



University of Toronto Scarborough **Urban Design Guidelines**

July 9, 2020



UNIVERSITY OF
TORONTO
SCARBOROUGH

**URBAN
STRATEGIES
INC .**

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1.0

**INTRODUCTION AND
CAMPUS VISION**

1.1 Introduction

The University of Toronto Scarborough (UTSC or the University), has undergone a significant institutional transformation since its founding in 1964. Beginning as an undergraduate satellite campus, significant campus growth and investment has established UTSC as a major institution in the Eastern GTA with comprehensive academic, research, athletic, and cultural programs. The University continues to evolve and expand, approaching growth from the perspective that academic expansion must be carefully supported through ongoing investment and enhancement of the physical campus in order to successfully fulfill its academic mission.

The UTSC campus is an expression of its unique cultural history, with agricultural and pastoral roots giving way to the development of a unique mid-century suburban campus, renowned for technological and design innovation. Since that time, UTSC has strengthened and expanded beyond its academic role to become a leader in community stewardship, local and regional economic development, and creative city-building. In recent years, the University has constructed several major academic buildings and, in partnership with the City of Toronto, the Toronto Pan Am Sports Centre. With large undeveloped land holdings, increasing student enrolment rates, and the potential delivery of the future Eglinton East LRT to the campus, the future of campus development at UTSC is promising.

Institutional campuses such as UTSC are subject to different development and design pressures than those faced by other areas of the City. Unlike traditional residential and commercial development, the University's development projects are driven by program needs and funding opportunities. These in turn have a direct impact on building scale, massing and architecture. The University must also invest in and maintain an enhanced campus setting for these buildings. As a long-term landowner, UTSC has both a responsibility and a desire to enhance the public realm and campus setting in which it operates.

Furthermore, UTSC's ownership and access to large greenfield sites sets it apart from many other post-secondary institutions. In an urban context, campus development is strongly influenced by existing urban fabrics. Universities in these environments are often required to take a more surgical and reactive approach to campus planning and design. Unlike its more urban counterparts, much of UTSC's landholdings remain undeveloped and are subject to few organizing elements. This presents exceptional opportunity to accommodate a wide range of institutional activities in a variety of forms and densities, but also raises a challenge in providing certainty and cohesion as development occurs.

The intent of these guidelines is to implement the University of Toronto Scarborough Secondary Plan, and to provide appropriate direction to support the University's ability to realize its academic mission while ensuring the realization of a high quality campus setting. This requires careful navigation between the need to provide a clear and certain framework for growth and the need for versatility and adaptability so that the University may effectively respond to ever-changing needs and trends. To this end, the guidelines ensure flexibility in fostering design excellence and creative design solutions as UTSC continues to grow and evolve its campus.

1.1.1 How and Where the Guidelines Apply

To ensure that UTSC continues to develop as a successful 21st century campus, the municipal planning framework has been updated to guide growth and investment. These Urban Design Guidelines are an essential component of this framework, implementing the University of Toronto Scarborough Secondary Plan, providing a clear and comprehensive set of design principles and criteria that will lay the groundwork for the next generation of campus development.

The guidelines apply to the full extent of the University of Toronto Scarborough Secondary Plan Area (referred to as the UTSC campus or the campus), as shown in Figure 1.0. Covering roughly 123 hectares, this area is generally bounded by the neighbourhood of Highland Creek to the east, the Highland Creek Ravine lands to the south, Morningside Avenue to the west, and the City-owned land near Highway 401 to the north. The intersection of Military Trail and Ellesmere Road is located at the centre of the campus.

Informing the design of new buildings, new open spaces, and the circulation network connecting these campus elements, the guidelines are intended for both internal and external use. The guidelines are intended to provide direction to designers working within the campus setting, to guide the University's Design Review Committee review of major projects, and to inform decision-making. The guidelines can also support municipal staff review of development applications including zoning by-law amendments, minor variances, and site plan applications.

How To Read this Document

The UTSC Urban Design Guidelines provide guidelines that apply to the entire campus, including open spaces, streets and built form, and are intended to allow for creative design solutions and flexibility while maintaining or establishing important campus relationships and settings.

Urban design objectives and specific guidelines are provided through a combination of qualitative statements, numeric standards, supportive diagrams, and precedent images. Where numeric standards are provided, they should be considered flexible insofar as the general intention of the guidelines is met.



Figure 1.0: University of Toronto Scarborough Secondary Plan Area

1.1.2 Evolution of the UTSC Campus

Development within the Secondary Plan Area has historically been focused in the South Campus, informed by the 1963 campus plan. Anchored by the iconic Andrews Building, the original campus plan emphasized an ecological approach to design with multi-functional spaces and interconnected circulation intended to foster interactions between students and faculty.

As student enrolment steadily grew over the subsequent decades, demand for additional academic facilities and residences was met by expanding development across the South Campus. To accommodate this future growth, a new vision and master plan was needed to guide the future expansion of the physical campus, in particular on the North Campus.

Beginning in 2008 with a Campus Vision statement, the University undertook numerous workshops and open houses, where input was received from the students, faculty, staff, as well as community partners, neighbours and staff from the City of Toronto. This work culminated in a 2011 Campus Master Plan, which translated the vision into a comprehensive set of policy objectives and physical plans.

Since being approved by the University's Governing Council in 2011, the Master Plan has guided over 50,000m² of new campus facilities, including the award-winning Toronto Pan Am Sports Centre and most recently, Highland Hall.

Relationship to the Campus Vision and Master Plan

The Urban Design Guidelines are one of the planning tools developed to support the realization of the University's Campus Vision and Master Plan.

To ensure the City of Toronto planning framework supports the Campus Vision and Master Plan, UTSC prepared a University of Toronto Scarborough Secondary Plan and these guidelines. The Secondary Plan establishes the key directions and objectives set forth in the Master Plan, providing contemporary policy direction that aligns with the University's long-term vision and academic mission.

The Urban Design Guidelines are an additional component of the campus planning framework and a means to implement UTSC's physical vision for its lands. Drawing on a legacy of community engagement and critical analysis, the Urban Design Guidelines provide a means for both the University and the City to understand and evaluate the growth and evolution of the campus specifically from an urban design perspective.

Future Potential Transit Network

While the UTSC campus has historically been designed as a commuter campus, the future transit network that will serve the campus will dramatically shift the mode share of transit trips to and from the campus, which could help encourage growth and intensification to occur in strategic locations across the University campus. These potential future infrastructure investments are protected for and reflected in the Secondary Plan and these guidelines.

In particular, the future Eglinton East LRT will provide the University with a direct connection across the City and to other major transit nodes, including the future Durham-Scarborough BRT. Although the Eglinton East LRT will dramatically improve access to the campus once built, there remains uncertainty with respect to the project timeline and eventual delivery details and mechanisms. Despite this uncertainty, there is a need for the University to continue to advance its own campus planning framework in a way that ensures the University's campus design and placemaking goals are achieved, while still providing the flexibility to accommodate a future LRT if and when one should ever be constructed.

UTSC could also benefit from a future Durham-Scarborough Bus Rapid Transit (BRT) connection. Metrolinx published an Initial Business Case for the Durham-Scarborough BRT in spring 2018, which determined a "Hybrid" combination of centre-median and curbside BRT infrastructure as the preferred alternative. While Metrolinx's study recommended the line running along Ellesmere Road through the campus and the Secondary Plan Area, the exact location of stops has not yet been identified, and will be determined through a future design/business case phase.

1.2 A Vision for the UTSC Campus

In conjunction with the University Secondary Plan, these guidelines establish a vision and strategy for transforming the campus. This transformation will be led by an expanded and enhanced public realm, pedestrian-priority design, transit-supportive intensification, and the continued conservation and celebration of the University's heritage and institutional identity. These guidelines are intended to support the realization of this vision by providing appropriate guidance for the future campus development.

The vision for the campus is a diverse, walkable, and transit-accessible place that has respect for and takes action towards the conservation of the natural environment, and provides a lively, dynamic learning environment for students of diverse backgrounds.

By implementing this vision, the University will transform from a suburban, automobile-oriented campus into a sustainable campus environment that is designed to prioritize active transportation. The majority of this transformation will take place on the North Campus, which will be the focal point for new development and growth within the University campus.

As the North Campus continues to be developed, it will ensure that it does so in a responsible manner, minimizing negative impacts where possible. Specifically, development along the edges of the campus will be sensitive and responsive to adjacent uses, and will employ appropriate transitions to residential neighbourhoods, where applicable. Development will minimize impacts on natural heritage features, and will continue to enhance the University's reputation as a leader in environmental stewardship and sustainable design.

The future vision for the Campus is organized around the three Character Areas, as depicted in Figure 1.1. These Character Areas were identified by a cultural heritage resource assessment that was prepared by ERA Architects in 2016 as part of the Secondary Plan and Official Plan Amendment application process.

North Campus

The North Campus Character Area includes all University lands north of Ellesmere Road. This area was identified in the Master Plan as a key area for future expansion for the University, a role which has been realized over the past decade with the construction of the Instructional Centre (IC), the Toronto Pan Am Sports Centre (TPASC), and most recently, the Environmental Science and Chemistry Building (ESCB). These buildings contribute to an institutional character defined by mid-rise built form and contemporary and innovative architectural style. With the potential future arrival of LRT service, and the decommissioning of a portion of Military Trail, the North Campus will be positioned to transform into a new centre of growth and activity for UTSC.

The area also accommodates extensive surface parking, and portions of vacant land. Growth in the North Campus will be concentrated primarily along the realigned (New) Military Trail, creating a vibrant and connected campus community. The realigned Military Trail will become a key artery and destination for the campus, and will be realized as an animated urban corridor.

To the northeast, is the undeveloped edge of the North Campus, bordering the residential community of Highland Creek. The landscape is largely comprised of invasive and non-native species, and though several informal trails lead through the area, there has been no formal investment in open spaces or transportation infrastructure.

This area will serve as a transition point between the more intensive development in the North Academic and Military Trail areas and the surrounding residential community. The area is expected to accommodate a range of university activities, including short-term uses, such as campus farming, or longer-term uses, such as University housing.

South Campus

As the site of the original development at UTSC, the South Campus contains the majority of University facilities and has served as the centre of academic activity and student life. The South Campus has been the focus of growth for UTSC until 2010, and the dynamic character of this area reflects the University's various periods of development and evolution.

Anchored by the iconic Andrews Buildings, the South Campus is characterized by bold and monumental architectural style, and a responsive relationship to the ravine supported by a network of open spaces and pedestrian pathways. Later academic buildings, including the Student Centre and Arts and Administration Building, support a pattern of lateral expansion from the Andrews Buildings. At the south periphery of this area, low-rise student housing creates a gentle transition to the surrounding community.

As the campus continues to grow, the South Campus will continue to serve as an important academic, cultural, and recreational hub on campus. Opportunities for redevelopment will be thoughtfully pursued and balanced with the need to conserve significant heritage resources.

Ravine Lands

The Ravine Lands comprise the southernmost portion of the University Lands, much of which has been undisturbed by development. The Highland Creek Ravine has long been a defining feature of the UTSC, and is recognized as a distinct Character Area within the campus that serves several critical functions.

Since the establishment of UTSC, the Ravine Lands have been the focus of recreation, education, and research activities. This unique natural state, and connectivity to the City's wider open space network, positions the Ravine Lands as an important ecological asset, a role which is prioritized and protected by the University.

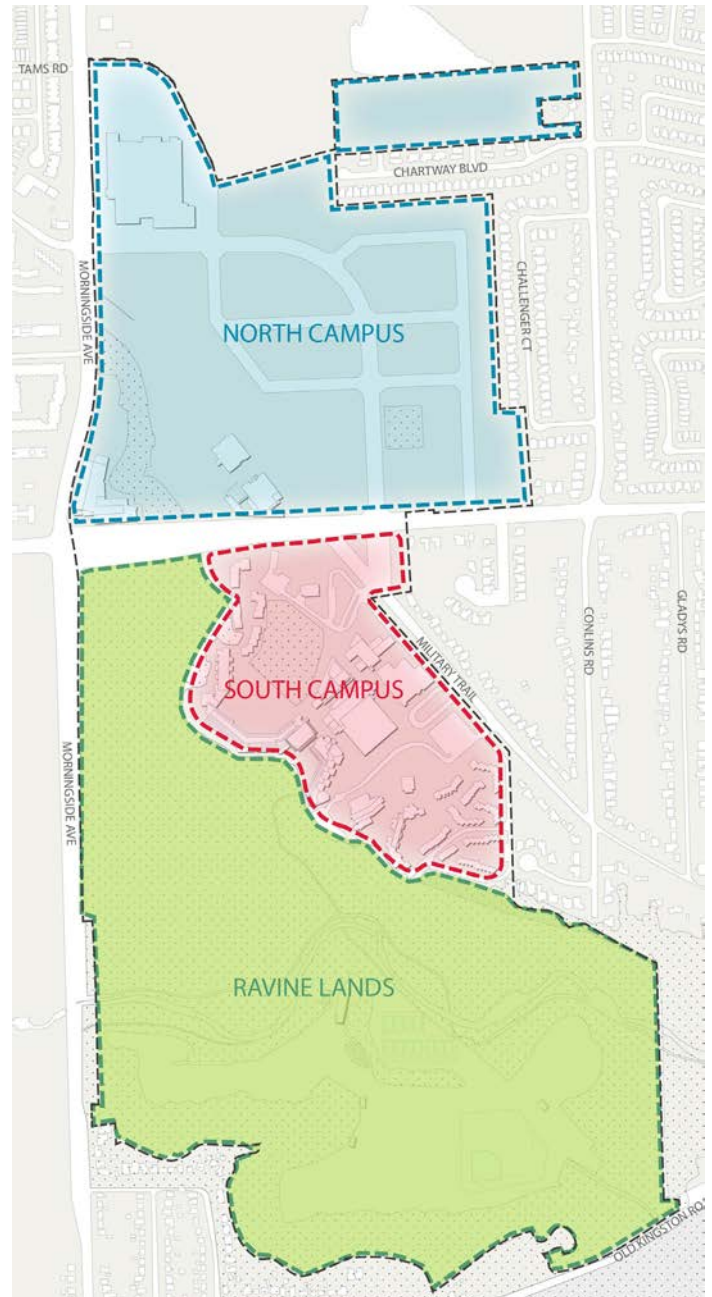


Figure 1.1: Campus Character Areas

1.3 Key Objectives

To ensure that the physical campus develops in a way that supports continued academic expansion and innovation, while respecting the unique UTSC legacy and campus experience, future growth will be guided by the following core set of objectives.

Expand the public realm network across the campus with a network of Major Open Spaces, smaller public realm investment and enhanced streetscapes.

- Seven Major Open Spaces will provide the foundation for an expanded open space network across the campus, serving as important gathering spaces and focal points.
- An extended street network will join areas of new development to the existing campus and adjacent neighbourhoods, creating a cohesive and connected campus.
- As the University develops, a series of smaller open spaces and pedestrian connections will be established to complement major public realm initiatives, and to ensure continued access to high-quality outdoor amenity spaces across the campus.



Woolwich Squares, London, UK

Promote people-first design with appropriately scaled buildings that support a walkable and vibrant campus

- New buildings will reflect architectural excellence through creativity and variety in built form, creating an aesthetically compelling campus.
- Buildings will prioritize the pedestrian experience at the ground level.
- Buildings will be carefully designed and massed to fit within the campus setting.
- A coordinated approach will be taken to the design of buildings and landscapes to support a built form interface that is welcoming and green.

Create a vibrant, complete University community that accommodates the wide variety of activities found on a 21st century campus

- The North Campus will support flexible and responsive built form, allowing the University to adapt to shifts in education, research, and opportunities for institutional partnerships.
- Housing for students, faculty, and staff will activate the campus beyond typical class hours, creating a vibrant and viable University community.
- The growing University community will be served by a variety of active frontages at-grade, concentrated along re-aligned Military Trail.



University of Cincinnati, OH



Emory University, Atlanta, GA

Support transit investment through the integration of transit infrastructure and intensification in appropriate areas

- Transit stops will be designed as hubs of campus activity, and will provide direct connections to pedestrian and bicycle networks, creating a truly multi-modal campus.
- Surface transit will be seamlessly integrated throughout the campus to facilitate use and minimize barriers.
- New development around transit stops will support increased height and density.

Enhance the unique UTSC legacy through the conservation and enhancement of cultural and natural heritage resources

- New development will support the architectural character of the University's important heritage resources, including the Andrews Buildings and Miller Lash House.
- The ravine will continue to be protected and enhanced as part of a healthy urban ecosystem, and as an invaluable institutional asset.
- Appropriate transition will ensure a harmonious relationship between the campus and adjacent neighbourhoods and open spaces.




Portland State College, Portland, OR



Miller Lash House, UTSC

2.0

**OPEN SPACE
GUIDELINES**



From its inception, the University's natural setting on the edge of Highland Creek Ravine has inspired campus planners and architects to incorporate generous open space into the campus environment. With the introduction of the University of Toronto Scarborough Secondary Plan, open spaces will continue to be prioritized as key components of all future campus development.

This expanded open space network will be comprised of a variety of open spaces. Anchored by the ravine, the open space network supports a wide range of functions that are essential to the long-term health and sustainability of the campus. Natural open spaces provide an opportunity to appreciate, experience, study, and learn from nature. As the University grows, these natural resources will be conserved and enhanced to ensure that these benefits can be enjoyed for future generations at UTSC.

Major Open Spaces, such as the existing Science Wing Common and the planned Military Trail pedestrian spine, act as hubs of campus activity. These dynamic and distinct spaces supporting a range of active uses including large-scale events and congregations and help to build a strong sense of campus identity.

Minor open spaces such as lawns, courtyards and plazas, complement and connect these larger spaces, and create a more intimate and green interface with the campus built form. Not only do smaller open spaces serve as places for relaxation and social interaction, but these also support way-finding and walkability. Tying these spaces together are a series of smaller pedestrian connections, found in the form of outdoor paths and trails, paved walkways, and various interior connections that promote all-season use and greater permeability.

Open Space Guidelines

The guidelines contained within this section build on the vision for the University's Open Space Network (as shown in Figure 2.0), established by the UTSC Secondary Plan. They do so by providing a greater level of detail and guidance on the design of open spaces throughout the campus.

The following guidelines apply to the design of all open spaces within the campus:

1. Open spaces should be designed for the comfort, safety, and enjoyment of users recognizing that the majority of the standard academic year takes place in the winter months.
2. Opportunities to increase the quality and quantity of pedestrian amenities such as benches, lighting, shade trees, and wayfinding elements should be sought where appropriate.
3. Best practice in low-impact, sustainable, and resilient landscape design should inform the enhancement of open spaces. Non-native species are discouraged, and drought tolerant species and lawn-alternatives are preferred.
4. Universal accessibility should be pursued in the design of open spaces.







-  Gateways
-  Ravine & Natural Heritage
-  Major Open Spaces
-  Lawns, Courtyards & Plazas (Existing)
-  Pathways & Mid-block Connections
-  North Campus Greenway



Figure 2.0: Open Space Network

2.1 Ravine and Natural Heritage

The Highland Creek Ravine is a defining feature of the University, both in terms of the physical campus and in terms of the University's academic mission and image. The campus also contains a wide variety of other natural heritage features that collectively contribute to the ecological health of the campus and broader Highland Creek watershed. The continued protection, restoration, and enhancement of the ravine and other natural heritage features will remain a priority for the University.

The following guidelines apply to all areas identified as natural heritage features on the campus (as shown in Figure 2.1).

Guidelines

1. New development adjacent to the ravine will be compatible with the heritage character of the Ravine Area and will
 - i. Respect the form and arrangement of the buildings, lawns, gardens and pathways of the Miller Lash Estate;
 - ii. Support and enhance the system of recreational trail linkages;
 - iii. Respect and balance the open valley, recreational infrastructure and buildings within the landscape; and
 - iv. Protect the vista across the Highland Creek Valley from Morningside Drive, framed by the silhouette of the Science and Humanities Wings along the ridge of the Ravine.
2. Natural and programmatic connectivity to adjacent city-owned ravine lands will be encouraged through natural heritage and trail enhancements.
3. Development adjacent to identified natural heritage areas will incorporate the appropriate buffers to minimize impact.
4. Improvements to ravine accessibility through enhanced trail systems, lighting, and way-finding will be encouraged.
5. Pedestrian and cyclist use of the ravine trail system will be encouraged through high quality trails, appropriate signage and wayfinding. Safety and security will be considered in trail design and infrastructure.



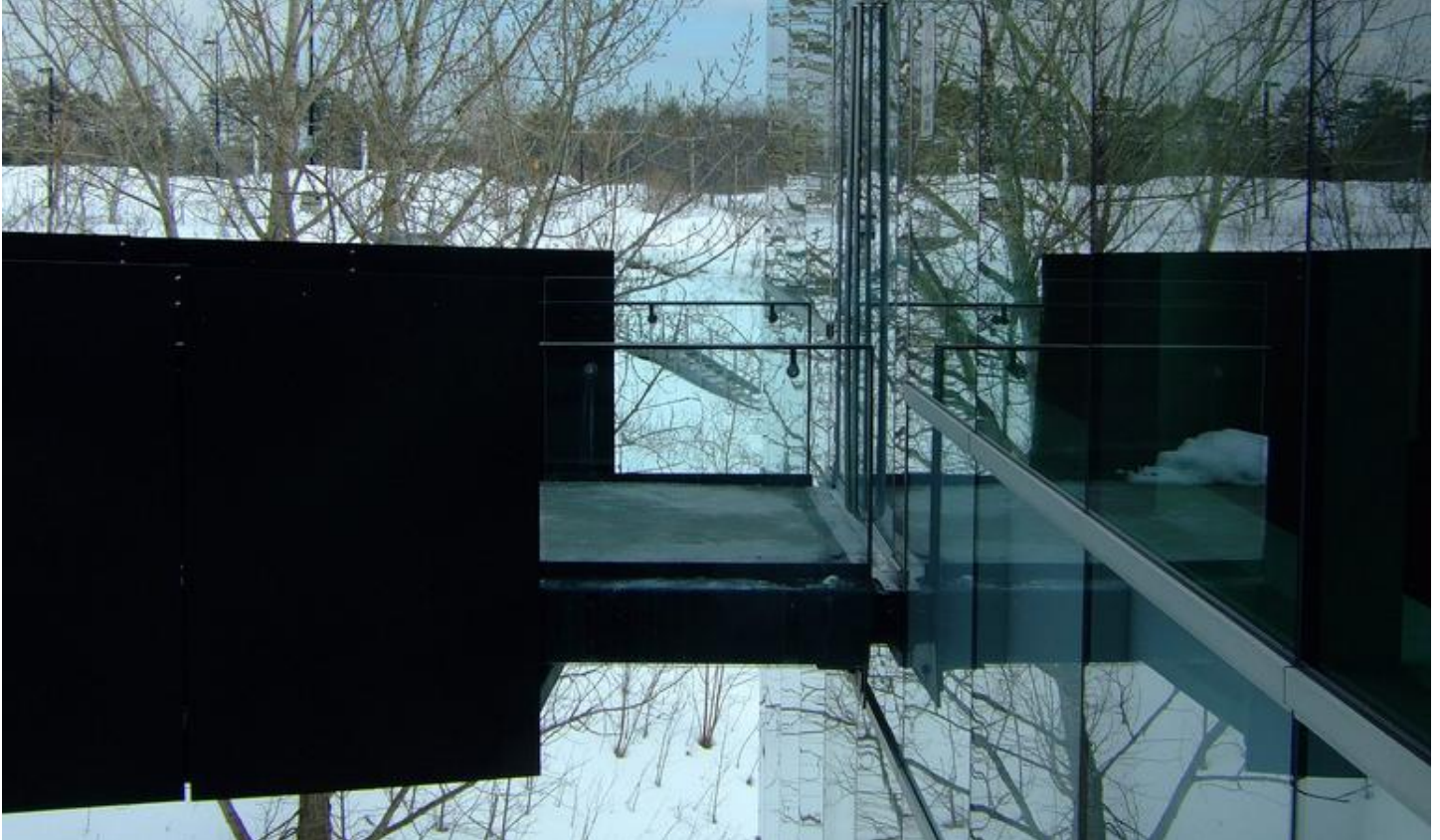
-  Ravine
-  Woodlot



Figure 2.1: Ravine and Natural Heritage Network



Further opportunities to extend and integrate the Ravine landscape into the campus should be explored, as seen near the Andrews Buildings (UTSC).



Campus development should be responsive to the natural heritage condition (Centennial College pedestrian bridge at UTSC)



Improvements to Ravine infrastructure provide benefits for all-season use and general accessibility (UTSC).



Lighting and trail enhancements improve wayfinding, accessibility, and user experience through the UTSC ravine network.

2.2 Major Open Spaces

Major landscape features have been a core component of campus development since the original 1963 campus master plan. The Science Wing and Humanities Wing Greens have long provided a natural setting to frame and complement the iconic Andrew's Building, and subsequent development in the South Campus. This academic core has been further supported by Major Open Spaces within the ravine which provide opportunities for active and passive recreation, as well as research, education, and social activities. These founding Major Open Spaces will continue to be conserved and enhanced.

As development expands to the North Campus, a series of major landscape initiatives will create new focal points for campus activity while supporting a cohesive, connected, and green campus. Most notably, the decommissioned portion of Military Trail will be re-purposed as an active pedestrian spine. Branching from this spine will be a new North Campus Common, mirroring the generous academic lawns of the South Campus and overlooking the ravine. A green corridor, comprised of a series of smaller landscapes and open spaces will promote connectivity throughout and between the North and South Campus areas. Finally, a new Major Open Space is envisioned between the existing Highland Creek neighbourhood and the University.

The following guidelines build on the policy direction provided by the proposed UTSC Secondary Plan for Major Open Spaces. They do so by establishing a more granular level of detail to be considered in the design and maintenance of the seven Major Open Spaces located within the UTSC campus (as shown in Figure 2.2), helping ensure a dynamic and interconnected open space network.

Guidelines

1. Landscape design should respond to the scale and significance of the open space and surrounding buildings and context. Consistency in design, plantings, lighting and furnishing should be employed around the periphery and within Major Open Spaces.
2. Opportunities for a range of year-round active and passive uses should be supported, including formal events (convocations, concerts, rallies, etc.). Adverse impacts from winter weather and rain should be considered in landscape design.
3. Pedestrian pathways will support primary travel routes through and at the periphery of Major Open Spaces where appropriate.
4. Development adjacent to Major Open Spaces should frame and define open space edges through complementary architectural and landscape design.
5. Active uses with high levels of activity will be encouraged on the ground floor areas facing onto Major Open Spaces.
6. Shadowing of Major Open Spaces should be minimized where feasible to maximize sunlight, recognizing that shadow impacts vary depending on the use, design and/or intended function of the open space.
7. Major Open Spaces should be designed to improve air quality, provide shade, create habitat for wildlife including bees and butterflies, contribute to biodiversity and support innovative stormwater management practices.



Figure 2.2: Major Open Spaces

2.2.1 Old Military Trail

Major Open Space No.1

This Major Open Space is envisioned to become the primary active transportation thoroughfare of the North Campus. It relies on the proposed re-alignment of Military Trail, and will transform the existing right-of-way into a pedestrianized and bicycle friendly open space to link major destinations within the North Campus to the rest of the campus.

1. Old Military Trail should be developed as an animated, pedestrianized boulevard with signature paving treatments, lighting, and other landscaping elements.
2. Furnishings and plantings along Old Military Trail should be designed to enhance the experience of pedestrians and cyclists, and should not obstruct circulation.
3. Extensive building setbacks are discouraged at the edges of Old Military Trail to appropriately frame the space and conserve a well defined building facade.



Converted pedestrian streets can connect key campus destinations and to foster a more active and animated campus using existing infrastructure. (Gould Street, Ryerson University, ON).

2.2.2 North Common

Major Open Space No.2

Facing directly onto Old Military Trail, the North Common will become a central open space within the North Campus, providing opportunities for large outdoor events, recreation, congregation and relaxation. As this space is planned to host a variety of different activities and users, it will be minimally programmed so as to conserve its open character and allow flexibility and adaptability to various uses.

1. The North Common should be generally designed and maintained as an unobstructed open space to accommodate larger events and recreational activities.
2. Furnishings and plantings in the North Common should be designed to enhance the views of the Highland Ravine.
3. Extensive building setbacks are discouraged at the edges of the North Common to appropriately frame the space and contribute to a well defined public realm.



Landscaping treatments can maximize programmable space while supporting direct pedestrian connections to main building entrances (University of Sydney, AU).

2.2.3 North Campus Greenway

Major Open Space No.3

The North Campus Greenway is imagined to be a series of smaller landscaped areas and open spaces within the North Campus, that together provide a critical pedestrian linkage on the campus.

1. Furnishings and plantings throughout the North Campus Greenway should be designed to enhance the experience of pedestrians and should not obstruct pedestrian circulation.
2. The North Campus Greenway will develop incrementally and may include interior, through-building connections in addition to smaller open spaces such as plazas, lawns and courtyards.
3. Extensive building setbacks are discouraged at the edges of the North Campus Greenway to define a streetwall condition and frame the pedestrian corridor.



Landscaping and architectural treatments support areas of high pedestrian activity (Arts and Administration Building Pedestrian Corridor, UTSC).

2.2.4 Community Green

Major Open Space No.4

The Community Green Major Open Space is intended to provide a linkage and transition area between the campus and the residential neighbourhoods located to the east of the campus. This open space is intended to be a shared space between the University students, faculty, and staff and the broader community.

1. The Community Green should be designed to accommodate year-round activities for a diverse range of users, including adjacent residential communities, on- and off-campus.
2. Pedestrian and cycling pathways will support connectivity between the North Campus and the adjacent residential community.



The design and orientation of Major Open Spaces can link together the campus and surrounding communities, by providing amenity for a diverse range of activities and users. (Grange Park, OCAD University, Toronto).

2.2.5 Science Green

Major Open Space No.5

The Science Green Major Open Space is located on the South Campus, between the Science Wing and a large woodlot. It will be designed to allow for informal recreation and pedestrian movement across the open space, and to act as a transitional space between the campus and the woodlot.

1. The Science Green should be generally designed and maintained as an unobstructed open space to accommodate informal recreational activities.
2. Furnishings and plantings in the South Common should be designed to enhance the experience of pedestrians and cyclists, while protecting views of the Science Wing.



The Humanities Wing Lawn will continue to serve as an important Major Open Space and may be expanded and enhanced as redevelopment occurs (UTSC).

2.2.6 South Common

Major Open Space No.6

The South Common Major Open Space, is located within the South Campus, to the south and east of the Humanities Wing, and is planned to become a Major Open Space by creating various linkages and connections between the existing smaller and disparate open spaces that currently exist on the site.

1. Furnishings and plantings in the South Common should be designed to enhance natural and cultural heritage, protecting views of the Humanities Wing.



Diagonal pedestrian pathways accommodate pedestrian travel in all directions, across a campus quad (Washington University, MO).

2.2.7 The Valley

Major Open Space No.7

This open space is located within the ravine lands to the south of the campus, which currently provides for much of the University's athletic and recreational facilities, and accommodates extensive community use. The Valley Major Open Space provides an important setting for outdoor recreational space and small-scale facilities while balancing the need for ecological enhancement and flood protection.

1. The Valley should be primarily designed for active recreational and sporting uses.
2. New and/or enhanced connections between the Valley and the broader City-wide park network will be made where possible, with a particular emphasis on linkages to Colonel Danforth Park and Morningside Park to ensure a contiguous ravine network is achieved.



Major Open Spaces within the Ravine provide opportunities for a range of active recreation activities (UTSC).

2.3 Smaller Open Spaces: Lawns, Courtyards and Plazas

In addition to Major Open Spaces, the campus will feature a collection of smaller landscapes and open spaces (as shown in Figure 2.3), creating an intimate and green setting in relation to campus development. These spaces, including lawns, courtyard, plazas, and forecourts, support a human-scale interface with campus buildings by breaking up building mass and creating porosity and variety in the public realm. These smaller open spaces provide diversity of functions, whether for quiet contemplation, outdoor learning, pedestrian flow or high-volume meeting spaces. As the campus grows and evolves, opportunities to expand and enhance this important network should be sought and prioritized.

The following guidelines provide direction on the design and integration of smaller open spaces into the overall open space network.

Guidelines

1. Minor open spaces will be achieved on all development blocks, and may take the form of lawns, courtyards, plazas, or forecourts situated in highly visible and/or accessible locations.
2. Development blocks should include landscaped open spaces with a mix of soft and hard landscaping features, as well as interior and exterior elements.
3. Consideration should be given to the unique campus functions required of smaller open spaces, responding to surrounding uses, activities and buildings.
4. New development should emphasize visual and physical relationships to open spaces.
5. Street furniture, paving materials, planting, and lighting should respond to surrounding developments, and be intentionally designed to support a pedestrian-oriented campus setting.
6. Landscaping and architectural features such as canopies and overhangs should ensure comfortable pedestrian conditions for four-season use.
7. Visibility and direct connectivity between smaller open spaces and the larger public realm is encouraged to support an interconnected open space network across campus.
8. Landscape treatment should be varied and reflect the character of its campus area, as identified in Section 1.2. Special attention should be paid to landscape design at the edges of these campus areas to ensure cohesion.



Figure 2.3: Smaller Open Spaces

Minor open spaces create important sites of green reprieve amongst built form elements (Science Wing plaza, UTSC).



Plazas provide space for informal outdoor congregation and support an animated campus. (Cambridge University, Cambridge, UK).



Soft and hard landscaping features can be integrated in outdoor plazas to provide a welcoming and visually interesting space (McMaster University, Hamilton, ON).





Smaller open spaces can be strategically located to support main pedestrian routes (Pace University, NY).



The design of smaller open spaces can reflect and complement the surrounding built form (Student Centre Plaza, UTSC).



Minor open spaces can provide visual and physical connections to larger open spaces and naturalized areas (Fred Urquhart Memorial Garden, UTSC).

2.4 Mid-Block Connections

Mid block connections (as shown on Figure 2.4) are planned across the University campus and consist of a variety of configurations, including interior mid-block connections, and laneway connections. Each type of mid-block connection prioritizes pedestrian movement, and seeks to enhance connectivity throughout the campus. The following guidelines apply to the design and planning of mid-block connections on the UTSC lands.

Guidelines

1. Mid-block pedestrian connections are encouraged through and between existing and new development blocks.

2. Interior mid-block connections should be clearly marked through signage or design features to support wayfinding, and should be lined with animated spaces, where feasible.
3. Some mid-block connections will be delivered in the form of laneways, which will allow for vehicle and servicing access, but will be primarily designed to enhance pedestrian connectivity and safety within the campus.



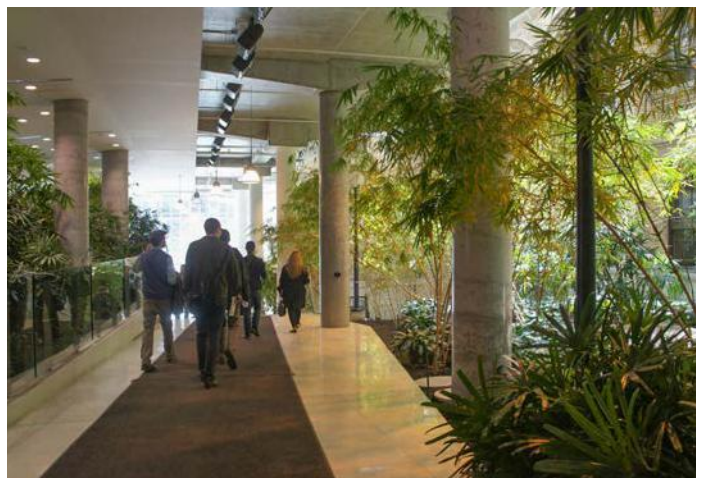
All season pedestrian activity can be encouraged through the design and maintenance of outdoor connections (Management Building Walkway, UTSC).



Interior pedestrian walkways encourage permeability and connectivity between interior and exterior spaces (Rice University, Houston, TX).



Special paving and lighting are used to signify a major pedestrian corridor (Locust Walk, University of Pennsylvania, PA).



Interior pedestrian walkways provide options for pedestrian circulation throughout a development block (University of Toronto St George, ON).



Figure 2.4: Pathways & Mid-block Connections

2.5 Gateways, Views and Public Art

2.5.1 Gateways

Gateways (as shown on Figure 2.5) mark an important sense of arrival and threshold between the campus and the surrounding city. Gateways promote a sense of arrival and strengthen the overall sense of place and institutional image. Moreover, gateways play an important role in campus wayfinding by providing key landmarks to orient travelers and framing important views and sight-lines. Gateways can be expressed through a range of architectural and landscape features and supported through a combination of art, lighting, signage and other public realm elements. The following guidelines present design criteria that should be considered at key gateway locations on campus.

Guidelines

1. New development and public realm elements in gateway areas should be designed to signal the transition from city to university.
2. Distinct signage, lighting, landscaping, and public art features may be incorporated into the public realm within gateway areas.
3. Where feasible, gateways should support and frame sightlines to key destinations across campus.
4. Iconic building design is encouraged at gateways to support the gateway function.
5. Important pedestrian entrances to campus may be designed with appropriately-scaled landscape features and built form elements that reflect a gateway condition.

2.5.2 Heritage Views

Views of Significant Heritage Resources on campus from the public realm are identified in the Secondary Plan, and are shown on Figure 2.5. In addition to practical benefits for wayfinding, these views contribute to institutional identities and provide connection to the unique history of the Character Areas.

Guidelines

1. New development will frame and support significant heritage views.
2. New development on the edges of sites that frame identified views will be coordinated and designed to maintain the visibility of the view terminus from the identified viewpoint.
3. Views through the decommissioned Military Trail and towards the ravine will be conserved.

2.5.3 Public Art

Public Art will be used to enhance place-making opportunities throughout the campus, and support and enhance the character of the University campus.

The University of Toronto Art Committee will develop public art strategies which will identify existing and potential sites for public art and ensure that public art is provided in a coordinated manner as the University grows. The below guidelines will provide guidance and direction to that ongoing process.

Guidelines

1. Public art installations will seek to celebrate the University's unique culture, heritage and identity.
2. Public art installations will be used to foster a sense of arrival at key campus Gateways, and will be considered in other areas of high pedestrian volume, including along key open space corridors.

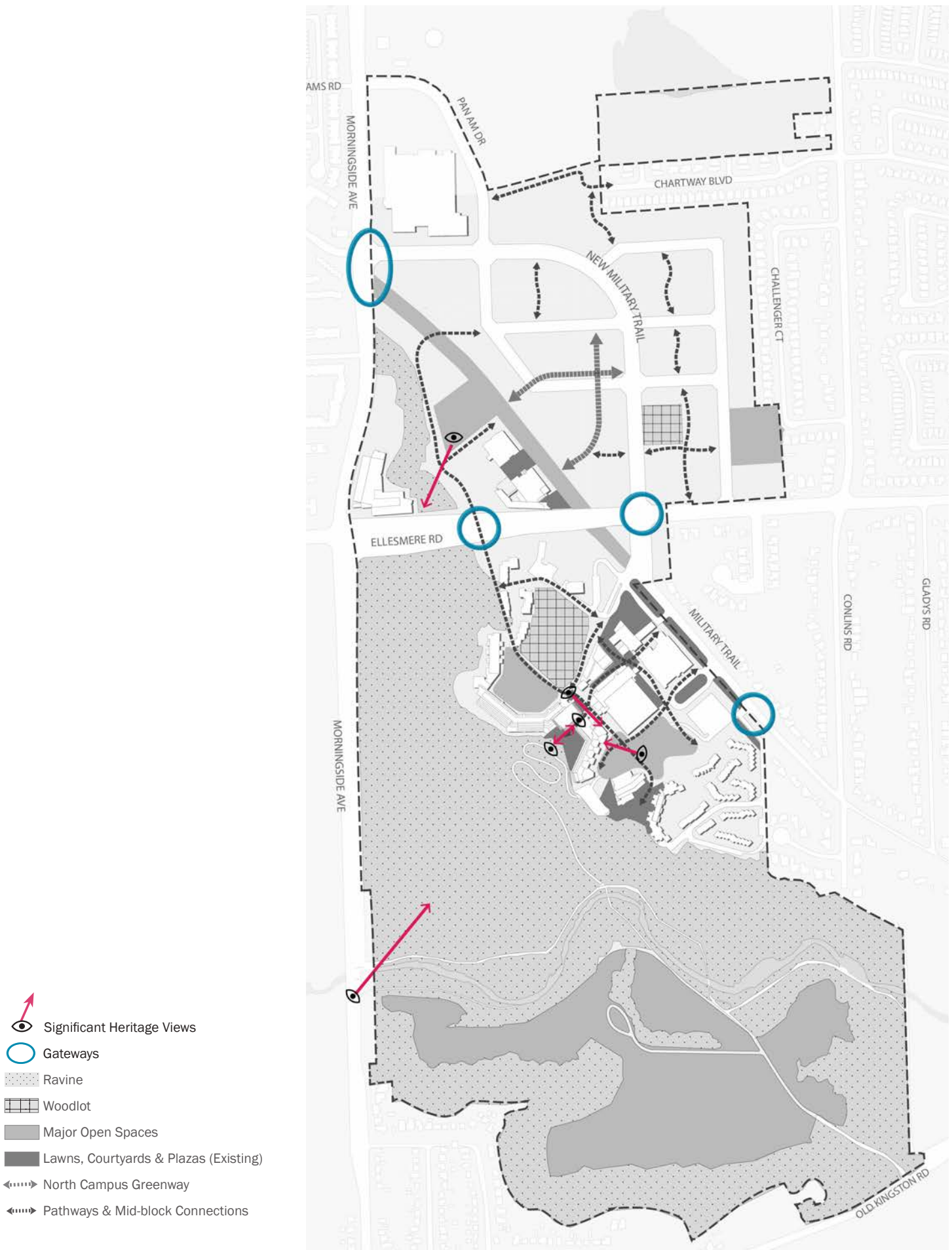


Figure 2.5: Gateways & Views of Significant Heritage Resources



Unique architectural features and signage can signify a gateway space (Graduate residences, University of Toronto St. George).



Gateways can be located on primarily pedestrian connections in addition to vehicular routes (Pedestrian gateway, Purdue University).



Traditional gateways often incorporate symmetrical built form and landscaping features.(Columbia University, NY).




business.rutgers.edu

Bold massing and design can create a sense of arrival and a visual landmark at campus gateways (Rutgers School of Business, Newark, NJ).



3.0

STREET NETWORK AND STREETScape GUIDELINES



The campus street network (as shown on Figure 3.0) is comprised of four main street typologies, including Arterial Streets (Ellesmere Road and Morningside Ave), New Military Trail, University Streets, and University Laneways. Each typology – further detailed in Section 3.1 of the Guidelines – has a distinct form and functional need, contributing to the character and quality of the campus setting while supporting safe and efficient movement across campus.

The re-alignment of Military Trail provides the structuring framework for long-term campus growth and a corresponding movement network to support a more urban and connected campus setting. The expanded street network will ensure that a range of mobility options are supported through a complete, interconnected network of streets. New streets will be designed as complete streets, with priority placed on pedestrian activity. New public and private streets will accommodate cars and other vehicles, but will be designed to support an urban and pedestrian-oriented university campus.

In addition to circulation and movement functions, the street network is a major component of the public realm. Streets are the primary means by which the campus is accessed and experienced. The importance of the campus street network will be reflected in the quality of investment in new and existing streets.

The following guidelines apply to all streets within the University of Toronto Scarborough campus.

Street Network and Streetscape Guidelines

1. Design and planning for streets should consider the entire space from building face to building face to ensure consistency in street design, accommodation of active transportation elements, and consideration of the interface between new buildings and streets.
2. Streets will safely accommodate active transportation uses, with priority given to pedestrians and cyclists. Safe vehicular speeds will be addressed in the design of all streets in and around the campus.
3. Streets should provide a variety of pedestrian amenities including street trees, seating, regular crossings, and lighting.
4. Active Transportation infrastructure should be considered in the design of streets, including safe bicycle travel lanes and convenient bicycle parking.
5. New street trees should be native species and should be provided with enough soil volume to ensure their long-term health and viability.

The following pages provide a description of the key features and characteristics of the street typologies and outline design guidelines for investments in new and existing streets.

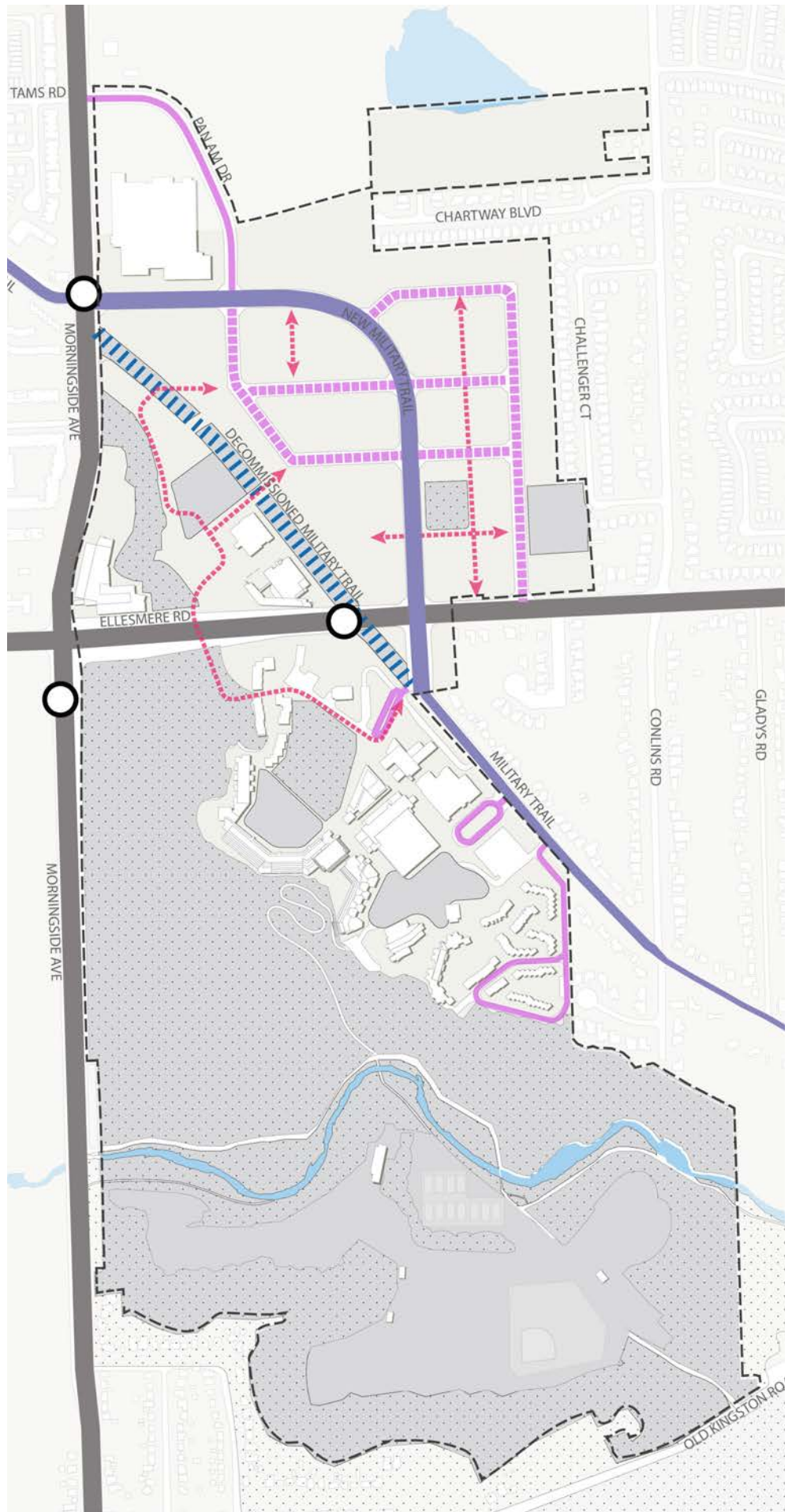


Figure 3.0: Street Network

3.1 Street Typologies

3.1.1 Arterial Streets

Arterial Streets, including Ellesmere Road and Morningside Avenue, will accommodate major vehicular traffic to and from the campus, and act as an important interface with the surrounding community.

1. Arterial Streets should be enhanced to recognize and emphasize their unique characteristics and role in defining the transition between the city and University.
2. Elements such as landscaping, signature paving and signage and other distinct design features should be considered along Arterial streets to announce the University's presence and distinguish it from the surrounding city.
3. Safe and distinct bicycle lanes will be accommodated on all arterial streets consistent with City of Toronto bicycle planning initiatives.
4. Building setbacks along Ellesmere should be urban in character, and should seek to minimize separation distances between the South and North Campus.
5. Safe and convenient pedestrian crossings will be prioritized at key intersections, and the intersection of Military Trail and Ellesmere will be designed to accommodate the highest volumes of pedestrian traffic.
6. In a future scenario in which the Eglinton East LRT is delivered, Arterial Streets should be designed to accommodate appropriate LRT and vehicular travel lane widths, LRT platforms, and traffic light signalization to prioritize transit movement and pedestrian safety.
7. In a future scenario in which the Eglinton East LRT is delivered, the intersection of Morningside and Ellesmere should be designed to accommodate a high volume of pedestrian traffic, as well as an LRT station/stop.



Clear pedestrian crossings integrated in a multi-modal street support pedestrian safety (Stockholm, Sweden).



Distinct signage and lighting on major streets can support university identity and define campus edges (Western Road, Western University, London ON).

3.1.2 New Military Trail

New (re-aligned) Military Trail will act as a primary corridor through the University, and as a major structuring element for future growth in the North Campus.

The design of New Military Trail will be a critical structuring element of the North Campus that requires a unique set of guidelines to help achieve the University's long-term vision.

New Military Trail will be designed as a multi-modal street that can accommodate the potential future Eglinton East LRT in addition to pedestrian, cyclist, and vehicular movement. With generously proportioned sidewalks, quality landscaping and street furnishing, New Military Trail will develop as an active and animated main street. Designed at a right-of-way width of 30 metres, New Military Trail will ensure a desirable street condition for the near-term, that can adapt to potential scenarios in which the Eglinton East LRT is delivered at a future date.

The following pages include street cross sections that depict the street condition both with and without the potential future LRT, illustrating that a desirable and attractive street condition can be achieved in both scenarios. Specifically, Figures 3.1 and 3.2 depict the pre-LRT condition at key intersections, demonstrating an active and multi-modal street condition. Figures 3.3 - 3.8 illustrate the streetscape condition following the completion of the LRT highlighting how LRT platforms (Figures 3.7 & 3.8), vehicle turn lanes (Figures 3.3, 3.5 & 3.8), and appropriate landscaping and pedestrian space can be retained.

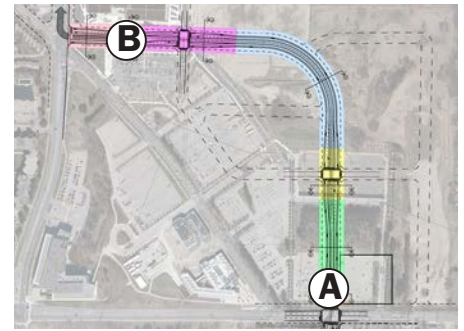


Landscaping and lay-by parking create clear demarcations between multi-modal travel lanes (Hammarby Sjöstad, Sweden).

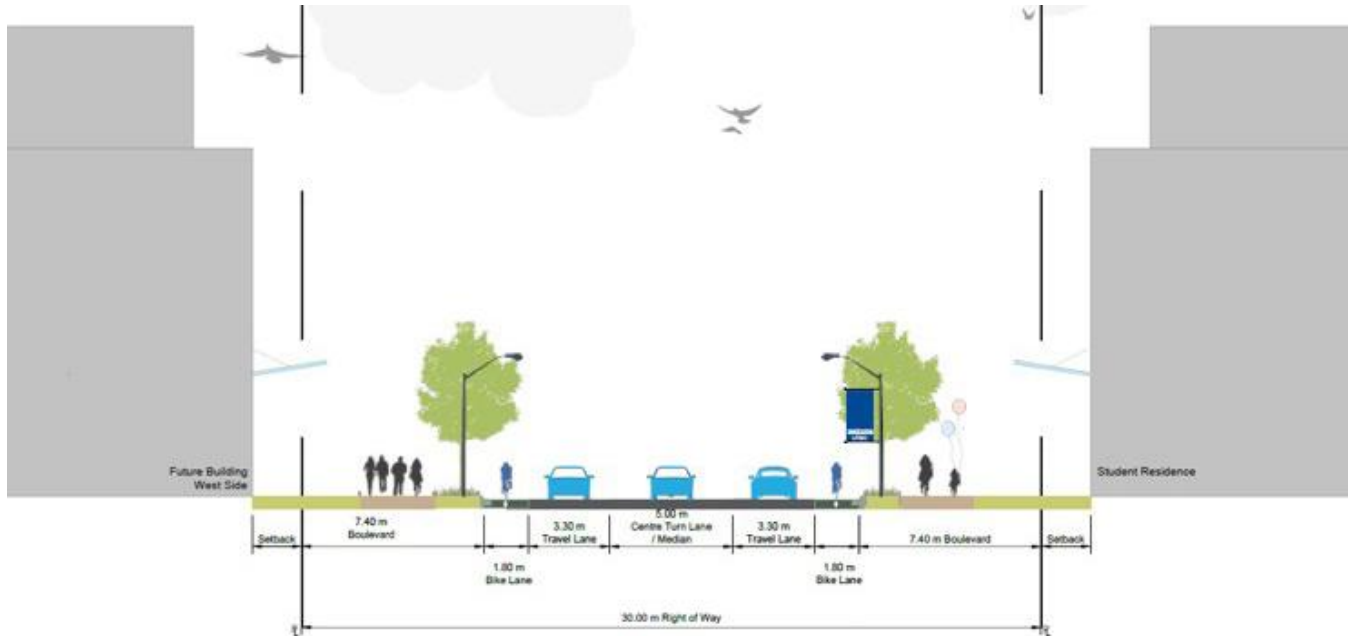
1. New Military Trail will accommodate high traffic volumes and be the primary street for accessing and servicing the campus.
2. The design of the New Military Trail will accommodate potential LRT travel lanes, vehicular travel lanes, bicycle lanes, wide sidewalk areas with street trees, and at signalized intersections, vehicular turn lanes (as shown in Figures 3.3 - 3.8).
3. Building setbacks and intersection treatment will vary along New Military Trail, and will respond to site-specific constraints, in order to preserve the functionality of New Military Trail to accommodate vehicle, potential future LRT, cyclist and pedestrian movement within the planned right-of-way.
4. The pedestrian experience will be improved through enhanced sidewalk and landscape areas within the public right-of-way and in setback areas beyond the right-of-way.
5. Intersections should be designed to support safe and convenient pedestrian crossings.
6. Streetscape design should clearly identify re-aligned Military Trail as part of the campus setting through the use of consistent pavement and materiality of the road and sidewalk surface throughout the campus.

Conceptual New Military Trail Cross Sections

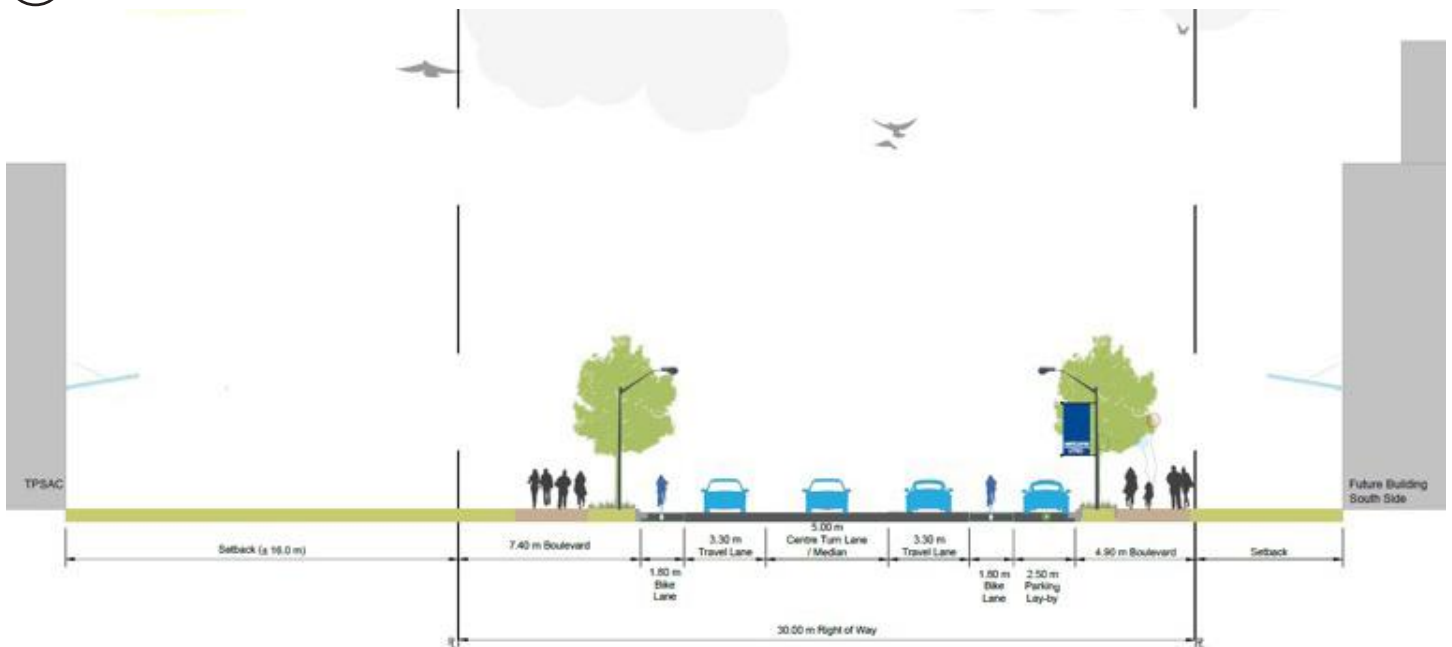
Before LRT Construction:



(A) Figure 3.1: New Military Trail at Ellesmere Road (pre-LRT)



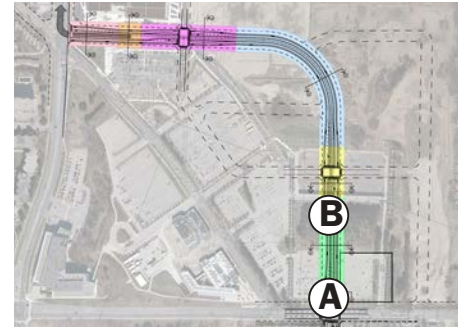
(B) Figure 3.2: New Military Trail at Morningside Avenue (pre-LRT)



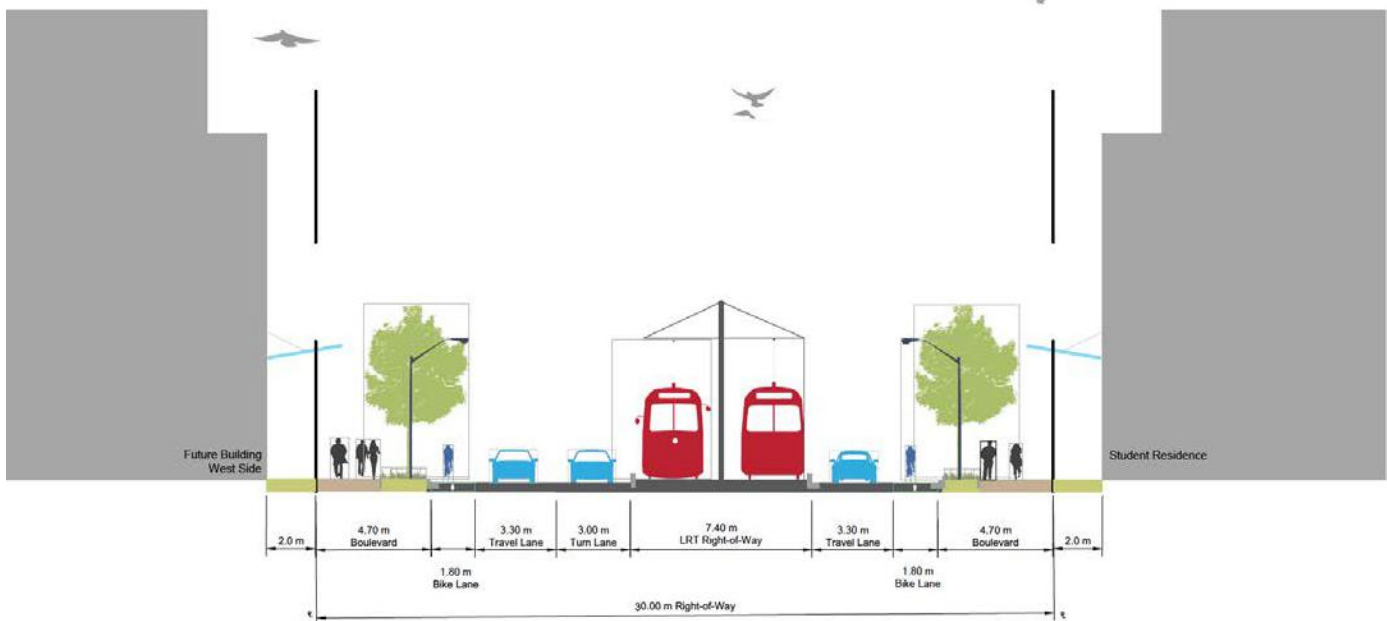
New Military Trail Cross Sections (diagrams: BA Group).

Conceptual New Military Trail Cross Sections

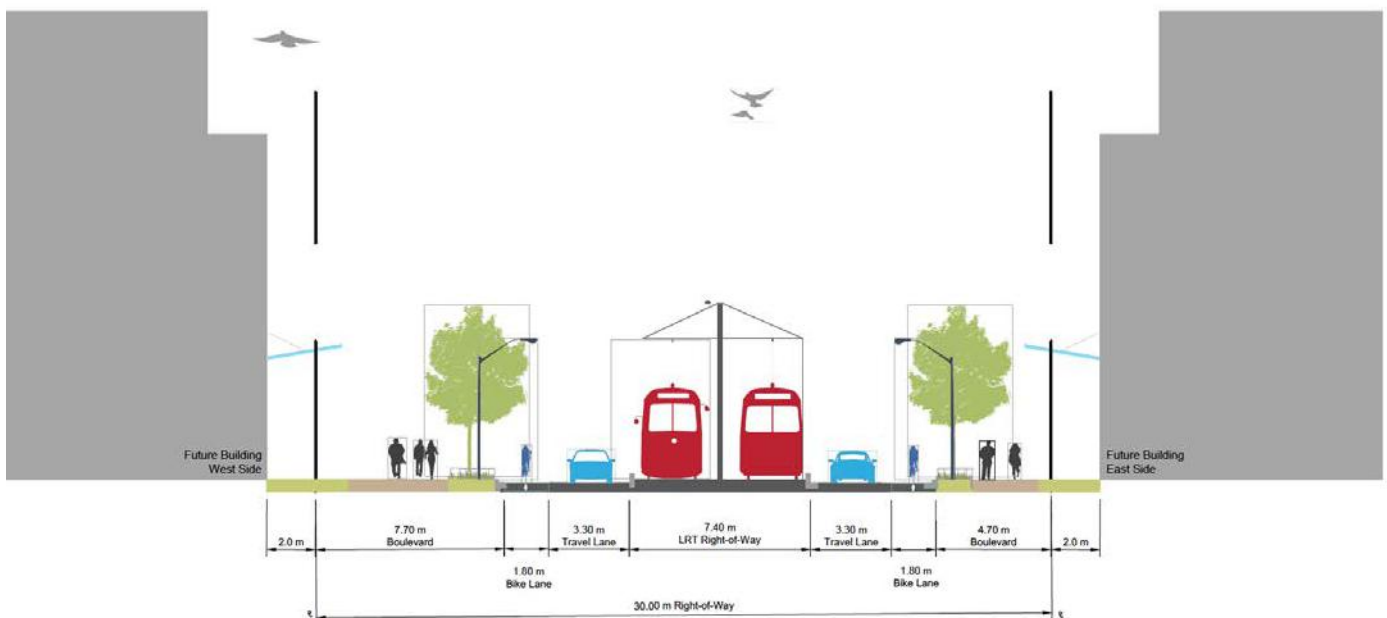
Following centre-median LRT Construction:



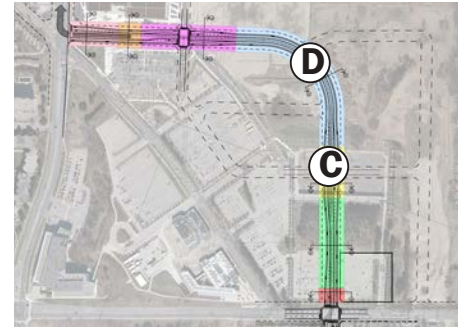
Ⓐ Figure 3.3: New Military Trail at Ellesmere Road (with LRT)



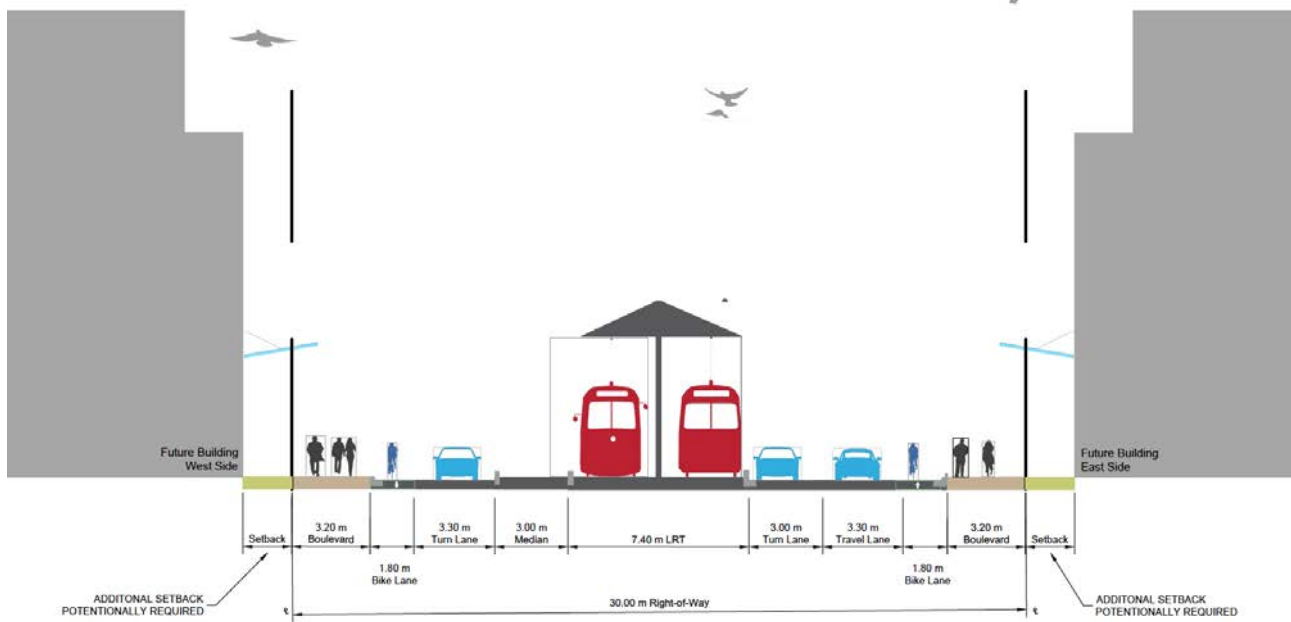
Ⓑ Figure 3.4: New Military Trail at Morningside Avenue (with LRT)



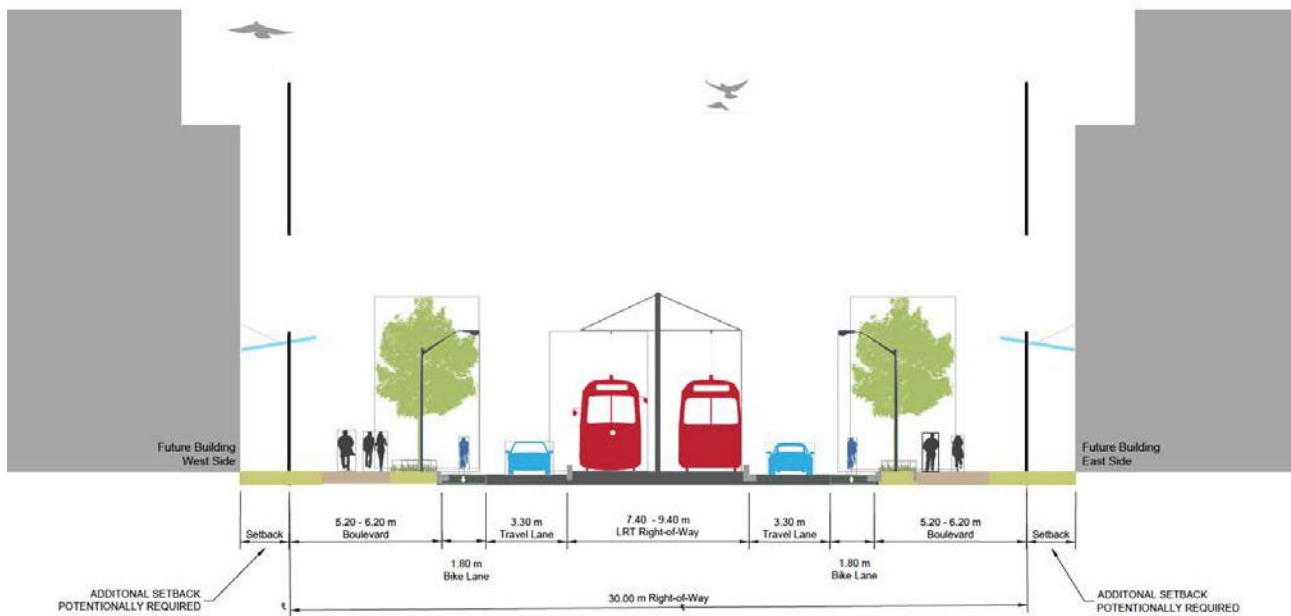
New Military Trail Cross Sections (diagrams: BA Group).



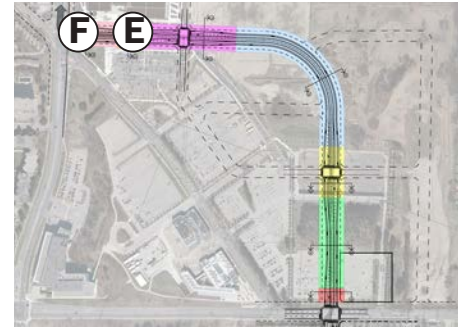
Ⓒ Figure 3.5: New Military Trail at future Pan Am Extension (with LRT)



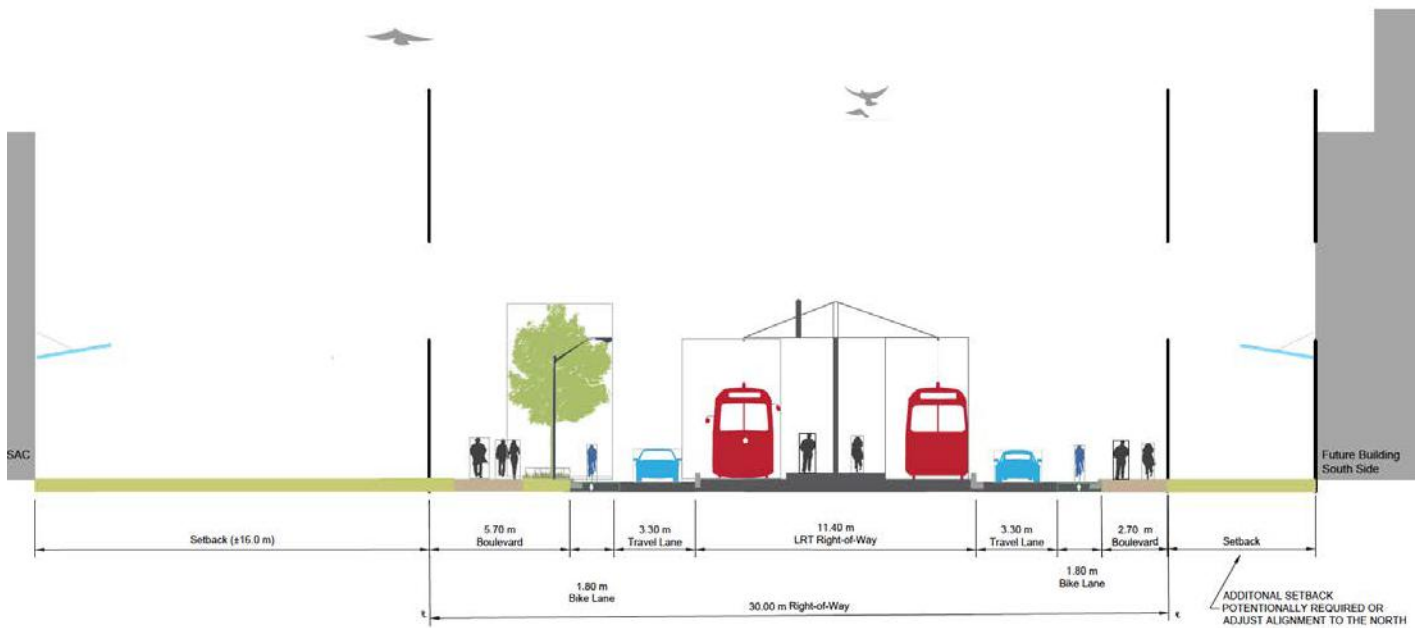
Ⓓ Figure 3.6: New Military Trail at future University Street connection (with LRT)



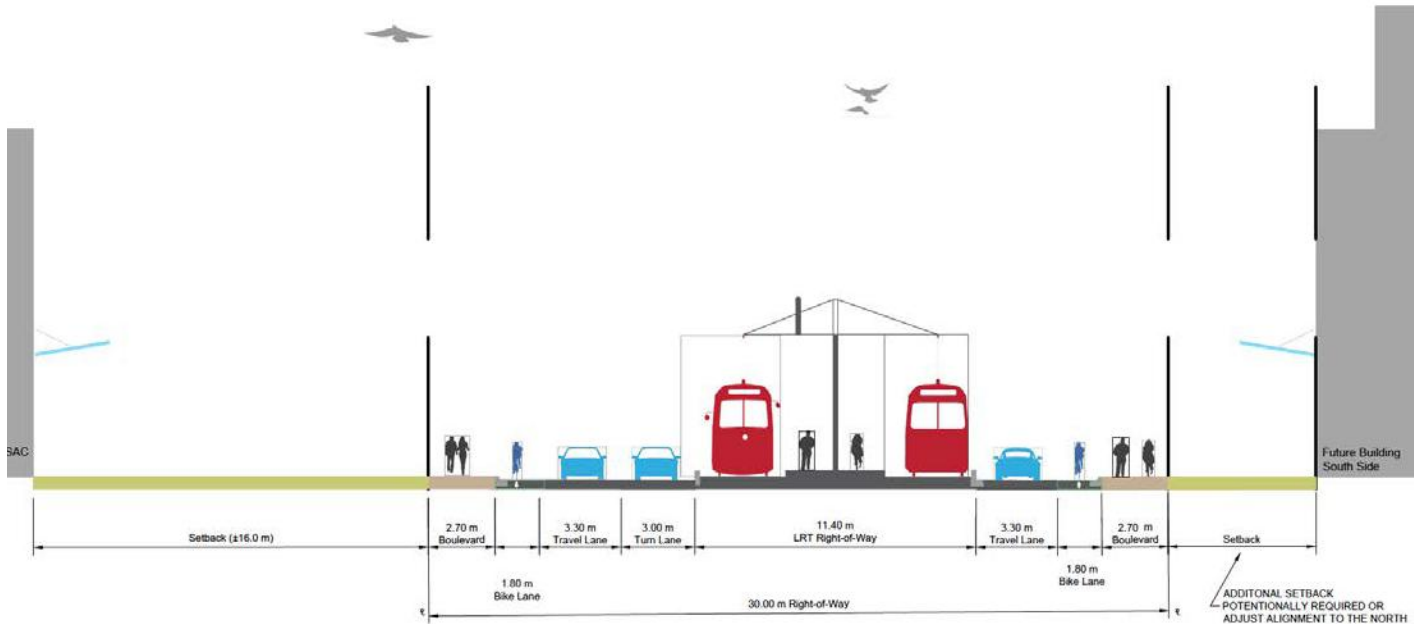
New Military Trail Cross Sections (diagrams: BA Group).



Ⓔ Figure 3.7: New Military Trail East of Pan Am Drive (with LRT)



Ⓕ Figure 3.8: New Military Trail West of Pan Am Drive (with LRT)



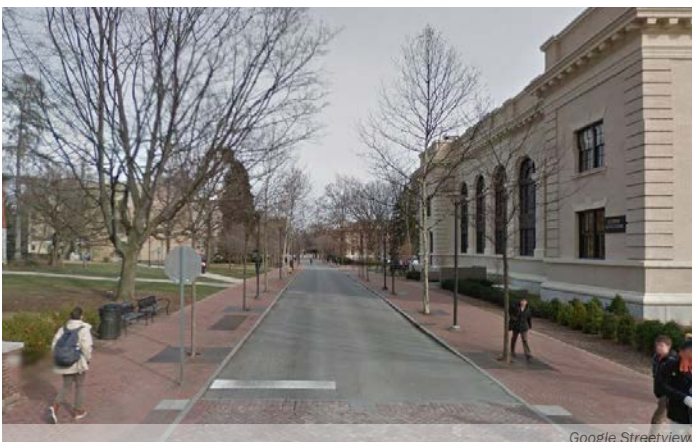
New Military Trail Cross Sections (diagrams: BA Group).

3.1.3 University Streets

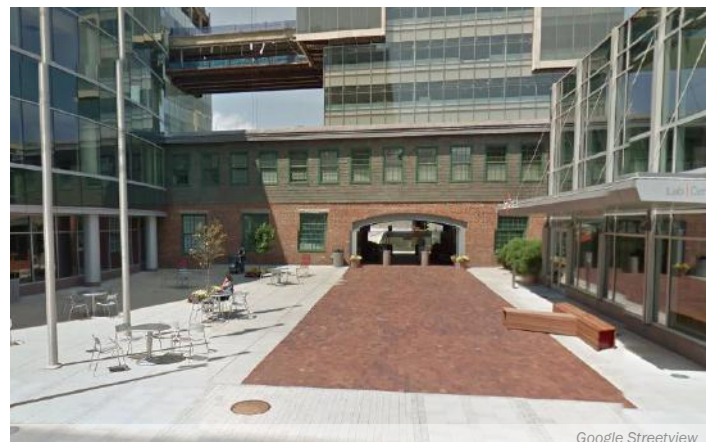
University Streets support internal campus movement and will be designed to serve the diverse needs of the University, while prioritizing pedestrian movement.

The design of University Streets will be responsive to the wide range of activities on campus, but will generally be smaller in scale and volume than arterial streets. The width of University streets will be determined by the programmatic needs of the street, including sidewalks, landscaping, parking and vehicular travel. The minimum dimensions and design of University Streets will be determined based on facing distances between buildings and development blocks. The following guidelines provide flexible design direction for the evolution of the University street network.

1. University Streets will be designed as complete streets, which are calm and safe for pedestrians. This may be achieved by:
 - i. Implementing traffic calming measures, including speed bumps, curb bulb-outs, and planting strips;
 - ii. Restricting vehicular access to key pedestrian locations during major events and periods of heavy pedestrian activity; and
 - iii. Prioritizing space for pedestrians and landscaping over vehicular traffic lanes.
4. University Streets may be designed as shared streets, where the entire street is designed for pedestrian activity while supporting vehicular activities. Shared streets can be distinguished through signage, distinct and consistent paving treatment, the use of bollards or other street furnishings to restrict vehicular activity and additional landscaping.
5. University Streets are intended to be smaller in scale to support a more intimate, pedestrian-oriented campus setting. Building facing distances across streets will vary depending on the character and function of streets.
6. The functional requirements for new university Streets should be determined prior to new development along the street.
7. University Streets shall be the primary means of accommodating pick-up and drop-off activity within the North Campus. On-street parking may be accommodated on University streets.
8. Consistency in landscape design, paving, lighting, and signage should be achieved across University Streets to promote a strong and cohesive campus identity. The University may develop design standards and other tools to ensure consistency in street design.
9. Bicycle travel will generally be accommodated in mixed traffic lanes.



A narrow vehicular right-of-way and generous sidewalk infrastructure signifies pedestrian priority while addressing vehicular needs. (Pollock Road, Penn State University).



Traffic calming measures including lay-by parking, street markings, and planting strips create a safer and more attractive pedestrian environment (MIT, Cambridge, MA).

The design of University Streets will be dynamic and responsive to the local context, ensuring that streets effectively serve the functional needs of local users and activities while ensuring an enhanced campus setting.



A university street designed to accommodate lay-by vehicular parking and bicycle parking (York University, Toronto, ON).



Marked crossings featuring signage and distinct paving support greater pedestrian safety (Cambridge, MA).



A generous pedestrian realm along a university street accommodates multi-modal traffic (Penn State University, PA).

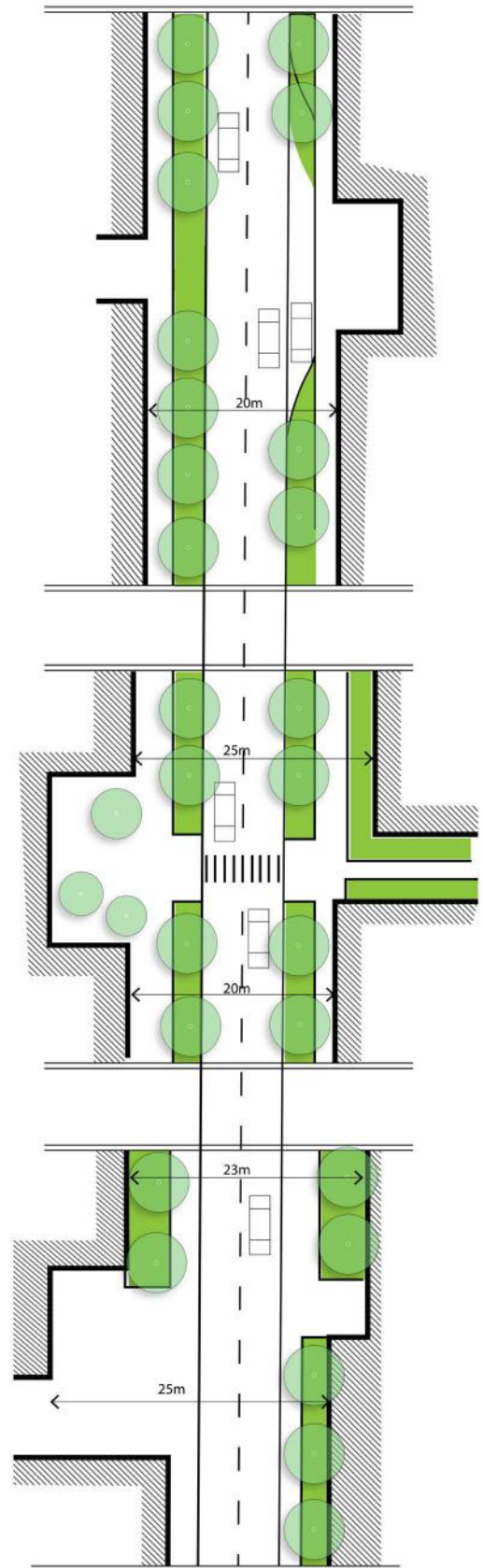


Figure 3.9: Conceptual University Streets Diagrams
Possible configurations of University Streets illustrating a variety in street widths, building facing distances, and public realm amenities while accommodating pedestrian and vehicular requirements.

3.1.4 University Laneways

University Laneways provide a fine-grain network of formal and informal connections within blocks that accommodate both vehicles and pedestrians in a narrow and intimate setting.

In addition to providing service access and the 'back door' for campus development, University Laneways create opportunities for pedestrian connections, improving permeability and walkability on campus.

1. University Laneways should be designed as pedestrian-oriented spaces that complement on and off-street pedestrian connections, while enhancing the public realm.
2. The pedestrian experience of laneways should be enhanced through greening, the inclusion of way-finding elements, distinct paving, and other street furnishings.
3. University Laneways should be designed to accommodate required service functions, including service vehicles, occasional private vehicles.
4. Loading areas within University Laneways should be designed to minimize impacts on pedestrians, and vehicular access points should be clearly marked with signage and lighting to reduce conflict between servicing and loading function and pedestrian activity.
5. Narrow building facing distances are considered appropriate for University Laneways, and will vary depending on pedestrian and landscape character of streets.
6. Primary building entrances should not be located on University Laneways.



Areas of minimal building separation distance can achieve a pedestrian-friendly environment with distinctive paving and lighting (Pullan Place, Toronto).



Landscaping treatments tighten a right-of-way, supporting a more human-scale experience along a university laneway (Bancroft Ave, University of Toronto St. George).



Traffic bollards maintain pedestrian priority along a commercial laneway while allowing vehicular access when required (Paternoster Square, London, UK).



A narrow right-of-way serves as a traffic calming measure, allowing a residential laneway to function as a shared-street (Toronto, ON).

3.2 Transit Integration

The campus and street network has been designed to accommodate a potential future LRT through the campus, in keeping with contemporary transit plans for the City of Toronto.

While the timing and specific details of the Eglinton East LRT project remain uncertain, the Campus Master Plan and the associated Urban Design Guidelines and Secondary Plan have been developed to protect for this potential future infrastructure while ensuring development can proceed in the interim.

The potential delivery of the future Eglinton East LRT would represent one of the most significant drivers of growth and change on the campus. Ensuring that this potential investment, along with other transit initiatives such as the Durham BRT, are fully integrated into the campus environment will be essential to the success of the UTSC as a 21st century campus.

The careful planning and design of transit stops, paired with investments in university placemaking, will translate to an active, attractive, and accessible campus environment. These placemaking opportunities, including streetscape and landscape improvements, transit-supportive development, and the integration of bicycle and other mobility infrastructure, will be pursued in response to transit investment.

Key design details will be decided at the time of the appropriate environmental assessment or Transit Project Assessment Process related to the infrastructure investment. The following guidelines are therefore intended to inform the overall approach to transit integration and transit supportive development on campus.

Guidelines

1. Transit stops should be located along major pedestrian corridors and in close proximity to active uses and major activity hubs.
2. Pedestrian connections to transit stations will be prioritized, and generously proportioned to accommodate the high flow of pedestrian traffic coming to and from transit.
3. Transit infrastructure and operations should be carefully planned in order to minimize conflicts between transit vehicles and pedestrian activity.
4. Designated transit waiting areas should incorporate weather protection and lighting to enhance comfort and safety of transit users. Where possible, future LRT waiting areas will be incorporated into nearby buildings.
5. Convenient bicycle parking should be considered in close relation to transit stations to facilitate ease of transfer between modes of transportation.
6. Bus-based transit stops may be dispersed throughout the road network immediately surrounding the core campus at Ellesmere Road and Military Trail.



Proximity between bicycle and transit infrastructure facilitates transfer between modes (Portland, OR).



The design of transit waiting areas can support high pedestrian volumes with appropriate public realm amenities and greater sidewalk widths (UTSC).



Low-impact stormwater management features can be integrated into transit waiting areas to support a more attractive and sustainable campus. (Highland Hall Bus Loop, UTSC).



Shelter and signage encourage transit ridership by providing comfortable pedestrian environments (Rutgers University, NJ).



Real-time transit technology in transit waiting areas allow users to efficiently plan their commutes and respond to changes in service (York Region Transit, ON).



When carefully integrated, rapid transit service and intensification are mutually supportive (One American Plaza, San Diego, CA).

3.3 Active Transportation Connections

3.3.1 Pedestrian Connections

The pedestrian experience defines the campus experience, and a rich network of pedestrian connections is essential to the campus open space network. A system of formal and informal pedestrian connections including trails, walkways, and open spaces, will increase the porosity and accessibility of the campus, greatly enhancing the overall experience for all users. Pedestrian connections are illustrated on Figure 3.10.

The following guidelines provide direction for the design and implementation of pedestrian connections on the UTSC campus.

Guidelines

1. Pedestrian connections should provide direct, convenient and universally accessible connections to building entrances, public open spaces, transit stops, parking and pick-up/drop-off areas, and other important destinations.
2. Localized landscape initiatives should connect to and complement the pedestrian path network.
3. Key pedestrian connections should be over-sized to accommodate high volumes of pedestrian traffic during peak periods.
4. A mix of interior and exterior pedestrian connections are encouraged to provide diversity and support four season use.
5. Some pedestrian connections may take the form of service driveways or University Laneways. Despite any shared uses, all pedestrian connections should be designed for pedestrian priority.
6. Pedestrian connections are encouraged to connect to areas surrounding the campus to ensure a permeable and inviting campus experience.
7. Highly public and heavily trafficked areas may serve as a focal point for public art and other landscape investments.
8. Exterior pedestrian spaces, including hardscaped areas, building entrances and, where feasible, pedestrian paths, will be designed for universal accessibility.

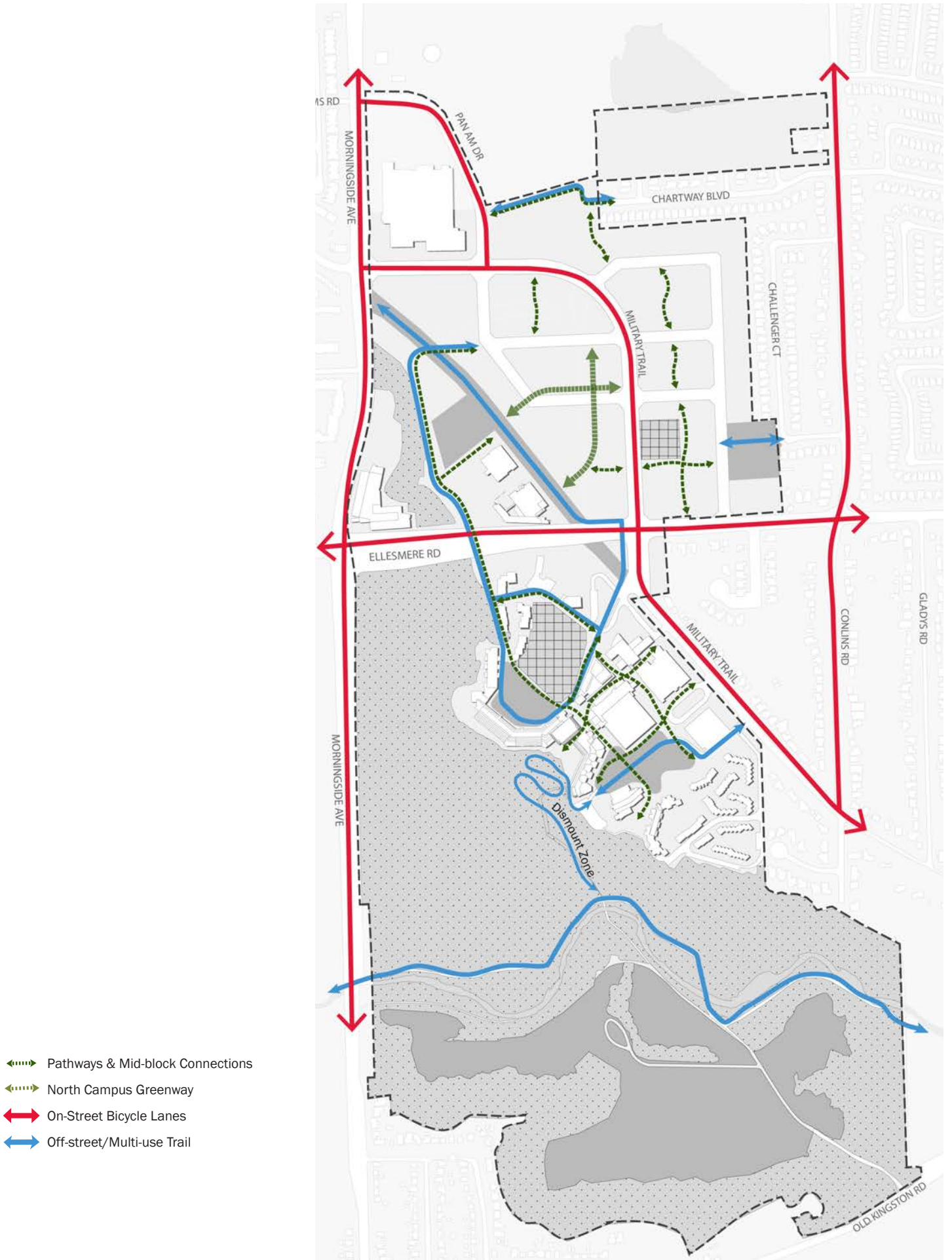
3.3.2 Cycling Connections

Cycling connections will also be prioritized across the campus that will both serve to enhance the internal movement and circulation of students, faculty, staff and visitors, and help address connectivity between the University and surrounding communities. Cycling connections are illustrated on Figure 3.10.

The following guidelines provide direction for the design and implementation of cycling infrastructure, facilities, and connections across the UTSC campus.

Guidelines

1. The UTSC campus will be linked by an accessible, safe, convenient and comfortable bicycle network that will ensure seamless connectivity from the Ravine Lands through to the North Campus, and will provide direct and convenient connections to existing streets and walkways within the areas surrounding the campus.
2. Streets will be designed to prioritize safe and convenient cycling access and to minimize conflict with vehicles.
3. The decommissioned portion of Military Trail on the North Campus may will be re-purposed as a primary multi-use trail and open space, and will be designed to accommodate high volumes of pedestrians, and cyclists, as well as emergency and service vehicles.
4. The cycling network will be designed to accommodate people of all ages and abilities, especially children, older adults and people with disabilities.
5. Bicycle use will be encouraged throughout the campus and will be supported by a connected network of on-street bicycle lanes and off-street/multi-use trails. Multi-use trails will be designed to accommodate a range of active transportation users, including cyclists.







-  Pathways & Mid-block Connections
-  North Campus Greenway
-  On-Street Bicycle Lanes
-  Off-street/Multi-use Trail

Figure 3.10: Active Transportation Network



4.0

**BUILT FORM
GUIDELINES**

Since its inception, development within the UTSC Campus has demonstrated a commitment to architectural innovation and excellence. The bold and unique modern architecture and its relationship to the University's unique setting is recognized as a key attribute of UTSC. In conjunction with the enhanced public realm, campus buildings play a key role in defining the campus experience.

Campus buildings are driven by the academic mission and tailored to the unique needs of the University. Unlike typical residential and office development patterns, the form and function of University buildings are driven by specific program needs. For UTSC, this has primarily resulted in large floorplate buildings that typically range in height from two to five storeys.

While future campus growth will likely see the construction of more intensive and taller buildings, particularly along the re-aligned Military Trail, the intention of the built form guidelines is to establish general built form directions, to ensure that new campus buildings contribute positively to the institutional and iconic character of the campus, minimize impacts to the campus and surroundings, and ensure a mutually-supportive relationship with the public realm network.

The following guidelines provide direction on building height, setbacks and facing distance, pedestrian experience, and massing. This chapter contains guidelines which apply to the entire campus area, as well as more specific built-form guidelines for individual campus areas.



Aerial view of ESCB, IC and South Campus buildings.



4.1 Built Form Objectives

The UTSC Campus is a unique environment that has a distinct pattern and form of development that does not reflect the established built form conventions and standards that are seen elsewhere across the city. Accordingly, the Built Form Objectives balance the need to accommodate new growth on the UTSC Campus while respecting its unique Character Areas, established natural features, public realm and open space network, in a manner that is appropriate for the unique University campus context.

The guidelines in this section inform how buildings should be scaled relative to their context. In order to maintain the key attributes of each Character Area and the overall campus character, the scale and degree of growth should not be uniform across the campus. Scale-appropriate development will respond to Character Area attributes, context, adjacent open spaces, streets, mid-block connections and existing campus resources.

The following guidelines apply to all future development within the University of Toronto Scarborough campus.

Guidelines

1. New buildings across the campus will primarily mid-scale in form, with tall buildings accommodated in appropriate locations.
2. Development will establish sensitive transitions in height from the mid-rise campus areas around the realigned Military Trail Area and South Campus Character Area to the adjacent stable neighbourhoods.
3. New buildings will activate and better frame the Re-aligned Military Trail edge through a consistent and pronounced mid-scale street wall.
4. Development in the South Campus will respect the established pattern, spacing, and character of the existing built form.
5. Development fronting onto Major Open Spaces will appropriately frame these spaces with lower built form edges.



4.2 Campus Growth Patterns

Growth Patterns

Built form will vary across the UTSC campus, and will respond to established context and other site-specific considerations. Heights of individual buildings will generally respond to the growth pattern structure outlined in Figure 4.0, but these categories are intended as guidelines and should not be read as strict zones.

In determining the growth patterns and the respective block conditions across the UTSC campus, this report has considered the character of adjacent context and uses as well as planned growth areas, and infrastructure investments within the University campus.

The eastern boundary of the UTSC campus is lined with a series of low-rise, single family houses within the Highland Creek Neighbourhood. To the south of the campus, existing heritage buildings on the University's lands respond to the adjacency of the ravine. To the west of the campus are small pockets of established neighbourhoods as well as apartment neighbourhoods that are higher in density near the intersection of Morningside and Ellesmere Avenue. The lands located north of the campus are predominantly occupied by City of Toronto-owned lands and works yards, that have a legacy of landfill operations.

The growth patterns and block conditions presented in this section have been developed in response to these existing conditions, as well as the planned re-alignment of the Military Trail corridor, and the associated potential future delivery of the Eglinton East LRT.

Growth Corridors

Intensification will be promoted along arterial roads, including Ellesmere Road and New Military Trail. The re-aligned (New) Military Trail Corridor will be a focal point for new development within the campus, responding to the potential future LRT. Block conditions will feature a more compact, urban scale, with a well defined streetwall. Buildings will generally have a height up to 40-metres in these areas, but some taller buildings may be permitted in appropriate locations.

Campus Core

The Campus Core comprises the majority of the UTSC lands, and will seek to reinforce the existing mid-rise character established across the campus. Development blocks will seek to deliver ample pedestrian connectivity and open spaces through well defined building setbacks, and development will include a range of institutional uses, including residential. Buildings will generally have a height up to 30-metres.

Neighbourhood Edge

The Neighbourhood Edge condition applies to areas that are directly adjacent to established low-rise neighbourhoods to the east of the university lands. These areas will generally have a height up to 15-metres along the western edge. Greater heights may be permitted provided appropriate transition in scale to adjacent neighbourhoods is provided through the application of angular planes, building articulation or stepbacks, as appropriate.

Tall Buildings

Tall buildings will be permitted in locations across the campus, where it can be demonstrated that there will be no unacceptable impacts, and will be permitted with a variety of different base building conditions. In some instances, base buildings may be more mid-rise in scale, while in others tall buildings may be permitted as stand-alone buildings, with no definitive base. The location of tall buildings will generally be located around major arterial intersections and nodes adjacent to future LRT stations, including within the New Military Trail Corridor, along Ellesmere Road and select University Streets, and the Old Military Trail spine.

- Growth Corridors
- Campus Core
- Neighbourhood Edge

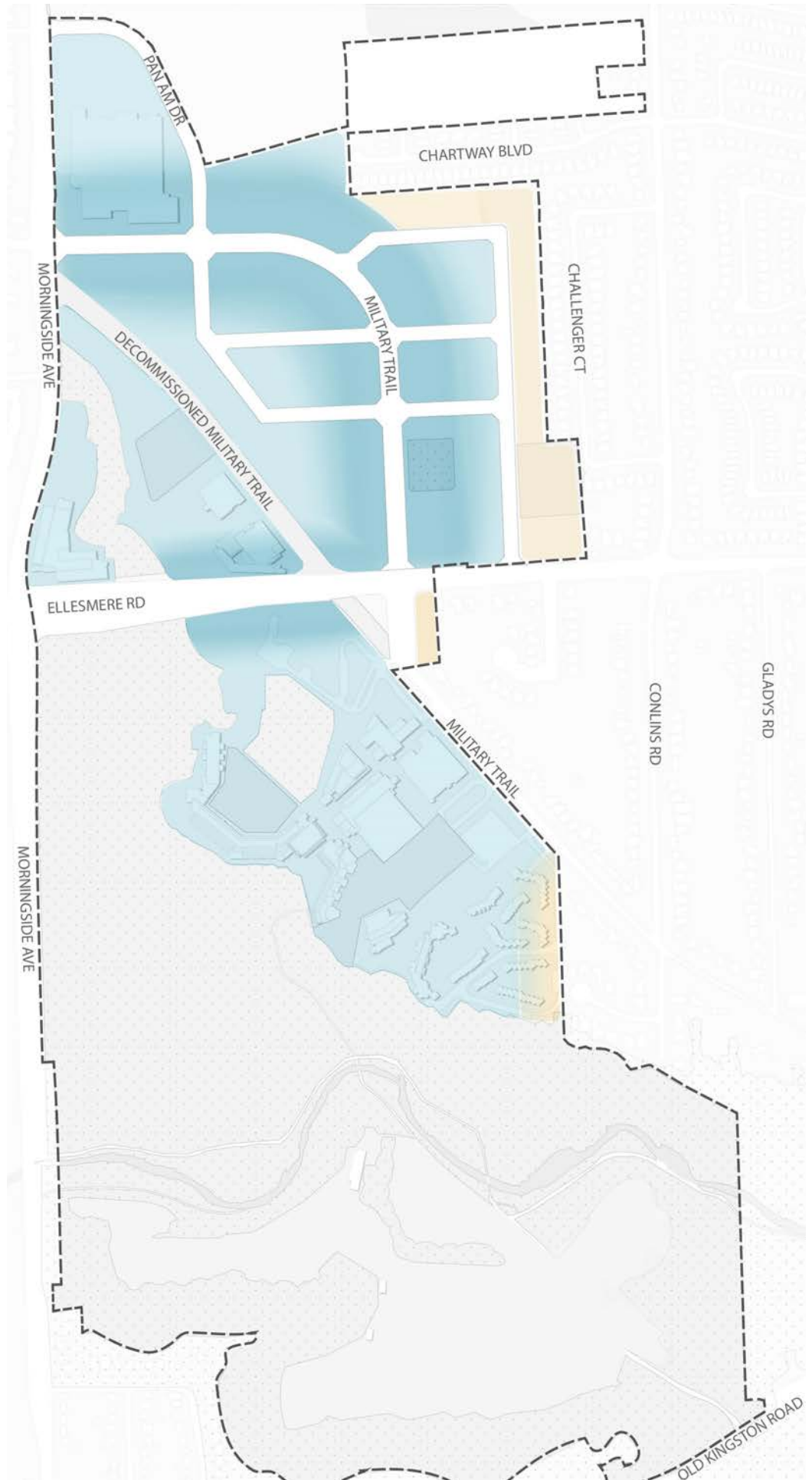


Figure 4.0: Campus Growth Patterns

4.3 Campus Building Typologies

The following building typologies describe the diversity of built form conditions that characterize existing and future campus buildings.

Mid-rise Pavilion



Mid-rise Streetwall



Low-rise



Tall Buildings



Mid-rise Pavilion

1. Pavilion style buildings will represent an important building typology across the UTSC campus, as they are typically buildings with larger floorplates that can accommodate a variety of different uses, including both residential and non-residential uses, and contribute to a sense of campus porosity and pedestrian access.
2. New Pavilion buildings should be designed to reflect the modern and innovative architectural style prevalent on the campus, and will respect the existing pattern of mid-rise buildings located within an enhanced, pedestrian oriented setting.
3. New development of Pavilion buildings and associated infrastructure and landscape design should support the realization of and protection of Major Open Spaces.
4. Built form and public realm elements within and adjacent to Pavilion buildings will contribute to a cohesive campus setting.
5. Pavilion buildings with long or large floor plates should be articulated to provide visual interest and break up the perceived mass.
6. The size and configuration of building elements, including floorplates, for Pavilion style buildings may vary based on the building program.



The recently completed ESCB represents a continued commitment to architectural innovation and sustainable design (ESCB, UTSC North Campus).



Cantilevers and transparent glazing support a more permeable interface between buildings and adjacent open spaces (Ben-Gurion University, Israel).

Mid-rise Streetwall

1. Development on New Military Trail and other arterial streets will be designed to achieve a continuous urban street wall through the application of consistent setbacks and by avoiding large gaps between buildings.
2. Active uses and public amenities, featuring highly transparent facades, should be incorporated within the base of Streetwall buildings.
3. Streetwall building heights will generally be aligned with the width of the right-of-way of the primary fronting street or the facing distance between building frontages.
4. Streetwall buildings will be designed to support the pedestrian-scale and contribute to a positive pedestrian experience at the ground level.
5. Ground floor heights of Streetwall buildings should generally have a minimum height of 4.5m where there are non-residential ground floor uses.
6. Underground parking may be incorporated into new developments, with vehicular access provided from secondary streets or laneways.
7. Streetwall buildings may accommodate a range of building programs including both residential and non-residential uses. Building program may impact the design, configuration and size of Streetwall buildings to accommodate particular needs associated with particular uses.



Active, at-grade uses serve to animate campus streets beyond class hours (Rutgers University, NJ).



Wider transit right-of-ways with consistent streetwalls contribute to a contained urban campus character. (Karolinska Institutet, Sweden).



Low-rise buildings paired with generous landscaping provide an appropriate transition towards adjacent neighbourhoods. (Maisons d'éducation de la Légion d'honneur, France).



Older townhouse-style student housing is located along the southern periphery of the campus, providing transition to adjacent residential uses (Student Housing, UTSC South Campus).

Low-rise

1. Buildings that are low-rise in scale will be directed to locations across the campus, particularly within the Neighbourhood Edge, or at the fringes of the UTSC campus and adjacent to residential neighbourhoods.
2. Building heights will generally be limited to two to four storeys, in order to provide a transition in height and scale between the higher density institutional core and the surrounding residential neighbourhoods.
3. Transitions may incorporate articulation such as stepbacks, angular planes or horizontal breaks, and may consist of a visual cue such as a change in materiality.
4. Setbacks for low-rise buildings will vary according to site specific conditions, such as street width, adjacent open space conditions, and established setback patterns both within the campus, and in the surrounding neighbourhoods.
5. Building footprint size will generally be determined based on the building program. In particular, institutional uses and programmed student housing require greater floorplate sizes than typical residential buildings.

Tall Buildings

1. Some areas within the campus can accommodate additional height in the form of tall buildings, which may include a base buildings that is mid-rise in scale, or may feature no base building at all.
2. Where tall buildings are located on larger base buildings, tower elements may be stepped back from the base building.
3. Tower elements should maintain an appropriate separation distance to support sunlight penetration and sky views.
4. Floorplates of tower elements should be designed to adequately limit shadowing and preserve skyviews.
5. The orientation of tower elements should maintain key viewpoints within and to the campus.
6. Tall buildings proposed on the UTSC campus will generally be encouraged to meet the principles established by the City of Toronto's Tall Buildings Guidelines. However, the unique development needs of the University or individual buildings may result in tower elements that do not conform with all aspects of those guidelines.
7. The floorplate size of tower elements will be determined based on the building program. In particular, institutional uses and programmed student housing require greater floorplate sizes than typical residential tower elements.
8. Innovation and creativity in the design of taller building elements is encouraged, and deviation from these guidelines may be appropriate where a harmonious relationship with the surrounding context is maintained.



Setbacks from base buildings reduce the visual and physical impact of taller elements including wind and shadowing conditions (Research Tower, York University).



Setbacks and appropriately scaled base buildings enhance relationships to the public realm (Rendering - Ryerson University, Toronto, ON).

Responding to Programmatic Needs

As not all future programming needs can be fully projected, and in recognition of the University's unique setting and context, it is important to preserve the ability for the University to develop buildings that may not be categorized according to the above typologies. This need for increased flexibility is unique to larger institutional entities and landowners as priorities may shift over time, or future conditions may present challenges that cannot be anticipated, impacting the University's landholdings or pattern of development.

Examples of buildings that may not conform with the above typologies could include specialized athletic facilities, vertical farming structures, hotels and conference centres, and other buildings that may not reflect the typical built form across the campus. Acknowledging that not all future needs can be anticipated, the following guidelines will generally apply to buildings that are not characterized by any of the dominant typologies outline above.

Guidelines

1. A variety of building types that do not conform with the dominant campus building typologies will be permitted across the UTSC campus, as unique uses and specialized needs arise from time to time.
2. The form, scale, and use of these buildings will vary, however projected building types include:
 - a. Athletic & Recreation Buildings;
 - b. Hotels & Conference Centres;
 - c. Future Institutional Uses (to be determined).



Variety in building orientation and materiality can create visual breaks and divides within larger developments (University of Waterloo Quantum Nano Centre).



Linear landscaping elements can support pedestrian connectivity and draw attention to primary building entrances (Richard Ivey Business School, Western University).

4.4 Street Relationship

The University's unique and varied academic needs define the development program and built form considerations. Most institutional buildings are generally larger than typical commercial developments, both in terms of floorplates and floor-to-floor heights. These institutional uses typically require greater flexibility in massing to accommodate the wide range of activities found on campuses today. The following guidelines therefore present a balanced approach to providing this flexibility, ensuring that the perceived density of campus buildings does not overwhelm the pedestrian realm.

4.4.1 Setback Conditions

Guidelines

1. Setbacks will vary across the UTSC Campus, but will generally conform with the minimum setbacks illustrated in Figure 4.1.
2. Setbacks from the street and property line should be designed to extend and enhance the public realm, allowing for amenities such as landscaped open spaces, trees, seating, public art, bicycle rings and signage, and to accommodate green infrastructure.
3. Setting back buildings more than the minimum will allow for more generous lawns and forecourts, which contributes to the public realm and open space network, as well as offering diversity along the streetscape.
4. Setbacks may incorporate low-impact development measures and should be planted with diverse vegetation to contribute to biodiversity.
5. Setbacks should incorporate sufficient soil volumes or soil cell technology to promote mature tree growth, providing shade and contributing to a reduction in building heating and cooling needs.
6. Where setbacks are adjacent to an open space, they should be designed to read as an extension of that space, with use of complementary soft or hardscaped treatments.
7. At major building entrances, forecourts should be integrated with building setbacks to signal the public nature of the entrance, provide additional pedestrian gathering space, and create opportunities for amenities such as weather protection, overhangs, benches and bicycle parking.
8. Minor projections into setback areas may be permitted for architectural purposes, and additional setbacks may be considered to achieve enhanced pedestrian zones.
9. Where appropriate, projections are encouraged to be designed as building entrances and/or some other prominent building feature that requires emphasis or focus.



Figure 4.1: Building Setbacks and Separation Distances

4.4.2 Building Massing

The guidelines in this section inform how buildings should be massed, **relative to their context**. In order to maintain the key attributes of each Character Area and the overall campus character, the scale and degree of growth should not be uniform across the campus. Instead, massing should be relative to each site's existing and/or planned context and may reflect a diversity of building typologies.

For the North Campus, where the vast majority of future growth is to be directed, the future context is largely based on the planned street and open space networks (described in Section 3 and Section 2, above). Those structuring moves inform the appropriate massing context, as described in the following section.

The subsequent guidelines are therefore organized around key areas of change within the UTSC campus, as shown on Figure 4.2, providing context-specific guidance for the massing of future development within these key campus areas.

- A. New Military Trail
- B. Decommissioned Military Trail
- C. University Streets a)
- D. University Streets b)
- E. Neighbourhood Edge
- F. Ellesmere Road

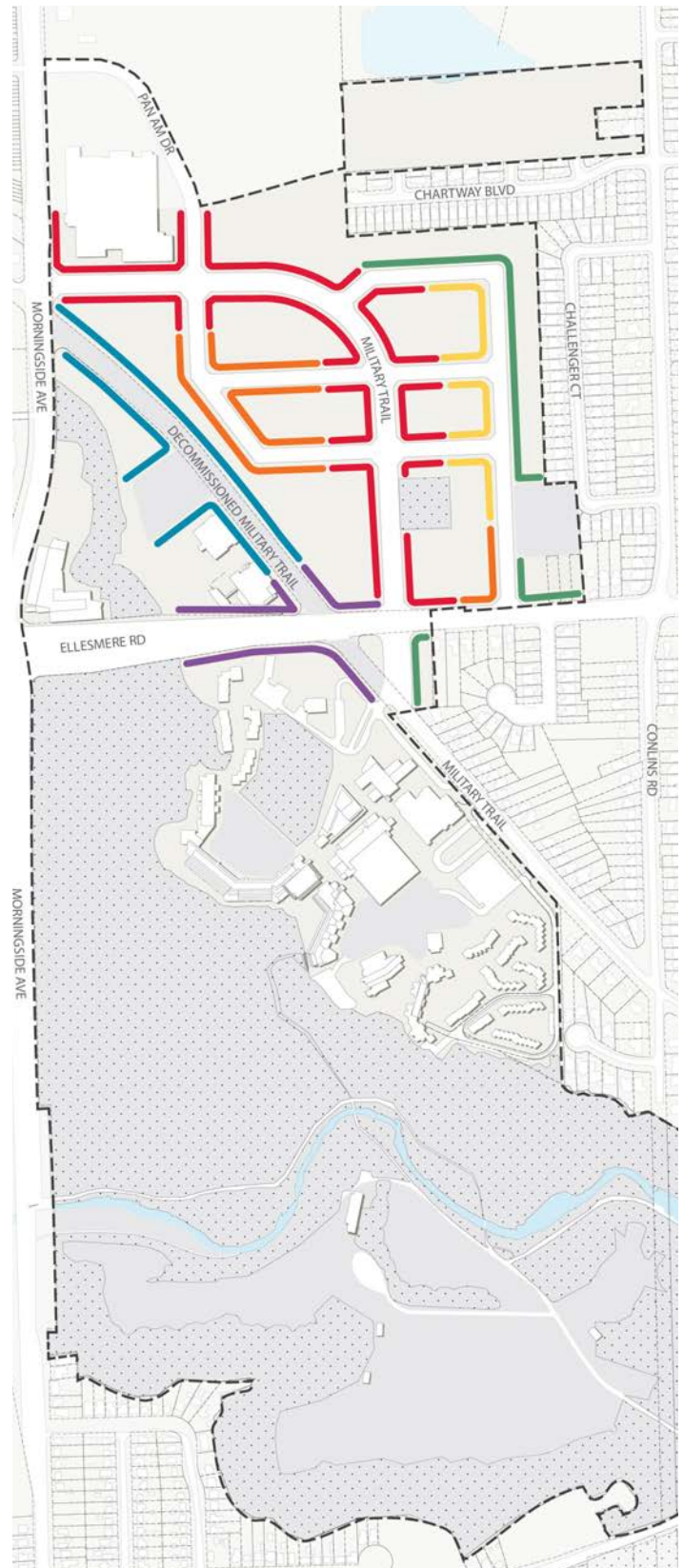


Figure 4.2: Building Massing Conditions

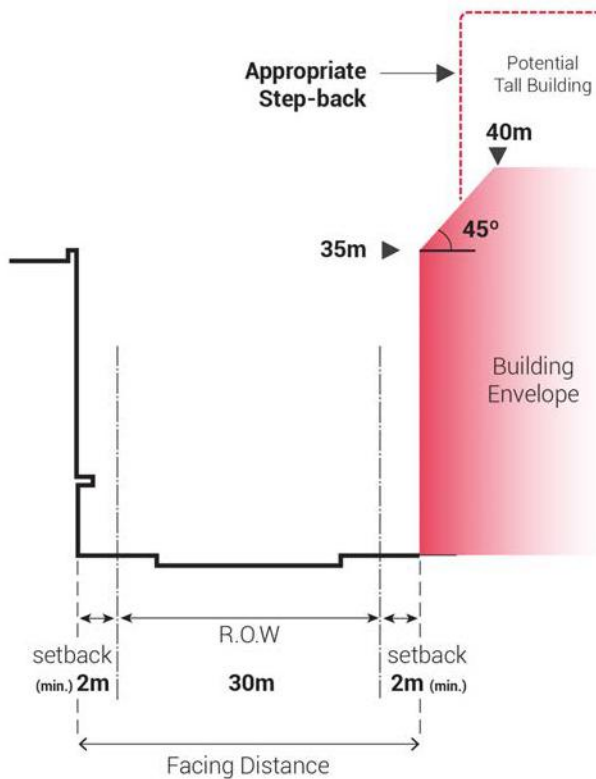


Figure 4.3: New Military Trail Massing Conditions

A. New Military Trail

1. Buildings fronting onto Military Trail (as shown on Figure 4.2) will feature greater heights in response to the wide right-of-way and the intention to create a consistent mid-rise streetwall.
2. Buildings should ensure a consistent and coordinated setback, that preserves a minimum of 2-metres from the public right-of-way to support wide pedestrian sidewalks.
3. The rear condition of base buildings should ensure an appropriate relationship to the campus setting and, where appropriate, should also be designed as a frontage.
4. Continuous street walls will be disrupted through building articulation, setbacks, and other architectural features including potential projections outside of the building envelope (as shown in Figure 4.3) as appropriate.
5. Taller building elements may be permitted along New Military Trail. Appropriate setbacks or transitions should generally be applied from the base building to reduce the visual impact of taller elements.
6. Buildings along the South Military Trail should maintain a 10 to 15-metre setback to reflect existing buildings and to provide adequate transition between institutional uses and adjacent Neighbourhoods.

B. Decommissioned Military Trail

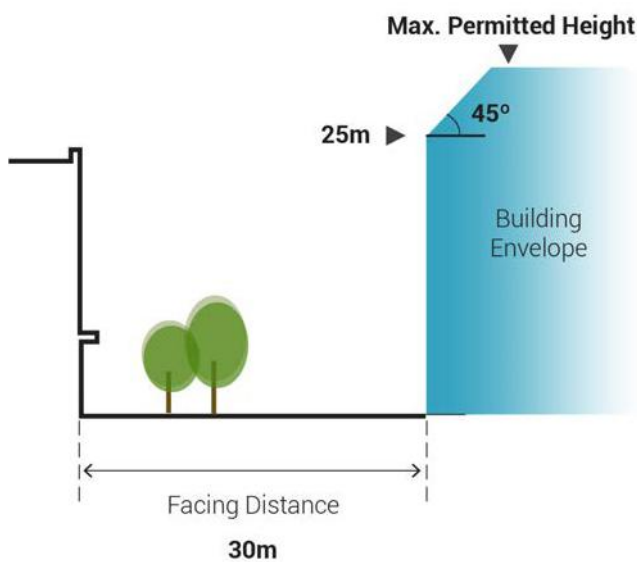


Figure 4.4: Decommissioned Military Trail Massing Conditions

1. Buildings along the eastern edge of Decommissioned Military Trail should ensure appropriate setbacks to provide for a series of smaller open spaces and landscape elements, including plazas, courtyards, and interior connections.
2. Decommissioned Military Trail will be a focal point for new development and will feature active frontages.
3. Buildings will be massed and oriented in relation to higher order streets and Major Open Spaces.
4. Taller building elements may be permitted along Decommissioned Military Trail. Appropriate setbacks or transitions should generally be applied from the base building to reduce the visual impact of taller elements.
5. Continuous street walls will be disrupted through building articulation, setbacks, and other architectural features including potential projections outside of the building envelope (as shown in Figure 4.4) as appropriate.

C. University Streets A

1. Base buildings on University streets will reflect a variety of heights, floorplates and streetwall relationships to ensure a diverse and varied street wall.
2. Continuous street walls will be disrupted through building articulation, stepbacks, and other architectural features including potential projections outside of the building envelope (as shown in Figure 4.5) as appropriate.
3. Base building heights will generally respond to the facing distance between base buildings fronting onto University Streets.
4. Additions above the base building may feature additional stepbacks and total height will generally not exceed 30m.
5. Taller building elements may be permitted along University Streets A. Appropriate stepbacks or transitions should generally be applied from the base building to reduce the visual impact of taller elements.

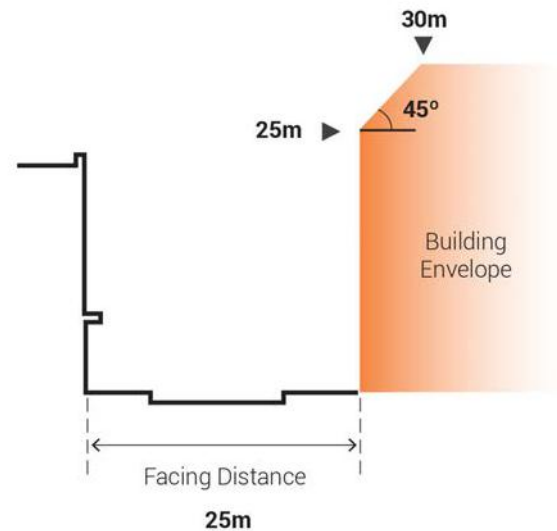


Figure 4.5: University Streets A Massing Conditions

D. University Streets B

1. Base buildings on University streets will reflect a variety of heights, floorplates and streetwall relationships to ensure a diverse and varied street wall.
2. Continuous street walls will be disrupted through building articulation, stepbacks, and other architectural features including potential projections outside of the building envelope (as shown in Figure 4.6) as appropriate.
3. Base building heights will generally respond to the facing distance between base buildings fronting onto University Streets.
4. Additions above the base building will generally not exceed 20m in order to appropriately transition the scale of new development toward the lower heights to the east.
5. Separation and prioritization of pedestrian traffic should be maintained and enhanced where possible through the addition of new pedestrian pathways and enhancement of open spaces.

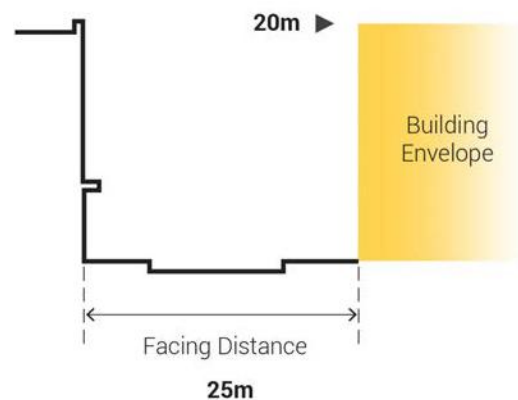


Figure 4.6: University Streets B Massing Conditions

E. Neighbourhood Edge

1. Massing and orientation of buildings will create a gentle transition between the higher-density Campus Core and low-density Neighbourhoods east of the campus. Two and three-storey low-rise buildings are encouraged in areas immediately adjacent to existing residential uses.
2. Appropriate setbacks and landscaped areas will ensure a clear delineation and transition between streets and buildings.
3. New streets will be designed to accommodate local pedestrian and vehicular traffic while supporting extensive tree planting and vegetation.
4. The building envelope will generally not exceed 15m in height, and appropriate transition to adjacent Neighbourhoods will be provided through the application of setbacks and angular planes measured from the rear lot line.
5. Continuous street walls will be disrupted through building articulation, stepbacks, and other architectural features including potential projections outside of the building envelope (as shown in Figure 4.7) as appropriate.

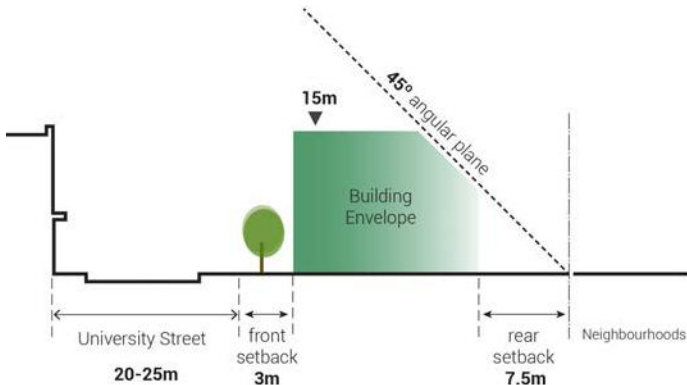


Figure 4.7: Neighbourhood Edge Massing Conditions

F. Ellesmere Road

1. Base buildings fronting onto Ellesmere should be designed to relate to the width of the street.
2. Streetwall and stepbacks should be designed to ensure appropriate skyview and shadowing conditions, with particular attention to impacts to neighbourhoods and open spaces. Angular planes and other tools may be used to ensure appropriate conditions.
3. Development within this area will be designed to achieve a continuous urban street wall through the application of consistent setbacks.
4. Continuous street walls will be disrupted through building articulation, stepbacks, and other architectural features including potential projections outside of the building envelope (as shown in Figure 4.8) as appropriate.
5. Taller building elements may be permitted along Ellesmere Road. Appropriate stepbacks or transitions should generally be applied from the base building to reduce the visual impact of taller elements.

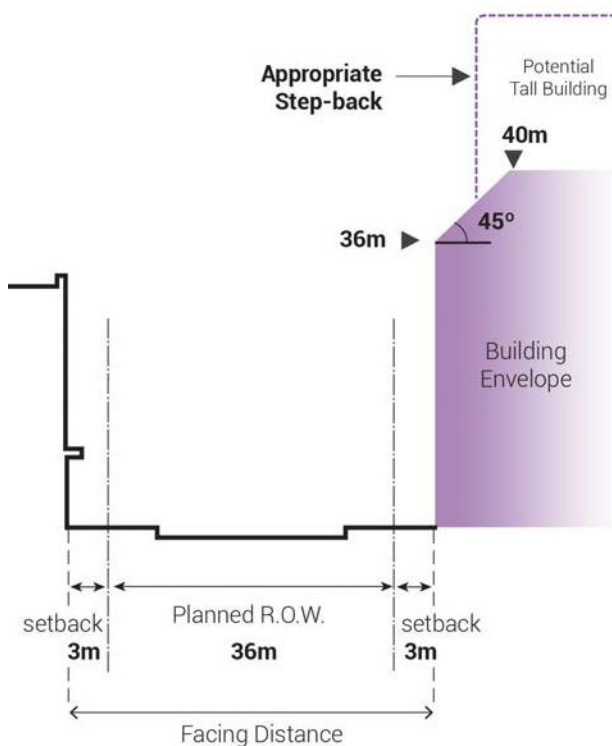


Figure 4.8: Ellesmere Road Massing Conditions

4.5 Pedestrian Experience

As the campus is primarily experienced by foot, the quality of the pedestrian environment is directly linked to the campus experience. Campus buildings should support this important relationship, providing a positive contribution to pedestrian experiences.

Rather than act as a barrier to pedestrian movement, campus buildings should be carefully designed and oriented to foster an animated, porous, and walkable environment all year round. In particular, considerations related to the design of base buildings can play a key role in supporting a high quality public realm. The following guidelines provide direction on how built form can support the pedestrian experience through features such as active frontages and entrances, glazing and transparency, and weather protection.

Guidelines are included in this section that provide additional guidance at the block-level, to help foster a dynamic pedestrian oriented environment on the campus, and to help ensure appropriate porosity and connectivity is provided between and around University buildings.



Generous public realm enhancing the pedestrian campus experience - University of Toronto St. George Campus

4.5.1 Active Frontages and Building Entrances

Guidelines

1. Wide sidewalks and covered entrances are encouraged to promote a comfortable pedestrian environment along primary frontages.
2. Building entrances should be located in clearly visible locations, free of obstruction, and directly accessible from pedestrian circulation routes to ensure ease of access.
3. Unobstructed sightlines between main building entrances of adjacent buildings is encouraged.
4. To support intuitive way finding on the campus, main entrances should be designed as the most prominent features on the main building façades, with clearly visible street addresses and/or building names.
5. Entrances should be welcoming and feature hardscaped plazas to accommodate anticipated users.
6. All public entrances, amenity areas and adjacent outdoor public spaces will be grade-related and accessible.



Unobstructed views of primary building entrances facilitate campus navigation and pedestrian circulation (Instructional Centre, UTSC).



Covered entrances shelter pedestrians from weather conditions and help to indicate primary building access points. (TPASC, UTSC).



Hardscaped plaza support flexible movement in areas of high pedestrian activity (Robert Lee Alumni Centre, UBC, Vancouver, BC).

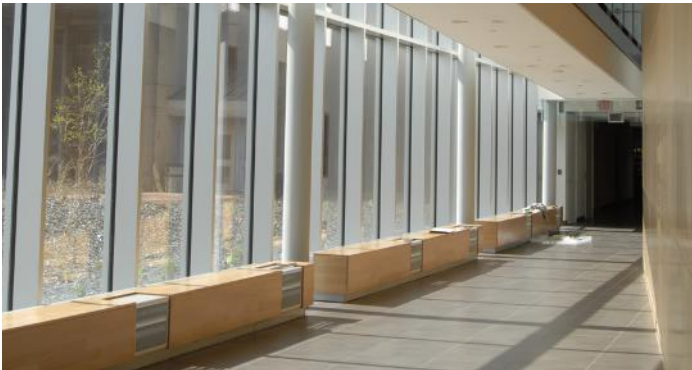


Street related uses help to animate the campus throughout the day (Drexel University, CA).

4.5.2 Glazing and Transparency

Guidelines

1. Street level facades should feature transparent glazing to ensure a high degree of permeability between interior and exterior spaces.
2. Transparent glazing is encouraged above ground to break up the perception of large floor plates and density and to provide overlook into the public realm.
3. Highly reflective materials may be used as a means to provide additional light in areas that may otherwise have reduced access to direct sunlight.
4. Interior pedestrian connections should be clearly marked with entrances in highly visible areas, transparent glazing, signage, and architectural features.
5. Glazing and surface treatments should be consistent with the City of Toronto's Bird Friendly Guidelines.



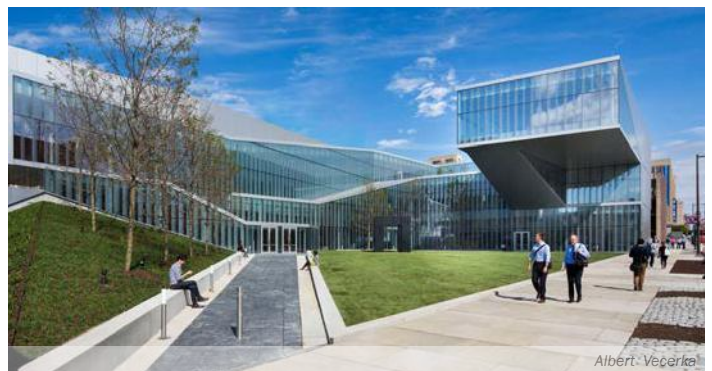
Windows at-grade help to activate building frontages and provide a source of natural light (Science Research Buildings, UTSC).



Where non-active uses are contemplated, reflective glazing at grade encourages a sense of permeability and interaction between indoor and outdoor spaces. (Academic Resource Centre, UTSC).



Reflective materials can be used to brighten environments that may have limited access to sunlight (Centennial College, Toronto, ON).



Highly transparent building walls minimize the perception of density (Singh Centre for Nanotechnology, University of Pennsylvania, PA).

4.5.3 Weather Protection

Guidelines

1. Pedestrian weather protection through architectural features such as canopies, awnings, and overhangs should be provided over main building entrances, in transit waiting areas, and along active frontages where appropriate.
2. New development should be massed to limit shadowing and create comfortable pedestrian level wind conditions on streets, pedestrian walks and open spaces.
3. Adjacent buildings should be designed so that entrances are aligned to minimize travel distance in inclement weather.
4. The design, materiality, and grade of all pedestrian connections and sidewalks should consider winter weather conditions.
5. Landscape design may consider weather protection, where appropriate, particularly in areas of high pedestrian volume.



Retractable awnings provide flexible sun shelter which can be adjusted to desired level of sun exposure during different times of day and year (DePaul University, Chicago, IL).



Weather protection and proper winter maintenance can activate pedestrian connections during colder months (Arts and Administration walkway, UTSC).



Recessed and covered entrances support more comfortable wind conditions at-grade (Humber River College, Toronto, ON).



High branching trees and canopies provide shade and visual interest (Victoria Garden Mall, CA).

4.5.4 Porosity and Block Conditions

Buildings across the UTSC campus will be designed to provide appropriate levels of porosity and open space in order to ensure the campus develops in a pedestrian-friendly manner. The nature of block porosity, open space and at grade conditions correspond with the three growth areas established in Section 4.2 of these Guidelines, including Growth Corridors, Campus Core and Neighbourhood Edge.

This section provides block-level structuring direction for new development within each of those three areas and establishes the block-level framework for open space and pedestrian-focused porosity throughout the campus.

Two key precedents are presented to demonstrate the typical block conditions and levels of open space for the Campus Core and Growth Corridors. The block containing UTSC's Instructional Centre and Environmental Science and Chemistry Building is used to illustrate the block-level considerations for the Campus Core, while the University of Toronto's Myhal Centre located in the St. George Campus illustrates block-level considerations for Growth Corridors. Key urban design elements are highlighted within these guidelines, which correspond with the images provided below.

The precedents and directions are intended to provide high-level direction for each growth area. The actual level of porosity and space between buildings will vary based on programmatic considerations, building typology, adjacent street and open space conditions, as well as other site-specific considerations.



(Figure 4.0) Campus Growth Patterns

- Growth Corridors
- Campus Core
- Neighbourhood Edge

A. Campus Core

1. The overall block structure for buildings located within the Campus Core is generally defined by a high degree of porosity and pedestrian connectivity. Generous **open space and interior mid-block connections** are encouraged and primary entrances will be designed with **forecourts** to read as significant gateways.
2. Generous **setbacks** will be encouraged on all sides of buildings located within the Campus Core and will be framed by a strongly defined building facade. Setback zones will allow for the provision of various landscaping elements such as trees and other street furniture, thereby contributing to a pedestrian-friendly public realm and campus environment.
3. Buildings located within the Campus Core will typically take the form of four-sided pavilion style buildings, that will be designed to have multiple entryways and feature ground floor **transparent glazing and active uses**. These elements help ensure that all sides of the buildings are effectively read as a frontage, and contribute to a sense of visual interest from the public realm.
4. Servicing will be effectively **integrated within the interior of developments** located in the Campus Core helping minimize its visual and operational impacts on the public realm.

UTSC Instructional Centre & Environmental Science and Chemistry Buildings

The UTSC Instructional Centre and Science Buildings exemplify built-form and open space objectives that can be achieved at the block level within the Campus Core. The images provided of these buildings demonstrate how the above guidelines can be achieved within the UTSC campus setting. Specifically, they highlight generous open spaces framed by buildings, important pedestrian connections, integrated servicing and loading, and interior mid block connections as key block-level elements within the Campus Core.

Open Space Connection



Interior Connection



Entry Forecourt



Setbacks



Ground Floor Glazing



Integrated Servicing



B. Growth Corridors

1. Development along Growth Corridors will generally feature the application of consistent and narrow **setbacks** from the adjacent right-of-way. Upper-level stepbacks will be encouraged to minimize the visual impact of mechanical penthouses and other equipment located on the roofs of buildings.
2. Ground floors will be designed to accommodate **active uses** and will feature **transparent glazing** to help create a sense of visual interest from the public realm.
3. Long development blocks will be broken up through the introduction of **mid-block atria and interior connections**, serving as primary gateways, and contributing to greater block-level porosity. Where mid-block atria are introduced, they will be recessed from the streetwall to allow for street furniture and other landscaping elements.
4. **Servicing will be integrated into new developments**, and will be located away from primary frontages and public realm features.
5. The introduction of **outdoor public amenity** and open spaces will be encouraged, to contribute to a lively and active public realm, and to help break up long development blocks.

University of Toronto Myhal Centre for Engineering Innovation & Entrepreneurship

The newly-completed Myhal Centre at the University of Toronto's St. George Campus represents vertical intensification within a constrained, growing urban campus, providing a useful comparable for block conditions within the UTSC's Growth Corridors. The images provided of the Myhal Centre illustrate the desired urban design objectives to be considered along the UTSC Growth Corridors, including: ground floor porosity, active uses at grade, both interior and exterior mid-block connections and integrated servicing, loading and parking facilities.

Setbacks and Outdoor Public Amenity



Ground Floor Active Uses and Transparent Glazing



Mid-block Connection



Integrated Service, Loading & Parking



C. Neighbourhood Edge

1. Residential and non-residential buildings located along the Neighbourhood Edge will be designed to have a frontage along any abutting public or private street, open space or mid-block connection.
2. Vehicular and servicing access should generally be provided from secondary streets, laneways, or towards the rear of buildings, and will be encouraged to be incorporated into the buildings directly.
3. New buildings will be designed to support the pedestrian-scale and contribute to a positive pedestrian experience at the ground level, by designing overlook elements along the primary frontages (doorways, windows, etc.).
4. Setbacks should be designed to extend and enhance the public realm, allowing sufficient space for lawns, trees, seating, and to accommodate green infrastructure.
5. Long development blocks will be broken up as necessary, and will provide connections with adjacent open spaces where possible.
6. The provision of outdoor amenity areas will be encouraged along street frontages, mews and walkways to contribute to a lively and pedestrian friendly campus environment.



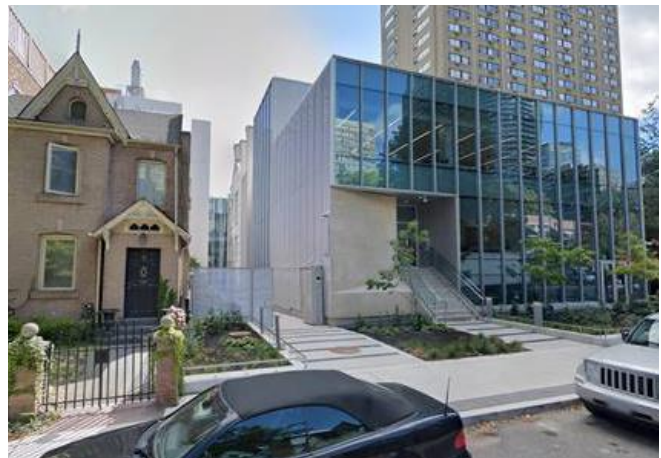
Outdoor amenity spaces can be incorporated into neighbourhood Edge areas to help animate the public realm. Sheppard Avenue Townhouses - North York.



Low-rise, apartment buildings can also provide opportunities for mixed-uses at grade. West Village - Detroit, Michigan



Low-rise buildings will establish an appropriate transition towards adjacent neighbourhoods. Roxton Road Townhouses - Toronto.



Institutional uses can be designed to appropriately transition to low-rise neighbourhoods. Ryerson University's Centre for Urban Innovation - Toronto.

4.6 Parking, Loading and Servicing

Though founded as a suburban, car-oriented campus, the University has evolved to become a more urban and accessible campus. With the integration of rapid transit, the growing popularity of ride-sharing, and autonomous vehicle technology on the horizon, a major shift in travel patterns is occurring and will continue to grow at UTSC. This shift will support the continued decrease in parking demand. However, over the near term, the campus will continue to rely on a large supply of parking, which will increasingly be provided in parking structures.

While parking and service areas are essential to the function of the campus, they must be carefully designed to minimize impacts on the campus experience. Similarly, carefully designed loading/service areas can be effectively integrated without significant impacts to the quality of campus.

The following guidelines provide direction on how to support these essential functions while maintaining a high-quality public realm.

4.6.1 Loading and Servicing

Guidelines

1. To ensure that the design of servicing and loading areas is sensitively integrated with development and promotes pedestrian safety, building servicing and loading should:
 - i. Be accessed away from public streets and main pedestrian entrances where feasible;
 - ii. Be integrated into building form where possible;
 - iii. Be carefully screened with landscaping or other architectural features in order to avoid direct views and mitigate noise to adjacent streets;
 - iv. Prioritize the safety and comfort of pedestrians;
 - v. Serve multiple connected buildings.
2. A preliminary, block-level loading and servicing strategy – that demonstrates how the proposed development’s loading and servicing will be integrated with future developments within its block – should be included with the first development proposal for each block.



Screening and landscaping treatments can allow loading areas to function effectively in close proximity to building entrances and contribute to the open space network (UBC, Vancouver, BC).

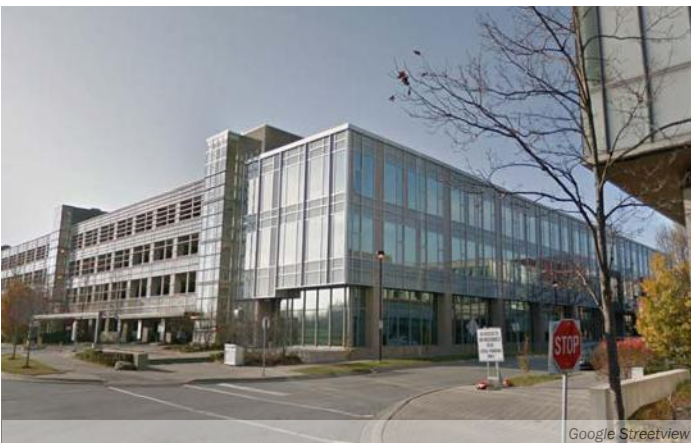


Combined service and loading areas reduce overall building footprints and minimize visual impact on the public realm (combined Instructional Centre and ESCB Loading Area, UTSC).

4.6.2 Parking

Guidelines

1. Visitor parking should be highly visible and accessible, and where possible, accommodated through on-street parking.
2. Surface parking areas will be designed and landscaped as high quality open spaces, and that landscape treatment should:
 - i. Screen parking areas from views;
 - ii. Break up large parking areas into smaller lots;
 - iii. Maximize shade to reduce heat island effects; and
 - iv. Ensure the provision of safe, convenient, accessible and highly landscaped pedestrian travel routes to surface parking areas.
5. City of Toronto Guidelines for Greening Surface Parking Lots will be considered in the design of new parking areas.
6. Parking is encouraged to be located below or above grade. Above-grade parking structures will be designed to minimize impacts to the campus environment by:
 - i. Integrating with other uses and buildings, located behind such uses;
 - ii. Incorporating active or other uses at grade along building frontages; and
 - iii. Incorporating design features and landscaping to reduce visual impacts from parking .



Parking structures can positively contribute to the campus experience by accommodating other uses at grade along key frontages (York University, Toronto, ON)

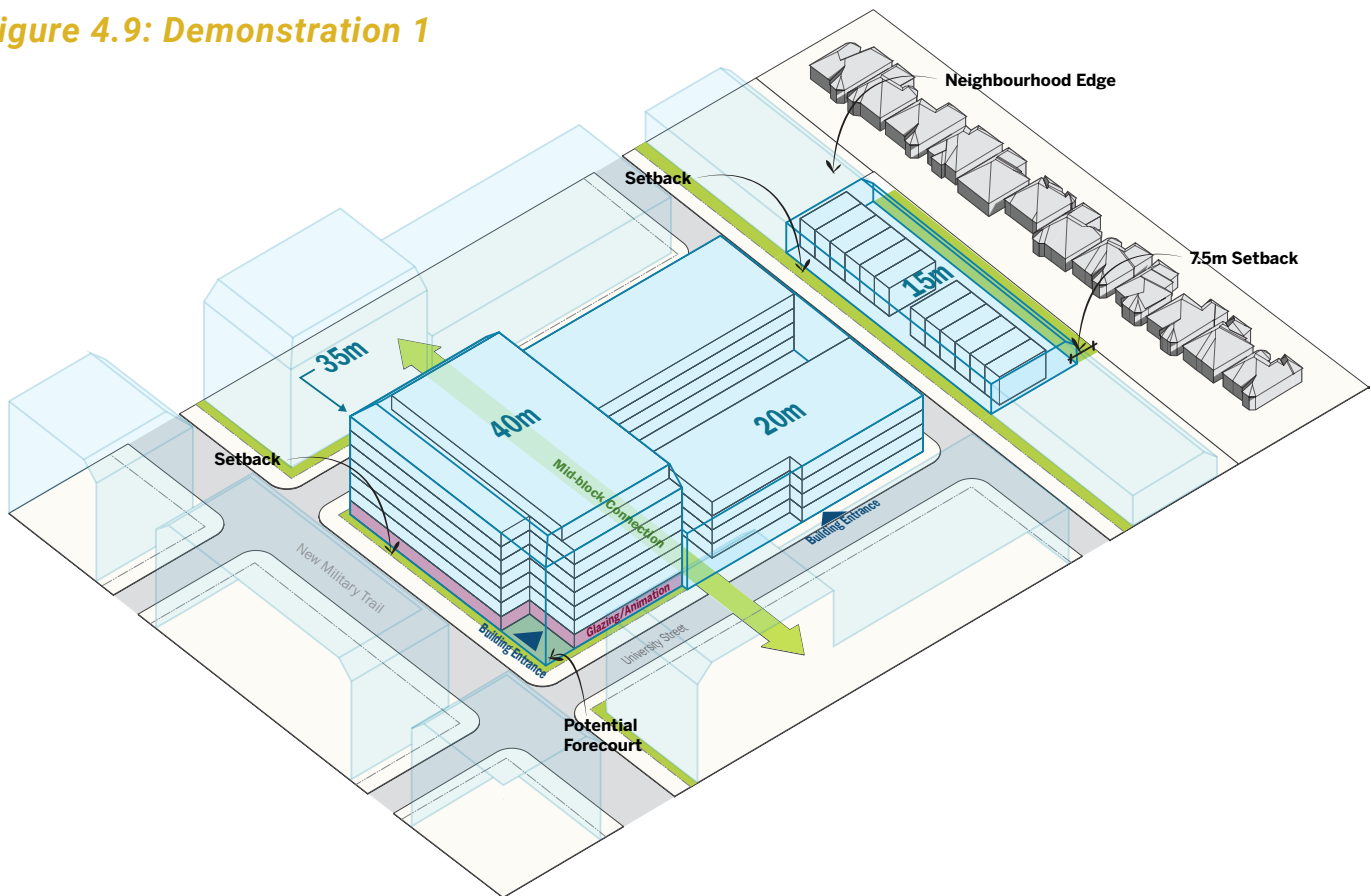


When complemented by appropriate sidewalk widths and landscaping, on-street parking can form a part of an attractive and safe pedestrian environment. (University of Toronto St. George, Toronto)

4.7 Demonstration Diagrams

The demonstration diagrams illustrate the relationship between the Built Form guidelines and the public realm network identified in Section 3. While intended to be conceptual and not representative of specific development plans, the diagrams provide a helpful visualization of the future potential build out of key campus areas, particularly in the North Campus where the majority of future campus growth will occur.

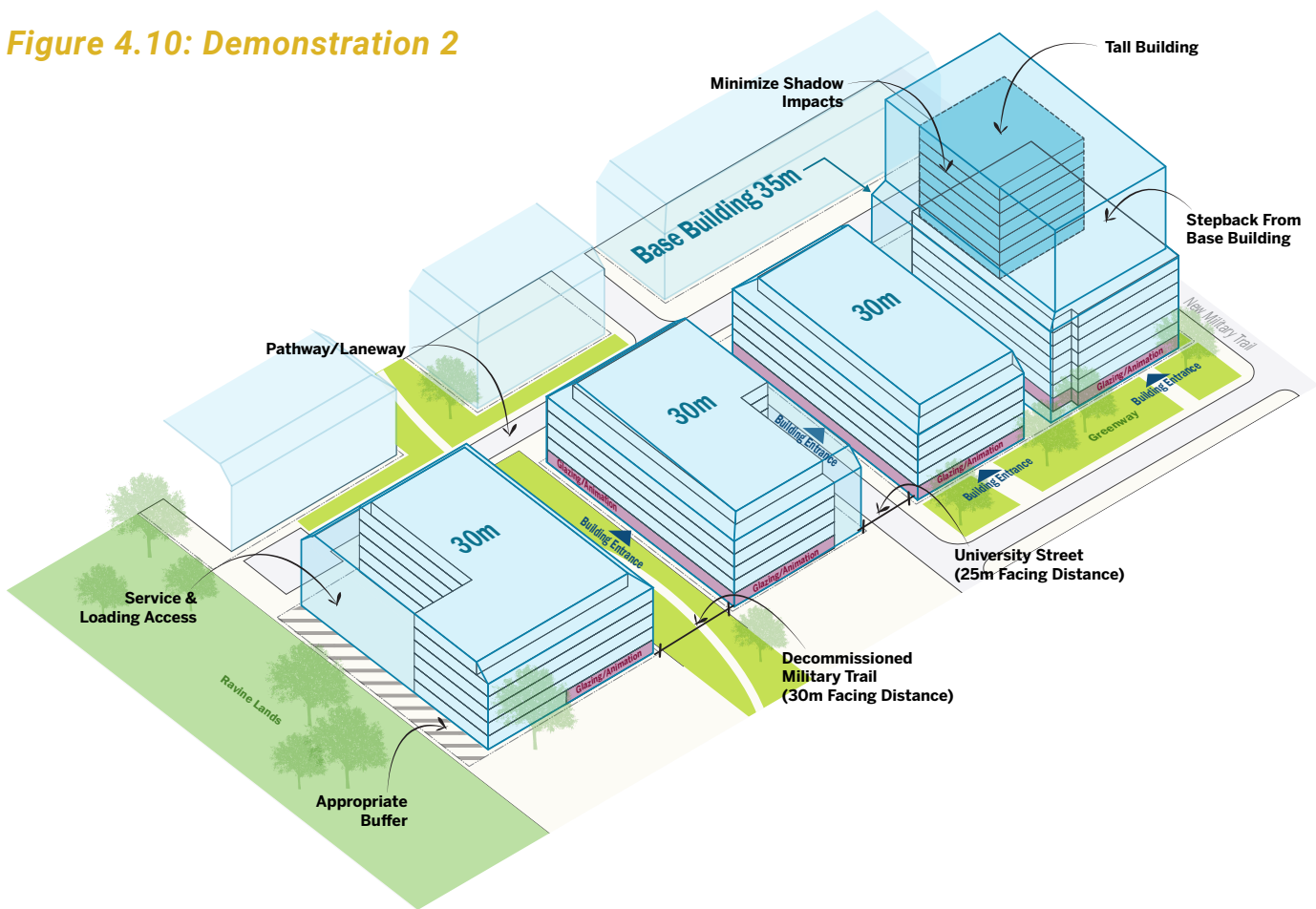
Figure 4.9: Demonstration 1



Highlights

- Throughout this demonstration area, building heights transition away from the 40m Military Trail corridor, to the 15m Neighbourhood Edge condition on the eastern perimeter of the campus, that serves as an appropriate transition to the neighbourhood uses to the east. (Section 4.2, *Campus Growth Patterns*)
- Massing along New Military Trail contributes to a defined streetwall condition, with active uses envisioned for the ground floor. Together with narrow setbacks, this will contribute to establishing the desired urban character along this key campus corridor. (Section 4.4, *Street Relationships*)
- On the eastern part of the block the general height and massing is shaped by the street relationship and the building-to-building facing distance across the future University Street. (Section 4.4, *Street Relationships*)
- The length of the development block is broken up with a north-south mid-block connection, enhancing the connectivity and porosity of the campus. (Section 2.3, *Mid Block Connections*, 3.3, *Active Transportation Connections*, and 4.5.4, *Porosity and Block Conditions*)

Figure 4.10: Demonstration 2



Highlights

- Located internally within the campus setting, building heights reflect the Campus Core context, facilitating a range of mid-rise pavilion and streetwall buildings. (Section 4.2, *Campus Growth Patterns*, and 4.3, *Campus Building Typologies*)
- Taller building elements are permitted along the New Military Trail corridor, and in other locations across the campus, which should consider appropriate setbacks or transitions from the base building and should ensure adequate skyview and separation distances are maintained. (Section 4.2, *Campus Growth Patterns*, 4.3, *Campus Building Typologies*, 4.4.2, *Building Massing*)
- Building massing along decommissioned Military Trail will establish a 1:1 relationship along the future open space, creating a comfortable building-face-to-building face condition appropriate for a campus setting. (Section 4.4.2, *Building Massing*)
- New development adjacent to natural heritage areas will incorporate appropriate buffers to minimize impact. (Section 2.1, *Ravines and Natural Heritage*)
- Appropriate facing distances help to clearly frame and define the pedestrian-oriented open spaces, while glazed and/or active ground floor uses are imagined for buildings facing the decommissioned Military Trail, contributing to the animation of the campus’ public realm. (Section 4.4, *Street Relationships*)
- Laneways will support both service access and pedestrian activity (Section 3.1.4, *University Laneways*)
- To minimize conflicts and impacts on the public realm, loading and servicing facilities will be accessed away from the main building entrances, and coordinated and/or centralized with other buildings within the block. (Section 4.6.1, *Loading and Servicing*.)



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