



University of Toronto

CAPITAL PROJECTS DEPARTMENT

TO: Business Board

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DATE: June 7, 2005 for June 23, 2005

AGENDA ITEM: 5(f)

ITEM IDENTIFICATION:

Capital Project – Science Building at the University of Toronto at Scarborough

JURISDICTIONAL INFORMATION:

Pursuant to Section 5.2. (b) of its Terms of Reference, the Business Board approves expenditures for, and the execution of, approved Capital Projects.

PREVIOUS ACTION TAKEN:

This is the first time this Project is being presented to the Business Board.

Other Board and Committee approvals to-date include:

- Planning and Budget - May 10, 2005
- Academic Board - June 2, 2005

HIGHLIGHTS:

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 John Andrews Building. The new buildings, including the Management Building, Student Centre, Academic Resource Centre, Joan Foley Residence and Campus Parking have been recently completed and the Arts and Administration Building is currently under construction. 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 and approved at Business Board on January 19, 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.

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 construction of Phase 1 of the new Science Building project 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 2,543 net assignable square metres (nasm) (27,400 gsf) or a maximum of 5,075 gross square metres (54,600 gsf), 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. Base construction cost is estimated at \$18,095,000 or \$ 331/gsf. (including \$5,575,000 in infrastructure and secondary projects).

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.

FINANCIAL AND/OR PLANNING IMPLICATIONS:

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 estimated at \$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. This will enable sufficient time, through to approximately 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 January 2008, 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 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 if the project is 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.

RECOMMENDATION:

THAT the Vice-President - Business Affairs be authorized:

- (i) to expend up to \$3,000,000 for design and site preparation work for the University of Toronto at Scarborough Science Building,
- (ii) with funding from the one-time-only fund identified in the 2004-2005 operating budget for academic projects seriously restricted by shortcomings in infrastructure and deferred maintenance.