# University of Toronto



Office of the Assistant Vice-President, Space and Facilities Planning

TO: Planning and Budget Committee

SPONSOR: Elizabeth Sisam, Assistant Vice-President Space and Facilities Planning

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DATE: February 13, 2006 for February 28<sup>th</sup>, 2006

#### AGENDA ITEM: 9

Project Planning Report for East Arrival Court at University of Toronto at Scarborough (UTSC)

#### 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**

The University of Toronto at Scarborough Master Plan, approved in 2001, by Planning and Budget identified a comprehensive plan for capital development in conjunction with landscape improvements. The master plan included the provision of a courtyard environment, enhancement of pedestrian pathways and enhancement of the existing structures surrounding the Arrival Court site. It also organized parking and provided a secondary entry and drop off loop around which most of the parking for the inner campus would be located.

#### HIGHLIGHTS

The UTSC campus has grown significantly since the time the master plan was written and many new facilities have been built. Due to intensive development in recent years, the conditions of pedestrian pathways, the east parking lots, open space and roadways have deteriorated, creating unsafe conditions.

The existing layout of this area no longer aligns with surrounding facilities old and those recently constructed, and does not make use of the existing space and parking area in an efficient, attractive manner. In keeping with the planning principles of the 2001 Master Plan. The current proposal for the East Arrival Court incorporates the recommendations and direction set out within it, making improvements to enhance the student environment. The key to the design of the East Arrival Court is its pick-up/drop-off feature, adding a second commuter facility to the campus, both very much needed by the student population.

The East Arrival Court will provide a new entrance from UTSC Military Trail, organized around a principal landscape feature, a "bioswail", which will enhance the environmental performance of the Campus and improve storm water management in the Highland Creek Valley watershed. The parking area will be re-organized to provide 21 barrier free spaces for patrons with disabilities and increase visitor parking capacity. 282 standard spaces for permit holders will be maintained.

#### FINANCIAL AND/OR PLANNING IMPLICATIONS

With the development of the east arrival court, the parking ancillary will address its main outstanding deferred maintenance item – refurbishment of the Inner parking lots, optimizing available space and meeting current design standards.

The total project cost for this work is estimated to cost \$3,112,642. Sources of funding are:

TOTAL	\$3,112,642
<ul> <li>c) Bridge funding from UTSC Operating</li> <li>Fund to be paid back from the Ancillary</li> </ul>	\$2,629,918
b) Ancillary Investment in Capital Assets	\$ 249,961
a) UTSC Carry Forward	\$ 232,763

There is no requirement for borrowing within the capital program. The Parking Ancillary budget submitted to the Services Ancillary Review Group (SARG) includes the loan that has been identified for the East Arrival Court. The budget model reviewed by SARG demonstrated that the ancillary is able to carry the cost of this loan over a 12 year term while meeting the budgetary requirements of SARG.

#### RECOMMENDATIONS

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

- 1. THAT the Project Planning Report for the East Arrival Court at the University of Toronto at Scarborough be approved in principle
- 2. THAT the project scope as described in this report at an estimated cost of \$3,112,642 be approved
- 3. THAT three sources of funding be approved as follows:

	TOTAL	\$3,112,642
c)	Bridge funding over a 12 year term from the UTSC Operating Fund to be paid back from the Ancillary	\$2,629,918
b)	Ancillary Investment in Capital Assets	\$ 249,961
a)	UTSC Carry Forward	\$ 232,763

# **PROJECT PLANNING REPORT**

### FOR

# EAST ARRIVAL COURT

## AT

# THE UNIVERSITY OF TORONTO AT SCARBOROUGH (UTSC)

February 1, 2006

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#### 1. EXECUTIVE SUMMARY

- Pursuant to the initiatives approved in the 2001 UTSC Campus Master Plan, construction of the East Arrival Court is planned for summer 2006 as a means of further developing and drawing together elements of the East campus.
- The 2001 Master Plan included plans for the East Arrival Court, intended to "provide[s] an alternative arrival point and drop off loop to the main entry court for users familiar with the campus".<sup>1</sup>
- The East Arrival Court project has been undertaken to consolidate open space, parking and public access to the eastern side of the Campus. A slight decrease below existing parking levels is proposed.
- The project will provide a major new campus entry along Military Trail, which is organized around a principal landscape feature.
- This new landscape feature a bioswale will enhance the environmental performance of the Campus and improve storm water conditions within the Highland Creek Valley watershed.
- The project will improve traffic conditions for public transit, students, faculty and visitors through the provision of a second entry point off Military Trail. This second entry will:
  - Relieve congestion along Military Trail by providing additional access points for vehicles,
  - o Improve the pattern of vehicles entering and leaving the parking facility,
  - Enable the provision of a dedicated bus loading area, which is a goal of both the TTC and GO transit providers,
  - Provide a new pick-up and drop off area for students on the east side of the campus to improve car-pooling and relieve congestion now occurring at the existing drop-off facility.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Baird Sampson Neuert Architects, *Scarborough College Campus Master Plan Update*, May 17 2001 <sup>2</sup> ibid

#### 2. PURPOSE OF THE WORKING GROUP

- 1. Assess the current condition.
- 2. Respond to the general principles in the Master Plan in implementing design features for the East Arrival Court at UTSC.
- 3. Propose a recommendation to upgrade from the current situation to meet the current and future needs of the campus.
- 4. Identify all resource implications, including estimate of total project cost.
- 5. Identify sources of funding.

The working group responsible for investigating and making proposals for parking upgrades at UTSC consists of:

Kim McLean, Assistant Principal and Chief Administrative Officer, UTSC Jim Derenzis, Director, Facilities Management, University of Toronto Michel Richard, Director, Project Management, UTSC Darcy Griffith, Manager, Police and Parking Services Sandi Parsons, Supervisor, Parking Services Julian Binks, Manager, Capital Projects Planning Gail Milgrom, Managing Director, Space and Facilities Planning Jon Neuert, President, Baird Sampson Neuert Architects Incorporated Greg Reuter, Associate, Baird Sampson Neuert Architects Incorporated

#### 3. BACKGROUND INFORMATION

The 2001 Master Plan submission indicates a number of Planning Principles for future development:

- Develop a multi-centered campus organized around outdoor courtyards and activity nodes.
- Strengthen opportunities for conviviality and collegiality.
- Strengthen the environmental identity and sustainability of the campus.
- Maintain and enhance Scarborough's architectural and landscape legacy.
- Develop a system of east/west pedestrian linkages.
- Extend the interior pedestrian street system.
- Provide a universally accessible learning environment.
- Organize transportation and parking infrastructure to reinforce planning principles.
- Phase new buildings and facilities to ensure campus coherence at all stages of development.
- Site and organize new development to rectify existing design deficiencies.<sup>3</sup>

Due to intensive development of building facilities in recent years, the condition of the east parking lots, pedestrian pathways and roadways has deteriorated. The existing layout of this area no longer aligns with surrounding facilities and does not utilize existing space in an efficient, attractive manner. In keeping with the planning principles of the 2001 Master

<sup>&</sup>lt;sup>3</sup> ibid

Plan, the 2006 development of the East Arrival Court incorporates many of the above principles in its design, chief among these being the provision of a courtyard environment, enhancement of pedestrian pathways, and enhancement of the existing structures surrounding the Arrival Court site.

#### 4. CAPITAL PLANS AND CAMPUS MASTER PLAN

Academic plans at UTSC call for a growth in combined undergraduate/graduate enrolment from about 5,700 students in 2000-01 to approximately 10,000 students in 2010-11. To accommodate this growth, the library has been expanded into the Academic Resource Centre, and a Student Centre, Management Building, new Residence and Arts and Administration Building have been constructed. Currently, a new Science Building is in design phase.

This development affected the Parking ancillary by removing from inventory 58% of available Inner lot permit surface spaces. The ancillary responded to this reduction by limiting availability of permits to employees, visitors, a number of student leaders, and persons requiring barrier-free access to UTSC. The Outer parking lots, developed in 2003 and 2004, compensated for spaces lost in the Inner lots and provide parking for UTSC students and employees, as well as employees and students of Centennial HP Science and Technology Center.

The 2001 Master Plan concept for the East Arrival Court design "organizes parking and provides a secondary entry and drop off loop. Most of the parking for the inner campus will be organized within and around this space."<sup>4</sup> These features are seen in the design plan for the East Arrival Court, Appendix II.

#### 5. EAST ARRIVAL COURT FEATURES

The 2006 Baird Sampson Neuert Architects design for the East Arrival Court adheres to the design principles endorsed in the 2001 Master Plan, as delineated in section 3 above.

#### A. Bioswale:

A bioswale is defined as a "linear planted drainage channel" that "moves stormwater runoff as slowly as possible along a gentle incline, keeping the rain on the site as long as possible and allowing it to soak into the ground".<sup>5</sup>

The East Arrival Court

will provide a major new campus entry along Military Trail, which is organized around a principal landscape feature. This new landscape feature – a bioswale – will enhance the environmental performance of the Campus and improve storm water conditions within the Highland Creek Valley watershed.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> ibid

<sup>&</sup>lt;sup>5</sup> McGill School of Architecture (Fall 2002). *Think Tank Drink Tank*. Retrieved from http://www.arch.mcgill.ca/prof/bourke/arch672/fall2002/landscap.htm

<sup>&</sup>lt;sup>6</sup> Baird Sampson Neuert, UTSC East Arrival Court, Overview, January 18<sup>th</sup> 2006

The bioswale will:

- Improve amenity and serve as a source of identity for the Campus while promoting environmental stewardship of both the Campus and Highland Creek,
- Improve water quality by filtering roadway pollutants (oil and grit),
- Recharge storm water into the ground, thereby reducing the existing storm water outfall that contributes to erosion and water quality problem in Highland Creek,
- Utilize native Highland Creek species.<sup>7</sup>

#### B. Landscaping:

The East Arrival Court will be landscaped in a manner that reflects the natural surroundings in the Highland Creek valley, using species native to the area. It is anticipated that a maximum of twenty existing trees of caliper size will have to be removed in site preparation, necessitating a tree removal permit from the City of Toronto. Design plans include replacement tree plantings at a ratio of 8:1, using species native to the area to enhance pedestrian areas and drive lanes.<sup>8</sup>

#### C. Pedestrian Pathways:

The East Arrival Court design features new pedestrian pathways meant to enhance the flow of pedestrians between buildings on the East campus. These pathways will provide distinct, well-lit footpaths from:

- The Phase I & II residence pathway system, passing the parking lots and East Arrival Court road system, accessing the ARC and the B-wing.
- The H-wing pathway system to the Management walkway and the pick-up/dropoff facility, as well as the Wheel-Trans stop on the East Arrival Court roadway.

This internal pathway system will provide a connection between access points in the original UTSC buildings and those newly constructed during the recent growth phase.

#### D. Parking:

Parking facilities in the East Arrival Court feature:

- 282 standard spaces for permit holders and visitors
- 21 barrier-free spaces for patrons with disabilities
- Increased visitor parking capacity, central to all buildings in the area
- Improved lighting and emergency telephone provision
- Controlled access, reserving spaces for employees during the business day, releasing for visitor access in the evening, weekends
- Design features that not only provide improved stormwater management within the parking areas, but control the amount of run-off into the City storm water management system

#### E. Barrier-Free Parking for Persons with Disabilities:

Parking facilities in the East Arrival Court feature improved access for students, employees and visitors requiring barrier-free parking at UTSC. The number (21) of accessible parking spaces in each parking area was arrived at in consultation with UTSC's Office of

<sup>&</sup>lt;sup>7</sup> ibid

<sup>&</sup>lt;sup>8</sup> ibid

AccessAbility; locations were selected to provide optimal access to multiple locations, such as the Management Building, B-wing, and Humanities wing.

#### F. Safety Features:

The East Arrival Court will feature five emergency telephones, the location of which has been determined in consultation with UTSC Police Services. These telephones provide a communication link to UTSC Police, and allow Police to know the location of the person placing the call for prompt response.

Lighting plans within the facility will provide safe lighting levels for pedestrians utilizing footpaths and parking areas within the East Arrival Court. Lighting selection will align with the University's lighting standards, with lighting levels taking into consideration the needs of both campus patrons and residents in the surrounding community.

#### G. Deferred Maintenance:

With the development of the East Arrival Court, the Parking ancillary addresses its main outstanding deferred maintenance item – refurbishment of the Inner parking lots. As previously noted, construction in recent years removed the majority of parking spaces from the inner campus; remaining original parking spaces do not optimize available space or conform to current design standards. The parking facilities incorporated within the East Arrival Court replace the existing spaces with a slight reduction in inventory, updating the infrastructure, surface spaces, lighting, and emergency telephone systems.

#### H. Pick-up & Drop-off Facility:

Key to the design of the East Arrival Court is its pick-up/drop-off feature. This central feature adds a second commuter facility to the campus, the first being located near the Student Center and Arts & Administration Building. The East Arrival Court facility will relieve pressure on the existing commuter facility, and provide optimal access for commuting students requiring access to the buildings on the east side of the campus.

The new pick-up/drop-off facility will feature the following advantages:

- Location near the Management, Residence, H-wing, and ARC buildings
- Stopping areas adjacent to the existing ARC windowed corridors, with door access out to the roadway for passengers awaiting a ride
- A roadway separate from parking areas, discouraging long-term stays in permit spaces
- Access point off Military Trail is separate from the Main Entrance pick-up/drop-off circle and traffic lights at Ellesmere Road, lessening traffic congestion as vehicles exit the new facility to make either a left or right turn onto Military Trail.

#### I. Public Transportation Access:

The current location for TTC and GO Transit bus access is located parallel to Military Trail, at the north end of the R-wing. Buses using this area do so in conflict with vehicles dropping off or picking up students, as well as those accessing the Inner parking lots. This congestion creates difficulties for bus operators, and does not provide optimal loading and off-loading facilities for bus passengers accessing adjacent campus buildings.

The East Arrival Court will divert private vehicle traffic away from the R-wing roadway, leaving this area for the exclusive use of TTC, GO Transit buses and delivery vehicles. By

providing a dedicated facility for bus traffic, arriving and departing passengers will have safer access to footpaths leading to destination buildings.

#### 6. RESOURCE IMPLICATIONS INCLUDING SECONDARY EFFECTS

#### A. Total Project Cost:

The total project cost for all phases of work as identified, including all taxes, contingencies, permits, professional fees, and escalations consistent with the proposed implementation of the work, is currently estimated to be \$3,112,642. Details are described in Appendix I.

The estimate was priced at current rates and reflects current market conditions.

#### B. Operating Costs:

Operating and maintenance expenses for the new facility are incorporated within the ancillary's annual budget. Annual maintenance expenditures for items such as winter maintenance are not expected to exceed those already within the budget for the current facility. Expenditures for emergency repairs and maintenance of older surfaces will decline.

#### C. Secondary Effects:

During the construction phase in summer 2006, the Inner lot parking facility will be closed to all but Residence access via the east Ring Road, and emergency route provision. Both visitors to UTSC and persons holding permits for the Inner lots will relocate to the Outer parking facility. Facilities will be provided for persons requiring barrier-free access.

Following the construction phase, secondary effects of the East Arrival Court project will be:

- Improved traffic flow on campus
- Improved traffic flow on surrounding community streets
- Increased visibility of and access for public transit options

#### 7. FUNDING SOURCES

Sources of funding for this project are:

TOTAL	\$3,112,642
<ul> <li>c) Bridge funding from UTSC Operating</li> <li>Fund to be paid back from the Ancillary</li> </ul>	\$2,629,918
b) Ancillary Investment in Capital Assets	\$ 249,961
a) UTSC Carry Forward	\$ 232,763

All funds are or will be in hand by the completion of the project and the costs of financing have been built into this project.

#### 8. SCHEDULE

The following completion schedule is proposed:

Design Phase Design Development Contract Documents Tender Contract Award Construction November 2005 January 2006 March 2006 April 2006 May 2006 May - August 2006

#### 9. **RECOMMENDATIONS**:

The project planning Committee recommends:

- 1. That the Project Planning Report for the East Arrival Court at the University of Toronto at Scarborough be approved in principle,
- 2. That the project scope as described in this report, at an estimated total project cost of \$3,112,642, be approved.

3.	That the sources of funding for the East Arrival	Court be approved.
	a) UTSC Carry Forward	\$ 232,763
	b) Ancillary Investment in Capital Assets	\$ 249,961
	c) Bridge funding from UTSC Operating	
	Fund to be paid back from the Ancillary	\$2,629,918
	TOTAL	\$3,112,642

#### APPENDIX I: TPC

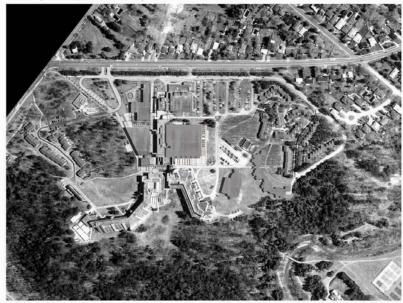
		APPENDIX I: TPC			
Project Manager: I		UTSC Project :			
NO	ITEM	REMARKS	BASE COST	GST(2.31%)	COST
CONSTRUCTION			•	• · · · · · ·	
835000	Main contract	as per CMRR estimate Jan 10, 2006	\$2,162,000	\$49,942	\$2,211,94
835731	Electrical	lighting upgrades @beechgrove	\$10,000	\$231	\$10,23
835752	Secondary Contract		\$0	\$0	\$
835732	Mechanical		\$0	\$0	\$
835765	Demolition		\$0	\$0	\$
835768	Site preparation	Enbridge Header Relocation	\$140,000	\$3,234	\$143,23
835757	Construction Contingency	at 10%	\$231,200	\$5,341	\$236,54
835762	Hazardous materials removal		\$0	\$0	\$
	Total Construction				\$2,601,94
LANDSCAPING					
835755	Landscaping	included	\$0	\$0	\$
	Total Landscaping				\$
PERMITS, INSURA	NCE				
835400	Permits	1% of const. cost	\$2,162	\$50	\$2,21
836700	Insurance	3% of const cost	\$6,486	\$150	\$6,63
	<b>Total Permits, Insurance</b>				\$8,84
PROFESSIONAL FI	EES				
835200	Consultants: -Architects, Engi	ne 10% of const	\$253,320	\$5,852	\$259,17
835201	Consultants - disbursements	5% of fees	\$12,666	\$293	\$12,95
835204	Construction management fee	s	\$0	\$0	9
835206	Other consultants	inspections, survey, arbourist	\$15,000	\$347	\$15,34
835210	Legal fees		\$0	\$0	9
835720	Design fees-In House		\$0	\$0	9
835721	External Project Manager		\$0	\$0	<u>c</u>
835725	Proj Mgmt Fees - Capital Proj	ec 3.5%	\$97,972	\$0	\$97,97
	Total Professional fees	1			\$385,44
SERVICES TO SITE					····,
835700	Site services & infrastructure	included	\$0	\$0	9
	Total Site Services		+-	<b>4</b> -	9
COMPUTER WIRIN	G AND TELEPHONES				•
821110	Computer infrastructure		\$0	\$0	\$
835010	Telephone	emergency phones included	\$0 \$0	\$0 \$0	\$
	Total Computer Wiring & Te	• • • •	ψũ	ψŬ	9
MOVING AND STA					•
837100	Moving		\$0	\$0	9
837101	Staging		\$0	\$0 \$0	9
007101	Total Moving and Staging		ψυ	ψυ	Ş
FURNISHINGS AND					
			02	<b>م</b>	5
820010 821010	Furnishings	porting ogginment	\$0 \$50 000	\$0 \$1 455	
	Equipment	parking equipment	\$50,000	\$1,155	\$51,1
821610	Scientific Equipment		\$0 \$0	\$0 \$0	(
821510	AV for classrooms		\$0	\$0	054.44
	Total Furnishings and Equip	oment			\$51,15
OTHER		- · ·			
835780	UTSC Forces	Grounds clean up	\$2,000	\$0	\$2,00
835780	Parking		\$0	\$0	c.
820011	Signage-Interior		\$0	\$0	e.
821325	Security & Access systems		\$0	\$0	c.
835756	Signage-Exterior		\$30,000	\$693	\$30,69
835764	Client Construction expenses		\$0	\$0	9
835900	Advertising		\$0	\$0	9
836430	Donor recognition		\$0	\$0	9
835766	Ceremonies	Ground breaking, Top off, Grand opening	\$0	\$0	9
	Total Other				\$32,69
		SUB TOTAL			\$3,080,09
PROJECT CONTIN	GENCY				
835758	Project Contingency		\$0	\$0	9
	Total Project Contingency			·	ç
FINANCE COSTS					
835300	Finance Costs	7% for 4 months	\$32,550	\$0	\$32,55
			<i>+--</i> ,000	<b>\$</b> 0	\$32,55
	Total Finance Costs				\$3

TOTAL PROJECT COST:

\$3,112,642

# APPENDIX II, EXISTING DEVELOPMENT AND PROPOSED DESIGN

University of Toronto, Scarborough Campus Existing Development, January 2006



University of Toronto, Scarborough Campus Proposed East Arrival Court, Summer 2006



**UTSC - EAST ARRIVAL COURT** 



# APPENDIX III: PROPOSED DESIGN, EAST ARRIVAL COURT

