS					
820011	Interior Signage: Purchase / Design	Included in Main Contract	-	-	-
821325	Security and Access Systems	Included in Main Contract	-	-	-
835070	Courier		1,000	-	1,000
835756	Exterior Signage: Purchase / Design	Included in Main Contract	-	-	-
835764	Client Construction Expenses		5,000	-	5,000
835766	Ceremonies	Ground breaking, top off, grand opening	-	-	-
835780	Parking	1% of main contract	25,560	-	25,560
890670	U of T Trades	allowance	2,000	-	2,000
890670	Facilities Repair/ Renovation: Internal	allowance	2,000	-	2,000
Total Others					\$35,560
SUB TOTAL:					\$3,509,613
PROJECT CONTINGENCY					
835758	Project Contingency	3% of main contract		-	105,288
Total Project Contingency					\$105,288
FINANCE COSTS					
835305	Interest Charges	assume fully funded by UTSC		-	-
Total Finance Costs					\$0
TOTAL PROJECT COST:					\$3,614,901
Project Management Fees		Recommended by: Jim Derenzis	Approved by:		
\$106,666		7/18/2007 11:25	Date:		

note 1

CM2R estimate is \$1,386,000 + \$1,446,000 + \$35,000 total \$2,867,000.

Green roof deletion, structure reduced 15%, glazing between offices replaced by drywall.

Design contingency reduced to 5% from 10%. Total \$311,000.

APPENDIX 2

ROOM SPECIFICATION SHEETS

SECTION A

Chairs' Offices

Rooms Required: Two
 NASM Required: each at 24 nasms

SECTION B:

- A. Space purpose and type of activity: Chair's office with small meeting space
- B. Number of occupants, resident: One
- C. Number of occupants, transient: 5
- D. Space relationship, proximity to other rooms/facilities: Adjacent to chair's secretary, close to meeting room and business officer
- E. Visual relationship, proximity to other rooms/facilities:
- F. Equipment:
 Existing: Phone, computer,
- G. Furniture, moveable:
 Existing: Office furniture, desk, chair, filing cabinet, bookshelves, small meeting table and chairs
 New:
- H. Furniture, built in/millwork:

SECTION C:

- I. Lighting: Suitable blinds to reduce heat gain in summer
- J. Power requirements: Electrical outlets at regular intervals
- K. Communications (phone, data, cable): One data outlet
- L. Special systems: Good ventilation
- M. HVAC (Heating, Ventilation, Air Conditioning):
- L. Plumbing:
- M. Special finishes: Windows tinted with blinds
- N. Special Needs:

SECTION A**Other Offices****Rooms Required:**

NASM Required: each at 12 nasms

SECTION B:

- A. Space purpose and type of activity:** Faculty Office and Admin Office
- B. Number of occupants, resident:** One
- C. Number of occupants, transient:** Two
- D. Space relationship, proximity to other rooms/facilities:**
- E. Visual relationship, proximity to other rooms/facilities:**
- F. Equipment**
Existing: Standard office equipment
New:
- F. Furniture, moveable:**
Existing: Standard office furniture
New:
- H. Furniture, built in/millwork:**

SECTION C:

- I. Lighting:**
- J. Power requirements:** Electrical outlets at regular intervals
- K. Communications (phone, data, cable):** One data outlet
- L. Special systems:**
- M. HVAC (Heating, Ventilation, Air Conditioning):** Consistent with needs of a class A gallery
- L. Plumbing:**
- M. Special finishes:** All outside offices must have blinds and tinted glass.
- N. Special Needs:**

SECTION A

Support Areas

Rooms Required:

NASM Required: Waiting areas at 20 nasms each; photocopy & display areas at 6 nasms each;
Reception areas at 15 nasms each

SECTION B:

- A. Space purpose and type of activity: Departmental support areas
- B. Number of occupants, resident: One in each reception area
- C. Number of occupants, transient: 5 in waiting areas
- D. Space relationship, proximity to other rooms/facilities: Must be accessible to adjacent offices and easily accessible to faculty with offices elsewhere.
- E. Visual relationship, proximity to other rooms/facilities: Visually monitored from a nearby administrative offices
- F. Equipment:
 - Existing: Photocopier, pigeon holes for mail, storage cabinets
 - New:
- G. Furniture, moveable:
 - Existing: Small table
 - New:
- H. Furniture, built in/millwork:

SECTION C:

- I. Lighting: waiting areas, photocopy, and display areas need not have windows
- J. Power requirements: 240v Electrical outlet
- K. Communications (phone, data, cable): One data outlet in each type of area
- L. Special systems: good ventilation
- M. HVAC (Heating, Ventilation, Air Conditioning):
- L. Plumbing:
- M. Special finishes:
- N. Special Needs: