

**FOR CONFIRMATION****PUBLIC****CLOSED SESSION**

**TO:** Executive Committee

**SPONSOR:** Scott Mabury, Vice President Operations & Real Estate Partnerships

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**PRESENTER:** As above

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**DATE:** October 12, 2021 for October 19, 2021

**AGENDA ITEM:** 5 (a)

**ITEM IDENTIFICATION:**

Capital Project: *Report of the Project Planning Committee for the Student Services Hub at the University of Toronto Mississauga*

**JURISDICTIONAL INFORMATION:**

Section 5.6.2 of the *UTM Campus Affairs Committee Terms of Reference* states that the Committee “considers reports of project planning committees and recommends to the UTM Campus Council approval in principle of projects (i.e. site, space plan, overall cost and sources of funds) with a capital cost as specified in the *Policy on Capital Planning and Capital Projects*.”

Section 5 of the *Academic Board Terms of Reference* capital projects are within the areas of responsibility of the Board and are brought to the Board through its Standing Committees.

The *Policy on Capital Planning and Capital Projects* provides that capital projects over \$5 million and up to \$20 million (Approval Level 2), at UTM will first be considered by the UTM Campus Affairs Committee and the UTM Campus Council, which shall recommend approval to Academic Board. The Policy further states that “If a project will require financing as part of the funding, the project proposal must be considered by the Business Board.” Following consideration and approval by the Academic Board, such proposals are then brought forward to the Executive Committee of the Governing Council.

The Business Board is responsible for approving the establishment of appropriations for individual projects and authorizing their execution within the approved costs. If a project will require financing as part of the funding, the project proposal must be considered by Business Board.

## **GOVERNANCE PATH:**

### **A. Project Planning Report**

1. UTM Campus Affairs Committee [for recommendation] (September 13, 2021)
2. UTM Campus Council [for recommendation] (October 6, 2021)
3. Business Board [for approval, financing] (October 5, 2021)
4. Academic Board [for approval] (October 12, 2021)
5. **Executive Committee [for confirmation] (October 19, 2021)**

### **B. Execution of the Project:**

1. Business Board [for approval] (October 5, 2021)

## **PREVIOUS ACTION TAKEN:**

At its meeting of April 8, 2020, the Capital Project and Space Allocation Executive Committee (CaPS Executive) approved up \$1,026,455 to be made available to engage consultants to the end of Construction Drawings for the Student Services Hub. Superkul Architects were the selected proponents in May 2020.

## **HIGHLIGHTS:**

In 2008, the Davis Building Master Plan was created as a response to UTM's Academic Plan of 2004 which identified the enrichment of the student experience as one of its five priorities. The last redevelopment phase as a result of this plan involved creation of the Student Services Hub (the Hub), located directly west of the Meeting Place.

The Hub will bring together departments that are currently scattered throughout the Davis Building into a single location that will function as a 'first stop' for UTM students seeking personal support and development opportunities. The Hub will reinforce UTM's commitment to offer an 'any door is the right door' approach for accessing student support programs and house the following services:

- career education & counselling
- physical, mental & learning disability resources
- health & wellness promotion
- co-curricular support
- community & leadership development
- commuter & off-campus housing assistance
- immigration advising & international student support
- new student orientation & transition
- student engagement
- international opportunities
- space for hotelling of tri-campus services headquartered elsewhere when present to aid UTM students.

Prior to schematic design, a pre-design consultation phase was undertaken to gather information and perspectives from students and staff. Separate user group meetings were held for the Career Centre, Accessibility Services, Wellness, Student Engagement, International Education Centre, and the Student Affairs and Services teams. A two-day Vision Session with a broad cross-section of SSH stakeholders, including several undergraduate and graduate representatives, further provided feedback around key service model and space considerations.

The design of the Hub enables students to find what they need quickly in a comforting and accessible way, including a triage function, self-help resources and kiosks, one-on-one and group peer help, and both professionally guided individual and group support. Faculty and staff, along with parents and families, will also be able to easily refer their students to this first stop for opportunities and assistance. Co-location of these services will also enable more effortless collaboration amongst them. Occupancy is scheduled for Spring 2023 and includes the following spaces:

- Front-End Greeting & Reception Area
- Back-End Triage Support Areas
- Workspaces (private and shared offices; open workstations)
- Multipurpose Rooms/Activity Rooms
- Presentation Spaces
- Bookable Meeting Rooms
- Self-Help Resources and Kiosks
- Private Advising & Consultation Rooms
- Individual Meeting Pods & Active Promotion Pods
- Peer Help-Seeking Space and Stations
- Wellness Home

## Schedule

Proposed Project Milestones:

Construction Documents	May 2021 – September 2021
General contractor tender & contract award	October 2021 – November 2021
Construction Phase (15 months estimated)	December 2021 – February 2023
Fit Out (Furniture & AV)	February 2023
Projection Completion/Move-In	March 2023

## FINANCIAL IMPLICATIONS

Discussion of overall costs and sources of funds can be found in the *in camera* document for this project.

## RECOMMENDATIONS:

Be it confirmed by the Executive Committee

THAT the project scope of the Student Services Hub at University of Toronto Mississauga, as identified in the *Report of the Project Planning Committee for the University of Toronto Mississauga Student Services Hub* dated August 6, 2021, totalling 1354 net assignable square metres (nasm) (2040.9 net square metres) be approved in principle, to be funded by UTM Capital Reserves derived from the UTM Operating Budget and Financing.

## DOCUMENTATION PROVIDED:

- Report of the Project Planning Committee for University of Toronto Mississauga Student Services Hub dated August 6, 2021.

Report of the Project Planning Committee for  
**University of Toronto Mississauga**  
**Student Services Hub**

August 6, 2021

## **I.Executive Summary**

The University of Toronto Mississauga campus was established in 1967 as one of three campuses of the University of Toronto. The William G. Davis Building, formerly known as the South Building, is the largest building at UTM, accommodating the majority of research laboratories, several large lecture halls, many student services, academic departments, the main administrative functions, the Davis Food Court and a large open seating area called The Meeting Place.

In 2008, the Davis Building Master Plan was created as a response to UTM's Academic Plan of 2004 which identified the enrichment of the student experience as one of its five priorities. The Master Plan called for three phases of redevelopment. Phase 1, the third floor Administration Renovation, was completed in 2009. Phase 3, the Meeting Place Renovation, was also completed in the spring of 2020. The completion of this project has set the stage for work to begin on the remaining Phase 2, the Student Services Hub (SSH), located directly west of the Meeting Place.

The SSH will bring together departments that are currently scattered throughout the Davis Building into a single location that will function as a 'first stop' hub for UTM students seeking personal support and development opportunities. The SSH will transform the way UTM students engage with crucial resources and will reinforce UTM's commitment to offer an 'any door is the right door' approach for accessing student support programs. The SSH will accommodate almost all student-facing functions in the following departments: Center for Student Engagement, International Education Center, Career Center, Accessibility Services and parts of the Health & Counselling Center. The SSH will be a home for the following services: career education & counselling, physical, mental & learning disability resources, health & wellness promotion, co-curricular support, community & leadership development, commuter & off-campus housing assistance, immigration advising & international student support, new student orientation & transition, and student engagement & international opportunities, with space for hotelling of tri-campus services headquartered elsewhere when present to aid UTM students as well.

Prior to schematic design, a pre-design consultation phase was undertaken to gather information and perspectives from students and staff as detailed in the appended Functional Space Program document. Separate user group meetings were held for the Career Centre, Accessibility Services, Wellness, Student Engagement, International Education Centre, and the Student Affairs and Services teams. A two-day Vision Session with a broad cross-section of SSH stakeholders, including several undergraduate and graduate representatives, further provided feedback around key service model and space considerations.

The design of the SSH enables students to find what they need quickly in a comforting and accessible way. The program is designed with a triage function, with a central service desk located along the 'Main Street' engaging users with the various resources and services. A controlled access space program is located to the north, with more open bookable spaces to the south. The service desk itself caters to accessibility needs and its surrounding area provides private niches for students who may be seeking services in a state of distress. Students will access help in the SSH through multiple modes including self-help resources and kiosks, one-on-one and group peer help, as well as both professionally guided individual and group support. Faculty and staff, along with parents and families, will also be able to easily refer their students to this first stop for opportunities and assistance. The space of the SSH will be fluid and flexible, offering a variety of workspaces while accommodating technology advances.

Workspaces, including a mix of shared, open and private workstations and offices combined with access to multipurpose rooms, allow for intentional programmatic overlap and the possibility of groupings by shared characteristics. Bringing together Student Affairs' student-facing services into a single location will maximize the sharing of resources at both the front-end greeting and reception areas and back-end triage support areas. Co-location will enable more effortless collaboration amongst the services present.

This project incorporates a new inviting entry sequence into the Davis Building by adding a 20.4 gsm conditioned vestibule with a large canopy and double door access at its west façade. The curvilinear entrance pavilion situates the SSH with a front door on a major pedestrian thoroughfare on campus. The entryway provides a connection to the nearby Innovation Complex building containing the Office of the Registrar, an important programmatic link to the Student Services Hub and one which was identified in the Circulation Map of the 2011 Campus Master Plan. Additionally, the Draft 2021 UTM Campus Master Plan identifies the area directly outside of the new SSH vestibule as a priority pedestrian connection. The entry is also a convenient access point to the Bus Loop directly to the south along Inner Circle Road and as such is anticipated to be a high traffic area widely used by students and staff. The large canopy and paved plaza area directly outside the entrance creates space for potential outdoor programming during key moments in the academic calendar. Hard and soft landscaping improvements to the immediately surrounding exterior incorporate seating and accessible ramps to the new entrance. The SSH is currently under Site Plan Approval Express (SPAx) with the City of Mississauga.

A total space program of 1354 nasm is housed within a net building area of 2040.9 square metres including the new vestibule of 20.4 square metres. The SSH will provide the following spaces:

- Front-End Greeting & Reception Area
- Back-End Triage Support Areas
- Workspaces (private and shared offices; open workstations)
- Multipurpose Rooms/Activity Rooms
- Presentation Spaces
- Bookable Meeting Rooms
- Self-Help Resources and Kiosks
- Private Advising & Consultation Rooms
- Individual Meeting Pods & Active Promotion Pods
- Peer Help-Seeking Space and Stations
- Wellness Hub



Davis Building, Student Services Hub Entrance, view looking east.



Davis Building, Student Services Hub Entrance, view looking northeast.



Student Services Hub proposed, view looking west towards new entrance.



Student Services Hub proposed Front Desk, view looking south.



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## II. Project Background

### a) Membership

Mark Overton	Dean of Student Affairs & Asst. Principal, Student Services, UTM (Co-Chair)
Susan Senese	Acting Chief Administrative Officer, UTM (Co-Chair)
Felicity Morgan	Director, UTM Career Centre
Yan Tam-Seguín	Special Projects Manager, Student Affairs & Services, UTM
Andrea Carter	Assistant Dean, Student Wellness, Support & Success, UTM alumna
Ayah Abdeldayem	Former UTMAGS President (representing UTM graduate students)
Atif Abullah	Former UTMSU President (representing UTM undergraduate students)
Melissa Ramsammy	UTM undergraduate student
Luke Barber	Interim Executive Director, Facilities Management & Planning (FMP), UTM
Monika Farrell	Assistant Director Planning and Design, FMP, UTM
Bernard Hau	Senior Facilities Planner, FMP, UTM
Rajko Jakovic	Manager, Project Development, University Planning Design & Construction (UPDC)
Sean O'Molloy	Senior Project Manager, Project Management, UPDC
Christine Burke	Assistant Vice President, University Planning, UPDC
Cara Kedzior	Planner, University Planning, UPDC

### b) Terms of Reference

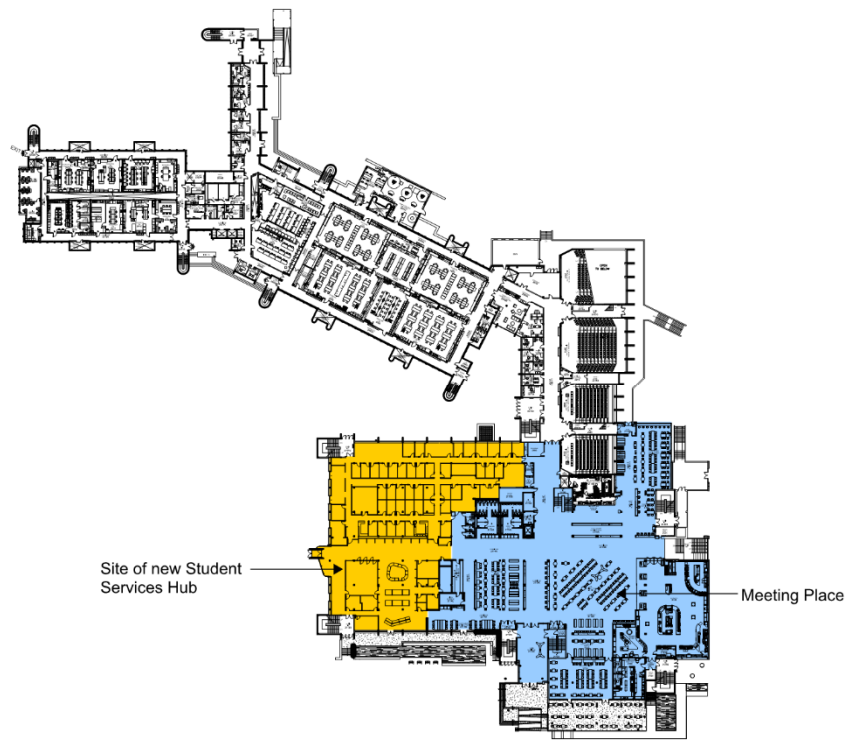
1. Develop a process or guidelines for making recommendations to the Architectural consulting team to provide innovative, state-of-art solutions to space design in support of new service models. The idea is to ensure the Architects have the ability to provide the consulting services required for a “Hub” delivery model of student centric services.
2. Make recommendations for a detailed space program and functional layout for the renovations.
3. Demonstrate that the proposed space program will be consistent with the Council of Ontario Universities’ and the University’s own space standards.
4. Demonstrate that the proposed space program will be consistent with accepted standards.
5. Identify a phasing plan and implementation plan for this project, if required.
6. Identify all equipment, furnishing necessary to the project and their related costs.
7. Identify all data, networking, AV and communications requirements and their related costs.
8. Identify all security, occupational health and safety, and accessibility requirements along with their related costs.
9. Identifying all costs associated with the planning, construction and secondary effects from this project.
10. Determine a total project cost estimate (TPC) for the capital projects.
11. Identify all sources of funding for capital and operating costs.
12. Complete the Project Planning Report by April 2020.

### **c) Background Information**

The University of Toronto Mississauga (UTM) is the second largest division of the University of Toronto. It is situated on 225-acres of protected greenbelt along the Credit River, 33 kilometres west of the St. George Campus. Established in 1967, it has a student population of 14,544 undergraduate and 904 graduate students as well as over 60,000 alumni. UTM has 17 academic units comprised of 15 departments and two institutions which offer 155 programs and 95 areas of study.

The William G. Davis Building is UTM's largest academic building and contains lecture theatres, classrooms, technology and science labs and the greenhouse lab. It houses services for students and visitors including the Accessibility Services, Bookstore, Campus Safety, Conference and Events Services, Career Centre, Health & Counselling Centre, Hospitality and Retail Services, Student Affairs & Services, Centre for Student Engagement, and The Meeting Place, an open area with seating and skylights connected to the Davis Food Court, the largest cluster of food services on campus. The Davis Building links to the Communication, Culture & Technology (CCT) Building, the Recreation, Athletics & Wellness Centre (RAWC), the Kaneff Centre / Innovation Complex, and the Terrence Donnelly Health Sciences Complex.

The University of Toronto Mississauga's Academic Plan of 2004 identified the enrichment of student experience as one of its five priorities. In 2006, UTM began planning for the creation of a hub to consolidate student services. The Davis Building Master Plan (then named the South Building) of 2008 called for three phases of redevelopment, enabled by the library moving to the newly constructed Hazel McCallion Academic Centre. Phase 1, Third Floor Administration Renovation, was completed in 2009. Phase 2, Student Services Hub and Phase 3, Meeting Place Renovation were both approved in principle by Governing Council in 2008 but were deferred while UTM focused on building new space for teaching, expanding academic departments and upgrading major infrastructure across the campus. The Meeting Place Renovation was approved in full in 2017 and construction has been completed in the Spring of 2020. The location of the planned Student Services Hub is directly west of the new Meeting Place and served as a temporary food court and seating area while the Meeting Place underwent construction. With the completion of construction, the Student Services Hub is ready to begin and fulfill the final phase of the original Master Plan.



This project will build on elements established in the previous phases while creating the consolidated Student Services Hub programming as well as a new entrance at the west façade which allows for direct connection to pedestrian circulation from the existing transit bus loop and the Innovation Complex containing the Office of the Registrar.

#### **d) Existing Space**

##### Existing space

The existing interior space within the second (main) floor of the Davis Building is 2020.5 net square metres and is divided by a primary circulation “Main Street” corridor. The northern and larger section of 1240.4 net sm is comprised of perimeter offices and inboard classrooms as well as a row of ten examination rooms along the southern edge of this space that are currently inactive. These north and west facing perimeter offices are currently occupied by various staff groups including Student Affairs & Services (SAS). All users who are not SAS will be relocated prior to construction. During construction SAS will continue to occupy offices in the northeast corner of the site and the general contractor will develop an appropriate phasing strategy to allow SAS to carry on their operations with minimal disruptions. SAS departments occupying space in the proposed site include: The Centre for Student

Engagement in offices 2092, 2093, 2098 and 2099; Health and Counselling Centre in office 2095A and the International Educational Centre in 2090, 2091, 209A-E, 2095 and 2096.



The “Main Street” corridor, defined in the diagram above is indicative of the need to provide a connection from the exterior into the Meeting Place and beyond. An opening in the west façade with a vestibule addition will create a new entrance into the Davis building and facilitate pedestrian flow from the Innovation Complex building next door which contains the Office of the Registrar, a programmatic connection important to the SSH, as well as foot traffic from the nearby Bus Loop on Inner Circle Road. Formerly a circulation stair connecting the 1<sup>st</sup> floor to the 3<sup>rd</sup> floor when the area was once a library, the existing area contains a fire-rated concrete block wall enclosure within this main public corridor which opens to a double-height space to the third floor and a skylight condition at the roof. This project will demolish the rated block wall enclosure and fully enclose the opening at the third floor with fire-rated glass walls to protect the opening and maintain fire separation between the floors. Doing so will provide natural light down into this central area of the Student Services Hub.

The southern section of the proposed SSH, 560.7 net sm, contained temporary seating which assisted the Meeting Place while under construction. Previously, this open area served as the seating area for the Temporary Food Court (TFC) which became a part of the recently renovated Meeting Place project. Constructed in 2012, the TFC was built in the former library space to provide a much-needed food service destination until a permanent food court could be built within the Davis Building. With the construction

of the Meeting Place complete and fulfilling its secondary requirement to increase the overall seating capacity to almost 900 seats, this additional seating space is no longer required and can be released for future development.

The current inventory of Student Services spaces located throughout the Davis Building in the First, Second and Third floors are indicated in the table below. Rapid growth of the departments and shortage of space on campus has contributed toward the existing scattering of SAS services and is a key driver of this project to bring these student focused services together in the SSH.

<b>Department</b>	<b>Existing Total Area (NASM)*</b>	<b>Existing Area Proposed to Move into SSC (NASM)</b>
Accessibility Services	251.27	102.34
Student Affairs & Services	382.87	0.00
Career Centre	244.48	250.05
Health & Counselling Centre	298.67	58.47
Centre for Student Engagement	160.86	108.1
<b>TOTAL</b>	<b>1338.15</b>	<b>518.96</b>

\*NASM definition - The amount of area or net assignable square metres (NASM) is the amount of area, which can be used by the occupants of the building. NASM is the sum of all areas on all floors of a building assigned to, or available for assignment to, an occupant, including every type of space functionally usable by an occupant (except Custodial, Circulation and Mechanical area).

The Total Area column in the table above includes spaces and staff that will not be moving to the new SSH location. Spaces that will not be part of the SSH include the Accessibility Exam Centre rooms and Clinical Treatment/Exam rooms located on the first floor. Staff that will not move to the new space include the SAS Senior Administration Team with offices on the third floor. Staff with priority for moving to the SSH include all student support staff and all staff interfacing with students directly. Mid-level administrative staff are to move into the new space. In total, the existing SAS space anticipated to be vacated and reallocated into the SSH footprint is 518.96 nasms.

### Occupant profile

The Student Services Hub will be occupied by staff, student staff and student users (undergraduate, graduate and professional). The Council of Ontario Universities (COU) space standards generate space based on “input measures” - the numbers of faculty, students, staff, etc., applied against “space factors” which indicate the amount of space required by function per input measure.

For the Project Planning Report the “input measures” have been provided by SAS, for both the reporting 2019/20 academic year and for projected growth over a five-year period. Although used in developing the preliminary space program, discussions are to continue and may result in some adjustments.

## Staff

The following table shows current SAS staffing as well as the anticipated staff occupancy of the Student Services Hub as not all current staff will be moving to the SSC:

<b>Department</b>	<b>Current SAS Staff Counts 2019-2020 FTE*</b>	<b>Current SAS Staff Counts 2019-2020 FTE to move to SSH</b>
Accessibility Services	14	12.4
Career Centre	23	22.8
Centre for Student Engagement	12.0	12.0
Health & Counselling Centre	19	3.4
International Education Centre	9.6	9.0
Student Affairs & Services	7	1.7
<b>TOTAL</b>	<b>84.6</b>	<b>61.3</b>

\* Staff FTE = Full Time Equivalent

The Council of Ontario Universities definition of FTE includes all filled established positions with appointments of at least three month's duration who receive remuneration via the university from all salary funding sources.

The following table summarizes SAS predictions of FTE five-year growth within the SSH:

<b>Department</b>	<b>2019-2020 Current FTE</b>	<b>2024-25 Projected FTE</b>	<b>Change % FTE</b>
Accessibility Services	12.4	16.4	32%
Career Centre	22.8	22.8	0%
Centre for Student Engagement	12.0	12.0	0%
Health & Counselling Centre	3.4	3.4	0%
International Education Centre	9.0	11	22%
Student Affairs & Services	1.7	1.7	0%
<b>TOTAL</b>	<b>61.3</b>	<b>67.3</b>	<b>9.8%</b>



### Student Staff

Student Staff & Interns do not have FTE positions associated with them and according to COU do not generate space. However, they will occupy space in the SSH and their accommodation is integral to the operation of Student Services. Currently, student staff are lacking space within SAS. This project will consider their needs. The space program reflects their functional & spatial requirements. The number of student staff employed has held steady and there is no growth projection for this occupant group.

The table below lists the current number of student staff employed by SAS:

<b>Department</b>	<b>Current SAS Student &amp; Intern Headcount 2019-2020</b>	<b>Current SAS Student &amp; Intern FTE Equivalent 2019-2020</b>
Accessibility Services	4	1
Career Centre	26	3
Centre for Student Engagement	72	8
Health & Counselling Centre	14	1
International Education Centre	27	3
Student Affairs & Services	0	0
<b>TOTAL</b>	<b>143</b>	<b>16</b>

### Student Users

The Student Services Hub (SSH) will serve all undergraduate and graduate students at UTM in all degrees and programs. It does not serve non-degree students registered only with UofT's School of Continuing Studies. Student users of the SSH will be both international and domestic students and both on-campus residents and commuter students. The space seeks to welcome Indigenous students, English language learners, first-generation and experienced students, undecided and declared students, along with UTM's many other demographic subpopulations.

### III. Project Description

#### a) Vision Statement

UTM's Academic Plan (2004) set as one of its priorities to enrich the student experience and sparked the initiative to create a hub for student services. The overall concept has not changed over time. The prime concepts are:

- Bringing together most of Student Affairs' student-facing services into a single location
- Maximizing the sharing of resources
- Providing effortless collaboration among all the services
- Offering students a "first stop" to address their increasingly complex needs
- Supporting students, as well as faculty, parents and families

The SSH will allow students to interact with peer and professional staff on a number of personal development matters. Students usually present an initial concern, which often carries additional underlying issues that may require multiple services. The SSH provides students with a 'first stop' space where a variety of matters can be addressed with guiding referrals as needed. Space is required for informal intake and students' needs assessments, with varying levels of privacy (e.g. front desk, informal spaces within the public area for student-staff peers and professional staff to talk with students for more detailed conversations). Students will need space to review paper and electronic materials on topics such as careers, international experiences, mentorship/leadership materials, health promotion and nutrition (similar to the UTM Career Centre's current space). This space would include computers, bookshelves, material and interactive digital displays. Within the space students would be able to receive assistance from peers and professional staff, as well as select materials and use computers independently.

#### b) Space Requirements, Program and Functional Plan

##### Space Requirements

The Council of Ontario Universities (COU) space formulae are used to generate a benchmark requirement for facilities, using the occupant profile above, and as modified by typical allocation by the University. This project falls within COU Category 10.0 Central Administrative Offices and Related Space, defined and calculated as follows:

##### **10.1 Office Space**

# FTE Non-Academic Staff requiring offices x 12 NASM = Category 10.1 Total NASM

##### **10.2 Office Support Space**

0.50 x Category 10.1 Total NASM = Category 10.2 Total NASM

Includes: conference/meeting rooms, storage, photocopy/print areas, waiting and reception areas, interview rooms, lunchrooms, kitchenettes, lounges and any other area that supports the office/work space.

Summary – Current COU analysis 2019-2020

COU Cat.	COU Space Type	Input Measure (FTE)	COU Space Factor	COU Generated Space “G” (NASM)	Existing Inventory “I” (NASM)	%I/G	Proposed (NASM)	%P/G
10.1	Central Admin. Offices	61.3	12	735.6	680.53	93%	706	96%
10.2			0.5	367.8	61.21	17%	648	176%
<b>TOTAL</b>				<b>1103.4</b>	<b>741.74</b>	<b>67%</b>	<b>1354</b>	<b>123%</b>

Summary – Projected Growth COU analysis 2024-2025

COU Cat.	COU Space Type	Input Measure (FTE) Projected	COU Space Factor	COU Generated Space “G” (NASM)	%I/G	Proposed (NASM)	%P/G
10.1	Central Admin. Offices	67.3	12	807.6	84%	706	87%
10.2			0.5	403.8	15%	648	160%
<b>TOTAL</b>				<b>1211.4</b>	<b>61%</b>	<b>1354</b>	<b>112%</b>

The analysis above shows that the Proposed Space Program is 123% of COU with current staffing needs and 112% of COU with future anticipated staff growth.

Space Program

The initial space program was developed using COU analysis as a benchmark. Educational Consulting Services Corp. (ECS) then developed a functional space program in consultation with the user group and ECS during the Pre-Design phase. Adjustments to COU standards were made in the following general categories:

- Typical offices are planned at 10 nasms.
- Shared office space average 2 occupants per 12 nasm office.

<b>Room Description</b>	<b>Room Code</b>	<b>Unit Area (NASM)</b>	<b>Quantity</b>	<b>Total Area (NASM)</b>
<b><u>Centre for Student Engagement</u></b>				
Admin Office (Private)	CSE-10.1-01	10.00	3	30.00
Admin Office (Shared)	CSE-10.1-02	12.00	2	24.00
Open Workstation	CSE-10.1-03	6.00	5	30.00
<b>Subtotal - Centre for Student Engagement</b>			<b>10</b>	<b>84.00</b>
<b><u>International Education Centre</u></b>				
Admin Office (Private)	IEC-10.1-01	10.00	4	40.00
Admin Office (Shared)	IEC-10.1-02	12.00	1	12.00
Open Workstation	IEC-10.1-03	6.00	6	36.00
IEC Kiosk	IEC-10.2-01	2.50	2	5.00

<b>Subtotal - International Education Centre</b>			<b>11</b>	<b>93.00</b>
<b><u>Career Centre</u></b>				
Admin Office (Private)	CC-10.1-01	10.00	12	120.00
Admin Office (Shared)	CC-10.1-02	12.00	4	48.00
Open Workstation	CC-10.1-03	6.00	4	24.00
Collaboration Area	CC-10.2-01	25.00	1	25.00
Career Resource Centre	CC-10.2-02	50.00	1	50.00
Computer Kiosk	CC-10.2-03	2.50	4	10.00
<b>Subtotal - Career Centre</b>			<b>26</b>	<b>277.00</b>
<b><u>Student Affairs &amp; Services</u></b>				
Admin Office (Shared)	SAS-10.1-01	12.00	1	12.00
Open Workstation	SAS-10.1-02	6.00	2	12.00
<b>Subtotal - Student Affairs &amp; Services</b>			<b>3</b>	<b>24.00</b>
<b><u>Accessibility Centre</u></b>				
Admin Office (Private)	ACC-10.1-01	12.00	5	60.00
Admin Office (Private)	ACC-10.1-02	10.00	5	50.00
Admin Office (Shared)	ACC-10.1-03	12.00	2	24.00
Open Workstation (Semi-Private)	ACC-10.1-04	6.00	3	18.00

Open Workstation	ACC- 10.1-05	6.00	3	18.00
Exam Packaging & Vault Room	ACC- 10.1-06	16.00	1	16.00
Production/Copy Room	ACC- 10.2-01	14.00	1	14.00
Note Taker Scanning	ACC- 10.2-02	7.00	1	7.00
<b>Subtotal - Accessibility Centre</b>			<b>20</b>	<b>207.00</b>
<b><u>Health &amp; Counselling Centre</u></b>				
Admin Office (Private)	HCC- 10.1-01	10.00	1	10.00
Admin Office (Shared)	HCC- 10.1-02	12.00	1	12.00
Open Workstation	HCC- 10.1-03	6.00	1	6.00
Wellness Hub/Collaboration Area	HCC- 10.1-04	32.00	1	32.00
<b>Subtotal - Health &amp; Counselling Centre</b>			<b>4</b>	<b>60.00</b>
<b><u>Shared Facilities</u></b>				
Front Desk	SHA- 10.1-01	50.00	1	50.00
Hoteling Room (Private)	SHA- 10.1-02	10.00	1	10.00
Hoteling Station	SHA- 10.1-03	6.00	2	12.00
Private Advising & Consulting Room	SHA- 10.2-01	8.00	5	40.00
Meeting Room Small (A&B)	SHA- 10.2-02	15.00	4	60.00
Presentation Space	SHA- 10.2-03	28.00	1	28.00
Meeting Room Large (C&D)	SHA- 10.2-04	24.00	2	48.00
Kitchenette / Staff Lounge Area	SHA- 10.2-05	42.00	1	42.00
Copy/Mail/Supplies Room	SHA- 10.2-06	10.00	2	20.00
Storage Room		50.00	0	0.00
CSE and IEC Collaboration Area	SHA- 10.2-07	57.00	1	57.00

File Storage	SHA-10.2-08	20.00	1	20.00
Student Staff Lockers	SHA-10.2-09	16	1	16.00
Peer Help Station	SHA-10.2-10	4.00	2	8.00
Self Kiosk/Info Display (Public Transit and Off-Campus Housing)	SHA-10.2-11	2.50	1	2.50
Peer Help Seeking Space	SHA-10.2-12	35.00	1	35.00
Activity Room B	SHA-10.2-13	86.50	1	86.50
Informal Activity Area / Soft Lounge Seats	SHA-10.2-14	50.00	1	50.00
Active Promotion Pods	SHA-10.2-15	3.00	2	6.00
Individual Meeting Pods	SHA-10.2-16	3.00	6	18.00
<b>Subtotal - Shared Support Space</b>			<b>36</b>	<b>609.00</b>
<b>TOTAL NASM</b>			<b>110</b>	<b>1354.00</b>
<b>Net* Area (SM)</b>				<b>2020.50</b>
<b>Net-to-NASM Ratio</b>				<b>1.49<sup>1</sup></b>

\*Net Area = Net Assignable Area + Net Non-Assignable Area (Includes service spaces, interior walls and structure. Excludes exterior wall assembly.) Because the proposed space does not include an entire floorplate, a net to nasm ratio instead of gross to nasm ratio is calculated here for space planning purposes.

<sup>1</sup> The average net to nasm ratio across University of Toronto's space inventory in 2020 is 1.60.

<b>SPACE SUMMARY</b>		
<b>Room Description</b>	<b>Quantity</b>	<b>Total Area (NASM)</b>
Admin Office (Private)	30	310
Admin Office (Shared)	11	132
Open Workstation (Semi-Private)	3	18
Open Workstation	21	126
Collaboration Area	1	25

Computer Kiosk	4	10
IEC Kiosk	2	5
Self Kiosk/Info Display (Public Transit and Off-Campus Housing)	1	2.5
Career Resource Centre	1	50
Peer Help Station	2	8
Peer Help Seeking Space	1	35
Exam Packaging & Vault Room	1	16
Production/Copy Room	1	14
Note Taker Scanning	1	7
Copy/Mail/Supplies Room	2	20
Wellness Hub/Collaboration Area	1	32
Front Desk	1	50
Private Advising & Consulting Room	5	40
Meeting Room Small (A&B)	4	60
Presentation Space	1	28
Meeting Room Large (C&D)	2	48
Activity Room B	1	86.50
Informal Activity Area / Soft Lounge Seats	1	50
Active Promotion Pods	2	6



Individual Meeting Pods	6	18
CSE and IEC Collaboration Area	1	57
Kitchenette / Staff Lounge Area	1	42
Storage Room	0	0
File Storage	1	20
Hoteling Room (Private)	1	10
Hoteling Station	2	12
Student Staff Lockers	1	16
<b>TOTAL</b>	<b>110</b>	<b>1354</b>

Space Program Elements:

**Accessibility Services** provides academic accommodations, advising and services to students who have a disability including physical, visual, hearing, learning disability, mental health condition, acquired brain injury, ADHD, autism spectrum disorder or chronic health conditions. Students with temporary disabilities are also eligible to receive services.

**Career Centre** offers a variety of appointments, workshops, employment services and fairs, drop-in services and resources to support students in their career journey.

**Centre for Student Engagement** offers campus and community-based co-curricular initiatives, student club support, programs to facilitate orientation and transition into university, and opportunities for student involvement, leadership and community engaged learning.

**Health & Counselling Centre** offers a medical clinic staffed with doctors, nurses, personal counsellors, psychiatrists (housed elsewhere in the Davis Building), and a registered dietitian. It also has an active health promotion team to deliver peer to peer health education (housed in the SSH).

**International Education Centre** offers outbound opportunities in over 150 countries for academic credit and as co-curricular experiences abroad. It also assists inbound international students on immigration-related matters, University Health Insurance Plan and transition to university in Canada. Additionally, it plans and hosts internationally focused events and programs that allow students to meet others who share the same interests and provides peer-to-peer support.

Other services in the SSH:

**Student Housing & Residence Life** assists students with off-campus housing matters including listings, roommate searches, adjacency to public transit, conflicts with landlords, and rights and responsibilities as a tenant.

## Functional Plan

The renovation to the interior of the Davis building will include co-locating certain departmental groups as listed below. Exterior elements and a new vestibule allow for a new entry into the building and circulation through the SSH into the Meeting Place and beyond.

### Co-located Groups:

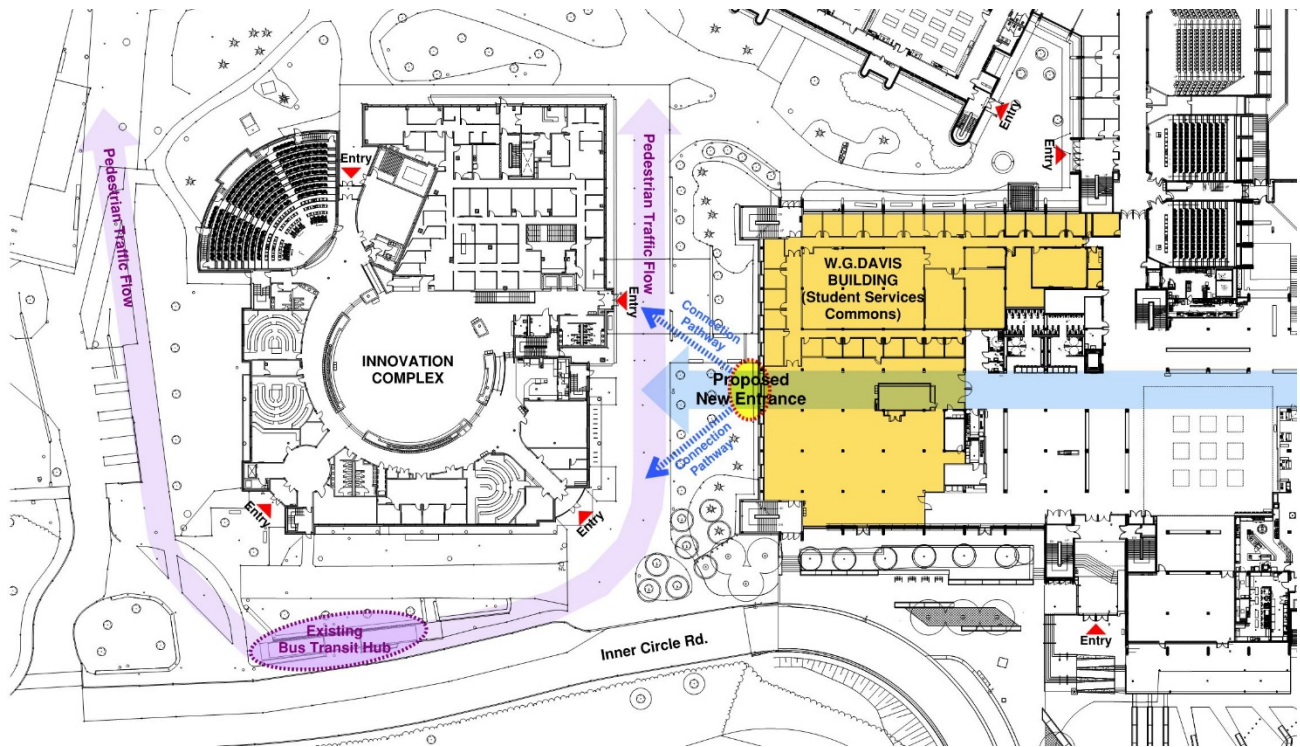
The service model employed by Student Services within the SSH will leverage the expertise and synergies between their services' offerings. It will allow for students to access services via in-person self-help within the kiosk and resource area, peer help with trained student staff, and specialized individual appointments with professional staff. Their "first-stop" model and physical co-location aims to increase student engagement, promote resource sharing, and facilitate provision of holistic, integrated services and programming. To this end, there is a priority to ensure the dove-tailing or close adjacency of professional staff who provide front-line services in:

- Co-curricular support
- Career education & counselling
- Community and leadership development
- Immigration advising and international student support
- Student engagement and international opportunities.

The co-locating of staff in Centre for Student Engagement, Career Centre and International Education Centre will allow them to develop and deliver streamlined services to students involving cross referrals, as well as design programs collaboratively that address potentially complex student issues.

### New Entry Sequence:

A new double door entrance with a 20.4gsm one storey conditioned vestibule addition and 58.5gsm canopy is planned to link the SSH to the Innovation Complex building where the Registrar's Office is located (an important connection to the Student Services program) as well as to the existing Bus Loop on Inner Circle Road. This new west entrance to the Davis building is anticipated to be a high pedestrian traffic area widely used by students and staff. The surrounding exterior landscape is to be incorporated into the entry sequence. This work will include removals of existing hardscape, softscape and two relocated existing light standards. The area will incorporate both hard and soft landscaping, and accommodation for benches in line with the campus' standard palette of street furniture and materials. The entrance will be accessible, incorporating a ramp to accommodate differences in grade.



**Light Well Opening:**

As described in Section II. D. Existing Space, the existing block wall enclosure will be removed in order to allow double height access to the clerestory skylights above. Window sprinklers will be added, and the opening above will be fully enclosed to protect and maintain fire separation between floors.



*Section through skylight into Main Street corridor below.*

### **c) Building Considerations & Sustainability**

#### Standards of construction

UTM's recently constructed buildings, as well as those currently under construction, have evolved from basic, functional forms that are evident in earlier structures, such as the existing William G. Davis Building and the former North Building. The Maanjiwe Nendamowinan building, Deerfield Hall, the Innovation Complex, the Instructional Centre, the Terrance Donnelly Health Sciences Complex, and the Hazel McCallion Academic Learning Centre can be considered as not only architectural benchmarks, but also as representative of the general standards of construction quality expected for the Student Services Hub.

For planning and costing purposes, it was assumed that the Student Services Hub project will be of a quality similar to that found in the interior design and finishes of the Meeting Place Revitalization project, the Innovation Complex, Deerfield Hall and the Instructional Centre.

## Building Characteristics and Massing

### Floor to Floor Heights

Existing floor elevations will remain, and any new construction will have matching floor elevations; the existing second floor elevation of the Davis Building is 126.52 metres. The new west entrance will be accessible and include a ramp to account for changes in grade.

### Structural Complexity and Built Form

The project will not alter existing beams or columns. A unique cantilevered structural design is proposed for the large canopy which reduces the size and visibility of the roof structure which thins significantly at its tapered edges. The vestibule design was refined to include structural glass creating a welcoming, transparent and approachable space of entry.

### Material Selection

The existing portion of the Davis Building under consideration has received little or no improvements to architectural finishes in recent years; much of the material finishes are the original, or replaced to match the original, since the Davis Building was completed in the early 1970's. UTM anticipates that this project will lead to the development of a distinguished architectural and interior design statement that not only befits its surroundings and completes the overlying Master Plan concept of a student centric hub for the Davis Building, but also serves as a destination for the whole campus.

Notwithstanding the desire for a strong architectural design, the materials and finishes must be carefully selected in recognition of the heavy pedestrian traffic and intensive use that the Student Services Hub and surrounds will be subjected to on a daily basis throughout the whole year.

## Sustainability design and energy conservation

The University of Toronto is committed to reducing its scope 1 and 2 greenhouse gas (GHG) emissions by at least 37% below its 1990 level of 116,959 tonnes eCO<sub>2</sub> by 2030, working towards becoming a net-zero GHG institution. To accomplish this, the University has retired the previous Energy Performance and Modelling Standard (April 1, 2019) and introduced this now-governing Tri-Campus Energy Modelling & Utility Performances Standard. This new standard provides project-specific energy performance and water efficiency targets, necessary at a minimum, to achieve the 2030 goal, while also introducing a streamlined modelling and documentation submission approach.

The renovation of existing buildings plays a critical part in U of T's plan to achieve the established 2030 GHG emission reduction target. This Standard also identifies utility performance requirements and targets for renovation projects of varying scopes and complexities through a prescriptive pathway for minor renovations and performance pathway for major renovation projects.

The UTM Sustainability Implementation Team classified the SSH project a Minor Renovation under the University's Standard. The project comprises a small percentage area, 4.25%, of the entire Davis building as a whole and has a limited scope regarding the exterior envelope. As such, the project is following a

prescriptive performance path for energy usage and performance. Minor Renovation projects are also required to meet the mandatory and prescriptive provisions of SB-10 Division 3 Chapter 2 “Additional Requirements to 2013 ANSI/ASHRAE/IES 90.1” for all improvements.

Beyond energy, additional performance levels include:

- 50% reduction in indoor water use over the LEED version 4 baseline
- 60% reduction in outdoor water use over the LEED version 4 baseline
- Complete whole-building air tightness testing following the US Army Corps of Engineers Air Leakage Test Protocol for Building Envelopes and submit air leakage testing report

The above targets are combined with project-specific information to establish unique energy and water efficiency targets for every building based on floor area and different space use types. The Project Charter outlines key project information, performance targets, and serves as a reference point throughout the project to ensure the performance goals are clearly understood by all involved parties and ultimately achieved.

To further ensure projects are developing in accordance with these performance requirements, documentation must be completed by the Project Consultant Team and/or the U of T Implementation Committee at each project stage. For each documentation item, the expectations and responsible parties are outlined in the Standard.

Please refer to the appendix item “Renovation Project Charter.” In addition, the consultant has prepared the appended Utilities Performance Report to assess targets met at the end of the Design Development phase.

### Accessibility

The University is committed to equitable access to all the building’s facilities by the whole campus community. To ensure universal design concepts are being incorporated into the project, the Consultant team will include a specialized Universal Design Consultant to review the design at key milestones and provide project-specific recommendations and guidelines for the design team’s use. To address the broad diversity of people who will use the facilities, the signage system will be designed to assist individuals with disabilities in identifying spaces (e.g. Braille, high contrast) and wayfinding. Attention will be given to the layout of the space and the materials used, and the Director of the Accessibility Services along with the Universal Design Consultant will be consulted at appropriate points in the design process.

An amendment to the Ontario Building Code (2012) related to Accessibility was filed on December 27, 2013 (Ontario Regulation 368/13). Effective for applications submitted after January 1, 2015, the requirements are more stringent and impact the following areas relevant to this project: barrier-free path of travel, visual fire safety devices, washrooms, and seating in assembly spaces.

New or redeveloped exterior, and some interior (i.e. service counters, fixed queuing guides, and waiting areas), public space, must comply with Part IV.1, Design of Public Spaces Standards (Accessibility

Standards for the Built Environment, Integrated Accessibility Standards of the Integrated Accessibility Standards, O.Reg. 191/11, <http://aoda.hrandequity.utoronto.ca/buildings/>). This would include approaches to new buildings. Maintenance, environmental mitigation, or environmental restoration is excluded from this requirement.

Public space projects affecting exterior paths of travel, recreational trails, outdoor play spaces, or accessible on-street parking must include consultation with the public and persons with disabilities pursuant to aforementioned standards.

UTM subscribes to the belief that all members of the UTM community and all visitors to the campus should be able to readily enter the campus, its buildings and facilities without any hindrances or encumbrances. Everyone must be able to access and enjoy all that the Student Services Hub will have to offer. This includes, but is not limited to, barrier free access to seating areas, service counters, kiosks, entries, washrooms, water/bottle-filling stations, etc.

For additional information contact the University of Toronto's AODA Office.  
<http://aoda.hrandequity.utoronto.ca/>

### Personal safety and security

While the design of the SSH must allow its students, faculty, staff and visitors' safe and convenient access, it must at the same time be sensitive to the needs of those whose activities require security after hours. Limited areas of this building could be operational throughout the week for 24 hours a day.

A detailed security plan of each zone and room has been developed in collaboration with the user group and UTM Campus Safety, and factored into the design of the building to ensure that accessibility, security, and functional objectives are all met simultaneously. Specific security requirements are identified in the Room Data Sheets.

The building design includes the following security equipment at the prescribed locations noted below. These recommendations from UTM Campus Safety have been reviewed with the consultant for project specific design considerations throughout the various stages of development.

T-card access hardware:

- Main entrance to new space (new building opening)
- All new and existing entrances to administrative offices (including entrance accessed from existing stairwell)
- Locations where sensitive/personal/confidential information is stored
- Meeting rooms where technology resides such as TV's, VOIP phones, white boards/projector equipment
- Collaboration Rooms
- Activity Room
- Consulting Rooms
- Wellness Hub

- Test and Exam Production Room (dual factor authentication)
- Telecommunications rooms (dual factor authentication)
- Mechanical rooms
- AV rooms

Note: Cabling for door security equipment shall be routed to the security control panel within Room 2114T located on the 2<sup>nd</sup> floor of the Davis Building.

#### CCTV:

- Exterior of building at new west entrance (2 IP Cameras total)
- Interior of new west entrance
- Interior entry points to Student Services Hub from Meeting Place (2 cameras)
- Interior entrances to controlled access area and administrative offices (3 cameras)
- At main gathering area/s inside Hub
- CCTV shall provide full coverage of all kiosks and corridors

#### Emergency Communications:

- Single interior and 1 exterior emergency code blue station connected to UTM Safety via BELL centrix line which shall also have CAT5/6 cabling present for future proofing
- Emergency call button at main reception or helpdesk

#### Signage

This project will provide all necessary interior and exterior signage and wayfinding associated with the building. Interior signage includes not only those signs mandated by the Ontario Building Code but also departmental identifications, room names and numbers, room schedules (as required) and interior wayfinding (both applied and digital). Exterior signage includes building identification, street and road signage for pedestrian and vehicular wayfinding, and other site-specific signage (e.g. parking, loading dock instructions, etc.). As well, the SSH plans to utilize digital signage for the cycling of campus information, events, student services, etc.

UTM specifications and standards for both interior, exterior and digital signage have been reviewed and the design team has implemented them on this project.

#### Non-assignable space

Included in the renovation project are non-assignable elements that are not specifically described in the Space Program but will be part of the Consultant's responsibility for the renovation design.

Non-assignable spaces included in the project consist of: corridors and circulation space including the new vestibule, existing electrical and telecommunication closets, and existing mechanical rooms and shafts. These aspects of the program are not included in the above summary of program spaces. All the



building's assignable and non-assignable areas are to be accommodated within the building gross-up factor described in the space program.

#### Washrooms:

The Davis Building services large numbers of students, given the presence of the Meeting Place and the number of large lecture halls. The revitalized Meeting Place addressed increased occupancy within the Meeting Place project and resulted in the addition of several Male and Female washroom stalls as well as two All Gender and one Universal. These washrooms are located directly adjacent to the SSH. Based on the new occupant load of the SSH, the Consultant has confirmed that additional washrooms will not be required.

### Mechanical/ Electrical and Data

#### Mechanical

The three air handling units (AHUs) AHU-J1, J2, and J3 serve the Davis Building (Block J) and are original to the building. Over the past 50 years, there has been considerable amount of maintenance on these units to keep them operational and have reached the end of their life cycle. AHU-J2, which predominantly serves Block J, sized at approximately 46,500 cfm, will be replaced as part of this project. AHU-J1 & AHU-J3 upgrade will be addressed in a separate future initiative.

The scope and mandate of the AHU-J2 Upgrade includes a complete upgrade of the central Air Handling system and ductwork located within the penthouse mechanical room. All the HVAC (reheat coils, baseboard heaters, pneumatic controls etc.) on the floor level will also be replaced. The upgrade is expected to encompass at a minimum the following elements.

- Replace like for like of the existing Air Handling Unit AHU-J2, and the corresponding Return Air Fan. 10% increase in capacity (space & utilities permitting) is desired.
- An upgrade of the piping related to the Heating Loop (Heat Exchanger, pumps, valves etc.) serving the Air Handling Units within the boundaries of the Student Services Hub site to the extent required to support the upgrade of the Air Handling Unit.
- An upgrade of the piping related to the Cooling Loop (Heat Exchanger, pumps, valves etc.) serving the Air Handling Units within the boundaries of the Student Services Hub site to the extent required to support the upgrades of the Air Handling Unit.
- An upgrade of the piping related to the Humidification System (humidifier, valves, steam traps etc.) serving the Air Handling Units within the boundaries of the Student Services Hub site to the extent required to support the upgrades of the Air Handling Unit.
- Architectural, Structural and Electrical Upgrades required to support the new AHU.
- On the floor level, all the HVAC will be replaced with VAV Boxes with reheat coils for heating.
- The existing HVAC on the floors in pneumatic and will be upgraded to digital controls within the boundaries of the Student Services Hub site. The new HVAC will be monitored from the central utilities plant and have trending / alarming capability.

#### Electrical

Electrically, Blocks J, K and L of the W.G. Davis Building is served by a 600V, 600A feed from the Davis substation within room DV1149A. Power for the proposed site for the Student Services Hub, located in Block J, is fed from transformers and panels located in Electrical Rooms DV2084A and DV2110L. The Meeting Place project upgraded the electrical system within the Davis Building incorporating a new electrical room, DV 2115G. Of the 600A feed from the substation, 300A has been allocated for the new Meeting Place loads, serving the new food court, common seating areas, and exterior lighting loads. With approximately 250A (~250kW) of additional available load to the new electrical room, the Student Services Hub should be adequately served by the existing service.

Also, as part of the Meeting Place renovation, two emergency panels were added for life safety loads, located in the new Electrical Room DV2115G and a new Electrical Closet DV2114T near the main entrance vestibule. Each panel is lightly loaded and has significant capacity to add more emergency light load.

The lighting in the proposed site currently uses fluorescent fixtures as its main lighting source. The Student Services Hub will be using high-efficiency LED lighting throughout its design. With these new LED loads, the estimated connected lighting load will range from approximately 0.4 to 0.5W/sf, and even further reduced with the addition of dimming and occupancy sensors. It is believed the proposed new design will be approximately 30-50% more efficient than the current electrical draw from the existing fluorescent fixtures.

### Data

Much of the Student Services Hub space is meant to be "fluid and flexible", allowing for "mixed configurations" of open and private areas.

A direct implication of such requirements is that the area requires a robust, high density wireless coverage, based on the latest UTM Wireless Network Standards and the UTM Communication Cabling Standards, see Appendix A. This also includes a predictive wireless survey based on CAD drawings and excellent understanding of space usage such as the number of offices, seating arrangements, maximum occupancy, and hoteling stations.

The wireless design shall be developed by UTM/I&ITS. A robust wireless deployment takes into account a myriad of variables, such as construction materials (e.g. wood, drywall, glass), seating plan, size and shape of the area. The architectural design, therefore, must be developed with these variables in mind and always favour function over form.

All copper data cables (Ethernet) should terminate in telecommunication room DV2115H. The farthest area in the proposed Student Services Hub, relative to telecommunication room DV2115H, is the corner closest to the outside bus stop. Preliminary calculations indicate the distance between the two points should be within specifications for the maximum length of Ethernet cables.

A cable tray system, containing only data cables (no electrical wires allowed), must be installed throughout the proposed Student Services Hub area. Free air cable runs sitting on top of ceiling tiles are not allowed. Cable trays should either be attached to the wall with angle brackets, or to centre-hung

supports from the ceiling, in order to facilitate the installation and removal of cables from the side(s) of the cable tray.

Existing legacy copper and fibre cables in the area must be deleted end to end. Under no circumstances should they be cut and abandoned. More information about horizontal cabling, including everything from wall data jacks, to patch panels and patch cords in telecommunication rooms, is laid out in the latest UTM Communication Cabling Standards.

Based on previous projects, the area will potentially include building automation system and audio-visual devices, collectively referred as Internet of Things devices. Their purchase and installation should follow the guidelines laid out in the UTM Design and Criteria for Internet of Things (IoT), see Appendix B, including but not limited to integration of wireless devices on the shared wireless spectrum and prohibition of consumer grade devices in a managed enterprise environment.

More network equipment will have to be purchased to support the new Student Services Hub, including but not limited to wireless access points, switches and/or switch cards, connectors, patch panels, and UPSs/PDUs. Costs incurred by these items can only be fully determined after the final design of the space.

#### Audio-Visual

The intent of this is to provide some direction for design and installation of AV systems, to ensure that a robust, consistent, flexible, sustainable, reliable, accessible and high definition standard is implemented across the University that meets operational needs.

The UTM Meeting Rooms, Information Technology / Audio Visual Design Specification is intended to outline the UTM campus requirements for meeting room technology and audio-visual equipment and should be followed for this project. This specification provides considerations and guidelines for the design of meeting room audio visual technology for all New Construction and Renovation Projects at the campus.

The UTM Classrooms, Information Technology / Audio Visual Design Specification is intended to outline the UTM campus requirements for classrooms technology and audio-visual equipment and should be followed for this project. This specification provides considerations and guidelines for the design of classrooms/workshop rooms audio visual technology for all new construction and renovation projects at the campus.

The space will have a mixed configuration layout to allow for multiple use cases. In areas where the UTM Meeting Room Design Specification cannot be used, Information & Instructional Technology Services (I&ITS) will be required to meet with the end users and consultant to determine the appropriate solution for the space.

End users will need the ability to collaborate in the desired spaces. This can consist of slide show presentation, video conferencing, peer document editing, events, etc. To accomplish collaboration requirements new equipment would need to be purchased for this project. Items such as displays (projector or TV), speakers, camera, control touch panel, etc. are required.

Each shared space would need to be independently controlled with a 4K digital media presentation system. For offices or small huddle spaces switching and control can be accomplished using the integrated computer. The audio-visual system would require to be integrated to the network to allow for remote control of the system. Any integration to the network must connect to enterprise grade equipment, be remotely manageable and follow industry best practices.

End users would need the ability to see if a shared space is currently being used or view the room's availability via a touch screen room scheduler interface outside the space. This will allow the end user to quickly glance at the display and know what is taking place in a room and when. In addition, the touch screen room scheduler interface would need the ability to connect to the Microsoft Office 365 calendar platform to allow for remote scheduling.

For long distance video runs, at minimum CAT6 cables are required to connect from transmitter to receiver and will not run back to the network data room. The installation of all network cables regardless of its intended use must follow the current UTM Communication Cabling Standards. There should also be considerations for multiple electrical circuits to allow for even power distribution.

The public information system (Digital Signage System) that will be used to provide events information, announcements, campus and community updates, emergency broadcasts & university news and brand contents, will be used both behind the info/reception space and in larger gathering areas. This system would require a network connection to the local PC to allow for control from Rise Vision or similar software. The signage and infrastructure in the SSH should be an extension and reflection of the student service portal, the mobile experience, and the service providers' experience. Refer to the Digital Signage System Specification as part of UTM's Construction Standards for additional information.

All Audio-visual designs are to be "support capable", that is, the systems installed will not be proprietary but among those recommended and supportable by the I&ITS team. It will have to be accessible for maintenance yet be secure enough for end users not to remove or tamper with the equipment. The suggested design for each space will be reviewed and approved by UTM I&ITS before implementation.

### Environmental Health and Safety

The University of Toronto's Environmental Health and Safety office, including an Environmental Protection Services team, provides a broad range of health and safety services to the University community and whose responsibility it is to ensure environmentally responsible, safe and healthy work, research and study environments on campus. Please refer to their website for information, <https://ehs.utoronto.ca/>.

The new office use will require complete renovation of the existing space. Key considerations for healthy environments will include office and student space design, use of materials, air quality, access to natural light, and overall space and furniture design.

An Asbestos-Containing Building Materials Condition Re-Assessment report on the existing physical infrastructure of the William G. Davis Building was prepared in 2019. The report included a summary of hazardous materials. Remediation of these hazardous materials is required.

#### **d) Site Considerations**

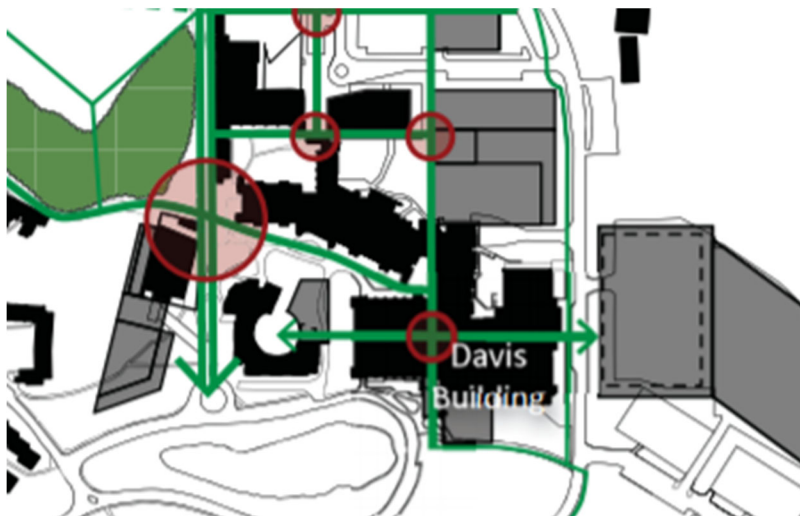
##### Site context

Located at 1867 Inner Circle Road, the William G. Davis Building lies within the South Campus sector of UTM. Within the southwest portion of the building, the space to be renovated is directly west of the newly renovated Meeting Place. The exterior elements of the project, creating a new west entrance to the building, are directly across from the new Kaneff Centre expansion (Site 4) named the Innovation Complex. To the southwest of the Davis Building, along Inner Circle Road is the Bus Loop.

##### Master Plan

Campus planning at UTM has evolved with enrolment growth and has been guided by key principles established in the Campus Master Plan of 2000. The 2011 Campus Master Plan builds on the 2000 Master Plan taking into account the growth as it has actually transpired since the earlier plan was published. Nine major buildings have been added to the inventory at UTM since 2000 plus one scheduled to start construction during the 2019/20 academic year. The siting and massing of these buildings have followed the planning principles set out in the campus master plan documents.

The Meeting Place renovation included Sites 5 & 6, a new south entrance and outdoor patio area. The Student Services Hub will feature a smaller one-storey vestibule west entrance to the building and incorporate seating, accessibility and both soft and hard landscaping elements. This entryway will ensure connection to the Innovation Complex containing the Office of the Registrar as indicated in the Circulation Map of pedestrian pathways in the 2011 Campus Master Plan.



*Circulation Map, UTM Campus Master Plan 2011*

A 2021 UTM Campus Master Plan is underway. The Draft 2021 Master Plan identifies the area directly outside of the new SSH vestibule as a priority pedestrian connection.

### Zoning regulations

The Mississauga City Council passed the Mississauga Zoning By-Law 0255-2007 on June 20, 2007 which regulates the use of land, buildings and structures, and implements the Mississauga Official Plan (2011). The By-law has designated three zones within the UTM property which include: Institutional (I-5), Greenbelt – Natural Hazard (G1), and Parkway Belt – Passive Recreation Use or Conservation Use (PB1).

This project's boundaries are included in the I-5 zoning, a classification that permits most uses related to the operation of a university.

The project has submitted for Site Plan Approval Express (SPAX) with the City of Mississauga and is currently under review.

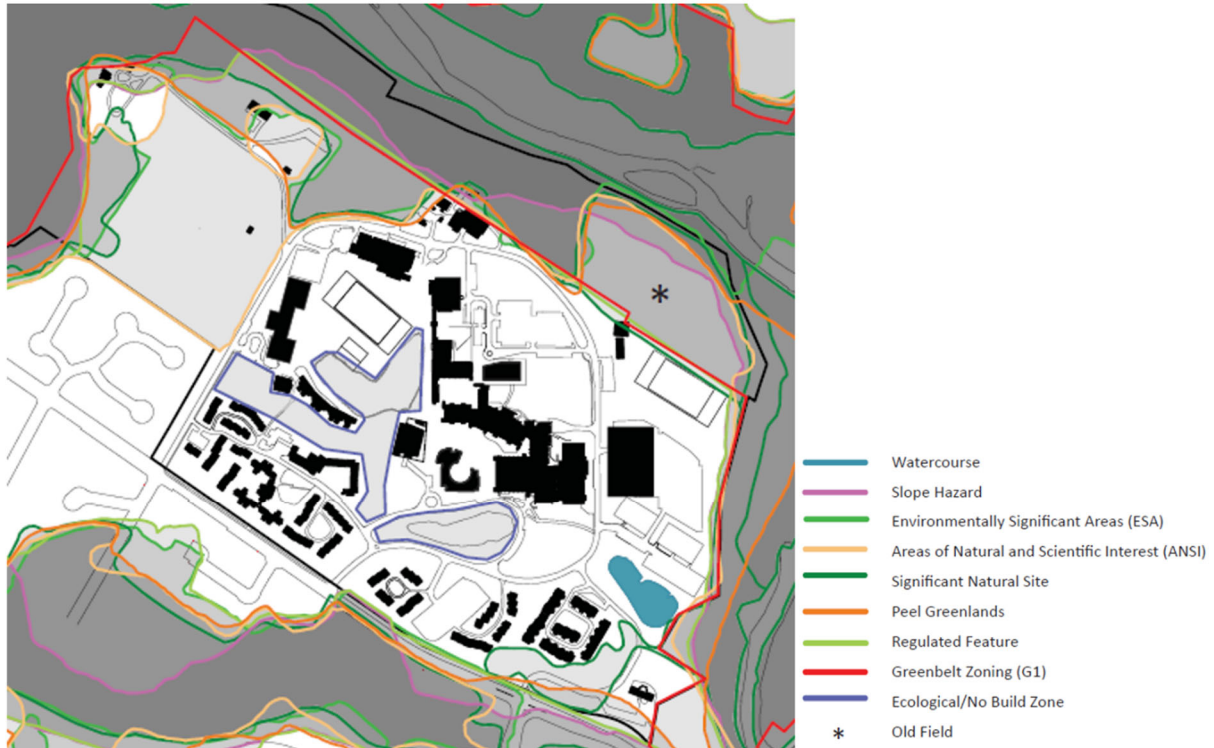
### Environmental issues, regional conservation, Ministry of the Environment

Environmental stewardship continues to be a high priority, given the campus' naturalized context and the institution's emphasis on environmental sciences, sustainability, biodiversity, and climate in programs such as geography, chemical and physical sciences, and management.

The primary regulating body affecting development on campus is the Credit Valley Conservation Authority (CVC). The CVC and Peel Region regulation and legislation boundaries surround the developed campus on all sides; each having specific implications on future growth not just within the boundaries, but in some cases, include setback requirements as well.

While environmental regulations pose unique challenges, at UTM those limitations are viewed as opportunities to plan more intelligently, creatively, and in a sensitive manner to preclude interventions that would be detrimental to the ecosystems of interest. Carefully considered development can also seek to make connections with the surrounding natural areas, thus ensuring the natural assets are appreciated and accessible to the campus community.

The proposed development site for the Student Services Hub west entrance is zoned by the City of Mississauga as Institutional (I-5) and is located outside of the Environmentally Significant Areas (ESA) and outside the boundaries of the Area of Natural and Scientific Interest (ANSI).



*Map showing regulation of environmental features*

Landscape and open space requirements

The natural environment is intrinsic to the UTM campus identity. Conservation of important existing open space networks and definition of future open space continues to be pivotal in shaping proposed future development. The proposed exterior elements must consider scale within the surrounding context (natural, institutional, and the suburban residential neighbourhood) and invite broader thinking about the campus as an integral part of the environment and the City.



*Proposed landscape plan.*

### Site access

Pedestrian and vehicular routes, parking, and service areas are essential to the function of the campus and must be carefully designed to minimize negative impacts on the campus experience. The proposed main entrances to the south end of the Davis building will be off Inner Circle Road. Together, the new South entrance created by the Meeting Place renovation and the new West entrance created in the SSH project will link with the existing paved pedestrian paths and provide increased connectivity to the broader campus network.

### Heritage status

The Mississauga campus in its entirety is designated a cultural landscape as per the City of Mississauga's Cultural Landscape Inventory. The 1968 original northern wing of the Davis Building, The Research and Laboratory Block, has listed heritage status with the City of Mississauga, however as this project is concerned entirely with the 1973 Phase 2 southern portion of the building this status does not apply.

### Site servicing; existing and proposed

The following considerations will need to be considered by the Consultant regarding the exterior elements of the project.



- Maintaining the required fire route clearances currently established between Kaneff Centre/Innovation Complex and the Davis Building. The new landscape development cannot encroach within this area.
- Coordination with 5-Minute Walk Revitalization project (separate initiative)
- Surface drainage
- Grading
- Snow removal & loading area
- Staging area for construction is to be reviewed once the General Contractor is on board (likely somewhere along existing landscape area along the west side of the Davis Building). Depending on how much area is anticipated to be utilized by the contractor, additional improvements/repairs may be required.
- Walkway connections to Innovation Complex entrance (across fire route) & Bus Loop at Inner Circle.

#### Hazardous waste disposal

The University of Toronto will investigate and identify designated substances and other site-specific hazardous materials present within the project area as per appropriate regulations and the Ontario Occupational Health and Safety Act.

#### **e) Campus Infrastructure Considerations**

##### Utilities (electrical capacity, water, gas, steam lines)

In consultation with Utilities, the three air handling units (AHUs) serving J Block have reached their lifespan. Rather than replace all units within this project, creating a major disruption, this project will include the replacement of the main unit serving this area, AHU-J2. The upgrade of the two remaining AHUs will be addressed in a separate future initiative.

##### Sewer and storm water management

Sewer and storm water management needs will be handled through existing infrastructure and the campus storm water pond. The proposed renovation minimally impacts the overall building envelope: the proposed west entrance vestibule addition will be built on areas that are currently made of both permeable and non-permeable materials. Softscape is to be included in the new landscape proposal.

The local area flanked between the Davis Building and the Kaneff Centre/Innovation Complex is served by four storm water catch basins and one storm water catch basin manhole. One catch basin is located within the landscaped area near the northwest corner of the Davis Building. These catch basins are connected by a storm drainage line running in a north/south direction in the middle of the concrete fire route located between the two buildings and leads down to Inner Circle Road. The current location of

storm drainage line will not interfere with the proposed west entrance vestibule addition and the surrounding landscape area. The landscape design carefully considers surface water management.

Located directly south of the Kaneff Centre and the Davis Building travelling in an east/west direction lies a 250mm diameter sanitary sewer line which crosses near the mouth of the fire route between the two buildings. This sanitary line is located a sufficient distance away from the Davis Building that it should not pose any interference issues with proposed west entrance vestibule addition and local exterior landscape work.

#### Bicycle parking

Bicycle parking is not required as part of this project. Existing bicycle parking is available nearby outside entrances to the Kaneff Centre, Innovation Complex and the Meeting Place.

#### Vehicle parking

This project does not significantly alter the existing building in such a way which would add or subtract from the existing parking inventory.

### **f) Secondary Effects**

The project area is currently occupied by various departments primarily as office functions and meeting rooms. These include the following:

- DV2094C: currently used by the Department of Geography as a Video Conference Room, this space will be permanently moved to DV1143, which presently serves as Change Rooms for Campus Safety. These Change Rooms will be temporarily relocated to the vacant administrative office spaces in DV2068.
- DV2094B, DV2094D, DV2111D, DV2111H, DV2111L, and DV2111N: these rooms are presently used by Facilities Management and Planning for temporary furniture storage and will be vacated. All stored furniture will be distributed to ongoing renovations and/or offered to departments as old furniture replacement. Furniture that is no longer required by the University will be disposed of.
- DV2097 and DV2110: These are Union Offices that will need to be relocated. While a permanent location has not been identified, they may be temporarily housed within the Academic Annex
- DV2102: Currently home to the Food Bank under UTMSU, this office will be permanently moved to the Student Centre
- DV2105D: Campus Safety will be temporarily relocated to another office within the Davis Building. DV3206 has been proposed.
- DV2111J: Formerly used by the Green Team, this space is currently vacant
- DV2101, DV2103, DV2105B, DV2105C, DV2111G, and DV2111F: These offices are currently occupied by Hospitality and Retail Services, and will be permanently relocated to DV1092A

The Student Affairs group also temporarily occupies a portion of the space within the Student Services Hub project area and will remain there until new space in the project is constructed. The space will be

demolished afterwards and redesigned to suit new functions of the SSH. This will require a phased construction approach.

The Student Services currently occupies multiple areas in the W. G. Davis Building on several floors. Some of the areas have been already allocated to other units and others will be reallocated for an ongoing academic and administrative growth, as well as used as a swing space during construction. Storage space allocated to the Interim Project Planning Report will be found elsewhere in the Davis Building with the understanding that it will be further away from the SSH than first proposed. This was agreed to in order to allow prioritized program to be collocated in the available project footprint.

#### **g) Schedule**

Project Milestones:

Construction Documents	May 2021 – September 2021
General contractor tender & contract award*	October 2021 – November 2021
Construction Phase (15 months estimated) <sup>1</sup>	Dec. 2021 – February 2023
Fit Out (Furniture & AV)	February 2023
Projection Completion/Move-In	March 2023

<sup>1</sup> Considers 2 phases of construction by the same contractor (single tender) and assumes Design-Bid-Build delivery model, duration to be confirmed.

### **IV.Resource Implications**

#### **a) Total Project Cost Estimate**

The total estimated cost for the project includes estimates or allowances for:

- construction costs (assuming a lump sum type of tender to qualified general contractors in the month of June 2021)
- contingencies
- taxes
- hazardous waste removal
  - decommission of hazardous substances
  - disposal costs for hazardous materials
  - release of area (hazardous materials) for unrestricted re-use
- site service relocates

- secondary effects
- demolition
- landscaping
- permits and insurance
- Professional fees, architect, engineer, misc consultants (ie. Inspection, Survey, etc.), project management
- computer and telephone terminations
- moving
- furniture and equipment
- miscellaneous costs [signage, security, other]
- commissioning
- escalation

**b) Operating Costs**

The proposed project is primarily an internal renovation and any increase in operating costs is believed to be nominal. It is currently estimated that annual operating costs may increase by approximately \$37,684 and will be accommodated by UTM’s operating budget.

**c) Other Related Costs**

Not applicable.

**d) Funding Sources**

The Student Services Hub project will be funded by a combination of the following sources:

- UTM Capital Reserves (derived from the UTM Operating Budget)
- Financing