Appendix "I" to Report Number 136 of the Academic Board (June 2, 2005)

University of Toronto

OFFICE OF THE VICE- PROVOST, SPACE AND FACILITIES PLANNING

TO: Planning and Budget Committee

SPONSOR: Ron Venter, Vice-Provost, Space and Facilities Planning
CONTACT INFO: 416-978-5515; ron.venter@utoronto.ca

DATE: April 25th, 2005, for May 10th, 2005.

AGENDA ITEM: 8

ITEM IDENTIFICATION:

Project Planning Committee Report for the Science Building at University of Toronto at Scarborough.

JURISDICTIONAL INFORMATION:

Under the Policy on Capital Planning and Capital Projects, the Planning & Budget Committee reviews Project Planning Reports prepared for a capital project and recommends to the Academic Board approval in principle of the project.

PREVIOUS ACTION TAKEN:

Enrolment plans for the University of Toronto at Scarborough indicate enrolment growth of about 65 per cent between 2000-01 and 2007-08. The UTSC Master Plan 2001 indicated several academic and other buildings that would be required to accommodate this level of growth, including an extension to the Sciences Wing of the Andrews Building. The other buildings, specifically the Management Building, Student Centre, Academic Resources Centre, Joan Foley Residence and Campus Parking have been completed or are under construction, i.e. the Arts and Administration Building. The new Science Building, an essential part of this expansion has now been identified as the highest priority for UTSC, and one of the highest priority projects at the University of Toronto.

The Project Planning Committee for a new Science Building at Scarborough was formally struck in September 2001, with the anticipation that Provincial Government funding might become available to support this project. The committee prepared a draft space programme for a building comprising 4,900 nasm. By early 2002 it became clear that the Provincial Government would not provide the required capital funding and the project report was not completed. However, the committee continued to meet, and introduced modifications to the proposal to respond to changing opportunities for funding. A multi-phase renovation and construction schedule for science facilities at UTSC was developed, which included a new science building as the culminating phase. A Project Planning Report for the first phase of this multi-phase schedule that addressed the renovation of the science teaching laboratories was submitted in Fall 2003 and approved by Governing Council in January 2004.

These renovations were completed in the summer of 2004 and the renovated teaching laboratories are currently in use. This earlier initiative met the critical teaching needs in the sciences at UTSC, but the problem of additional space for research in science remains unresolved and requires immediate attention to successfully recruit new faculty as well as to provide the infrastructure in support of this endeavour.

Enrolment growth plans for UTSC anticipate increased enrolment in the sciences, and the faculty complement plan requires that 13 new appointments in the sciences be made between 2004 and 2008. The simple fact is that there is no space available to provide research laboratories and /or offices for these new hires. A new Science Building at UTSC is essential if the academic plans for UTSC are to be implemented.

BACKGROUND:

A new Science Building at UTSC is urgently required to support and provide the facilities for the development of the physical and environmental sciences as well as the life sciences research endeavours on the campus. This project is planned to be constructed in two phases. While the complete project is urgently required, the available funding will only allow for the first phase to be undertaken at this time. The two phases will be almost identical and adjacent structures that together will address all the research and office needs for the sciences at UTSC, and will provide an innovative and advanced compendium of facilities for scientific research in the eastern GTA.

The Project Planning Report Report recommends the construction of Phase 1 of the new Science Building project which is primarily dedicated to research laboratories and offices for science faculty, and will meet the essential needs for science facilities at UTSC. Without Phase 1 UTSC will not be able to provide research facilities for the faculty who will be hired to teach the planned growth in enrolment.

For Phase 1 a new building of 2543 net assignable square metres [nasm] or a maximum of 5075 gross square metres, is recommended on a site adjacent to the existing Science Wing overlooking Highland Creek Valley. The project also includes the rectification of several deferred maintenance issues, plus renovations to existing research facilities that were built some 40 years ago and require serious upgrading.

The new Science Building will house 16 laboratories designed as generic wet labs with a planned core of support areas, 16 faculty offices and 24 offices for graduates and post doctoral fellows and a 150 seat classroom. The planned design has been driven by the need to incorporate as much flexibility in the future use of the facilities as possible. The design and construction schedule for the new Science Building is very aggressive and requires completion and occupancy in January 2008. The total project cost is estimated at $31,500,000.

HIGHLIGHTS:

The initiation of the planning and design of Phase 1 is critical at this time to signal a firm commitment to all that the University of Toronto is actively strengthening the science teaching and research at UTSC in the eastern GTA and will be aggressively seeking additional support from the Canadian Foundation for Innovation and other sources for strategic research projects that could be included within Phase 1 as well as extend into the planned Phase 2. While the planning for this project will proceed as rapidly as is practical towards a January 2008 completion date, a review of all secured funding resources will be undertaken in April 2006 prior to the commencement of construction, anticipated to occur in the early spring of 2006.

The Sprung Structure at UTSC must be relocated to clear the site for the new science building. It is necessary to do so because the sprung structure is required to accommodate large classes on the UTSC campus. It is projected that the relocation will take place in December, 2005 and be available for teaching in January, 2006.

Under the Policy on Capital Planning and Capital Projects, the Project Planning Committee will continue through the implementation phase. The Working Executive of the Project Implementation 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: Professors Ted Relph and Brian Greenwood

Planner: Elizabeth Sisam/ Gail Milgrom

Implementer: Julian Binks

This Working Executive will be expanded to include a Project Manager to be appointed by the Chief Capital Projects Officer. It is also recommended that the process, consistent with policy, to appoint the consultants be initiated immediately following approval of the project by the Planning and Budget Committee. Proceeding in this manner will allow the consultants to be formally hired immediately upon approval by Governing Council in late June, 2005 and as a result accelerate the project towards completion.

FINANCIAL AND/OR PLANNING IMPLICATIONS:

All projects that are advanced for consideration by the Planning & Budget Committee are evaluated against a stringent set of academic criteria. These criteria are detailed in the Capital Plan tabled at the Planning & Budget Committee, December 12th, 2004[1].

The urgent need to establish a Science Building at the University of Toronto at Scarborough is a direct consequence of the double cohort and the resultant enrolment expansion. More students implies more facilities to support the educational process, but also to attract high ranking academics through the provision of research facilities that will ensure that academics once recruited will contribute to the overall well-being of the educational and research aspirations of UTSC. The Stepping-Up initiative addresses the development of both UTSC and UTM and the need for the development of comprehensive facilities in support of students and academics on these campuses.

Borrowing capacity for the Capital Plan: The maximum borrowing capacity available to the University, as outlined in the Capital Plan presented to Planning & Budget on December 12th, 2004, was approximately $112 million[2]. At present the borrowing capacity as of March 31st, 2005, as reported to Business Board, has been reduced to $89 million.

[1] The nine criteria by which all capital projects are assessed are:

1. Mission Objectives of the University,
2. Policy Objectives & Legislative Requirements,
3. Provincial Space Standards,
4. Strengthening Scholarship,
5. Providing Academic Leadership,
6. Student Experience,
7. Economic Consistency,
8. Resources,
9. Deferred Maintenance.

[2] The Capital Plan data is based on all capital project approvals up to, but not including the Business Board approvals on November 8th, 2004.

The Science Building at UTSC is identified in the Capital Plan with a projected borrowing contribution of $20 million. The projected cost for phase 1 of the Science Building is $31.5 million.

The planned sources of funding for the project are identified below, however it is proposed to request the approval of only $3,000,000 at present to allow for the design to proceed to the *call for tender* stage of planning. This will enable sufficient time, through to March 2006, to confirm the various sources of external funding that are required for the project as noted below. Should the project not proceed according to the schedule outlined, any additional costs incurred as a result of delays will be carried by UTSC.

Planned Funding Sources: $20 million borrowing: The repayment of the $20 million mortgage, commencing upon completion of the project in December 2007, will be paid from the operating budget of the University of Toronto at Scarborough. The capacity to address these charges has been addressed and confirmed by the Vice-President and Principal of UTSC.

Planned Funding Sources: $11.5M: Additional funding for the project is required and will be derived from the following sources.

1. Cash allocation of $3,000,000 from the one-time-only fund identified in the 2004/05 operating budget for academic projects seriously restricted by shortcomings in infrastructure and deferred maintenance. These funds will suffice for Phase 1 of the project to proceed to design and tender and will, in the total context of the project, contribute to the direct infrastructure costs of this project currently estimated at $3,050,000.

2. The allocation of $4.5 million from UTSC carry-forward funds.

3. Funding from external sources in the amount of $4.0 million to support the project that could potentially materialize within the next twelve months. The various options that are available for consideration include:
    a. new support for capital projects from the Government of Ontario that could result from the spring budget.
    b. submission of CFI [Canadian Foundation for Innovation] proposals by UTSC faculty members that will support the development of these new science research facilities in targeted areas of research endeavour.
    c. elect, prior to the commencement of construction, anticipated for April, 2006, to proceed to shell-in the fourth floor of the project. This will result in a savings of approximately $1 million and could provide immediate savings were the project short of funds.
    d. delay the implementation of those *secondary effects* components of the project that can be delayed to post April, 2006. At this time the funding resources could be identified with no negative planning impact on the project. The total cost of the secondary effects that can be delayed to beyond April 2006 is estimated to be $1 million.
    e. In April, 2006, prior to commencement of the construction of the science building the availability of all funds would be reassessed. The possibility of additional funding through either cash contributions and or short term loans up to a maximum of $4.0 million would also be considered in the context of what new funding sources were available.

This approach allows Phase 1 of the Science Building to proceed through the detailed planning stage and will require a detailed re-evaluation of the situation prior to the commencement of the construction in April, 2006.

Operating Costs: The annual operating costs of the facility, Phase 1, are estimated at $300,000. These costs will be re-evaluated once the building is operational and carried from the operating budget of the University of Toronto at Scarborough.

RECOMMENDATIONS:

It is recommended to the Academic Board:

Subject to the project returning to Planning and Budget Committee for consideration of further funding sources when those can be identified,

1. THAT the Project Planning Report for Phase 1 of the Science Building at the University of Toronto at Scarborough, comprising a total of 5075 gross square metres, be approved in principle;

2. THAT a cash contribution in the amount of $3,000,000 from the one-time-only fund identified in the 2004/05 operating budget for academic projects seriously restricted by shortcomings in infrastructure and deferred maintenance will be made available to UTSC to undertake the design [starting June, 2005 to March, 2006] through to the tender stage of the development.

3. THAT all subsequent phases of the Science Building, consistent with established policy, will require formal approval by Governing Council and will require that the Project Planning Reports for each phase be reviewed by the Planning and Budget Committee.