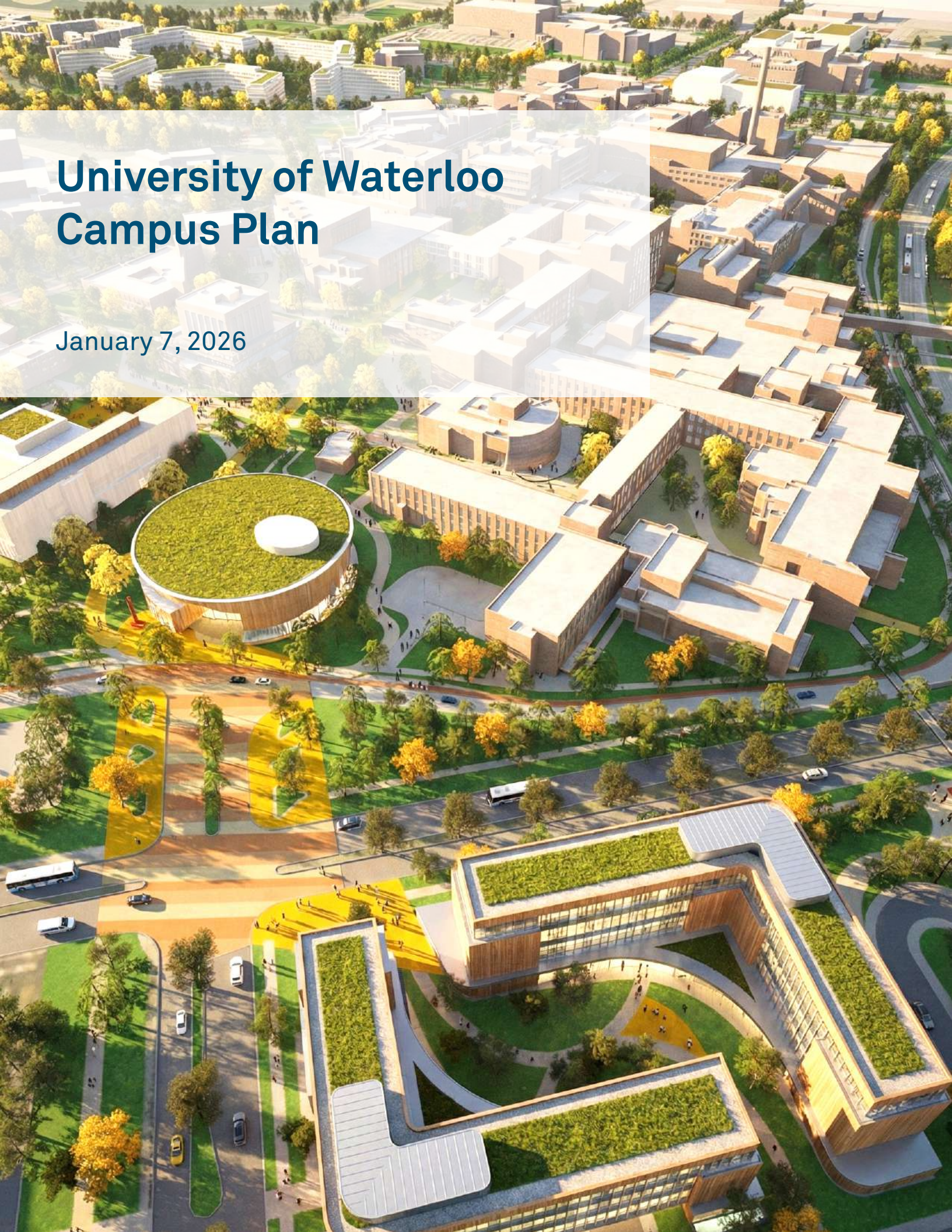
University of Waterloo Campus Plan

January 7, 2026



Territorial Acknowledgement

The University of Waterloo acknowledges that much of our work takes place on the traditional territory of the Neutral, Anishinaabeg, and Haudenosaunee peoples. Our campus is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River. Our active work toward reconciliation takes place across our campuses through research, learning, teaching, and community building, and is co-ordinated within the Office of Indigenous Relations.

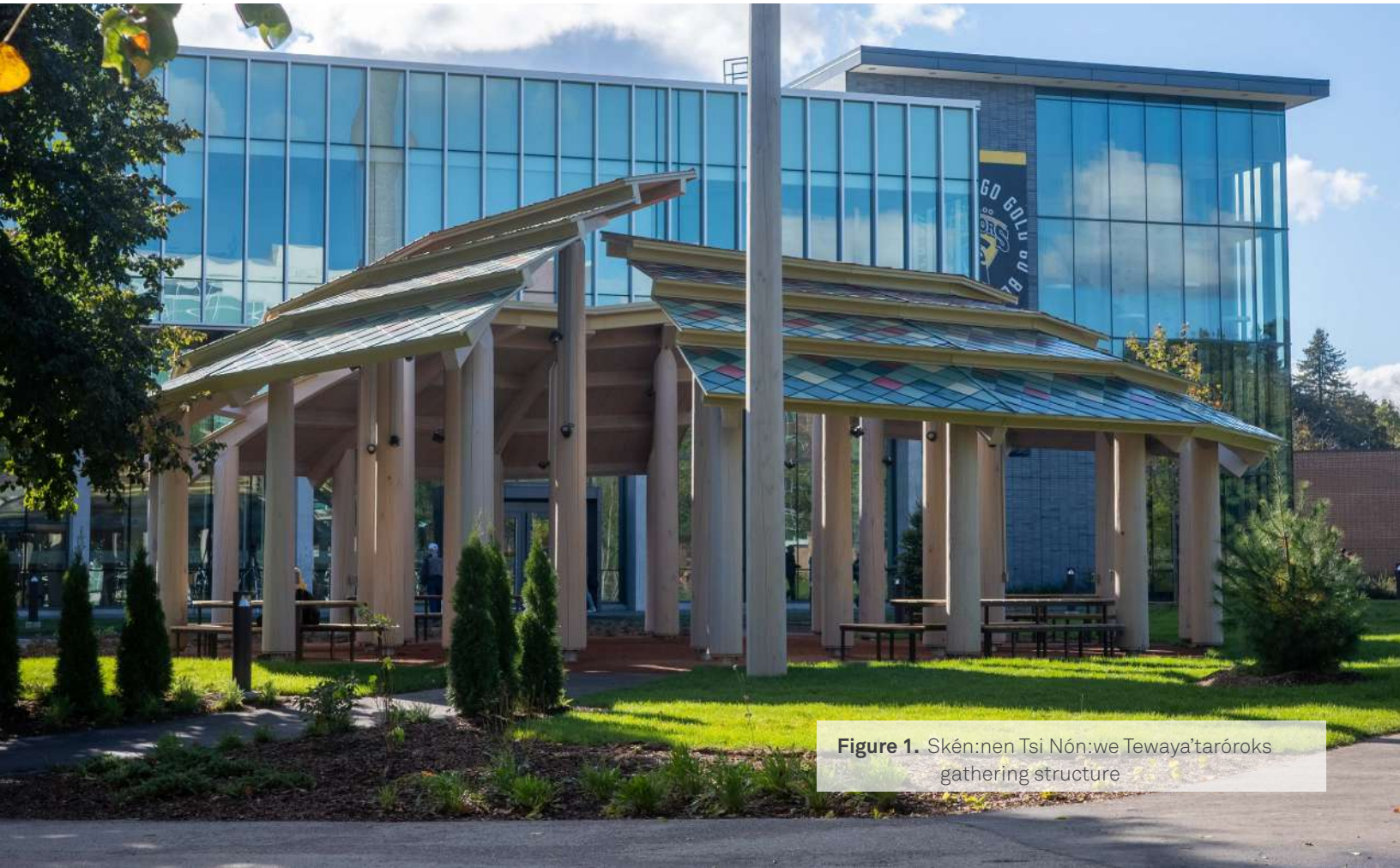


Figure 1. Skén:nen Tsi Nón:we Tewaya'taróroks gathering structure

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The Campus Plan will move the work of reconciliation forward through a focus on the decolonization of spaces of research, learning, teaching and community building. This work is accountable to members of the University of Waterloo's Campus Plan Working Group and Steering Committee, including representatives from the Office of Indigenous Relations.

Working Group

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Consultant Team

Brook McIlroy, Prime Consultant, Campus Planning and Design

Purpose Building, Sustainability

HDR, Transportation and Parking

Resource Planning Group (RPG), Academic Space Planning

Message from the President on the new Waterloo Campus Plan

Dear Members of the University of Waterloo Community,

It is with pride and determination that I present the University of Waterloo Campus Plan. This plan reflects our shared values and collective aspirations. It is more than a long-term roadmap for facilities and programs. It is a statement of who we are as an institution and a blueprint for meeting the future together with strategic foresight.

Our physical campus shapes the Waterloo experience. It influences how we teach, learn, research, and connect. We all have a stake in this plan. Over the past year, thousands of students, employees, and retirees shared their ideas through surveys, open houses, design workshops, and conversations across campus. Their perspectives shaped the priorities and principles guiding this plan.

The Campus Plan sets a clear direction. It looks beyond immediate needs toward the horizon, anticipating the evolving demands of higher education, the growth of our community, and our responsibilities to future generations. It is intended to guide decisions for decades, ensuring that the choices we make today contribute to a stronger, healthier, more sustainable and inclusive university tomorrow.

While centered on the main campus, the plan considers the role of satellite campuses in Cambridge, Stratford, and Kitchener, and lays the foundation for future work at each site. The plan identifies significant opportunities for improving connections with the community around us. The Campus Plan also envisions a dynamic relationship between the main campus and the Research & Technology Park, recognizing the Park as an extension of the University of Waterloo's academic and innovation ecosystem.

Central to this vision is our commitment to Indigenization and accessibility. We will honor Indigenous knowledge, traditions, and partnerships as integral to our academic and cultural fabric. At the same time, we will ensure that our campus is accessible to all, removing barriers, expanding opportunities, and creating spaces where every member of our community can thrive. These priorities are not optional. They are essential to the university we aspire to be.

The plan sets a balanced path forward. It encourages creativity while using resources with discipline for maximum impact. It supports collaboration, advances sustainability, and enhances the student experience. At the same time, it responds to the realities of our time.

Fiscal realities require careful stewardship of every investment and asset. Deliberate planning today helps us avoid reactive decisions tomorrow, which too often come at greater cost. These challenges call us to live our values more fully.

I thank the members of the Campus Plan Steering Committee and the Working Group for their leadership and enduring vision throughout this work. By thinking differently, acting with purpose, and working together, our efforts focused on what matters most—building a campus that is resilient, durable, and designed to endure. I also thank our Prime Consultant, Brook McIlroy, for their expertise and partnership—especially in our shared goal of Indigenizing this campus.

This plan belongs to all of us. It reflects the power of community and the belief that, united by our values, we can transform our built and natural environment into opportunities and shape a campus that serves generations to come.

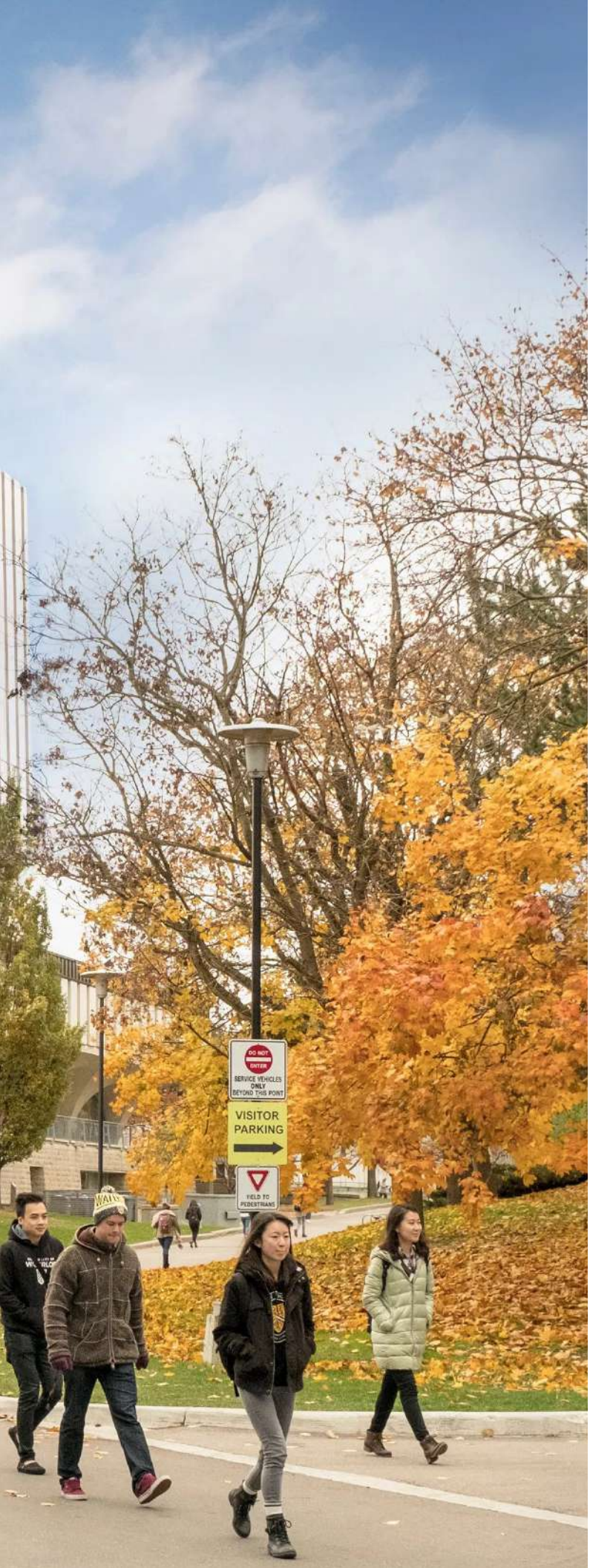
Sincerely,

Vivek Goel, CM, OOnt

President and Vice-Chancellor

Figure 2. The entrance to the Student Life Centre and Physical Activities Complex (University of Waterloo)

Figure 3. Dana Porter Library is an iconic campus building and landmark (University of Waterloo)



1.0

Executive Summary and Overview

1.1 Executive Summary

The Purpose of this Campus Plan

The Campus Plan envisions the University of Waterloo's main campus ("campus") as a holistic and interdisciplinary learning environment that offers flexibility, adaptability, and long-term resilience.

The Campus Plan is a long-term vision that requires a continued process of review and decision making to reflect the strategic ambitions of the University. Grounded in the vision and guiding principles, the Campus Plan demonstrates how these aspirations can be realized over time. It is not a prescriptive blueprint for construction; rather, it offers a flexible and visionary framework that supports academic, research, and housing growth while strengthening the University's ability to plan, communicate, and implement future projects effectively. The Plan identifies building and open space priorities to shape the campus's evolution for decades to come.

The illustrated campus vision can be used to inspire donors, forecast infrastructure costs, plan for servicing and district energy, as well as facilitate community collaboration and partnerships with authorities having jurisdiction.

A Campus in a Natural Setting

The University of Waterloo is located within the Laurel Creek watershed in the northwestern part of the City of Waterloo. The Campus Plan builds on this setting—its ecological richness, cultural significance, and academic strengths—to guide the future campus for the next 10 to 25 years. The Plan outlines a vision for a more connected, complete, and community-centered campus environment.

The Campus Plan establishes early and long-term goals for where growth and change should happen, and how it can improve and contribute to the unique natural and physical character of the campus and the evolving student experience.

The Campus Plan guides future buildings and outdoor spaces toward cultural-integration and ecological diversity. In response to the loss of open space as academic buildings and campus facilities have infilled over time, a key vision for the Plan is to return ecology and open space to campus. Closely integrated campus buildings and landscape encourage social connection, promote innovation, define and animate outdoor spaces, and advance sustainability and ecological responsibility.

Figure 4. The campus in its Laurel Creek setting (University of Waterloo)

Rooted in Place and Indigenous Context

The Campus Plan embeds Indigenous placemaking principles throughout its framework. Indigenous placemaking is reflected in the proposed Two Row Path, a re-imagined north south campus pathway that includes sculptural Markers based on the Seven Grandfather Teachings. The Two Row Path connects with other campus paths to strengthen connections with the Laurel Creek watershed and proposed Arboretum Trail, as well as the Land of Knowledge within the University's Environmental Reserve. Indigenous placemaking strengthens campus sustainability, natural and cultural inclusion and land-based learning. This includes opportunities for cultural expression in landscapes and buildings, the creation of spaces for ceremony and gathering, and incorporating Indigenous approaches to land stewardship and water protection, which is particularly relevant in the Laurel Creek watershed.

Transforming the Campus Residential Experience

The Plan introduces three new residential villages, each envisioned as vibrant mixed-use enclaves to bring students closer to academic, social, and recreational life on campus. These villages will have a blend of student housing, potential faculty/staff housing, outdoor social and learning commons and local amenities that frame outdoor common green spaces with gardens, places for informal recreation and more intimate courtyards that support well-being and cohesion with the local community. The residential villages help strengthen the campus as green, inviting, and accessible.

Strengthening Gateways and Arrival Experience

Strategic gateway improvements at campus edges are recommended to enhance arrival and better connect the University with the broader City. Improved transit interfaces, clear wayfinding, signature architecture, and landscape treatments will establish distinctive entry points that reflect the University of Waterloo's identity as a place of innovation, inclusivity, and environmental responsibility.

Re-imagining Campus Mobility and Streets

The Campus Plan envisions revitalized campus streets to re-balance mobility on campus. The Plan re-imagines the Ring Road as a connective and enhanced campus boulevard, providing dedicated space for pedestrians, cyclists and drivers to create safer access to adjacent campus lands including the Laurel Creek Watershed, the North Campus and the proposed West, East and South Villages.

Prioritizing pedestrians, cyclists, and transit, the Plan converts select campus streets into multi-modal corridors and people-first outdoor areas. Vehicular access is redefined to improve safety. Re-envisioned streetscapes will strengthen the relationship with the natural environment, creating a safer and more welcoming campus experience.

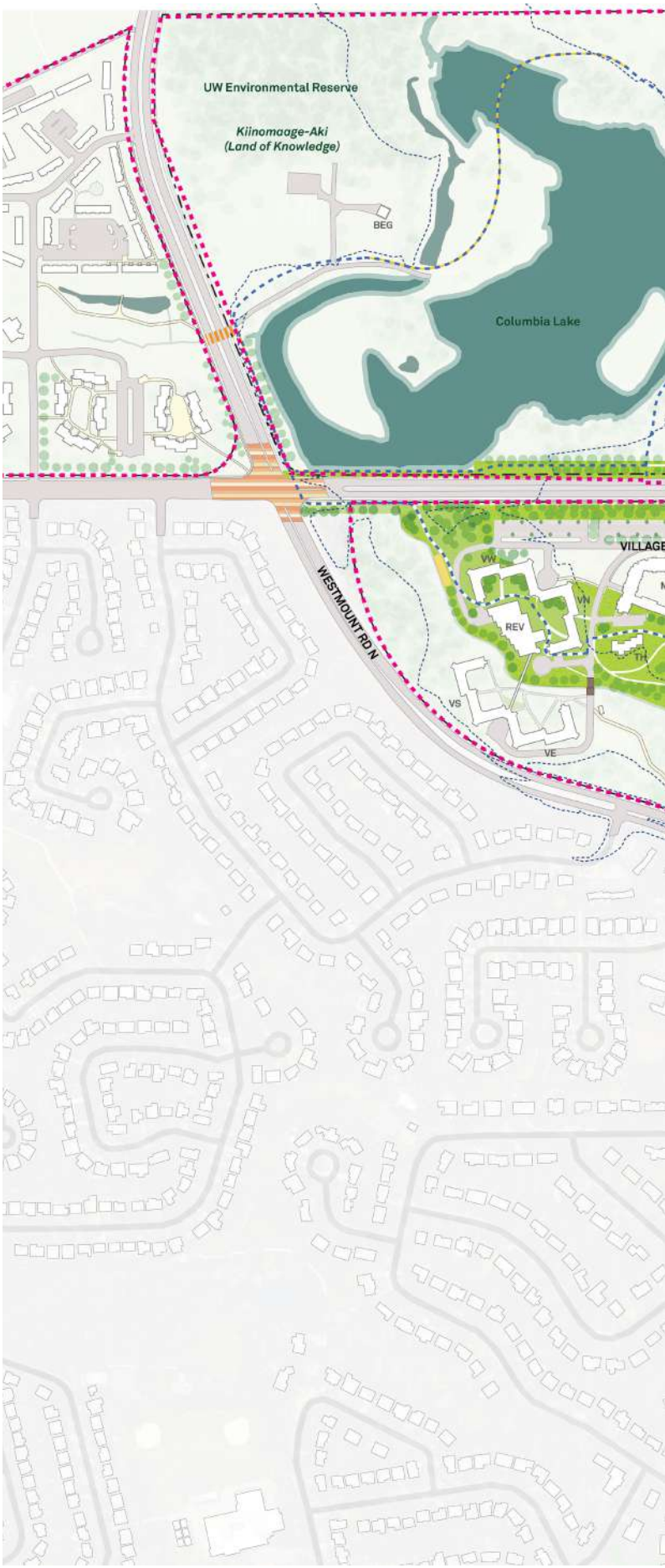
A Sustainable and Adaptive Future

The Campus Plan promotes long-term sustainability through integrated stormwater management, energy-efficient buildings, and climate-resilient landscapes. Development is strategically concentrated to protect sensitive natural areas while allowing for thoughtful and targeted intensification and/or redevelopment on key parcels envisioned to adapt to future academic and research needs.

The Campus Plan describes four Campus Design Frameworks guiding open space, development and programming, mobility, and innovation and creativity.

The Plan articulates a vision for the University of Waterloo's main campus, and describes proposed interventions across the following areas:

1. **East Village:** currently characterized by surface parking lots and a concentration of engineering buildings and EC 1-5, the East Village is envisioned as a mixed-use and academic area of campus with potential to expand the existing Transit Hub.
2. **South Village:** currently occupied by student residence courtyard and tower buildings, the South Village is envisioned as an expanded site for student residence buildings with active ground floor amenities and mixed uses, complementing the currently under construction NRB1 building in Parking Lot A.
3. **West Village:** characterized by the V1 student residence buildings, West Village is recommended to be a student village with new emphasis on recreation and well-being through the inclusion of a central West Common with access to the Healing Forest.
4. **Inner Campus:** within and abutting Ring Road, the Inner Campus is the site of proposed building renovation and renewal, with selective building removal to enhance open spaces, pathways, and infrastructure, and to create new buildings that restore a greater sense of belonging for the whole campus community.
5. **North Campus:** currently characterized by surface parking, the North Campus is envisioned to connect the Inner Campus and Research and Technology (R+T) Park through upgraded streets and pathways as well as new buildings to support the campus's future growth.
6. **The Environmental Reserve:** the Campus Plan envisions greater access to the Environmental Reserve and planned Land of Knowledge through the Innovation Trail and Arboretum Trail.
7. **The North West Campus:** anticipates improved connectivity to the CLV residence buildings in collaboration with the City and Region.

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Disc Golf Course
FRANK TOMPA DR
5
TJB
BRH
Sports Fields
CIF
HAGEY BLVD
N-1
N-2
BSC
OPT
Warrior Field
COLUMBIA ST W
4
1
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W-4
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W-3
W-2
C-2
FED
C-1
RING RD
ION LIGHT RAIL
EC-12
EC-11
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EXP
BMH
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PAC
WILLIAM TUTTE WAY
M4
Transit Hub
AVR
EC-9
PHILLIP ST
Healing Forest
SLC
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E7
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Strauss Lake
QNC
ESC
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C-3
NRB1
S-6
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Laurel Lake
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S-3
S-4
S-5
ION LIGHT RAIL
UEC
USC
CGR
PAS
WESTMOUNT RD N
RING RD
C-4
UNIVERSITY AVE W
SEAGRAM DR
Tree Nursery
Waterloo Park

1.2 Campus Planning Process

The University of Waterloo initiated the campus planning process in late 2024 to address the evolving needs of the University's main campus. Informed by the University of Waterloo's mission and values, a robust engagement process, and a comprehensive study of the campus's history and context, the Campus Plan offers recommendations for the next phases of campus development at the University of Waterloo.

The campus planning process was undertaken in four phases between January 2025 and February 2026. The campus planning process was informed by working closely with a Working Group and Steering Committee at regular meetings and included representatives across the University's student groups, faculties and administrative units. Milestone deliverables were presented for feedback throughout each phase of the campus planning process.

The Campus Plan has been shaped by consistent input from stakeholder interviews and meetings with students, faculty, staff, members of Indigenous communities, and representatives from the City, Region, and local transit agencies.

Feedback Summary

To ground the Campus Plan in the lived experiences of the campus community and to meaningfully include input from knowledge holders, stakeholders, and rights holders, the consultant team undertook an extensive and inclusive 12-month long engagement process. This process invited many perspectives, ensuring the Plan reflects a wide range of priorities and aspirations.

The engagement process successfully brought together over 2,900 voices and created multiple opportunities for dialogue and knowledge-sharing.

The following feedback summary reflects key themes gathered throughout the development of the Campus Plan, and reflects the concerns and opportunities brought forward by participants.

PHASE 1

Jan 25' - May 25'

- Background Doc. Review
- Draft Guiding Principles and Vision
- Stakeholder Engagement Sessions
- Existing Condition Memos
- Open House #1: March 5

PHASE 2

May 25' - Oct 25'

- Draft 3 Scenarios
- Determine Preferred Concept
- Draft Land Allocation
- Draft Sustainability Strategy
- Draft Transportation and Parking Strategy
- Space Optimization Study
- 3D Model Development
- Engagement Summary
- Open House #2: June 25

PHASE 3

Oct 25' - Nov 25'

- Draft Campus Plan Document:
  - Focus Area Development
  - Draft Phasing and Implementation Plan
  - Engagement Summary
- Open House #3: November 5

PHASE 4

Nov 25' - Feb 26'

- Final Draft Campus Plan Document
- Board of Governor's Meeting
- Open House #4: Late January

Figure 6. Campus Planning Process

Over 24 Community Engagement Events

650+ Open House and Design Charrette Participants

- Phase 1-4: Faculty, staff, and students participated in four on-campus open house events

2,900+ Online Survey Participants

- Phase 1-3: Four online surveys administered

5+ Design Consultation Sessions and Conversations

- Office of Indigenous Relations
- Indigenous Faculty Council
- Indigenous Staff Network

100+ University Staff and Faculty Members Interviewed

Figure 7. A student design charrette for the Campus Plan was held on May 28, 2025 to obtain their early ideas and comments.

Figure 8. Students writing their suggestions on the scale model of the existing campus

What We Heard

The following themes emerged throughout this year-long Campus Plan consultation process. These themes informed the development of the Campus Plan's Vision, Guiding Principles, and Design Frameworks.

Theme 1: Social and Financial Sustainability

- Address deferred maintenance in a fiscally responsible manner while creating a practical phasing and implementation plan for the campus.
- Renew and reuse buildings wherever possible.
- Integrate sustainable and climate responsive design in retrofits, renewals, and new developments.
- Consider opportunities to develop affordable housing, intergenerational housing, net-zero buildings, and mixed-use development.

Theme 2: Safety, Accessibility, and Creating a Legible Campus

- Ensure existing and new buildings comply with Accessibility for Ontarians with Disabilities Act (AODA) standards and move towards a performance-based approach to accessibility.
- Develop consistent signage, wayfinding, lighting, and furnishings within and across the campus.
- Consider diverse abilities holistically, including cognitive, energetic, behavioral, and physical abilities when improving accessibility across campus.

Theme 3: Inclusive Spaces, Diversity, and Placemaking

- Create opportunities for playful indoor and outdoor areas, diverse programming, and four-season spaces.
- Develop placemaking opportunities across campus to increase a sense of well-being and belonging.
- Promote Indigenous wayfinding, art, storytelling, and history of the land.
- Create multi-faith spaces and multilingual signage explaining the use of spaces.

Figure 9. Open House Presentation in Phase 3 of Campus Planning Process

Theme 4: Flexible Learning, Research, and Collaborative Spaces

- Develop the campus as a living laboratory and showcase innovation, research, teaching, and learning indoors and outdoors.
- Create outdoor study spaces, lounge areas, seating, and meeting areas.
- Create multi-purpose spaces that allow for collaboration, quiet studying, event spaces, lounge spaces, experiential learning spaces, maker spaces, informal social areas, research areas, common spaces, and bookable spaces on campus.
- Strengthen opportunities for interdisciplinary collaboration between faculties, academic disciplines, and public and private sectors.
- Create more common spaces for graduate students and alumni, including private meeting rooms for co-op students to have interviews or study for exams.

Theme 5: Multi-modal and Connected Campus

- Enhance campus gateways and entrances.
- Establish strong connections and relationships with the surrounding community, alumni and within the University.
- Address pinch points for crossing Ring Road, especially at William Tutte Way.
- Create better east-west connections across campus.
- Revitalize Ring Road to reduce traffic and be more pedestrian and bike-friendly.
- Create better connections to North Campus.

Theme 6: Enhance and Enrich the Natural Environment

- Strengthen opportunities for land-based learning, outdoor teaching and research, and community engagement.
- Reinforce safety and accessibility to the natural environment, allowing for students to conduct research and active learning.
- Protect existing green spaces as new developments have begun to encroach on the remaining spaces.
- Increase opportunities on campus to grow food and promote health and wellbeing.

Guiding Documents

The Campus Plan is informed by existing reports prepared by the University of Waterloo, including, but not limited to, those summarized below.

The Campus Plan process was completed prior to the finalization of the R+T Park Master Plan and the Library Strategic Plan Update. Efforts to align these plans with the Campus Plan continued as these parallel initiatives progressed.

Waterloo at 100 | Strategic Vision and Plan (W100)

The W100 plan provides a strategy for the University of Waterloo to 2057. The plan envisions the University as "a community of curious, collaborative, innovative and entrepreneurial problem-solvers and leaders who seek to understand and identify equitable and sustainable solutions for the future of humanity and our planet."

Key themes of the W100 document include decolonization and sustainability, prioritizing wellbeing and becoming carbon neutral. Integration with the surrounding community is emphasized.

As a leader in co-op and work-integrated learning, the University of Waterloo's approach to teaching and learning is unconventional. W100 notes the University's long-term commitment to focusing on global and local futures relating to society, health, sustainability, technology, and economy.

W100 contains a vision of the campus to the year 2057, noting that on-campus learning will continue to be important for a more social, interactive learning experience between students and teachers. The plan notes that advanced teaching technology will enhance work and connections, helping students achieve greater academic potential.

The plan notes that the University of Waterloo will be financially and environmentally sustainable and carbon neutral, culturally inclusive, equitable, and accessible physically and economically. Further, the University will promote and prioritize physical and mental health well-being and foster a deep sense of belonging.

The values and goals of the Waterloo at 100 plan have strong spatial implications, and the Campus Plan process aligns the development of the campus with the University's strategic vision.

Campus Housing Facility Strategy (CHFS)

The CHFS was prepared in 2022, and an addendum in 2024. The Strategy outlines the present condition of campus housing buildings and provides a strategy for demolition and development of housing on the University's campus. The strategy recognizes the issue of deferred maintenance and supports the capacity to serve future students with on-campus housing options that meet the needs of a world-class institution.

The CHFS is an evolving document. The Campus Plan has been prepared with the latest available information regarding the assumed timeline for removal of existing housing and construction of new housing.

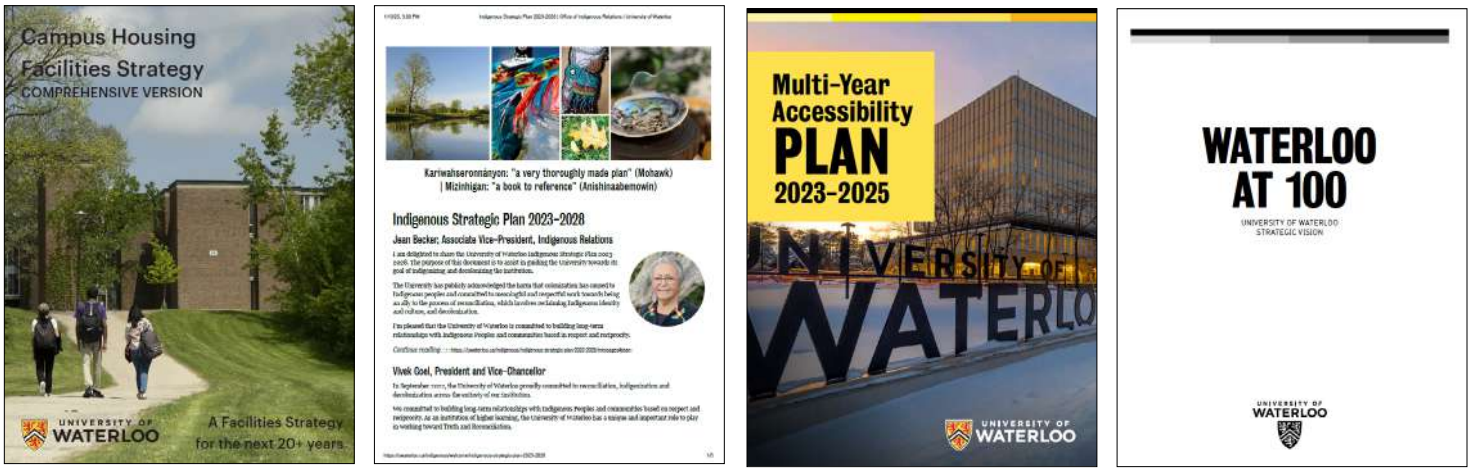


Figure 10. A selection of guiding documents from the University of Waterloo

Environmental Sustainability Strategy (ESS)

The ESS was prepared in 2025 and is presently being updated by the University. The report establishes five foundational actions:

1. Core Value: lay a foundation for sustainability as an important shared value
2. Sustainability Office: build institutional capacity for monitoring, communication, and support
3. Sustainability Action Fund: mobilize resources at all levels to enable action
4. Continual Reporting: transparently communicate progress and celebrate successes
5. Living Laboratory: collaborate between academic and operational units to make the campus a model of sustainable development for study and research

The ESS provides a number of sustainability actions that have informed the Campus Plan, including using the campus as a living lab, expanding stormwater management technologies on campus, reducing water consumption, becoming a zero-waste campus by 2035, and increasing sustainable transportation opportunities.

Multi-Year Accessibility Plan (MYAP)

The MYAP summarizes past progress on accessibility at the University of Waterloo. Section C summarizes progress on the design of public spaces at the campus, recognizing past commitments to develop a consistent strategy to address accessibility limitations, cataloging physical space elements, and embedding accessible features into the University of Waterloo's standard facilities management protocol.

Indigenous Strategic Plan (ISP)

The ISP 2023-2028 addresses the Truth and Reconciliation Commission's Calls to Action and UNDRIP within the University of Waterloo. The ISP sets goals that are relevant to the Campus Plan, including bolstering relationships between local Indigenous communities and the University, having physical places for Indigenous identifiers on campus, and strengthening Indigenous knowledge through education. Specifically, the ISP has a goal of braiding a connection to lands and waters through meaningful partnerships and relationships with Indigenous Peoples and communities.

1.3 Existing Conditions

The Campus Plan Study Area extends north to Frank Tompa Drive, east to Phillip Street, south to Seagram Drive, and west to Westmount Road. The Study Area does not include the Affiliated and Federated Institutions or the Satellite Campuses.

Campus History

The University of Waterloo was established in 1957 with a co-operative learning model. The early setting of the University was predominately agricultural, with initial buildings concentrated at the south edge of today's campus. Early buildings that remain on campus include the Grad House, reflecting the agricultural nature of the area, and Brubacher House, reflecting the German Mennonite community that settled in the Region in the late 1700s to early 1800s. Brubacher House continues to express this history through its on-site and digital museum exhibits and artist-in-residence program.

In 1962, the University purchased over 200 acres of land to extend the campus. The north and northwest campus were purchased in the late 1960s, and remained agricultural for many years. The 1960s saw the construction of many of the campus buildings, including the iconic Dana Porter

Figure 11. Aerial image of campus from southeast, with early buildings: Grad House, Douglas Wright Engineering, E2, E3 (partial), and Physics, 1961 (University of Waterloo Library Special Collections and Archives)

Figure 12. Aerial image of campus from southeast, with early buildings annotated in yellow, 2025 (Google Earth; annotation by Brook McIlroy)

Arts Library (1967) which was expanded in 1970, in response to an increasing student population. During this time, Ring Road was developed, providing vehicular circulation and defining the campus's edge. Beyond these edges, the University constructed campus housing, with the oldest being V1 (1966), Minota Hagey Residence (1967), and Ron Edyt Village (1968), followed by the UWP Courts and Beck and Eby Hall (1972). The separation of housing from academic uses was a common approach to campus development in this era.

Since the 1960s, the Inner Campus has exhibited an incremental development pattern, in which existing and new buildings were sited close together, resulting in clustered building patterns with a variety of outdoor space conditions including courtyards and forecourts. Outside of Ring Road, the campus has evolved to include additional residence buildings (CLV), recreation (CIF), and engineering (E5/E7) buildings, in addition to the R+T Park north of the campus. Within the Campus Plan boundary, over 200 buildings, the internal street network, and approximately 8,000 parking spaces occupy roughly 32% of the campus area.

Figure 13. Existing Condition of the University of Waterloo Campus, 2025

Since 2010, the University of Waterloo has continued to grow, primarily within the core, east, and south portions of the campus. Buildings and building additions have continued a pattern of development in close proximity to new buildings, sometimes with covered pedestrian walkways between buildings. In 2014, the University of Waterloo purchased EC 1 to 5 from Blackberry, adding over 1,000 parking spaces and five buildings to the campus.

Currently, a new residential building (NRB1), Math 4, and an expansion to the Optometry Building are under construction. The extension of academic buildings within the Inner Campus has resulted in a tighter arrangement of building fabric and the erosion of campus open space. Presently, an estimated 36% of the area bound by Ring Road is occupied by building footprints, with 14% in campus streets and 15% in paved surfaces and surface parking, leaving approximately 35% for open space.

Building Name	Year of Completion
Mathematics 3 (M3)	2009-2011
Engineering 5 (E5)	2010
Engineering 6 (E6)	2011
Environment 3 (EV3)	2011
Quantum Nano Centre (QNC)	2012
Claudette Miller Hall (CMH)	2017
Engineering 7 (E7)	2018
Physical Activities Complex (PAC) and Student Life Centre (SLC) expansion	2021
Science Teaching Complex (STC)	2015
Expansion (EXP)	2016
Autonomous Vehicle Research and Intelligence Lab (AVRIL)	2019

Figure 14. Buildings and additions constructed on the campus since 2010.

Zoning By-law

Three zoning designations apply to the University of Waterloo's campus: University College (UC) Zone, Station Area Business Employment Two (E2A) Zone, and Open Space Zones (OS1, OS2).

The UC Zone applies primarily to the Inner Campus and supports a broad range of educational, governmental, commercial, and community uses. These include traditional university functions, such as academic facilities, residences, and offices, as well as complementary and ancillary services like cafés, personal service shops, and maker spaces. Zoning policies reinforce a pedestrian-oriented campus environment.

Due to Area Specific Policy 34 in the Official Plan, campus lands south of Columbia St W, east of the ION, north of University Ave W, and west of Phillip St are also designated as an E2A Zone. The E2A Zone permits a variety of light industrial, office, and technology-based employment uses with associated retail and service uses allowed under defined conditions. The E2A Zone also includes detailed Active Frontage policies requiring active uses such as cafés, offices, and educational centers to front the street at-grade, fostering a lively, pedestrian-focused urban fabric.

The Open Space Zones, including OS1 (Parks & Recreation) and OS3 (Conservation), safeguard natural features and community amenities. OS1 permits uses such as community centers, municipal recreation facilities, and trail networks, while OS3 restricts development to environmental protection and low-impact activities, like conservation, education, and beekeeping.

Three site-specific zones further refine land use on strategically important parcels. Notably:

- C139/C255 (UC-81) at University Avenue and Seagram Drive restricts development to university residences, academic uses, and a limited proportion of ground-floor commercial space. There are also specific setback requirements related to the adjacent rail corridor.

- C159 (UC 81 & E2A) applies a holding provision to East Village lands pending environmental approvals and compatibility assessments with nearby industrial uses.

Cultural Heritage Landscape

In 2019, the City of Waterloo Council approved listing the University of Waterloo on the heritage register as a Cultural Heritage Landscape. The listing is supported by a Cultural Heritage Landscape Study , which describes 27 significant landscapes throughout the city. The study lists preliminary heritage attributes, including the naturalistic campus landscape and the evolving collection of institutional buildings.

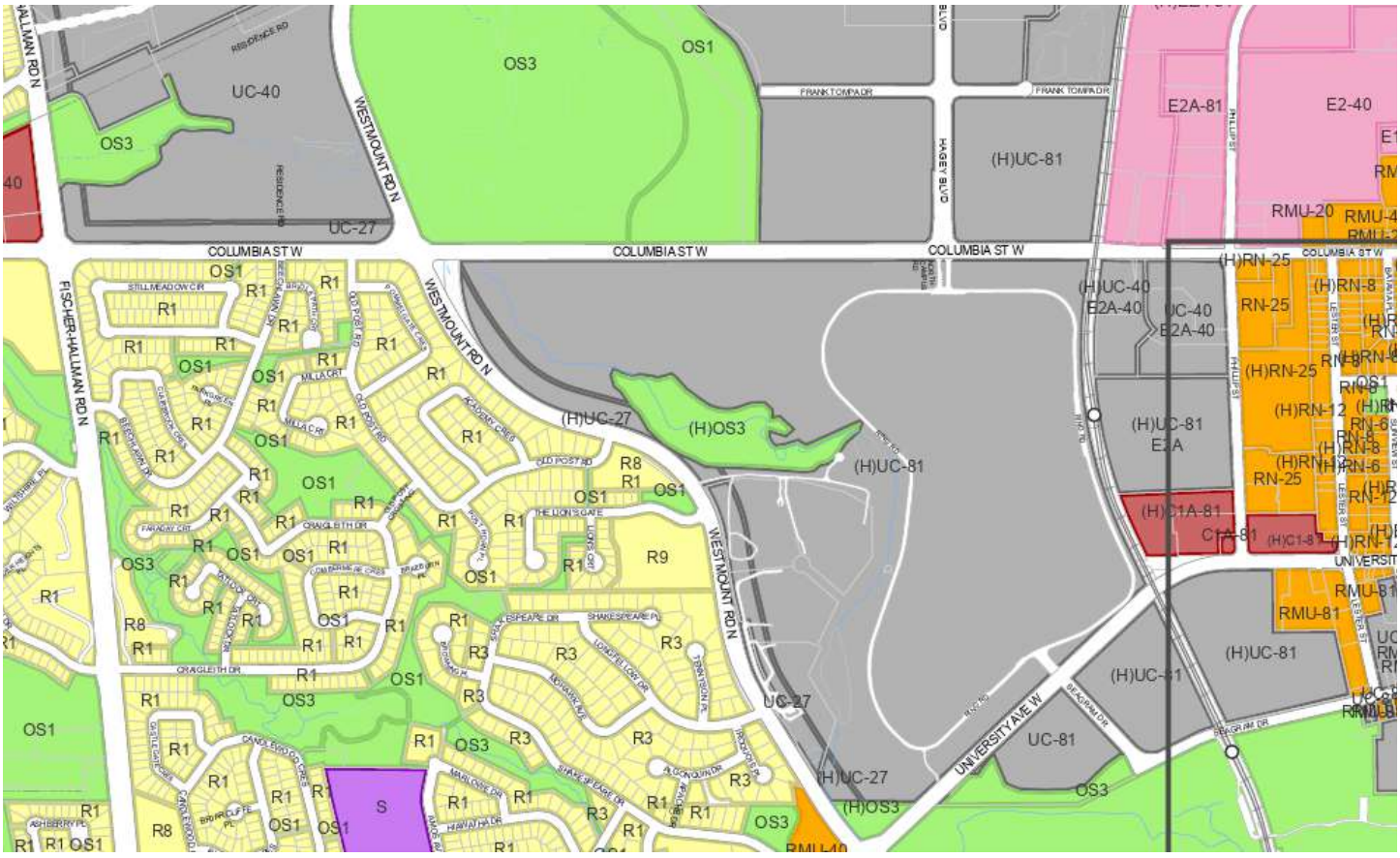


Figure 15. Excerpt of City of Waterloo Zoning By-law Schedule A

Figure 16. Students enjoying informal campus social space (University of Waterloo)

2.0

Vision and Guiding Principles

2.1 Vision and Guiding Principles

2.1 Vision and Guiding Principles

Campus Plan's Vision

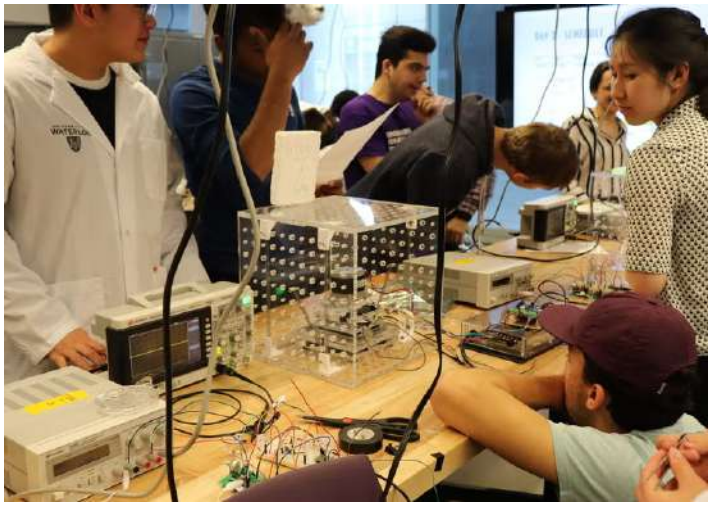
The University of Waterloo Campus Plan envisions a campus where ***people and curiosity thrive***. As an inclusive and future-focused environment, the campus will foster innovation, collaboration and sustainability.

By integrating advanced technology, green infrastructure, and accessible design, the campus will become a ***living laboratory*** and a resilient environment for learning, connection, and everyday life.

Campus Plan's Guiding Principles

Five guiding principles have been developed for the University of Waterloo Campus Plan through collaboration with the Working Group, Steering Committee, and the campus community.

These principles are designed to guide, direct, and inform decision-making for future campus developments, planning, and design. Each guiding principle supports the vision and goals outlined in Waterloo at 100 and aligns with the frameworks established by the University.



Innovative and Creative Campus

Foster an innovative and creative campus by providing flexible spaces that inspire curiosity, experimentation, interdisciplinary dialogue, and opportunities to showcase the University's work.

Community-Oriented and Inclusive Campus

Cultivate a welcoming and inclusive campus environment that responds to diverse cultural needs, integrates community-facing spaces, supports truth and reconciliation, and strengthens relationships with neighbouring communities.

Safe, Accessible, and Healthy Campus

Create a connected, human-scaled mobility network that enhances safety, well-being, and universal accessibility.

Natural and Sustainable Campus

Create a natural and sustainable campus that serves as a living laboratory for innovation, embeds environmentally responsible practices, advances carbon-neutral operations, and enhances the landscape through restored ecology and expanded open space.

Financially Resilient Campus

Ensure long-term financial sustainability by prioritizing design excellence and delivering buildings and open spaces that are efficient, adaptable, and cost-effective to operate and maintain.

Figure 17. Campus pathways extend through the Peter Russell Rock Garden (University of Waterloo)

3.0

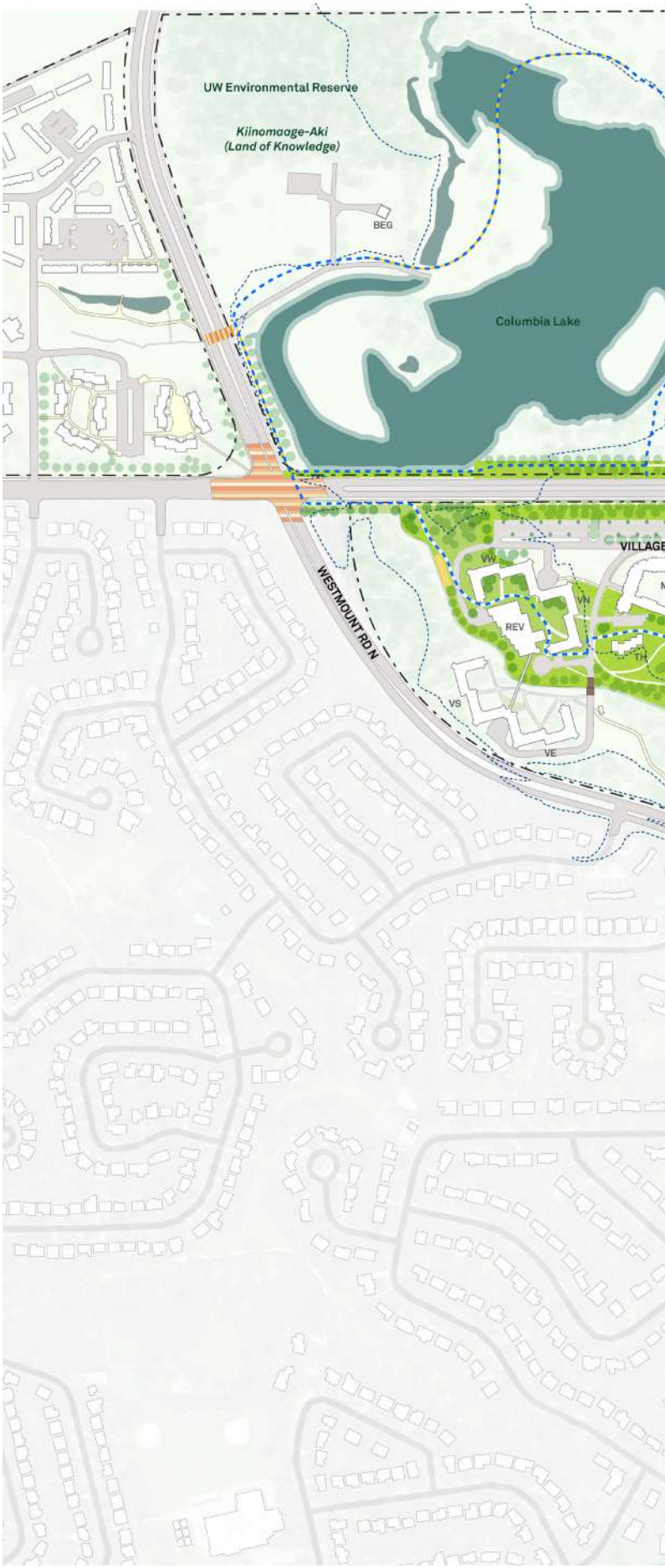
Campus Plan and Design Frameworks

3.1 Campus Plan

The Campus Plan re-imagines the University of Waterloo's campus as a dynamic environment for hands-on learning, interdisciplinary collaboration, and exploration. The Campus Plan reflects the University's ambition to improve existing buildings and open spaces through renovations and retrofits, and recommends the incremental construction of new buildings and open spaces.

Rooted in Indigenous place-keeping, ecological stewardship, and long-term adaptability, the Plan establishes four Design Frameworks to guide the campus's physical evolution over the coming decades.

Illustrated here, the Campus Plan explores key concepts (described on page 30 and 31) to demonstrate how these ideas are applied across the campus.




Disc Golf Course
FRANK TOMPA DR
BRH
Sports Fields
CIF
Warrior Field
HAGEY BLVD
N-1
N-2
BSC
OPT
COLUMBIA ST W
W-5
W-4
W-1
W-3
W-2
FED
C-1
RING RD
EXP
BMH
LHI
C-2
PAC
ERC
CSB
COM
M3
GSC
M4
WILLIAM TUTTE WAY
ION LIGHT RAIL
EC-12
EC-11
EC-13
EC-14
EC-15
EC-10
EC-8
Transit Hub
AVR
EC-9
PHILLIP ST
ECH
E5
E7
E6
Healing Forest
SLC
MC
C2
DC
Strauss Lake
HS
UW CAMPUS LANE
QNC
ESC
EIT
E3
B2
B1
STC
STJ
REN
NH
PHY
E2
CPH
Laurel Creek
LIB
RCH
UTD
ML
DWE
EV3
EV2
EV1
C-5
TC
C-3
NRB
UNC
UWC
CMH
S-6
S-1
S-2
S-3
S-4
S-5
UEC
USC
Laurel Lake
HH
PAS
CGR
WESTMOUNT RD N
RING RD
C-4
UNIVERSITY AVE W
SEAGRAM DR
Tree Nursery
Waterloo Park

Key Concepts:

INDIGENOUS PLACE-KEEPING & INNOVATION PATHWAYS: Central to the Campus Plan is an explicit acknowledgment of the traditional territories of the **Neutral, Haudenosaunee, and Anishnaabeg** peoples. The Plan embeds Indigenous knowledge, recognizing its place in the wider Open Space, Mobility, and Innovation and Creativity Frameworks of campus:

1. **The Two Row Path** – a north-south connection that honours the principles of mutual respect, partnership, and shared stewardship. The Path becomes a place of reflection and cultural learning, integrating materials, interpretive elements, and Indigenous-led design.
2. **The Innovation Trail** – an experiential route that weaves together campus destinations, ecological features, and cultural installations, creating opportunities for digital storytelling, education, and celebration of Indigenous histories and recognition of innovative homegrown research at the University of Waterloo.
3. **Kiinomaage-Aki (Land of Knowledge)** – an accessible learning landscape within the Environmental Reserve, offering immersive experiences rooted in Indigenous teachings, ecological restoration, and land-based pedagogy.
4. **The Healing Forest** – a contemplative space dedicated to reconciliation, healing, and education, forming part of a national network of Healing Forests across Canada.

ECOLOGICAL STEWARDSHIP & OPEN SPACE NETWORK: Situated within the **Laurel Creek watershed,** the University of Waterloo retains some of the largest contiguous open spaces within the City. The Campus Plan strengthens the campus's role as an ecological corridor and living laboratory by:

5. **Enhancing access** to naturalized areas, wetlands, and wooded landscapes for learning, recreation, and well-being.
6. **Restoring and expanding green infrastructure**, including stormwater management features, native planting zones, and habitat-supportive landscapes.
7. **Connecting open spaces** through a consistent, multi-modal network of trails, pathways, and outdoor gathering spaces.
8. **Integrating climate adaptation strategies** such as flood-resilient landscapes, shade and cooling strategies, and net-zero site design.

Figure 19. The Campus Plan envisions expanding the existing open space network (University of Waterloo)

INNER CAMPUS RENEWAL & STRATEGIC REDEVELOPMENT: The Plan addresses the aging infrastructure within the Inner Campus through a coordinated strategy of **building renewal** and selective building removal, strategic redevelopment, and public realm enhancement:

9. **Targeted removal** of buildings with unsustainable deferred maintenance, allowing renewal of key sites.
10. **Creation of signature open spaces** that reinforce campus identity, improve wayfinding, and accommodate programming throughout the year.
11. **Development of landmark, future-ready buildings** that support interdisciplinary research, flexible learning, student services, and emerging academic priorities.
12. **Transformation of the public realm** through pedestrian-oriented streets, plazas, and campus greens that elevate the everyday campus experience.

NORTH CAMPUS INTEGRATION & RESEARCH EXPANSION: The North Campus becomes a growth area that strengthens the relationship between the campus and the **R+T Park**:

13. **Improved connectivity** via multi-modal links, pathways, and transit integration with the Inner Campus.
14. **New academic and administrative buildings** positioned to support research, innovation, and emerging partnerships.
15. **Structured parking** integrated within new development to reduce surface lots and free land for higher-value uses.

SOUTH & WEST VILLAGES- DIVERSE HOUSING AND STUDENT LIFE: Supporting the University's **Campus Housing Facilities Strategy**, the Plan envisions the South and West Villages as distinct yet complementary residential mixed-use villages to support the campus:

16. **South Village** is intended to become a vibrant student-centered neighbourhood offering housing, dining, wellness supports, and indoor and outdoor study and social spaces.
17. **West Village** accommodates a broader mix of housing types—including upper-year and potentially graduate student accommodations—supported by recreation amenities and community-serving spaces.
18. **Integrated outdoor spaces** provide safe, inclusive, and accessible environments for socializing, play, study, and gathering.
19. **Walkable connections** strengthen links to academic buildings, transit, and daily amenities.

EAST VILLAGE FLEXIBILITY & LONG-TERM OPPORTUNITIES: The East Campus north-east block is re-imagined as a fully integrated mixed-use campus village. A **highly adaptable framework** is provided for long-term growth, for the evolving needs of the University and surrounding community:

20. **Potential new academic buildings** that respond to shifts in program demand, research priorities, or strategic partnerships.
21. **Block and street configurations** that can accommodate a range of development types over time.

3.2 Overview: Design Frameworks

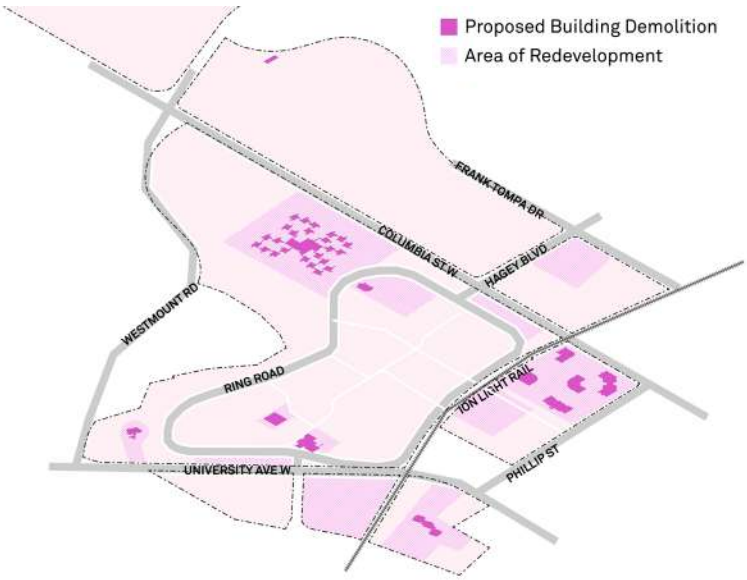
Design frameworks provide a cohesive strategy for guiding future growth and changes on campus. The frameworks offer flexibility in programming while embedding essential principles such as sustainability, safety, accessibility, wellness, placemaking, and stewardship into a unified vision. These frameworks ensure that new and existing developments maintain a balanced relationship between academic spaces, campus housing, administrative uses, campus life, and open areas.

OPEN SPACE FRAMEWORK

The Open Space Framework considers:

- Key Landscape Enhancements
- Key Open Spaces
- Key Open Space Connections

DEVELOPMENT AND PROGRAMMING FRAMEWORK



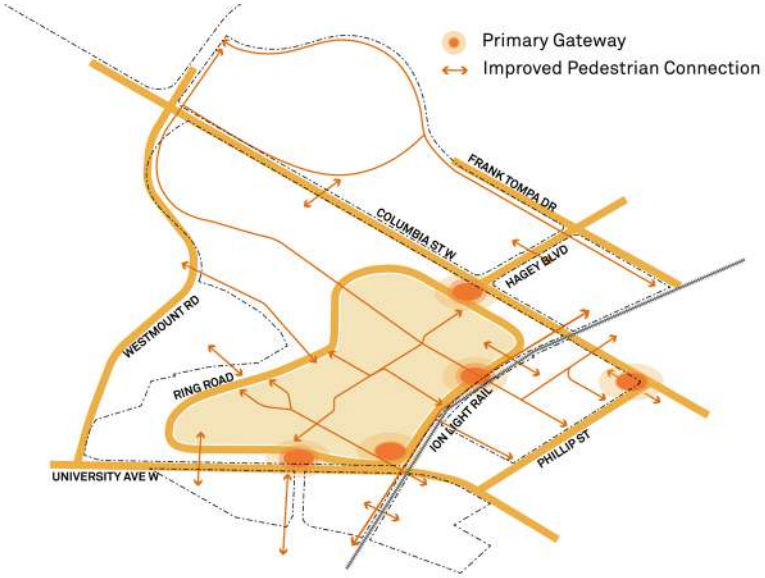
The Development and Programming Framework considers:

- Campus Program Needs and Development Enhancements
- Key Building Projects
- Sustainable Buildings

By shaping land use and guiding development, pedestrian circulation, and the integration of open spaces with infrastructure, the frameworks support a development approach that reinforces the campus's unique character and identity.

The frameworks provide a network-based approach to realizing the guiding principles through campus design. The strategy is further refined by the Key Focus Areas and Gateways (Chapter 4.0), which provide site-specific design concepts and recommendations.

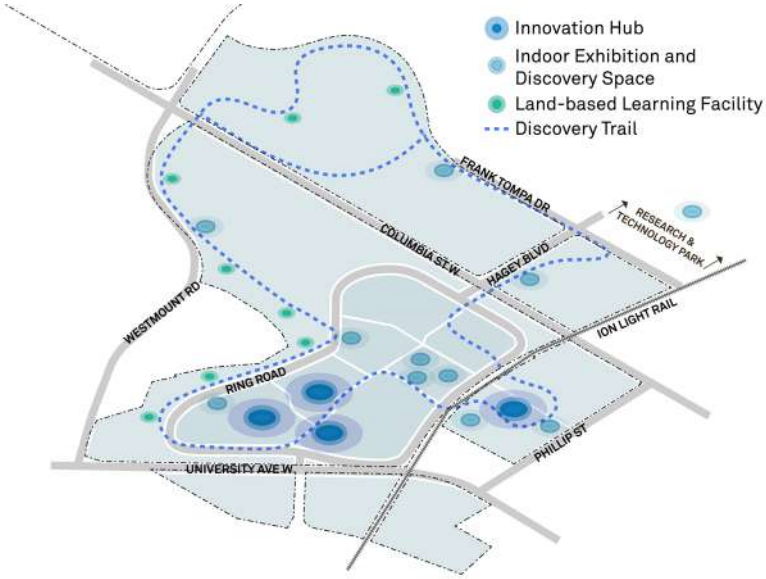
MOBILITY FRAMEWORK



The Mobility Framework considers:

- Key Mobility and Gateway Enhancements
- Path Networks
- Transforming Campus Streets
- Shared Streets
- Parking and Loading
- Tunnel System

INNOVATION AND CREATIVITY FRAMEWORK



The Innovation and Creativity Framework considers:

- Interior Innovation Spaces
- Outdoor Innovation Spaces

3.3 Open Space Framework

The Campus Plan is informed by the rich ecological and natural environment of the University of Waterloo and its connection to the Laurel Creek watershed. Situated within this watershed, the campus contains some of the largest open space in the City of Waterloo. The campus is home to over 1,900 species, with green spaces predominantly located in the northern and western edges of campus.

In alignment with the University's Environmental Sustainability Strategy and Indigenous Strategic Plan, the University of Waterloo is committed to the protection and enhancement of the ecological integrity of its grounds to promote cultural inclusion and ecological resilience.

The Open Space Framework integrates landscape design, placemaking, and ecological infrastructure within a cohesive, campus-wide system. The Framework envisions green corridors that extend throughout the campus and into surrounding areas, reinforcing connections and enhancing the Laurel Creek, Columbia Lake, and the Healing Forest. The Framework balances sustainability, environmental resilience, and civic life, resulting in a vibrant, inclusive, and educational public realm.

The Open Space Framework fosters the integration of research, learning, wellness, health, and community development. It balances natural landscapes with recreational, social, and academic gathering spaces while accommodating renovated, redeveloped, and new campus buildings.

Figure 20. Open Space Framework

- Campus Boundary
- Plazas
- Quads/Commons
- Recreational Fields
- Courtyards
- Enhanced Landscape Buffer
- Learning Landscapes
- Community Gardens


ION Rail
Hagey Blvd.
Phillip St.
Healing Forest
Laurel Creek
Seagram Dr.
Westmount Rd. N
Tree Nursery
University Ave. W
Waterloo Park

Key Landscape Enhancements

1. An Arboretum Trail to Increase the Tree Canopy:

Creating an on-campus tree nursery at the site of Minota Hagey Residence presents an opportunity to strengthen relationships with Indigenous groups and the broader community, while also serving as a valuable teaching resource for students. The Campus Plan supports increasing the urban tree canopy across campus to mitigate flooding and the urban heat island effect, and increase carbon sequestration. Extending an Arboretum Trail along Laurel Creek can provide outdoor teaching and learning opportunities. This key initiative would enhance campus open spaces and support connections to Office of Indigenous Relations projects such as the Two Row Path, Healing Forest, and Land of Knowledge.

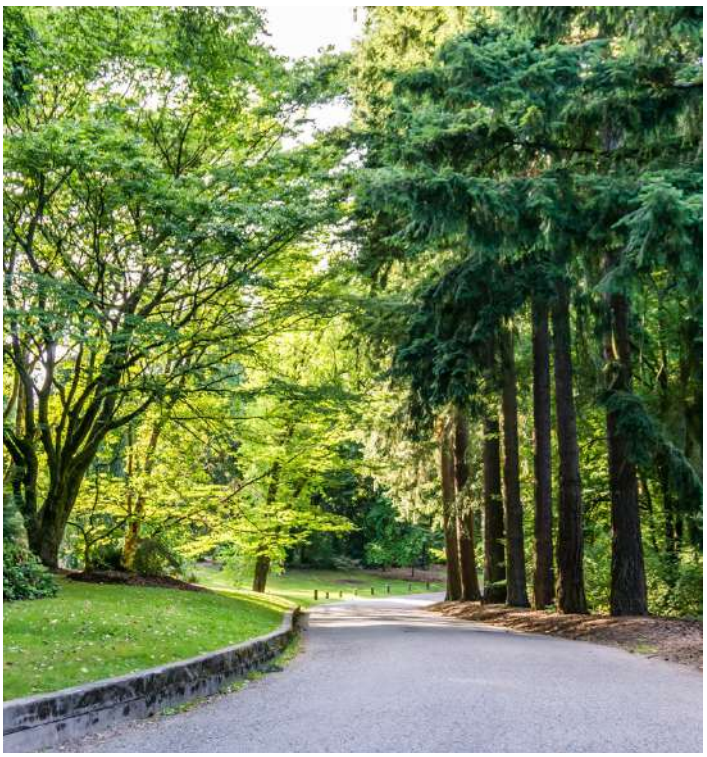


Figure 21. Established tree canopies enhance biodiversity and create comfortable climates for students, faculty, and staff (George Cole, Seattle Arboretum Loop)

2. Biodiverse Campus:

The Campus Plan supports transitioning from extensive and fragmented cultivated campus lawn areas to a more ecologically rich landscape. Multi-functional open spaces that balance ecological resilience, recreation, and social gathering, while reducing excessive hardscaping within the campus core can deliver ecological value and provide educational and cultural opportunities.

Figure 22. Introduction of native, drought-tolerant species on campus supports climate resilient landscapes while limiting maintenance requirements (Tom Arban)

Key Open Space Enhancements

1. Open Space as Village Courtyards and Commons:

New mixed-use residential villages include central gathering spaces as courtyards and commons framed by new residences with active ground floors. These projects, and other open spaces on campus, combine restorative green areas, accessible pathways, and multi-purpose open spaces that provide places for a mix of outdoor programs, informal recreation, and campus community gatherings. Outdoor spaces across campus support a welcoming environment programmed for year-round use.

Figure 23. Campus open spaces encourage a sense of belonging and spontaneous meeting between students, faculty, staff, and visitors

2. Revitalized Arts Quad:

The Campus Plan envisions a revitalized Arts Quad that enhances the Inner Campus with a signature open space. The revitalized Arts Quad showcases innovation within a generally open and flexible outdoor space for collaboration, informal gatherings and campus community building, including student orientation, graduation events, environment-based research, health and well-being. The existing grade change across the Arts Quad will be considered as a more even grade to promote access across and facilitate multiple programs.

Figure 24. Movable furnishings in outdoor spaces support flexible programming and activities (Michael Moran)

3. Gathering Structure: Adjacent to the Healing Forest, a dedicated gathering structure is envisioned as a space for teaching, reflection, and personal renewal. The design of the structure should be rooted in Indigenous iconography, and may reference key elements of traditional sweat lodge construction. The structure's orientation should align with the cardinal directions, with doorways positioned to reflect the sacred relationship to the four directions.

Key Open Space Connections

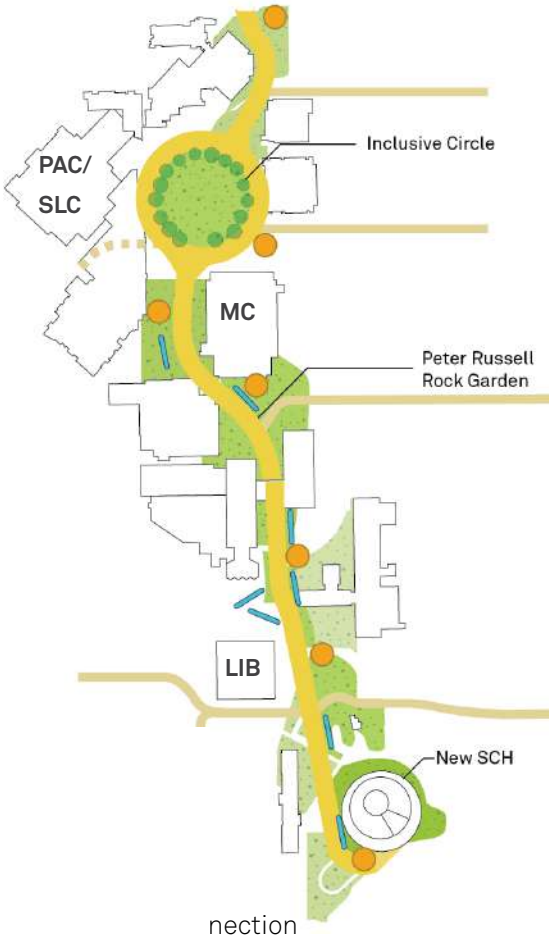
1. Two Row Path: An Indigenous inspired naturalized promenade within the main north-south walkway supports land-based learning and a vibrant public realm. Markers along the Two Row Path complemented by native plantings, sustainable stormwater infrastructure, and habitat areas provide opportunities for ecological and cultural learning.

The Two Row Path concept is inspired by the Teachings of the Seven Grandfathers, envisioning a tactile and visual experience to support wayfinding on campus. Inlays and interpretative art/signage can offer moments of discovery and reflection in gathering areas, supporting reconciliation on campus.

Two Row Path Markers are recommended to promote Indigenous knowledge, art, and storytelling. The Campus Plan envisions the co-design of the path and markers with on- and off-campus Indigenous groups.

Custom-designed benches are suggested to complement the Path and support diverse and accessible seating arrangements. In combination, seating, planting, and Markers can be designed to reinforce the Two Row Path as a living and culturally inclusive space.

Figure 25. Two Row Path Marker with bench seating



nection

Figure 26. Plan view of the Two Row Path and its supporting elements

2. Landscape and ecological corridors: The Campus Plan establishes a system of landscape and ecological corridors that connect the campus's ecosystems, open spaces, and mobility networks, complementing the Mobility Framework. Landscape and ecological corridors are intended to contribute to student and campus community well-being, provide social and teaching environments, and extend the ecological health of the Laurel Creek watershed and its associated natural areas.

Figure 27. Diagram of Arboretum Trail and Cross-Campus Connections

Campus Connections

The Open Space Framework includes the Arboretum Trail extending 1.5 kilometres along the western edge of campus, connecting the campus from Waterloo Park to the Environmental Reserve's Columbia Lake and the Land of Knowledge. The trail will connect to the Healing Forest in the West Village and include outdoor classrooms and spaces for research, study, and reflection.

The Plan promotes the revitalization of 3.1 kilometres of east-west pathways to further improve campus connections while enhancing ecological function, placemaking, and legibility. Existing service lanes are re-imagined to prioritize pedestrians and cyclists, while integrating native plantings and bioswales that strengthen biodiversity across campus.

Figure 28. Diagram of Ring Road in the Inner Campus

Ring Road

Ring Road is envisioned as a 2.6 kilometre green street that prioritizes safe pedestrian movement, enhances stormwater management, and reconnects the campus with its broader landscape. With dedicated cycling infrastructure, widened sidewalks, and improved connections to Laurel Creek, Ring Road can evolve into a green buffer that frames the campus and supports active mobility. Light outdoor structures placed strategically along Ring Road and Laurel Creek offer shade and weather-protected spaces for social interaction and outdoor learning spaces for students and faculty.

Figure 29. Established tree canopies support well-being on campus (University of Waterloo)

Open Space Recommendations:

General

- Protect and enhance areas with high ecological value including Laurel Creek watershed, Columbia Lake Conservation Area, and the Healing Forest.
- Consider undertaking a comprehensive Stormwater Management Plan to address existing drainage challenges, support sustainable campus growth, and strengthen climate resilience. A coordinated, campus-wide strategy could help reduce flooding risks, improve water quality, and protect natural systems while aligning future development with regulatory requirements and best practices.
- Collaborate with Indigenous faculty, staff, and students to identify areas on campus that are suitable to introduce traditional medicinal plants and sensory gardens as teaching spaces.
- To support the campus as a living lab, implement 'park and ecology-first' demonstration projects, where under-utilized spaces are replaced with naturalized landscapes planted with Indigenous species to increase stormwater infiltration and biodiversity.

Open Spaces

- Consider enhancing open spaces along pathways and within courtyards, forecourts and gardens to allow for flexibility in programming, social activities, recreation, research, and enhanced biodiversity.
- Design and program open spaces for four-season use, ensuring optimal sun/shade and wind conditions throughout the year.
- Prepare maintenance strategies for new or revitalized open spaces to ensure appropriate upkeep.
- Ensure engagement with relevant stakeholders and rights holders for the future design and implementation of open spaces.
- Create a dedicated memory landscape or garden space which transforms the University of Waterloo's campus into a living classroom that reflects the University's braided history and identity, and the ongoing journey towards reconciliation.

Pathways

- Establish key ecological and landscape corridors, including transforming the Two Row Path, Ring Road, and the Arboretum Trail, while creating vital open space pathways between these areas.
- Provide equitable access to nature on campus through well-marked and accessible paths with emphasis on promoting active transportation such as walking and cycling.
- Enhance street and pathway edge conditions with wayfinding signage, furnishings, and plantings to faciliate drainage and establish better connections to the surrounding community.

3.4 Development and Programming Framework

The Campus Plan reflects a Development and Programming Framework that emphasizes flexibility. It recognizes the University's ongoing effort to renovate and renew existing facilities and recommends the demolition of buildings where the re-use potential is limited, deferred maintenance costs are high, and the site's strategic location lends itself to replacement and renewal.

The construction of new buildings is anticipated to proceed incrementally, as outlined in **Section 5.0 Implementation Framework**. Each development will be guided by the University's evolving academic, research, and campus priorities, as well as emerging partnerships and available funding opportunities. This Framework leverages the highest and best use of campus lands by illustrating optimized development intensity and long-term build-out scenarios. Recognizing the need for flexibility, it reflects a high-level or notional vision for the planning and design of campus buildings, open spaces, networks, and gateways. This allows future architects and designers to interpret, refine, and advance the design of each site in response to future conditions and opportunities.

New buildings are located to improve their relationship with campus open spaces and pathways. Strong gateways at the north, east, and south of the campus improve connections to the neighbouring communities.

The Framework equitably distributes campus life spaces and ancillary services in active ground floors across campus. Mixed-use buildings anticipate a flexible approach to the provision of academic/ancillary, commercial, or residential programs in the long-term development of campus.

Figure 30. Development and Programming Framework

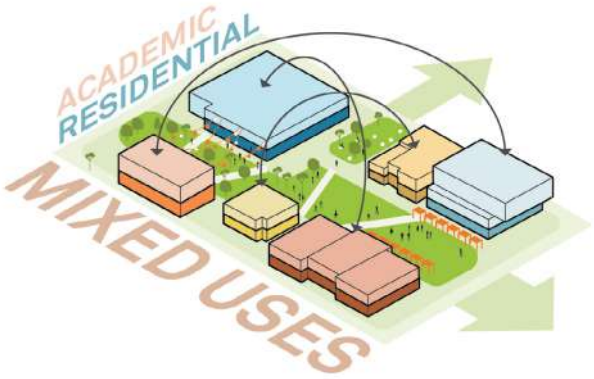

Phillip St.
Seagram Drv.
Westmount Rd. N
University Ave. W

Campus Program Needs and Development Enhancements

The Development and Programming Framework is informed by the Space Planning Study conducted by Resource Planning Group. As a flexible and strategic document, the Campus Plan provides high-level recommendations for programming and development that can be further referenced and refined through site-specific studies.

Currently, the existing total campus gross floor area (GFA) is approximately 604,700 m^2. The Campus Plan proposes a net increase of approximately 196,475 m^2 of academic, administrative, and campus life space, bringing the total potential campus GFA to 801,175 m^2.

These new buildings provide opportunities to replace end-of-life facilities and address the current shortfall of programmable space on the campus. As described in Section 5.0 Implementation Framework, the intent is to develop the campus incrementally, with an emphasis on the efficient use of existing spaces.



1. Academic Spaces

Most academic uses are currently concentrated within the Inner Campus, with a small number of teaching and research spaces located at the North and East Campus. There are limited shared spaces between faculties, excepting classrooms scheduled by the Office of the Registrar.

While the supply of classrooms and research labs is relatively aligned with institutional needs, issues exist with standardization, utilization rates, and equitable distribution across faculties.

The Campus Plan proposes the inclusion of more flexible building designs to support connections between faculties through centrally-assigned teaching and learning, and innovation spaces accessible to everyone. Where existing buildings are renovated, the incorporation of flexible classrooms and collaborative spaces are recommended.

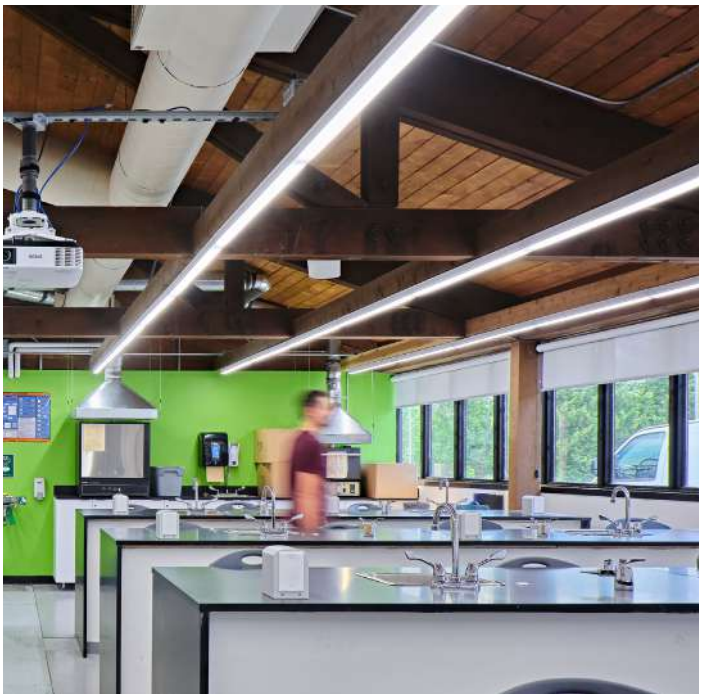


Figure 31. Teaching and learning spaces should be well-equipped with the required technology and provide flexibility to evolve with campus needs (Industryous Photography)

2. Campus Life Spaces

Existing campus life spaces, such as libraries, study space, bookstores, health and food services, and activity/exhibition spaces are currently concentrated in the Inner Campus. Through the expansion of active ground floors, the Campus Plan envisions new campus life spaces throughout the campus to support a sense of belonging on campus.

New residence buildings are recommended to incorporate flexible and open campus life spaces, particularly at grade level, to encourage socializing among residents and other peers. Informal seating, study areas and food services allow for passive activation of campus life spaces.

Figure 32. New social and study spaces can be co-located within the Villages to promote use by all students and the broader campus community (Monash University)

3. Office Spaces

Incrementally re-purposing and right-sizing office spaces where possible will result in more efficient use of space, and provide an opportunity to increase teaching, collaboration, and student-focused spaces across campus.

Office spaces are currently assigned on a permanent basis and are used by faculty, students, and administrative/ support staff. Both academic and administrative offices are currently concentrated on the Inner and East Campus. The Campus Plan recommends that office spaces generally remain within these areas, with new buildings integrating office space as required.

Figure 33. The office of Indigenous Relations is a multi-functional space for students, faculty, and staff.

4. Campus Housing

In line with the **Campus Housing Facilities Strategy** and **Addendum**, the Campus Plan supports the removal of 1,980 beds in demolished buildings, the addition of 3,810 beds in new residence buildings, with further additional beds in the renovation and renewal of existing student residence buildings. Changes to campus housing are anticipated to proceed in a phased manner. The construction of new housing will ensure that the University of Waterloo meets student expectations for quality and accessibility of student residence buildings. The Campus Plan proposes new residence buildings that can accommodate campus life programming and offer a mix of traditional and suite-style units for first- and upper-year students.

New residence buildings are located near existing housing facilities at the West and South Campus. The Campus Plan recommends siting these buildings around central commons and courtyards to provide greater access to outdoor space and provide a range of amenities for students, enhancing well-being and belonging. The proposed character and form of these buildings are described in **Section 4.2 Key Focus Areas.**

Figure 34. Communal and commercial elements enhance student housing experiences (Elkus Manfredi).

Key Building Projects

Recognizing the University of Waterloo's reputation as a leader in innovative co-op education, the Campus Plan envisions the renovation and renewal, or removal of existing buildings and construction of new buildings to meet the University's evolving needs. Future and existing buildings should ensure de-carbonization and climate resilience measures are integrated.

1. Renovation and Renewals

The Campus Plan identifies buildings for renovation and/or deep energy retrofits that support the Shift:Neutral carbon commitment and address accessibility barriers. Deep energy retrofits take a comprehensive approach to improving energy performance by upgrading the building envelope and mechanical systems to significantly reduce overall energy consumption. Potential retrofit strategies

Figure 35. The Physics building is recommended for minor renovation.

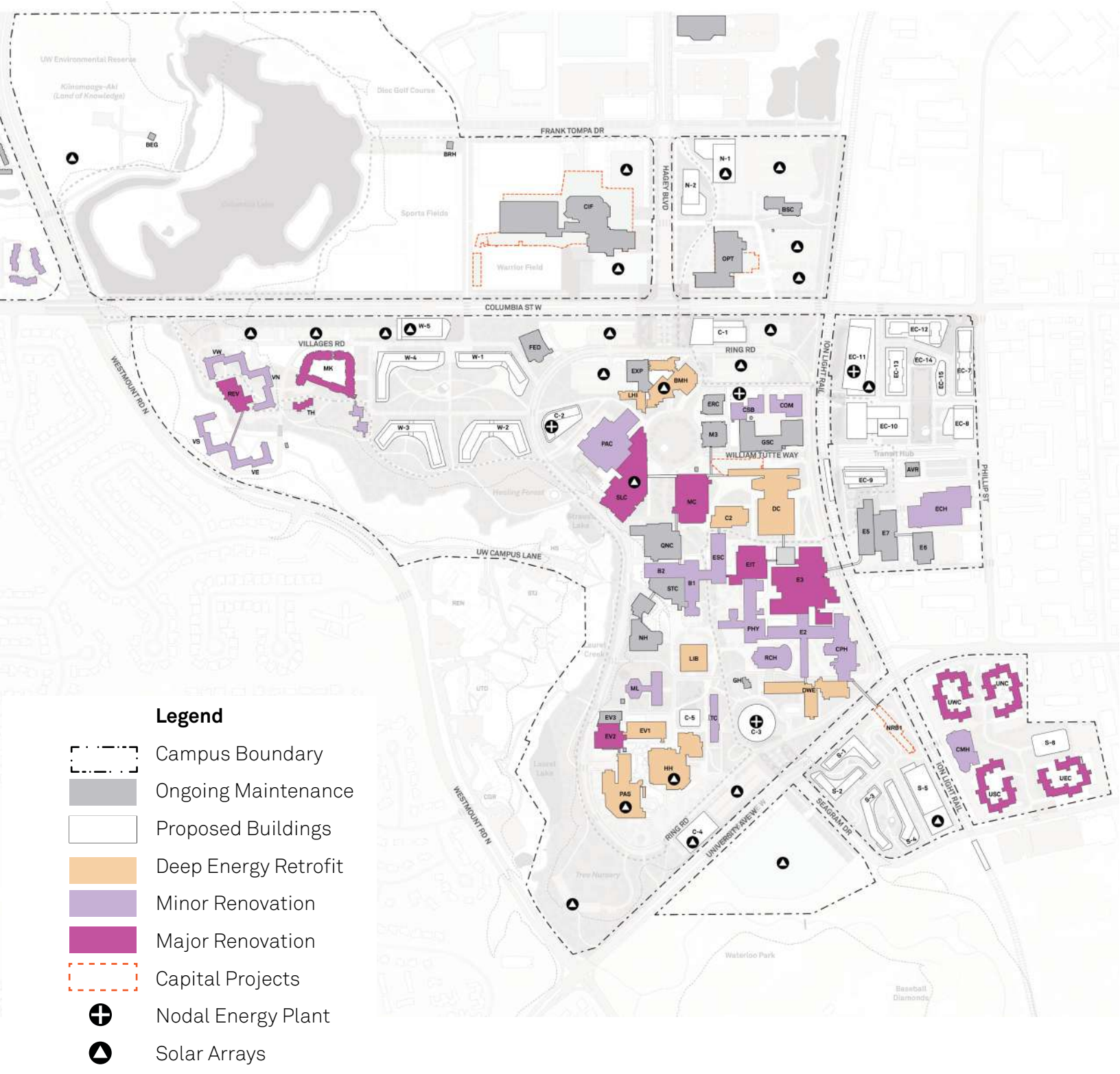


Figure 36. Building Renovation, Retrofit, and Renewal Plan

include upgrading insulation and windows, converting heating systems and smart building automation systems, and integrating renewable energy infrastructure, such as solar panels or district energy systems.

In addition to deep energy retrofits, the Campus Plan recommends district system nodal plants in key areas of campus as per the Shift: Neutral climate action roadmap. These include the current South Campus Hall site, the University Club site, the site near Parking Lot L, and in the East Village (**EC-11**). These decentralized, self-contained utility plants serve specific buildings and areas on campus. Integrated geo-exchange systems, electric hot water boilers, and gas backups will enhance resilience and redundancy in future climate events.

Renovations prioritize barrier-free buildings and sites, improving sustainability, re-purposing underused spaces, and upgrading teaching technology to align with evolving learning, social, and operational requirements.

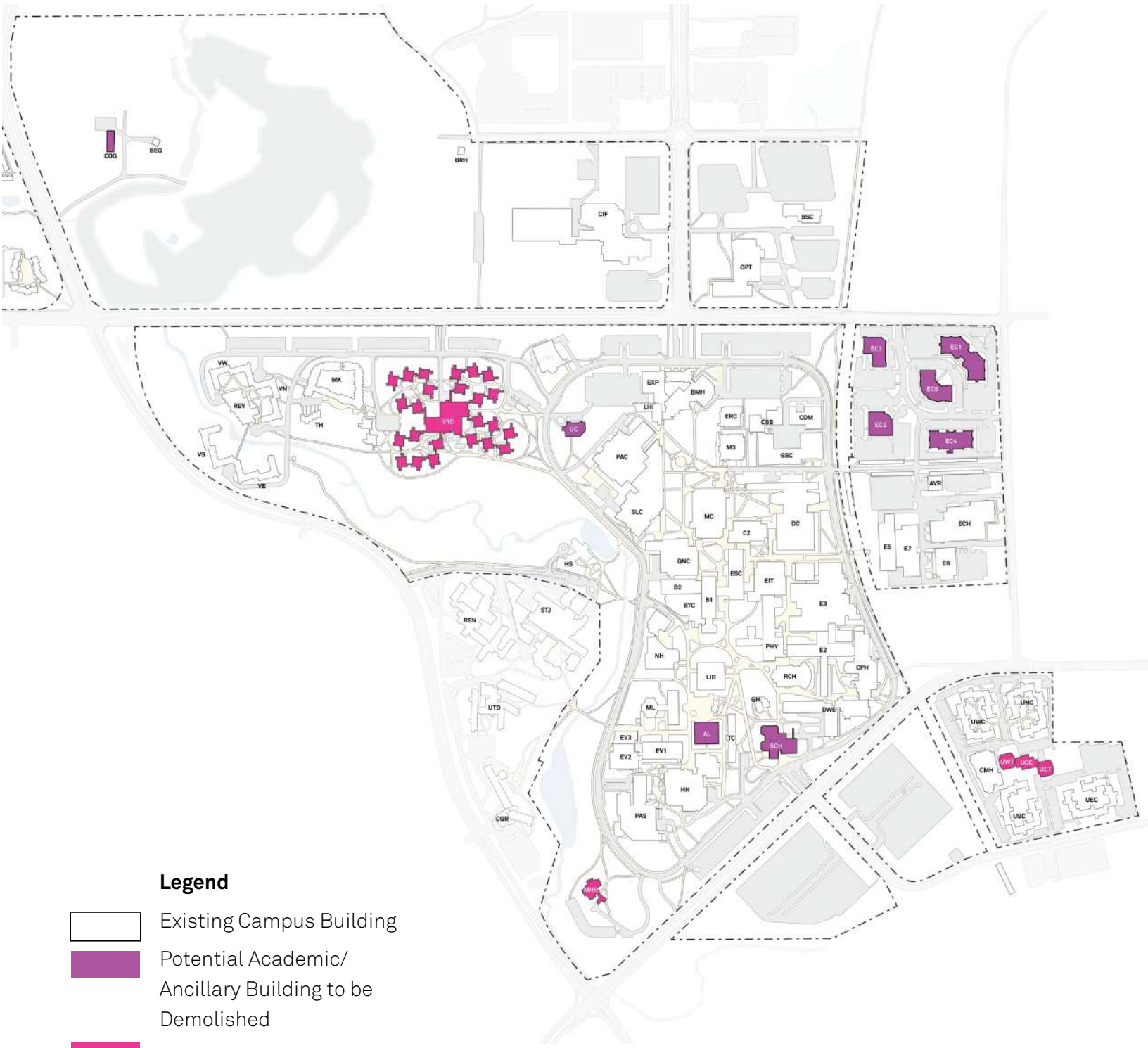
Figure 37. South Campus Hall is a building with high deferred maintenance. The site has strong potential to contain a new district energy nodal plant, an innovation hub, ancillary services, alumni spaces, an art gallery, and classrooms.

2. Demolition

Following review of available data, the Campus Plan recommends the demolition and replacement of nine academic and administrative facilities. The Campus Plan adopts the Campus Housing Facilities Strategy's recommendation to demolish the identified campus residence buildings.

The removal of select buildings alleviates deferred maintenance burdens and creates the opportunity for new buildings and open spaces to meet the University's vision for student wellness, accessibility and sustainability. Future campus buildings can provide modern teaching and learning space models, consolidated programs, energy efficient mechanical systems and high-performance, cost reducing building envelopes.

Figure 38. The district energy plant building at the University of Victoria features rainwater harvesting, the use of structural wood, and high-efficiency glazing, demonstrating the University's commitment to sustainability.



Legend

- Existing Campus Building
- Potential Academic/ Ancillary Building to be Demolished
- Potential Campus Housing Building to be Demolished

Figure 39. Potential Building Removal Plan

Sustainable Buildings

The creation of a Natural and Sustainable Campus is a guiding principle of the Campus Plan, and strategies to improve sustainability are embedded throughout the design frameworks. In addition to aligning with the University's **Environmental Sustainability Strategy**, the Campus Plan recommends specific sustainability strategies related to the campus built form below.

1. Decarbonizing the Campus

Exploring strategies to decarbonize new and existing campus buildings supports the University's net-zero carbon targets. Reducing carbon emissions in both the construction and operation of buildings through building design, clean energy, efficient distribution, and lowered consumption will support a more sustainable Waterloo.

Figure 41. Passive design and selective material choices can promote the de-carbonization of campus (Montgomery Sisam Architects)

2. Efficient Development

The efficient use and scheduling of existing and new buildings supports the responsible and sustainable use of University assets and resources. Land and building optimization reduces construction, operating, and infrastructure costs associated with roads, service and loading, mechanical and utility systems.

When new buildings are under consideration, life-cycle costing (LCC) and flexible design helps future-proof new buildings and ensure long-term sustainability. LCC looks at the total cost of building operations over 50 to 100 years, including design and construction, operations and maintenance, energy and utilities, renovation and upgrades.

Figure 42. Rooftop gardens can provide teaching and learning opportunities and enhance food security on campus

Figure 43. University of Copenhagen Humanities Building

Development and Programming Recommendations:

General

- When planned, new buildings should alleviate documented space needs and prioritize collaboration between multiple faculties. They should meet high sustainable and accessible design standards.
- Proposed academic buildings should not be solely dedicated to a single faculty and instead be designed to encourage collaboration, shared resources, and consider a mix of uses, including food services, and social and study space.
- Ongoing accessibility audits are recommended. A prioritized list of improvements should align with the University's capital renewal plan and phased implementation strategy.
- Implement strategies such as prefabrication to improve construction efficiency, centralized utility corridors to reduce disruptions during system upgrades, and the creation of flexible building layouts adapted to changing uses.
- Collaborate with external stakeholders and explore partnerships for planning future childcare services, health and wellness amenities, affordable housing, and emergency services.
- Minimize shading on buildings from the south and west wherever possible, while implementing glare control.
- Orient new buildings east-west wherever possible, with floor plate dimensions to promote better daylight and energy performance.
- Provide space for arts and cultural activities such as theatres or galleries in partnership with the community.

Space Programming

- Provide "right-size" classroom inventory across faculties to align with instructional needs and utilization data.
- Undertake utilization studies to optimize existing classrooms, labs, shared, bookable or hybrid work environments, and increase classroom flexibility to minimize net physical growth and ensure the wise use of space resources.
- Centralize classroom usage managed by the Registrar's Office to ensure efficient use of classroom space.
- Explore opportunities to modernize and upgrade classrooms to support active learning, flexible furniture configurations, and hybrid lesson delivery.
- Where possible, re-allocate surplus office space on campus to address shortages in teaching, collaboration, or student amenity spaces.
- Consider the re-purpose of existing spaces such as underused lecture halls, libraries, or administrative spaces as open student collaboration zones, maker spaces, or food services.
- Identify opportunities to expand and support existing reuse, repair, and sharing economy initiatives, such as material exchange hubs, tool libraries, clothing swap & repair spaces, or bike repair stations. Ensure capacity to operate and maintain them at scale.
- Provide waste sorting stations for multiple material streams that are readily accessible to all occupants, in locations that enable the traffic flow required to collect the waste.

Sustainability

- Identify opportunities where energy-efficiency technology can be utilized in energy retrofits across the campus.
- Conduct a deconstruction audit to identify the viability of reusing or re-purposing the materials used in buildings scheduled for demolition or renovations. Use this to quantify the embodied carbon impacts of replacing or renovating existing buildings.
- Include space for temporary construction waste storage and collection that considers noise, pedestrian safety, and effective, multi-stream sorting processes.
- Consider locating buildings or departments with complementary operating schedules as shared hubs to reduce space and energy needs and encourage mixed-use development on campus.
- Ensure de-carbonization and climate resilience criteria are integral to new developments and align with the University's net-zero targets and green building guidelines.
- Reduce greenhouse gas emissions from buildings through clean and efficient energy distribution and consumption.
- Create productive roofscapes in developments and existing buildings to promote accessible rooftops, renewable energy production, and resilience against future climates (higher temperatures, increased rainfall, etc.).
- Consider utilizing lifecycle costing and impact analyses to ensure future-proofing of University investments.
- Design future campus infrastructure and buildings to accommodate multiple life cycles through adaptability, reuse, and re-purposing.
- Develop campus heating and cooling infrastructure into a nodal district energy system, reducing emissions and increasing resiliency.
- Meet or exceed the minimum requirements of the Building Design Guidelines for all new development to minimize energy demand and improve indoor thermal comfort.
- Integrate smart building technologies and monitoring into new and existing buildings.
- Consider the preservation of existing high-quality fibre networks and ensure that new data centres, as required, are optimally located for heating and cooling.

3.5 Mobility Framework

The streets, pathways, and trails that form the circulation network play a crucial role in how people connect with the campus and the surrounding community. The Mobility Framework prioritizes active transit, accessibility, safety, and placemaking, while still accommodating vehicle access and circulation. The Campus Plan envisions campus streets and gateways that together create a unique sense of arrival on campus.

This pedestrian-focused approach to circulation promotes health, wellness, and social connectivity on campus. It aligns with the Development and Programming Framework and builds upon the public realm strategies described in the Open Space Framework. Clear and accessible connections throughout the campus facilitate ease of movement for students, staff, faculty, and community members of all abilities.

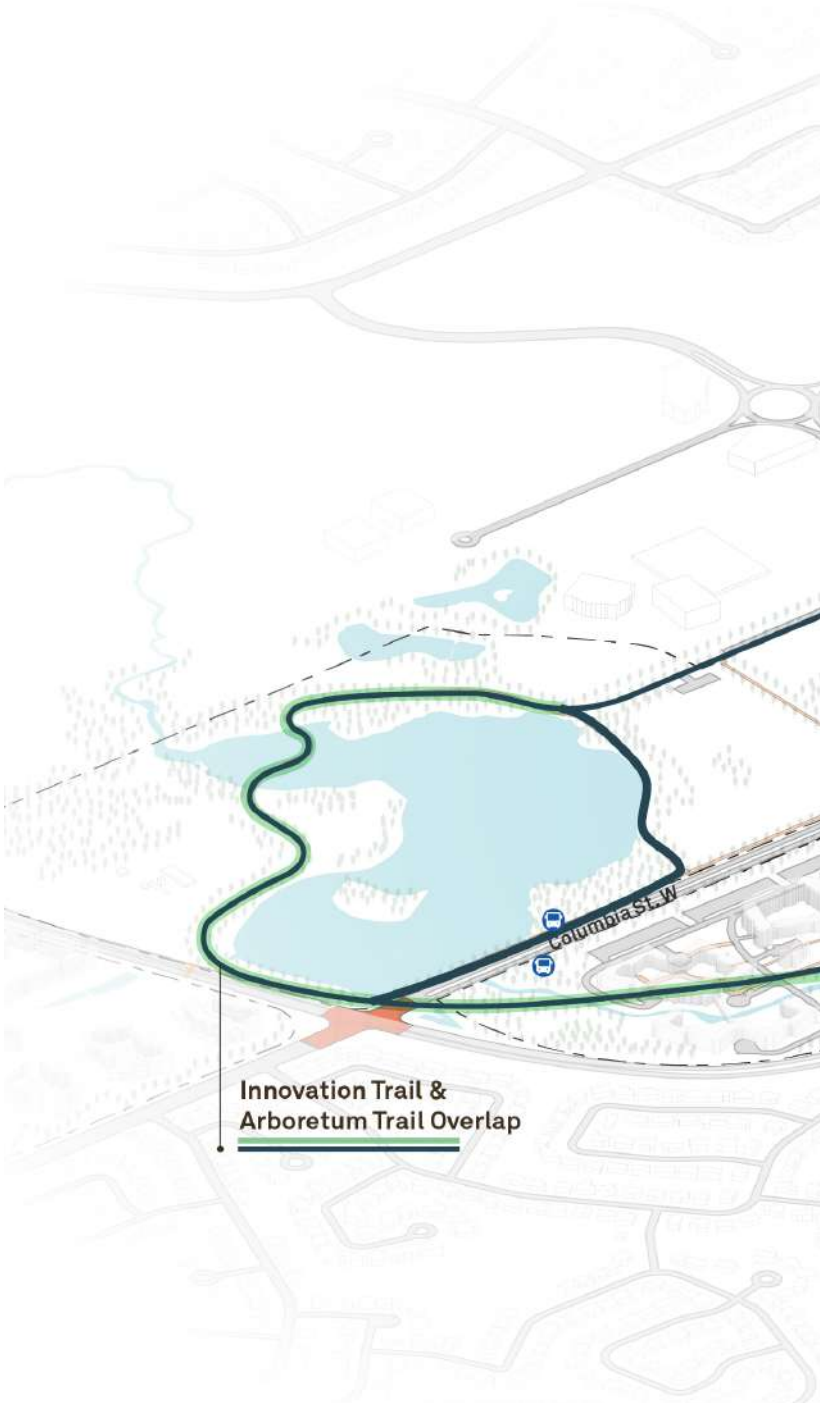
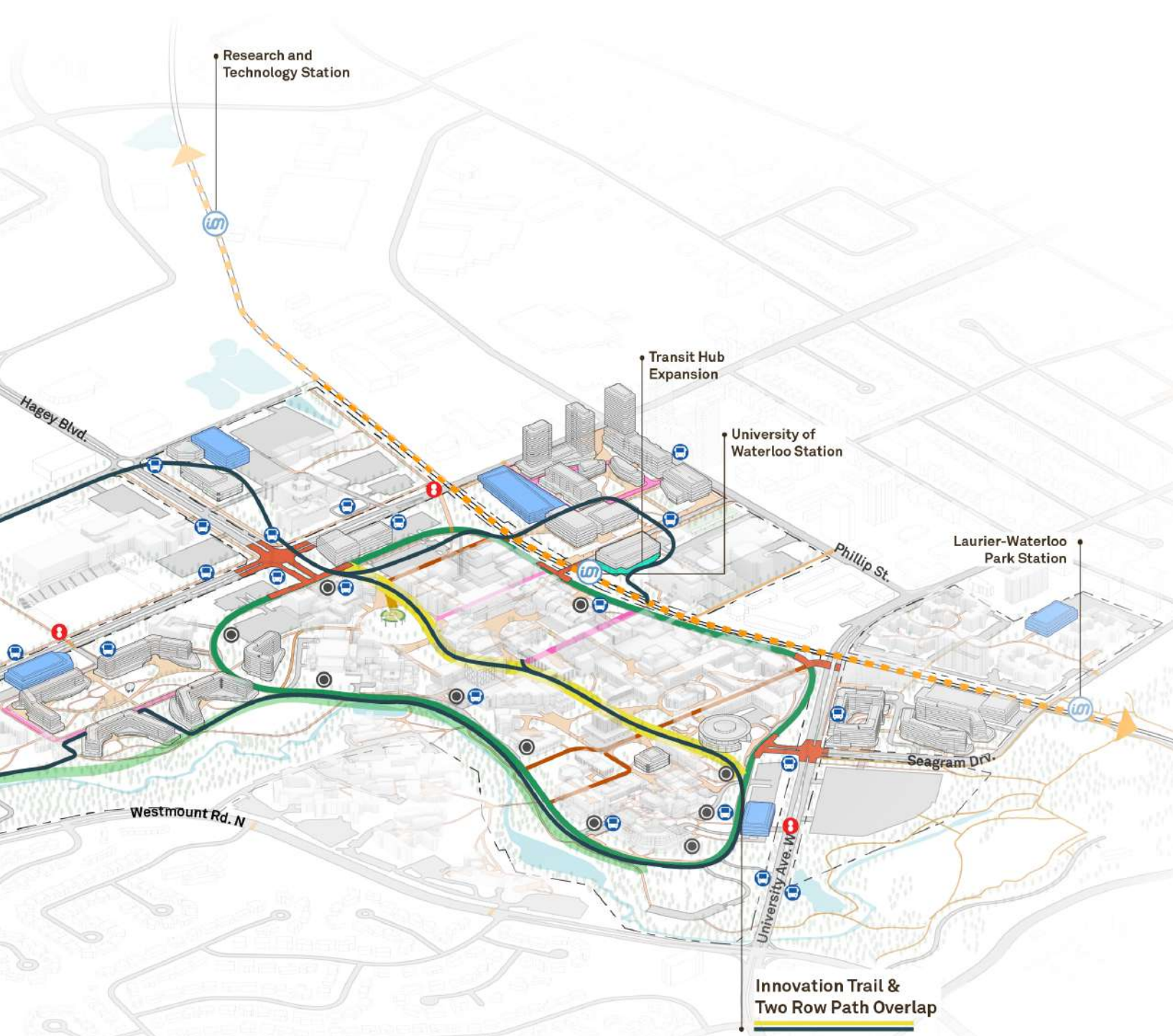


Figure 44. Mobility Framework

- Pedestrian Network
- Structured Parking
- Surface Parking
- Enhanced Surface Treatment
- Transit Hub Expansion
- Bus Stop
- Pick-up Drop-off Area and Shuttle Stop
- Ring Road
- Two Row Path
- Primary Pedestrian Path
- Innovation Trail
- Arboretum Trail
- Flexible/Shared Streets
- ION LRT
- Potential Future Traffic Signal


Research and
Technology Station
Transit Hub
Expansion
University of
Waterloo Station
Laurier-Waterloo
Park Station
Hagey Blvd.
Phillip St.
Seagram Drv.
Westmount Rd. N
University Ave. W
Innovation Trail &
Two Row Path Overlap

Key Mobility and Gateway Enhancements

1. Ring Road Re-imagined:

The Campus Plan proposes transforming the car-dominated Ring Road into a street that prioritizes pedestrians and cyclists, focusing on sustainability, accessibility, and fostering connections among people. Trees and green spaces framing the outer edges of the street treat the Ring Road like a continuation of the natural and urban areas surrounding it. A banner program to celebrate the campus's history and distinguished alumni is envisioned to further enhance the frontage and support placemaking across the campus.

Figure 45. Separated cycling infrastructure and generous walkways will transform Ring Road into a place of connection and enjoyment

2. Gateways as Campus Thresholds:

The Campus Plan envisions defined and inviting gateway entrances to mark a transition into the campus. Landscapes, public art and building design combine to express campus identity and place, connecting to the key pathways through the use of distinct materials, landscape and building design. Each gateway is recommended to express a cohesive yet site-specific design, ensuring they respond to their context and become legible and navigable for campus visitors and users.

Figure 46. Contrasting pavers and custom-designed furnishing enhances gateway placemaking (Northeastern University)

3. Transform Surface Parking:

The Campus Plan re-imagines existing surface parking lots as high-value redevelopment opportunities that support the University's long-term growth, sustainability goals, and enhance campus experience. By consolidating parking into new structured facilities as needed, the Plan utilizes strategically located land for academic buildings, housing, open spaces, and innovation-oriented uses. Structured parking with active ground-floor amenities such as retail, student services, bike hubs, or collaboration spaces can meet campus parking needs while enhancing street life and contributing to a more vibrant campus environment.

Parking structures can be designed with long-term adaptability in mind. Flat floor plates, higher ceiling heights, and flexible structural grids allow these buildings to be converted into future academic, residential, or recreational uses as campus needs evolve. Electric vehicle chargers are recommended to support **Shift:Neutral** goals for the campus.

4. Expansion of the Transportation Hub and enhancing the William Tutte Gateway:

The Plan envisions a new Transit Hub building that provides ground-floor amenities to improve daily travel for students, staff, and visitors, creating a comfortable arrival experience. The facility can offer essential rest areas and operational support to improve service reliability. A combination of enclosed waiting areas, covered walkways, and weather-protected platforms provide for all-season comfort and encourage greater transit use year-round.

The Plan recommends exploring ways in which the adjacent ION rail corridor can improve safety, accessibility, and capacity at key crossing points. Upgrades may include new tactile and accessibility features, upgraded signals, and widened pathways to accommodate high pedestrian volumes. These improvements can create safer, more efficient crossings and reinforce strong connections between Inner and East Village, and through South Village.

Figure 47. Multi-use parking structures incorporate active ground floors and can be converted as mobility shares change (Open Platform and JAJA Architects)

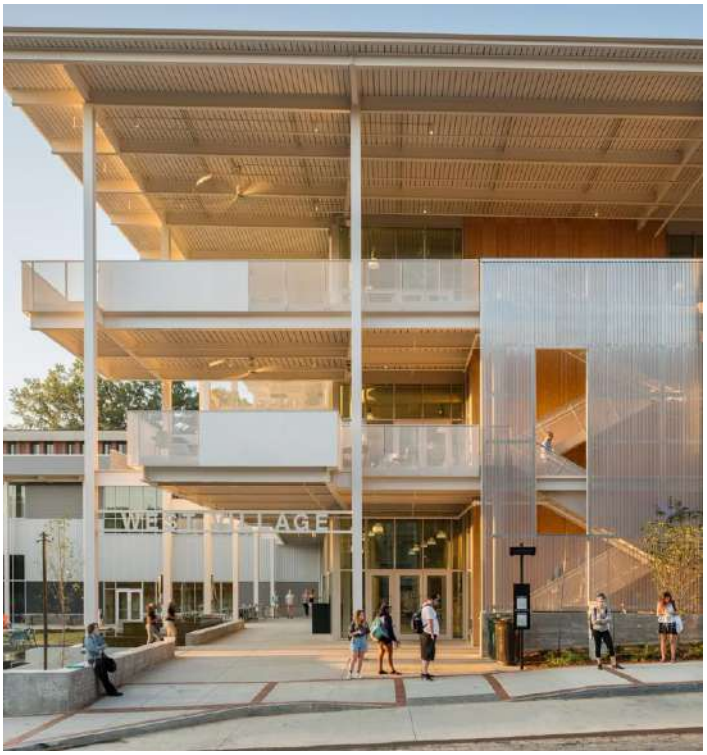


Figure 48. Covered walkways and enhanced visibility create a safer and more enjoyable transit experience (Community Hub at Georgia Institute of Technology)

Path Networks

The Campus Plan establishes a hierarchy of pathways to create a cohesive, inclusive, and barrier-free system. The Plan envisions a path network that supports four-season activity, enhances wayfinding, and reinforces campus identity.

1. Accessibility Improvements

The current path network poses many accessibility challenges, including uneven or deteriorated surfaces, narrow pathways, high curbs, and curb cuts that are missing or misaligned. Many exterior stairs lack convenient or appropriate alternate routing for those with reduced mobility. Several pathway connections are interrupted by stairs without accessible alternatives. A notable example is the network flanking RCH, where two major staircases force people with reduced mobility to either detour through the building using elevators or reroute via other campus areas.

The Campus Plan proposes the redesign of primary and secondary paths and the upgrading of existing surfaces, including the provision of standard widths and materials. The Plan recommends that areas with exterior staircases, such as RCH, provide exterior accessible alternatives, such as ramps, to ensure equitable access to circulation. A full accessibility study of the campus is recommended.

In addition to pathways, building entrances would benefit from improved signage and lighting to improve accessibility and wayfinding. The campus is currently undertaking a wayfinding project to address a lack of cohesion, standardization, and legibility across campus signage. Directional signage along pathways is inconsistent, presenting challenges for pedestrians navigating through campus.

Designated accessible parking for employees is limited and frequently located far from central buildings, situated on inclines, or overlapping with servicing and loading areas, reducing both convenience and safety. There is also a lack of designated spaces for pick-up drop-off across the campus.

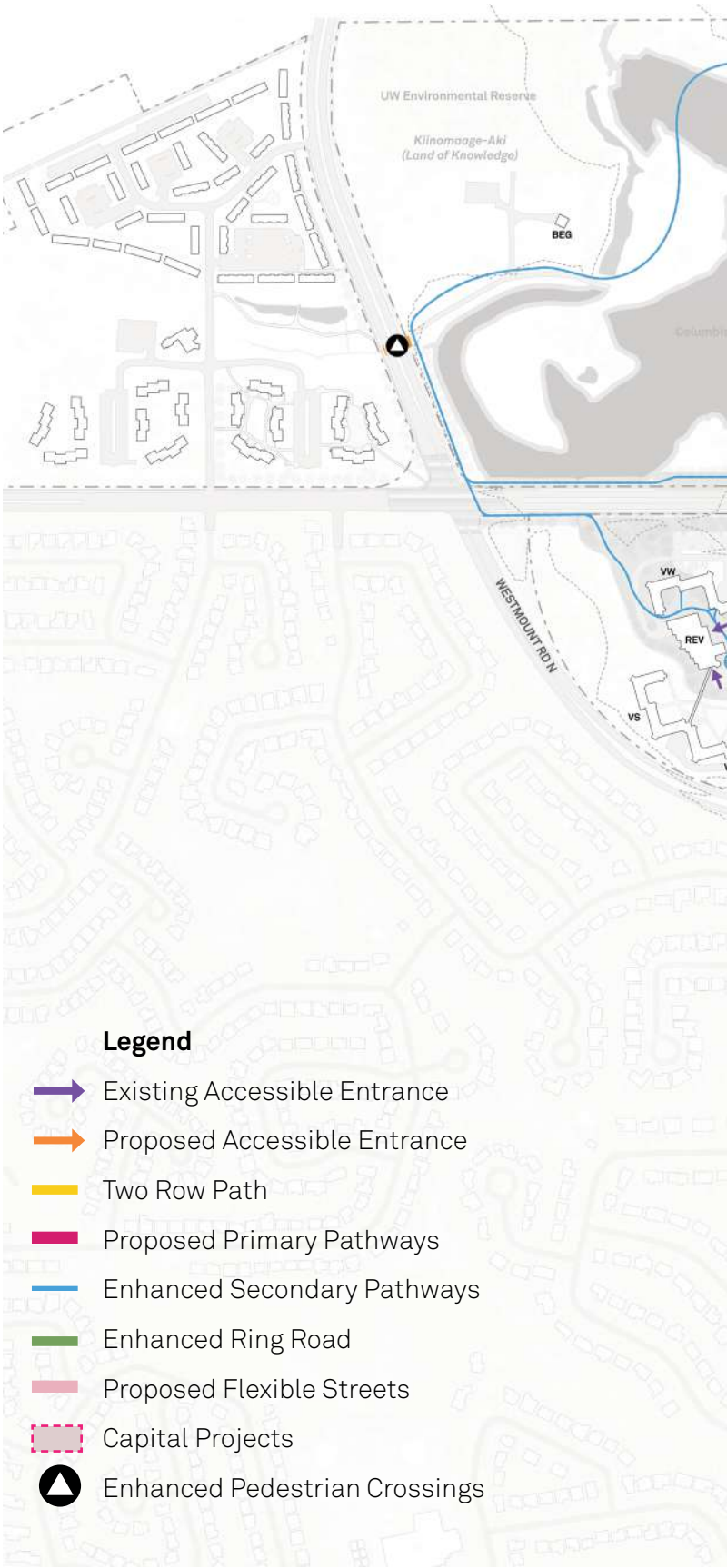
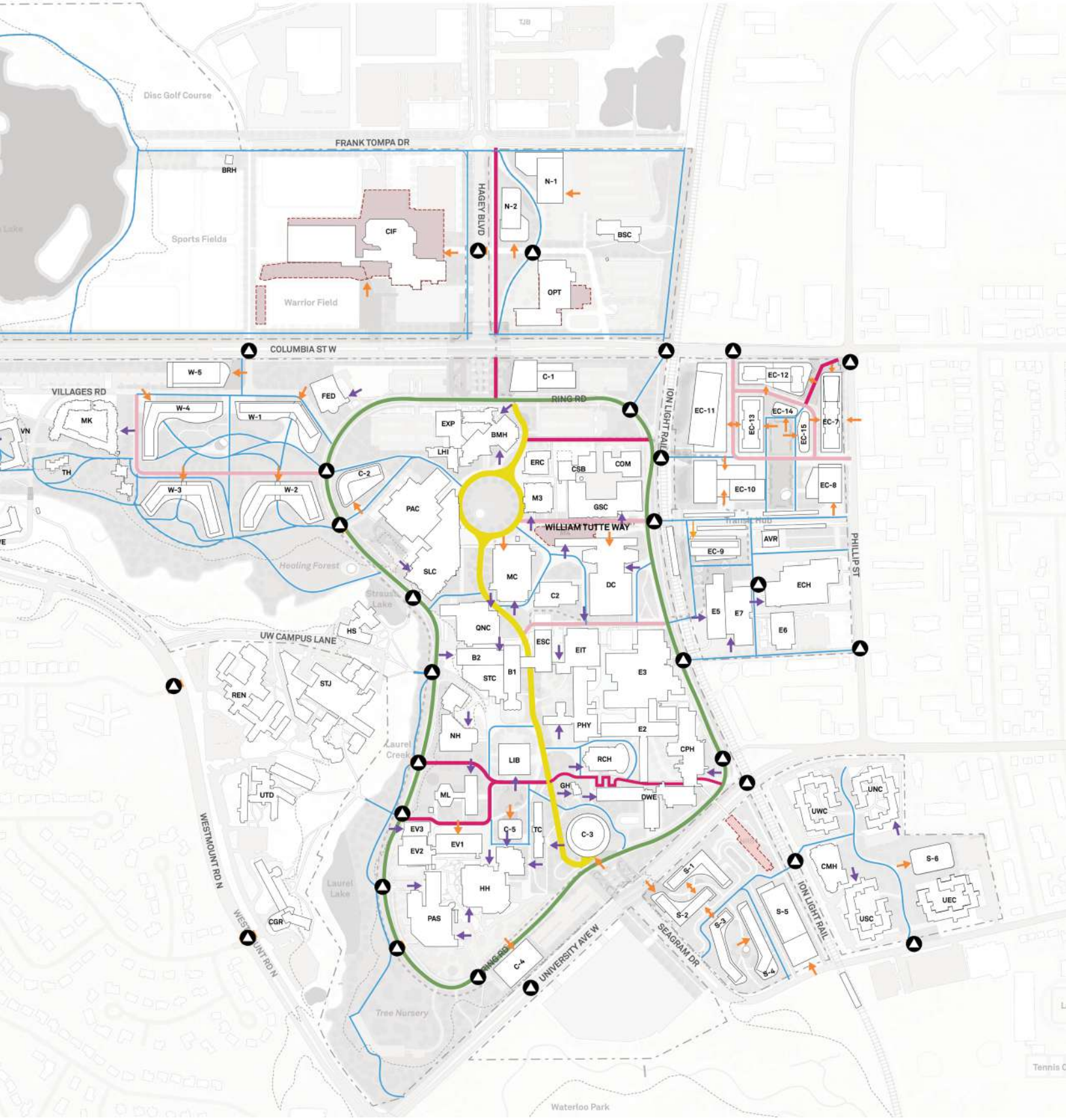


Figure 49. Pathway and Accessibility Upgrades Plan


Disc Golf Course
FRANK TOMPA DR
BRH
Sports Fields
CIF
Warrior Field
HAGEY BLVD
N-1
N-2
BSC
OPT
COLUMBIA ST W
VILLAGES RD
W-5
FED
W-4
W-1
MK
VN
TH
W-3
W-2
C-2
C-1
RING RD
EXP
BMH
LHI
ERC
CSB
COM
M3
GSC
PAC
SLC
WILLIAM TUTTE WAY
Transit Hub
AVR
EC-9
ION LIGHT RAIL
EC-11
EC-12
EC-13
EC-14
EC-15
EC-7
EC-10
EC-8
PHILLIP ST
ECH
E5
E7
E6
Healing Forest
Strauss Lake
MC
C2
DC
QNC
ESC
EIT
E3
B2
B1
STC
HS
UW CAMPUS LANE
STJ
REN
NH
PHY
E2
CPH
LIB
RCH
GH
DWE
ML
UTD
EV3
EV2
EV1
C-5
TC
C-3
HH
PAS
CGR
WESTMOUNT RD N
Laurel Creek
Laurel Lake
RING RD
C-4
UNIVERSITY AVE W
Tree Nursery
Waterloo Park
UNC
UWC
CMH
S-6
UEC
USC
S-1
S-2
S-3
S-4
S-5
SEAGRAM DR
ION LIGHT RAIL

2. Primary Pathways

Primary pathways complement Ring Road and shared streets as higher-order pedestrian routes on campus. The Campus Plan envisions these routes to connect gateways, transit hubs, and major campus destinations, offering wide, accessible corridors with high-quality paving, landscaping, and enhanced street furniture. Primary paths are located in the Inner Campus and East Village. The Campus Plan anticipates a width of up to 6.0 metres for Primary Pathways across the campus.

Two Row Path anchors this system as the primary north–south path through the Inner Campus, linking to the North Campus and South Village and fronting key academic buildings, open spaces, and points of interest.

Other primary pathways connect through the Inner Campus extend this framework at and east-west orientation to support clear and direct connections. One primary path extends along the north elevation of the CSB and COM buildings, anticipating a potential energy nodal plant, and reconnecting Ring Road and East Village to the Two Row Path. A second primary path connects the Inner Campus from CPH and RCH to ML.

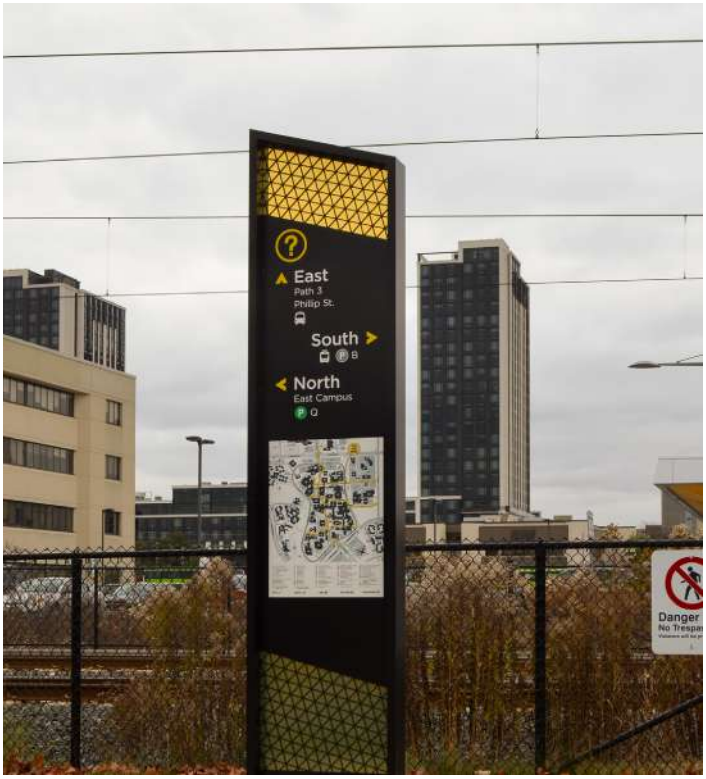


Figure 50. Existing campus wayfinding signage

Figure 51. The recently upgraded section of the Two Row Path emphasizes this primary pathway through the campus

3. Secondary Pathways

Secondary pathways and trails complement the higher-order pathways by providing a more intimately scaled circulation network. These routes carry lower pedestrian volumes but play an important role in stitching together the broader circulation system.

Secondary paths are envisioned to feature consistent paving, furnishings, and lighting, ensuring barrier-free access. They also encourage informal interactions and create opportunities to pause, reflect, and engage with the surrounding campus landscape through the use of plantings and furnishings.

Integrated into the campus Arboretum Trail, recreation areas, and secondary gateways, these routes are envisioned to enrich the everyday campus experience and support alternative, quieter pedestrian routes.

3. Tertiary Pathways

The Campus Plan envisions incremental upgrades of existing and new tertiary pathways that connect secondary pathways to building entrances, gardens, outdoor learning spaces and smaller courtyards. Consistent paving, furnishings, and lighting is envisioned to ensure barrier-free access and clarity across the campus.

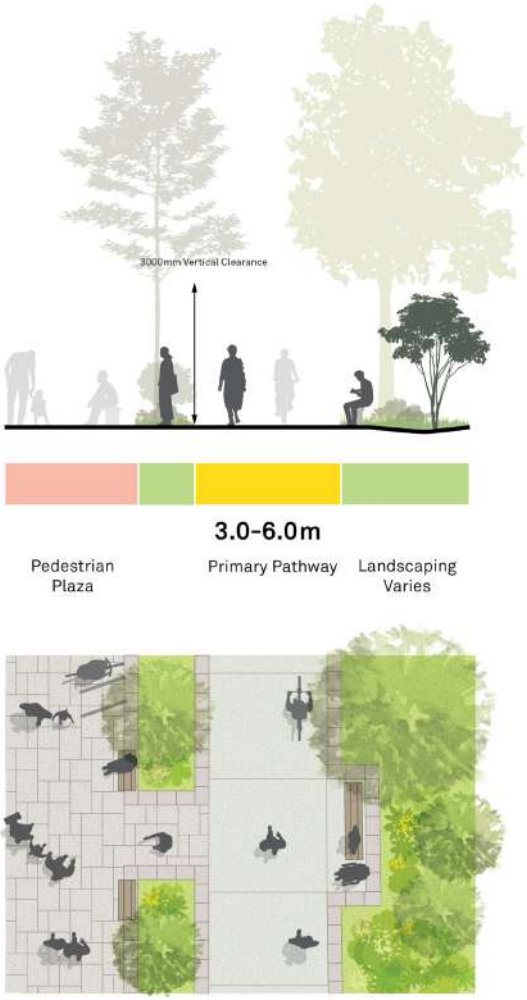


Figure 52. A typical cross-section of a primary pathway on campus. May vary with site constraints.

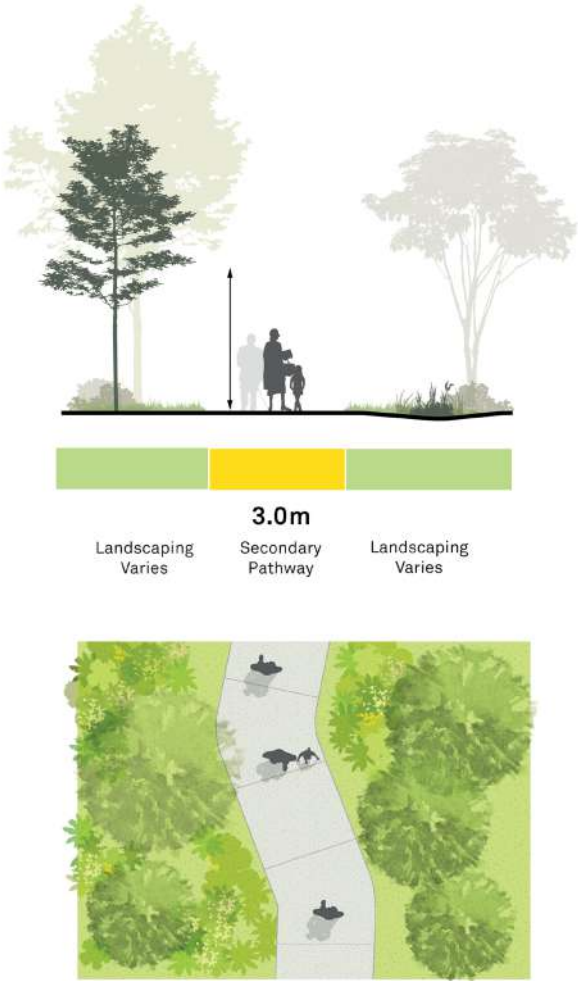


Figure 53. A typical cross-section of a secondary path on campus. May vary with site constraints.

Transforming Campus Streets

The Campus Plan recommends significant enhancements to Ring Road, the existing Transit Hub, and the surrounding streets, to transform the campus into a more ecologically resilient learning environment that supports public transit and prioritizes cyclist and pedestrian safety while maintaining loading and vehicular access.

1. Transit Hub Expansion

The Campus Plan introduces a new Go Bus drop-off area adjacent to AVR and the ECH Parking Lot in the East Village. This area is envisioned with a bus lay-by to accommodate the buses that currently park in the existing East Campus and North Campus.

The Campus Plan envisions a Transit Hub building in the East Village to support the provision of amenities for bus drivers and transit users.

2. Ring Road Pilot Project

The Campus Plan recommends that the University undertake a pilot project east of the North and South Gateways to test a one-way street configuration combined with targeted traffic-calming measures on a select segment of Ring Road. This pilot will allow the University to evaluate operational performance, user experience, and safety outcomes before committing to a full capital redesign of the right-of-way. The proposed pilot should utilize temporary measures, such as a reduced speed limit, pavement markings, modular curb extensions, and planters to establish the one-way configuration.

As part of the pilot, a structured data collection program is critical to evaluating the pilot's success. Baseline conditions should be recorded before the installation, including vehicle speeds and volumes, pedestrian and cyclist activity, GRT and shuttle operations, and parking utilization. The same metrics should be used to evaluate and monitor throughout the pilot.

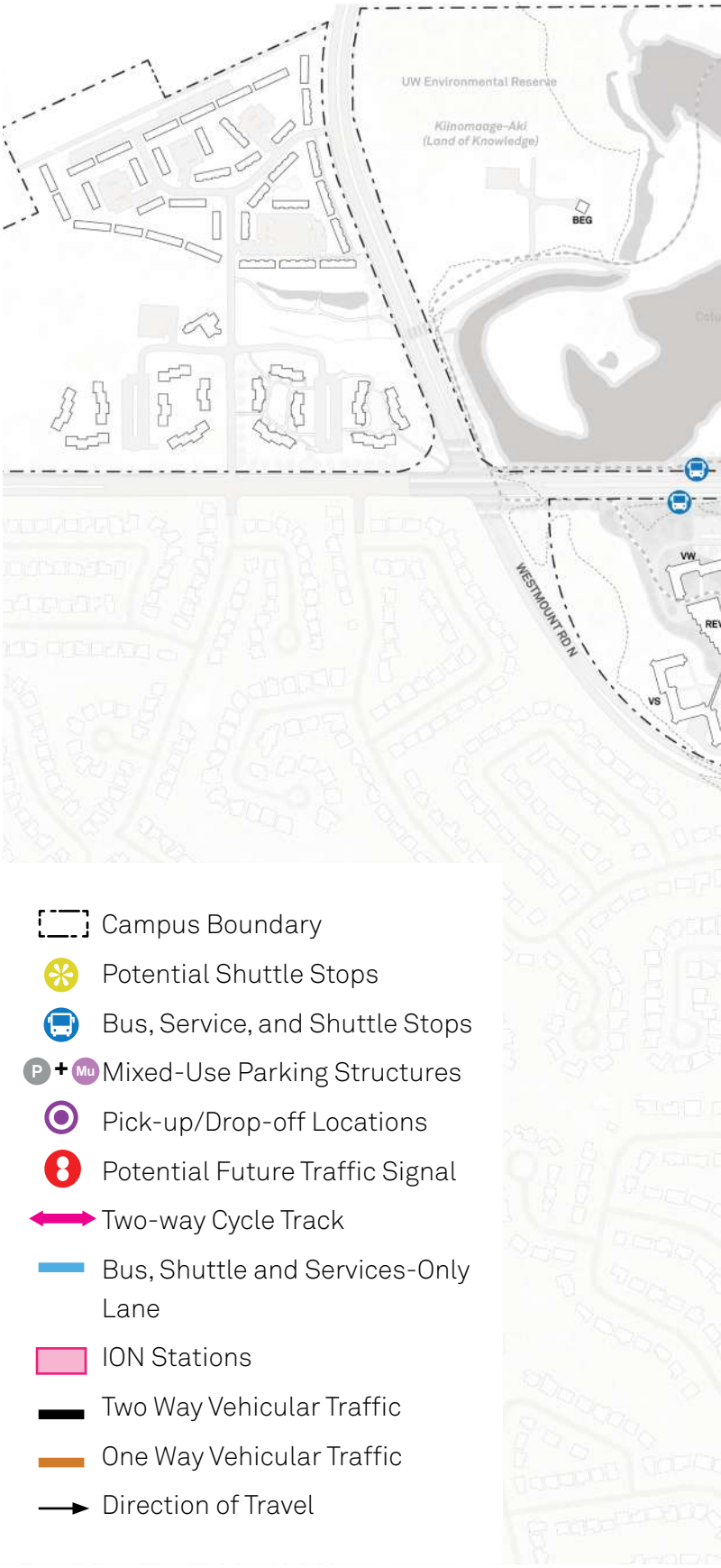
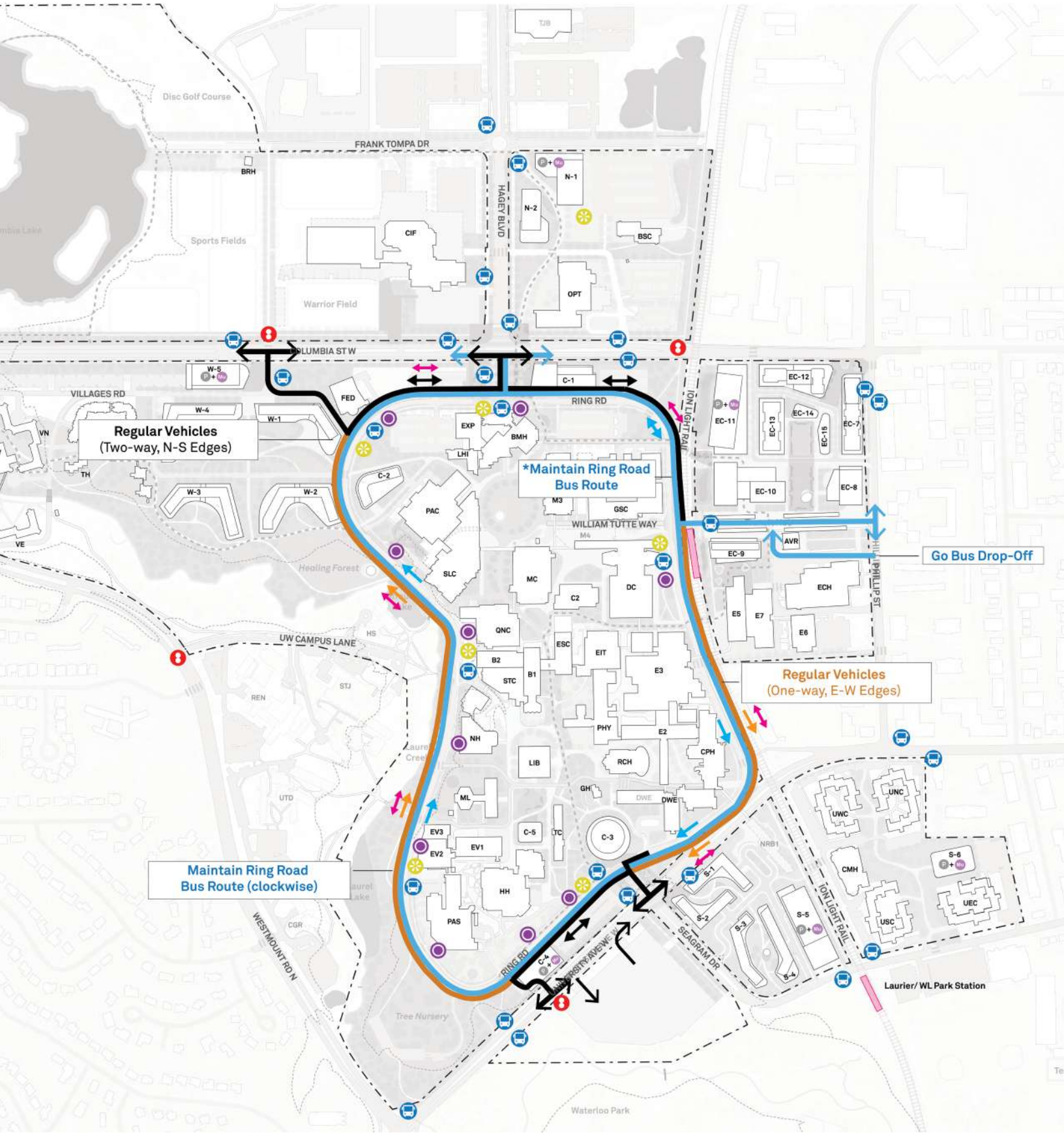


Figure 54. Ring Road Circulation Plan


Regular Vehicles
(Two-way, N-S Edges)
*Maintain Ring Road
Bus Route
Go Bus Drop-Off
Regular Vehicles
(One-way, E-W Edges)
Maintain Ring Road
Bus Route (clockwise)
Laurier/ WL Park Station
FRANK TOMPA DR
COLUMBIA ST W
VILLAGES RD
RING RD
WILLIAM TUTTE WAY
UW CAMPUS LANE
HAGEY BLVD
ION LIGHT RAIL
PHILLIP ST
SEAGRAM DR
WESTMOUNT RD N
Disc Golf Course
Sports Fields
Warrior Field
Healing Forest
Tree Nursery
Waterloo Park

If evaluation results demonstrate positive outcomes, the University should consider proceeding with a phased program to transition the temporary pilot into a permanent right-of-way redesign using durable materials, integrated landscaping, seating, and upgraded accessibility, branding, and lighting features.

This pilot-based approach allows the University to test solutions in real conditions, refine the design based on evidence, and build broad community support. By implementing a temporary demonstration project before major capital investment, the University can reduce risk, strengthen confidence in design decisions, and ensure that the long-term campus street network aligns with its goals for safety, sustainability, and enhanced campus experience, treating the campus infrastructure as a living lab.

3. Ring Road Enhancements

The reconfigured Ring Road transforms the main campus street into a safer, greener, and more vibrant street. By re-allocating parts of the existing right-of-way, the design reduces the dominance of vehicle lanes. The Campus Plan introduces two-way cycle tracks, connections to the existing Laurel Trail multi-use pathway, and clearly designated lanes for buses, shuttles, and essential service vehicles.

Select one-way segments on Ring Road help calm traffic and create more predictable movement patterns for all users. Additional traffic calming measures include reducing speed limits, minimizing pedestrian crossing distances, and embedding vertical markers and tactile paving at crossings, all aimed at improving safety for pedestrians and cyclists.

The Plan also integrates existing bus stops, pick-up/drop-off (PUDO) locations, and designated shuttle areas, and incorporates features such as banners, lighting, and vertical markers.

Expanded planting areas and an increased tree canopy strengthen the road as a green spine, enhancing comfort, mitigating heat, and contributing to campus biodiversity. Together, these improvements elevate the campus experience by strengthening access to key destinations, encouraging active and sustainable travel, and fostering a healthier campus environment.

The following pages provide cross sections of the existing and proposed conditions of segments of Ring Road. They illustrate how Ring Road can be reconfigured to provide more space for pedestrians and cyclists to extend and connect the campus's generous open spaces, while prioritizing transit access to the campus.

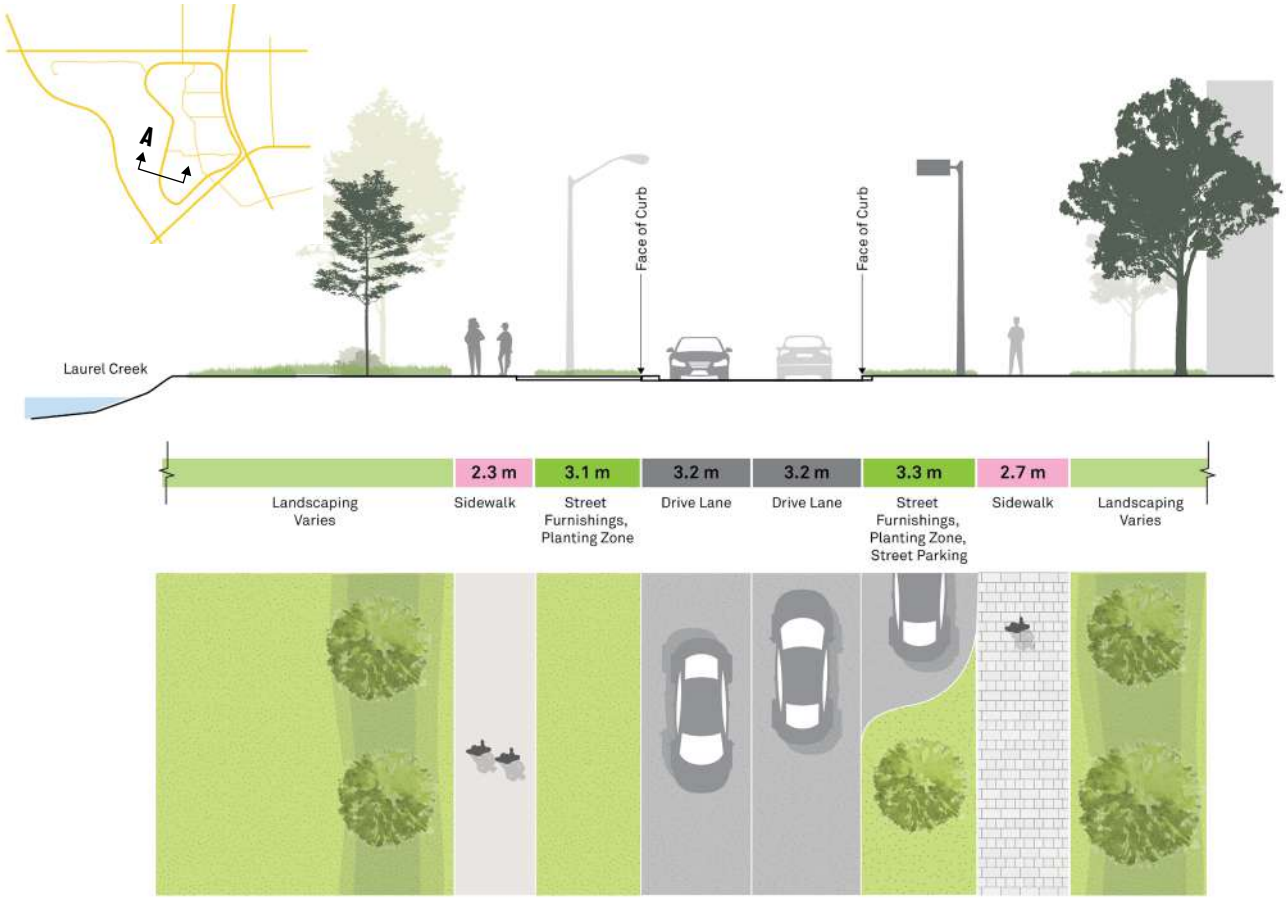


Figure 55. Section A. Existing condition of Ring Road (western edge).

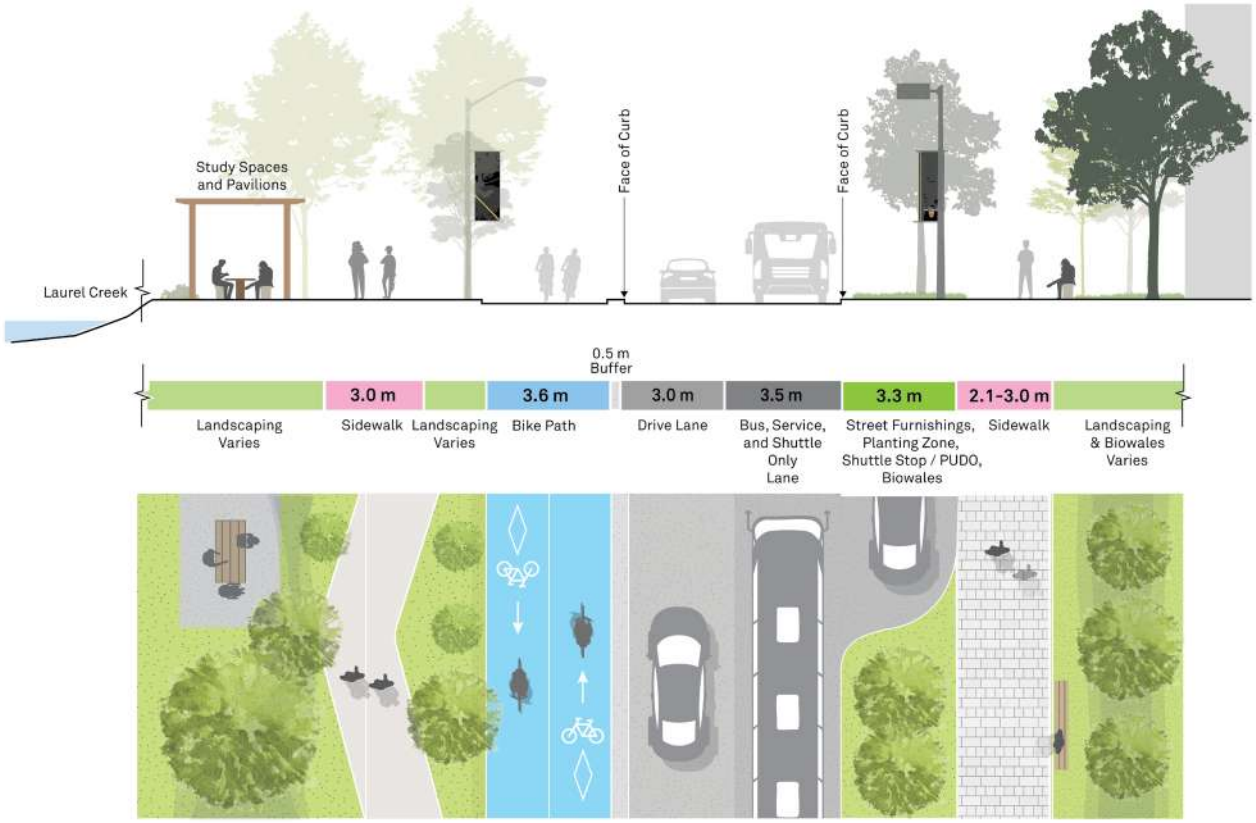


Figure 56. Section A. Proposed condition of Ring Road (western edge).

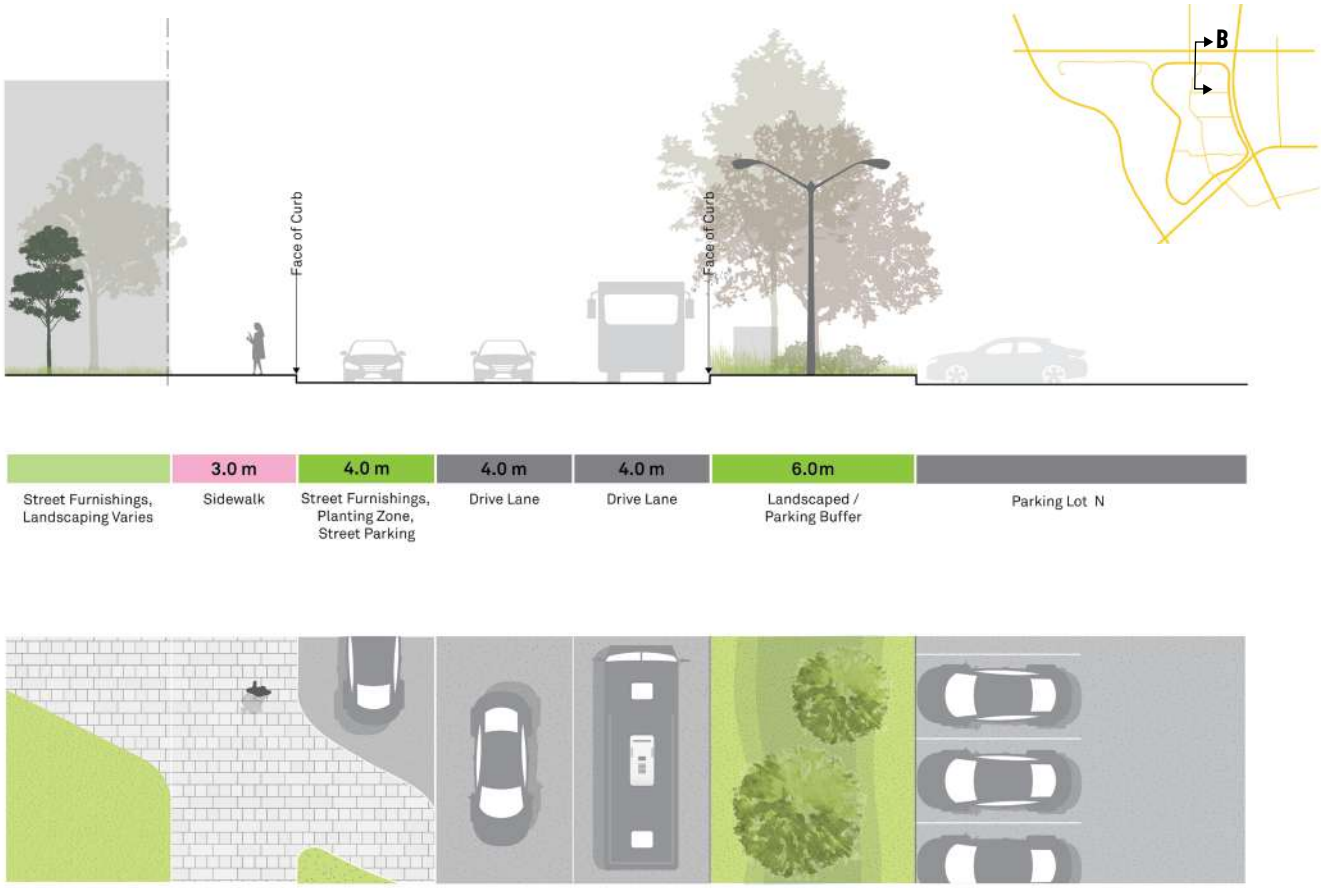


Figure 57. Section B. Existing condition of Ring Road (northern edge).

Figure 58. Section B. Proposed condition of Ring Road (northern edge).

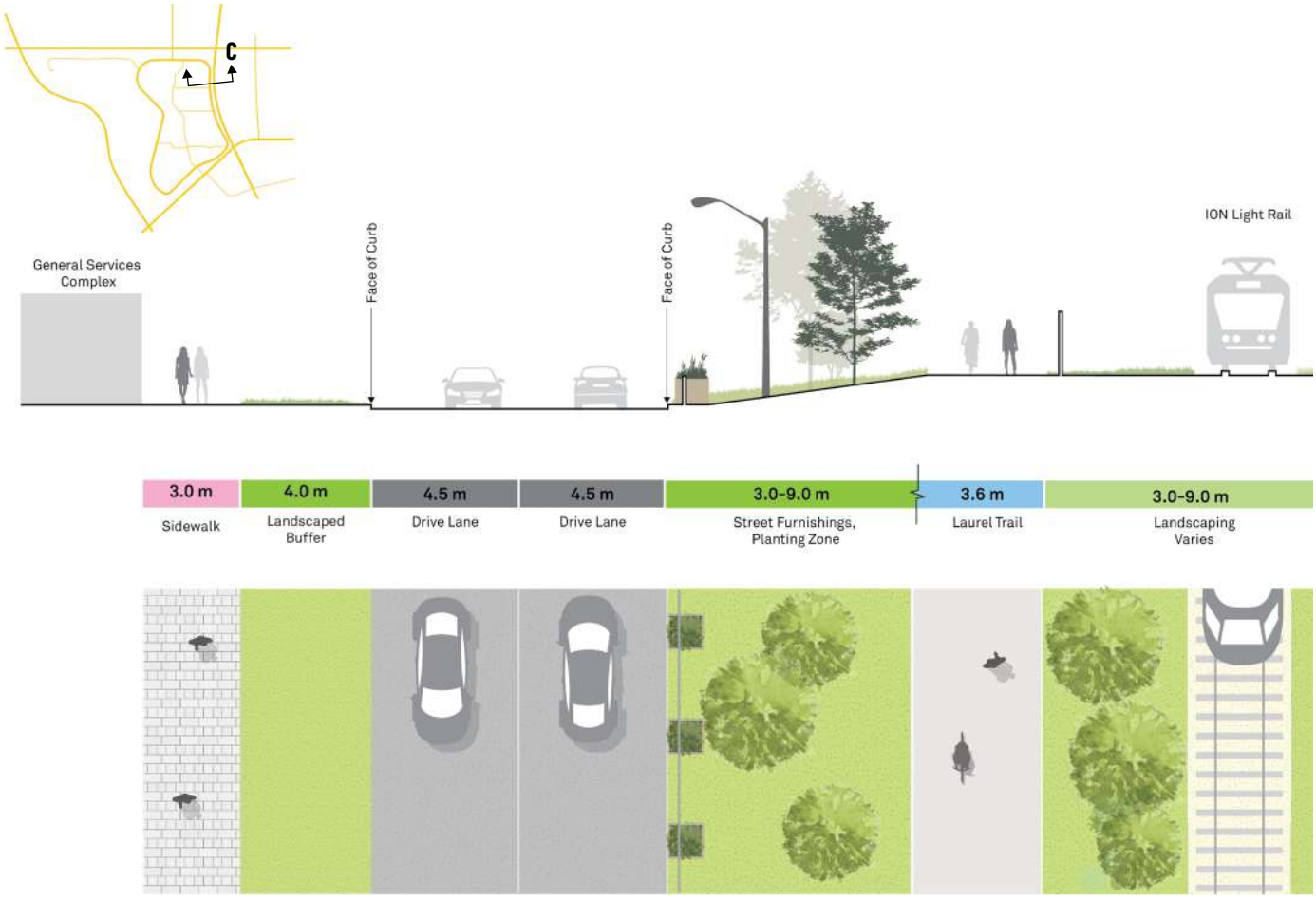


Figure 59. Section C. Existing condition of Ring Road (northeast edge from Hagey Blvd to William Tutte Way).

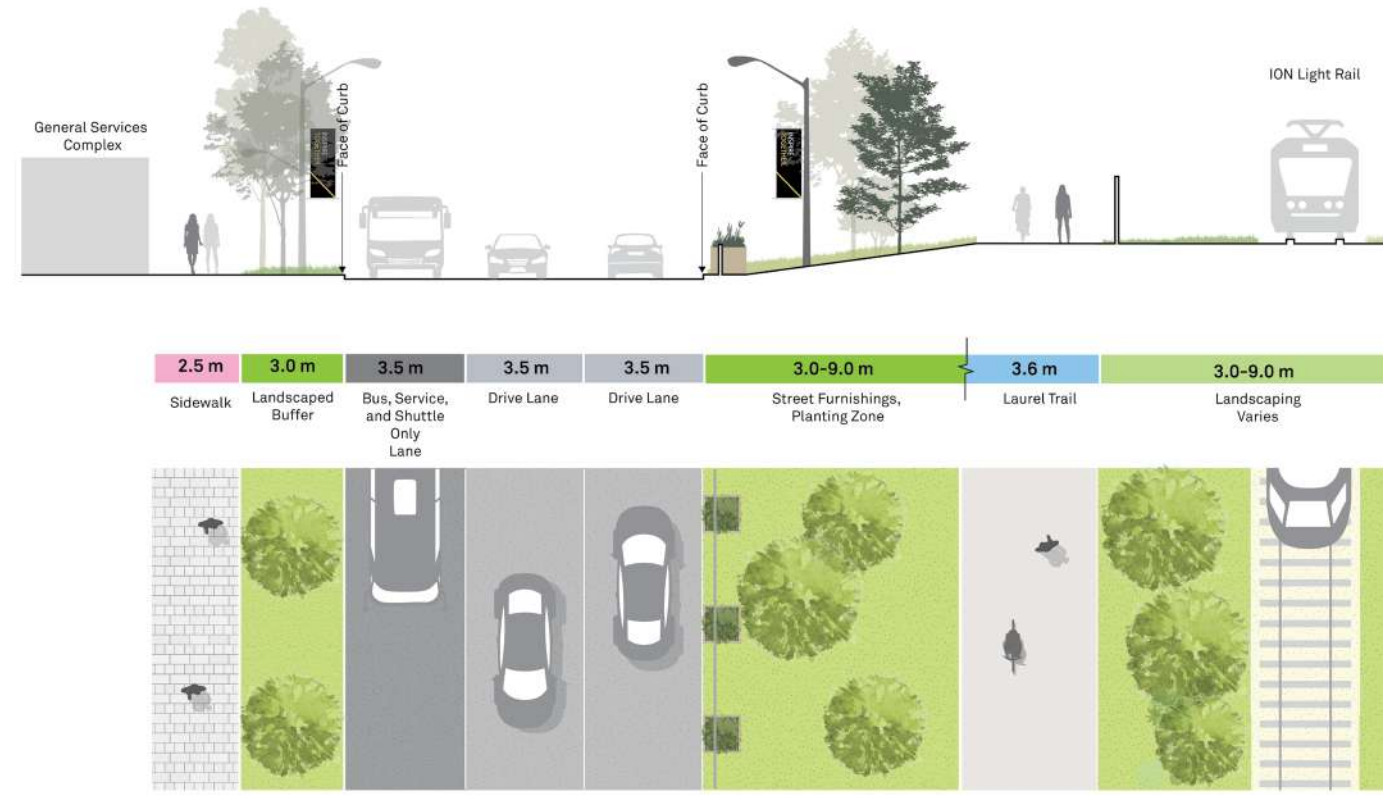


Figure 60. Section C. Proposed condition of Ring Road (northeast edge from Hagey Blvd to William Tutte Way).

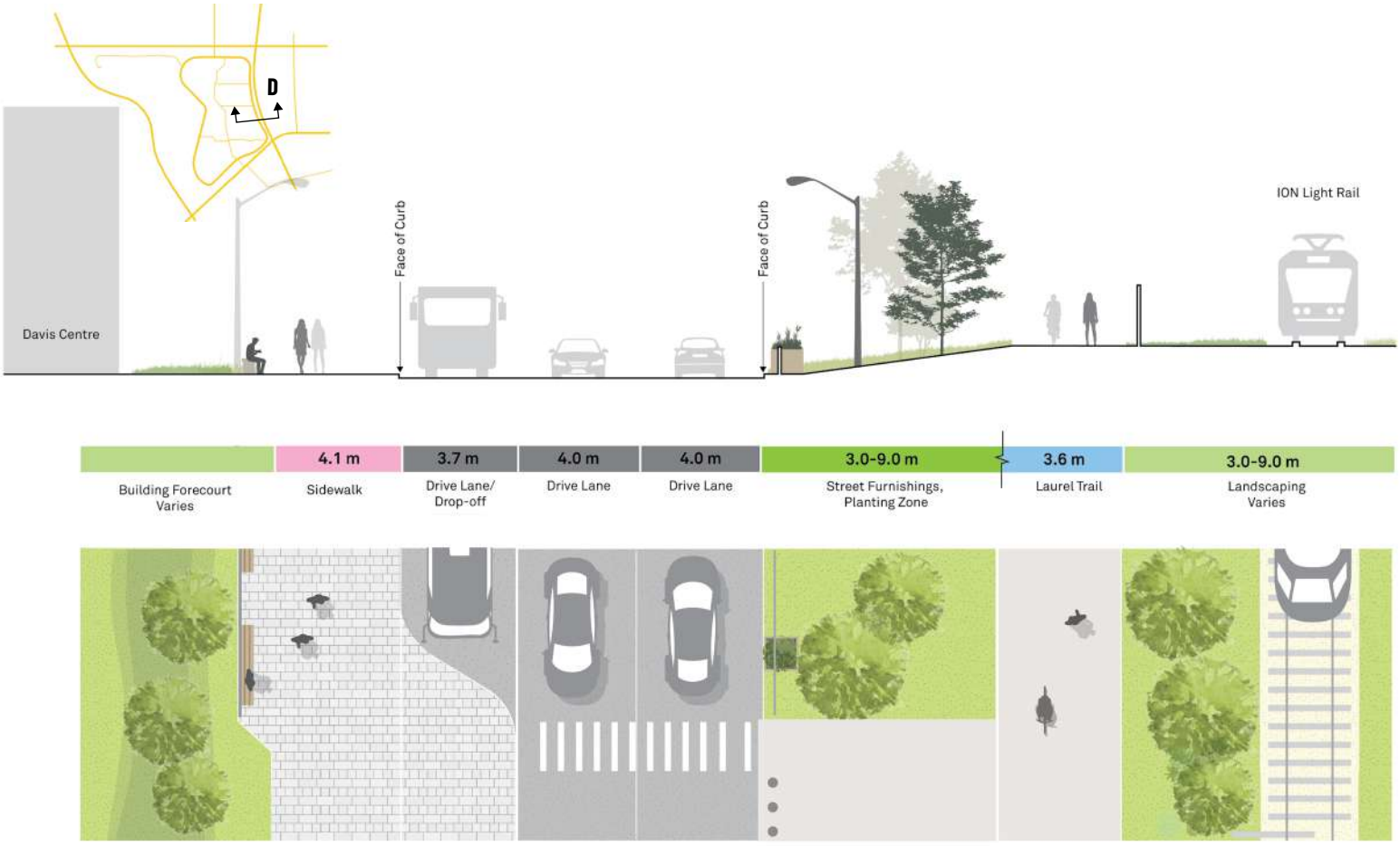


Figure 61. Section D. Existing condition of Ring Road (eastern edge).

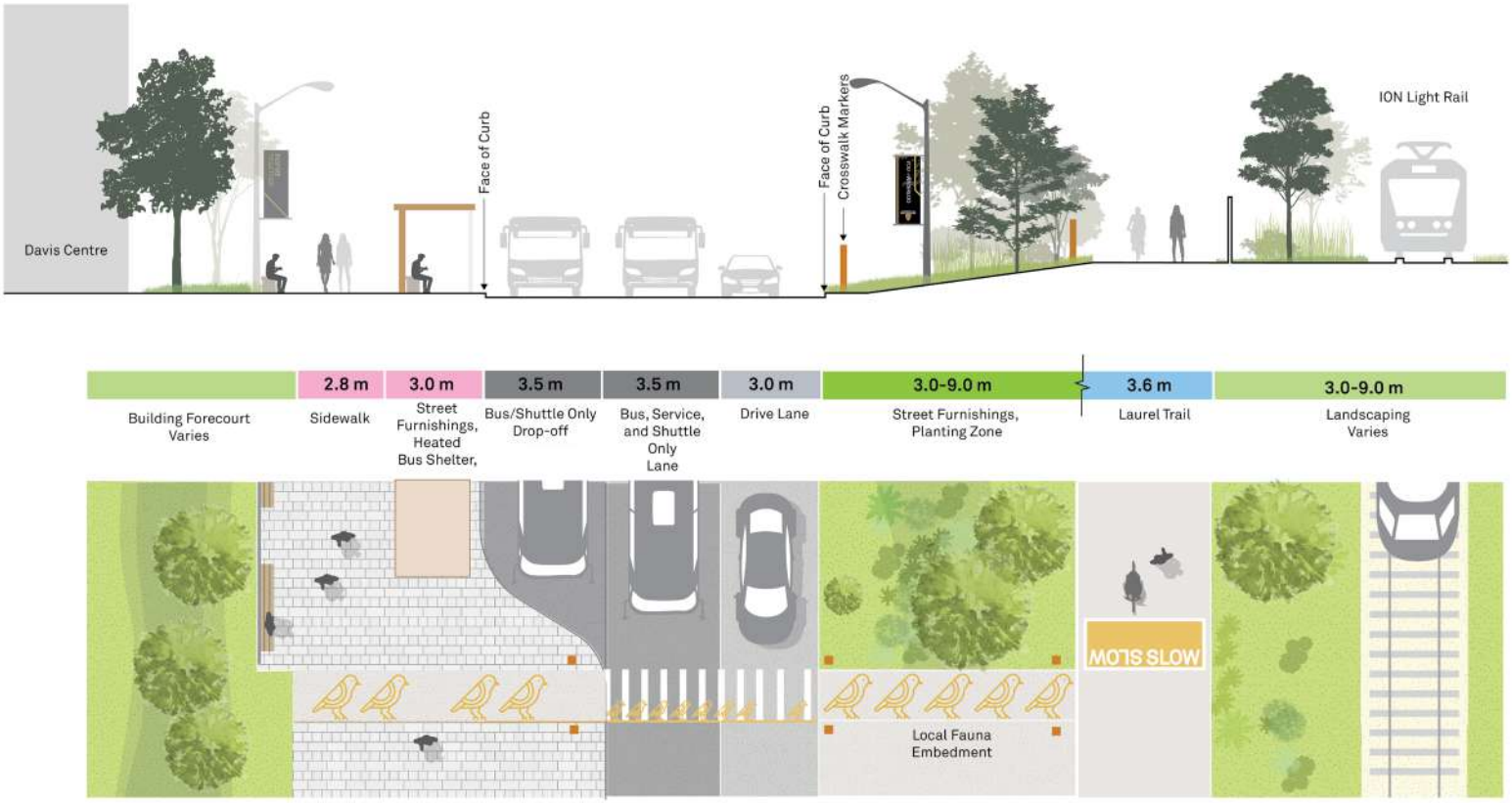


Figure 62. Section D. Proposed condition of Ring Road (eastern edge).

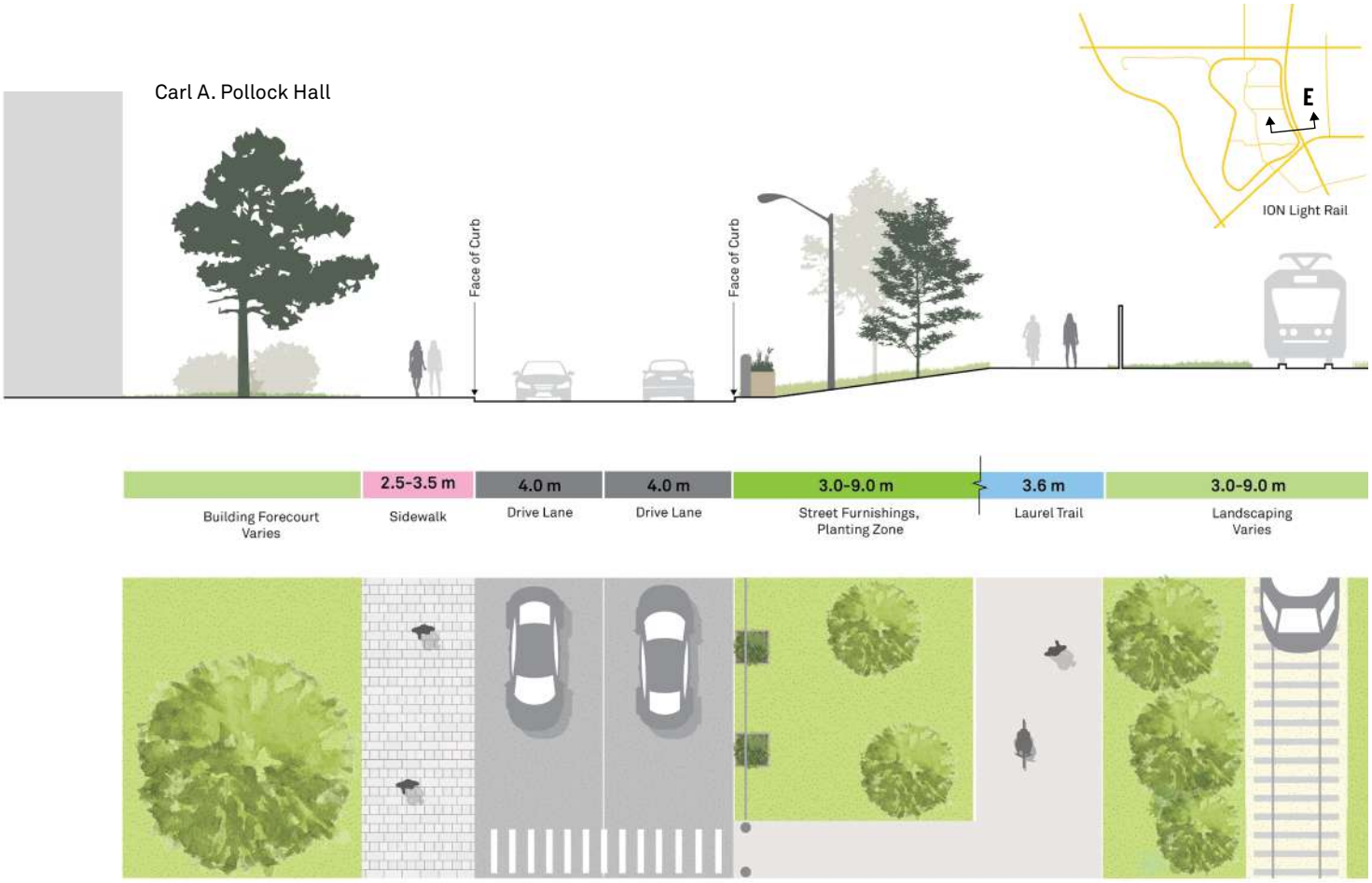


Figure 63. Section E. Existing condition of Ring Road (southeast edge).

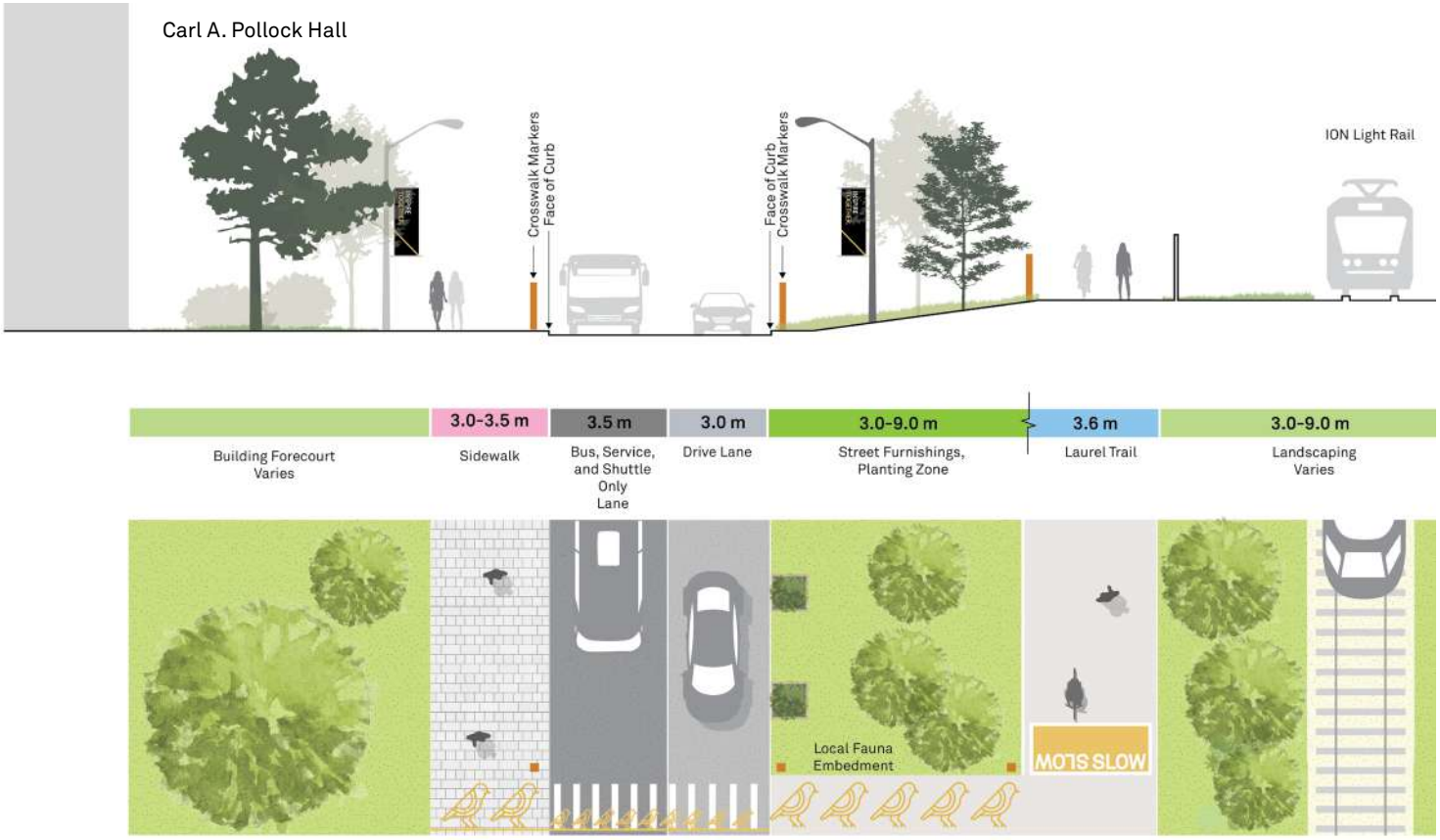


Figure 64. Section E. Proposed condition of Ring Road (southeast edge).

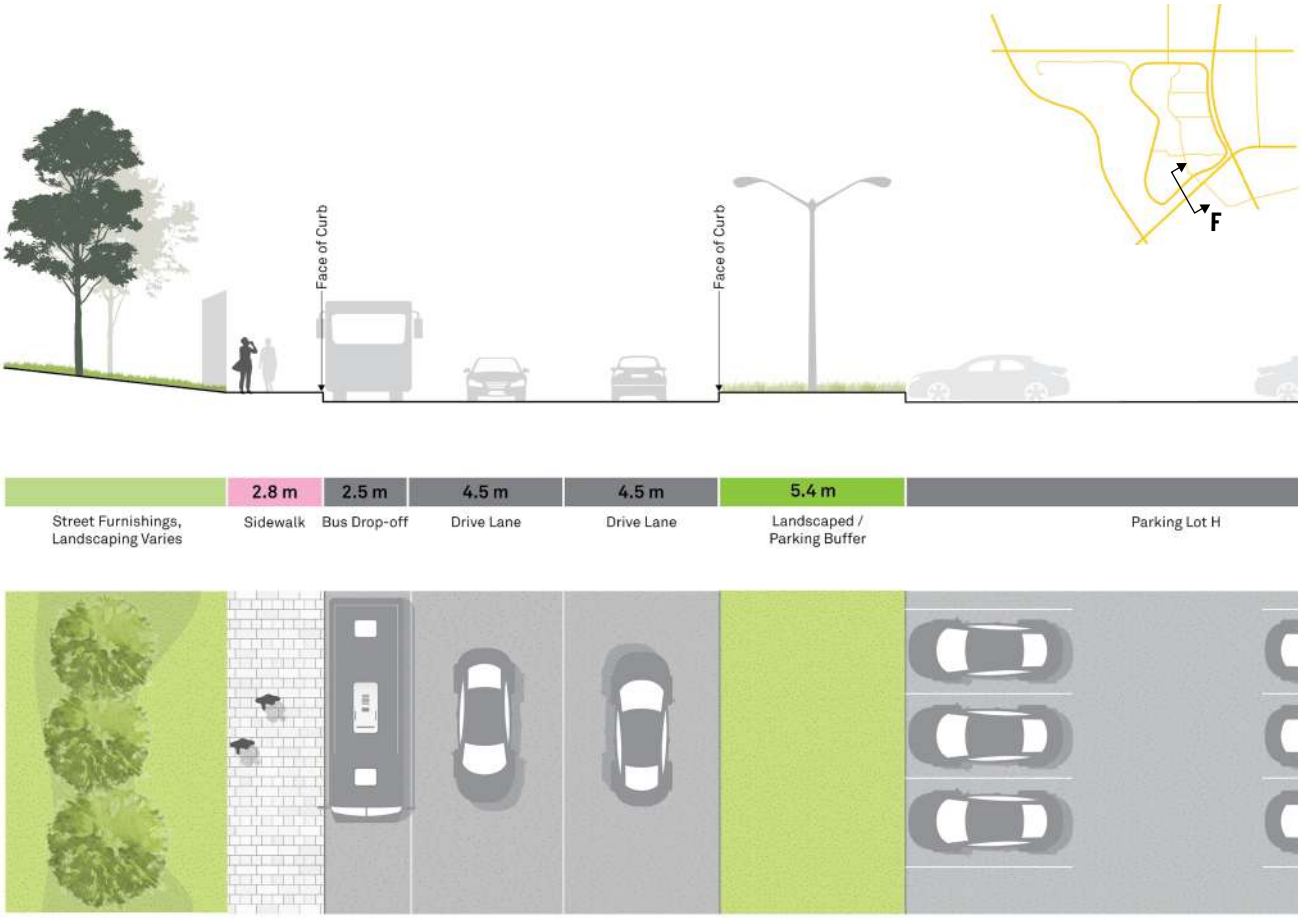


Figure 65. Section F. Existing condition of Ring Road (southern edge).

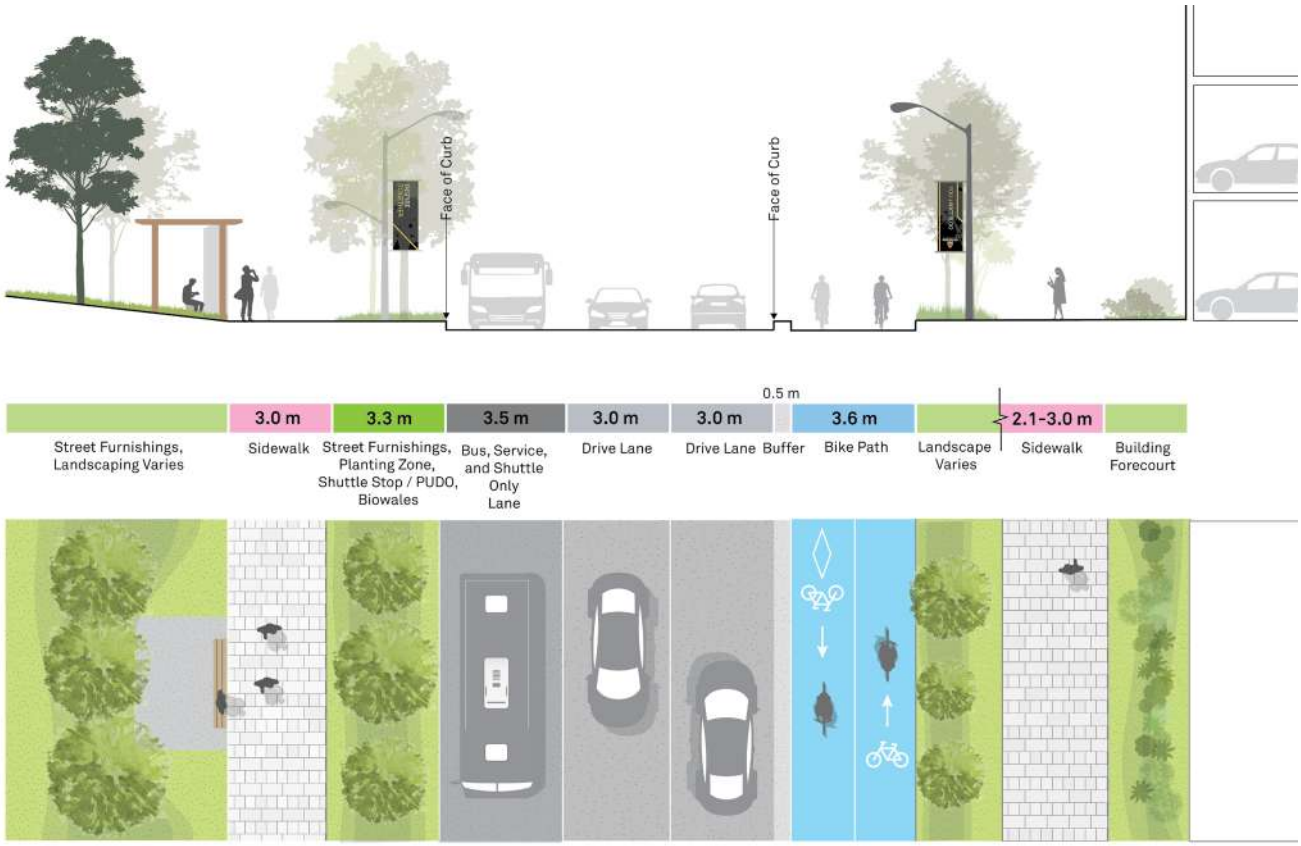


Figure 66. Section F. Proposed condition of Ring Road (southern edge).

Shared Streets

The Campus Plan re-envisions William Tutte Way, the engineering service lane, and the primary road within the East and West Villages as shared streets, transforming them into a flexible, people-first extension of the campus public realm, while allowing for emergency and service vehicles.

The following cross sections illustrate how these streets can facilitate vibrant, programmable, and adaptable spaces that balance mobility, safety, and social activity across the campus public realm.

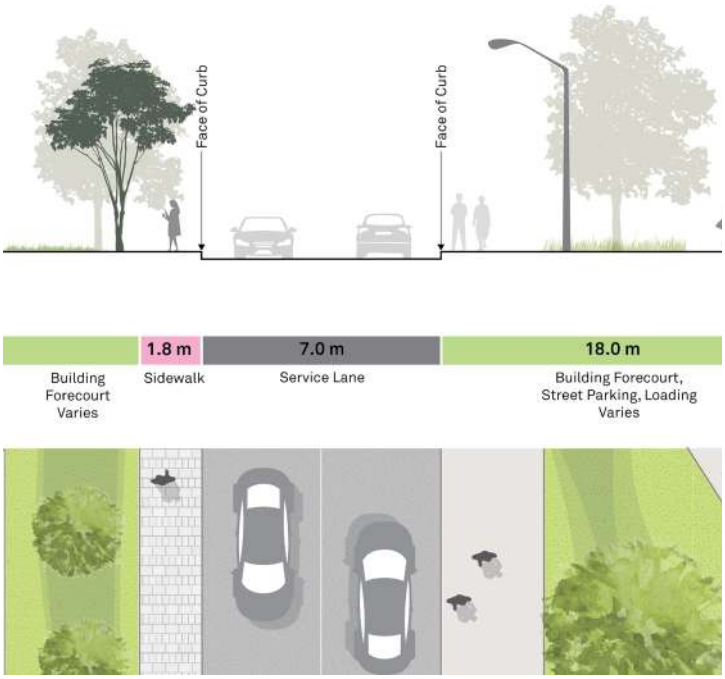


Figure 67. Section G. Existing Condition of William Tutte Way

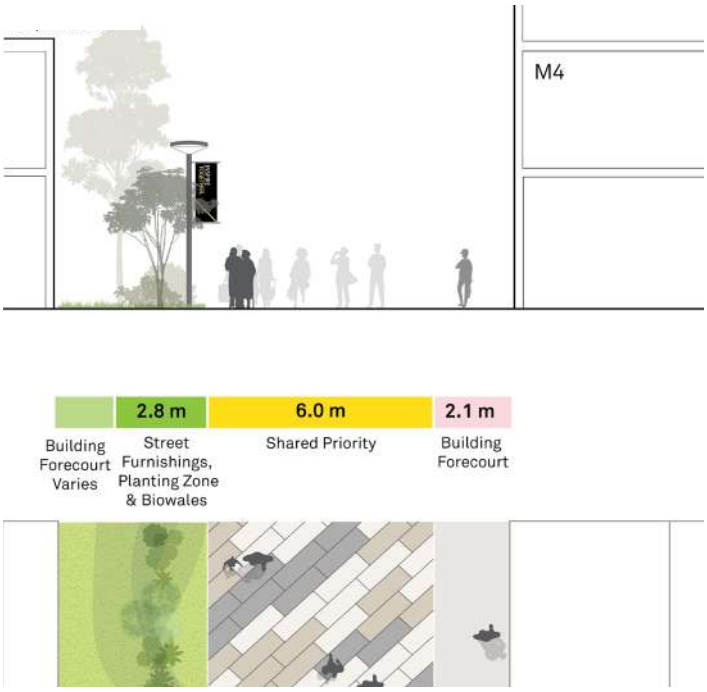


Figure 68. Section G. Proposed Condition of William Tutte Way.

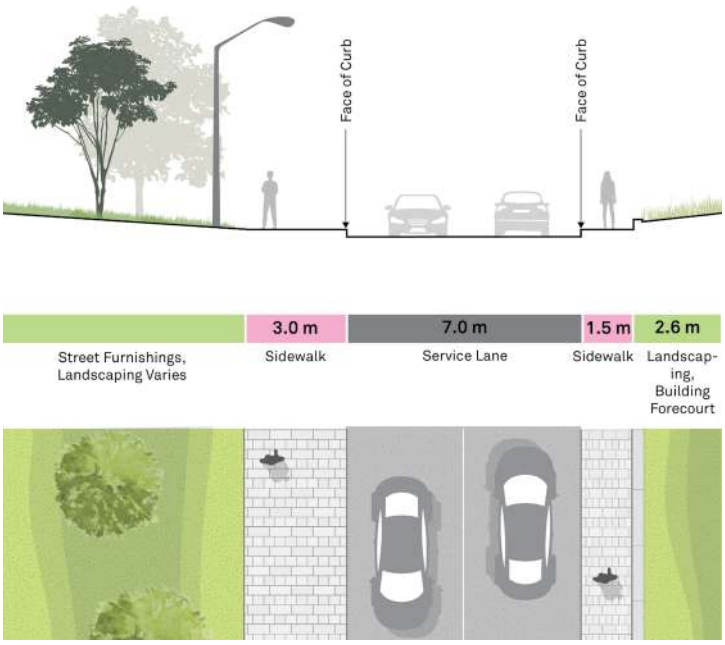


Figure 69. Section H. Existing condition of Engineering Service Lanes between DC and E3

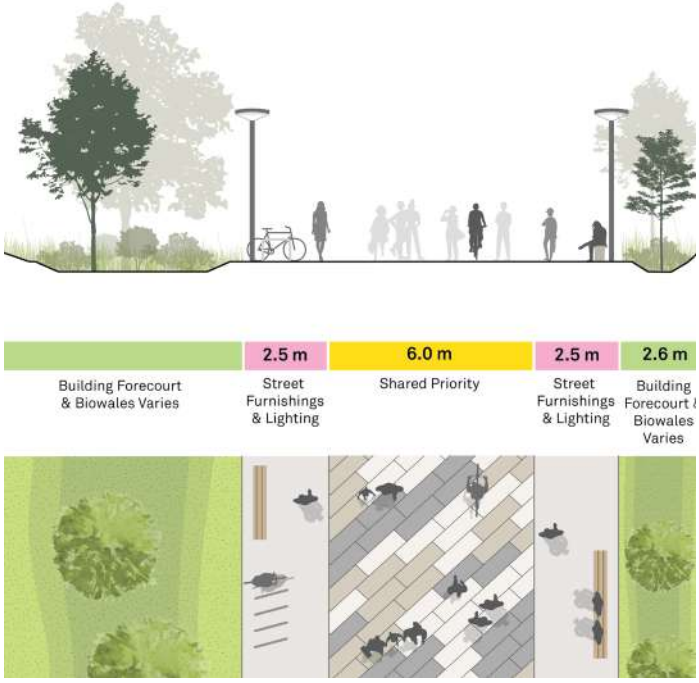


Figure 70. Section H. Proposed condition of Engineering Service Lanes between DC and E3.

Parking and Loading

The Campus Plan supports the University of Waterloo's goal of shifting toward sustainable modes of transportation. The University presently manages over 7,200 parking spaces across campus. These surface parking spaces are typically permitted and are underutilized.

The Campus Plan proposes the partial or full redevelopment of a number of existing surface parking lots to optimize the value of campus lands and balance the need for parking spaces. Upgrades to retained surface parking lots include low impact development (LID) measures, such as rain gardens and bioswales, to infiltrate surface run off, and solar photo voltaic carports to generate energy. These land use changes are proposed in an incremental manner, and ongoing parking studies are recommended to ensure that campus parking is right-sized and efficiently managed with smart technology. The Campus Plan also incorporates a total of six new structured parking lots containing a maximum of approximately 1,900 parking spaces.

Parking structures are envisioned to incorporate a variety of active ground-floor uses to contribute to a vibrant campus. These include academic, campus life, retail, or innovation, collaboration, and incubation spaces. The reduction of surface parking supports broader objectives related to pedestrian safety, accessibility, and public realm enhancements to result in smoother transitions to the adjacent urban fabric.

Loading areas remain essential to campus operations. The Campus Plan retains key loading and servicing locations and integrating these into the surrounding built form to support and enhance walkability, safety, and overall campus character.

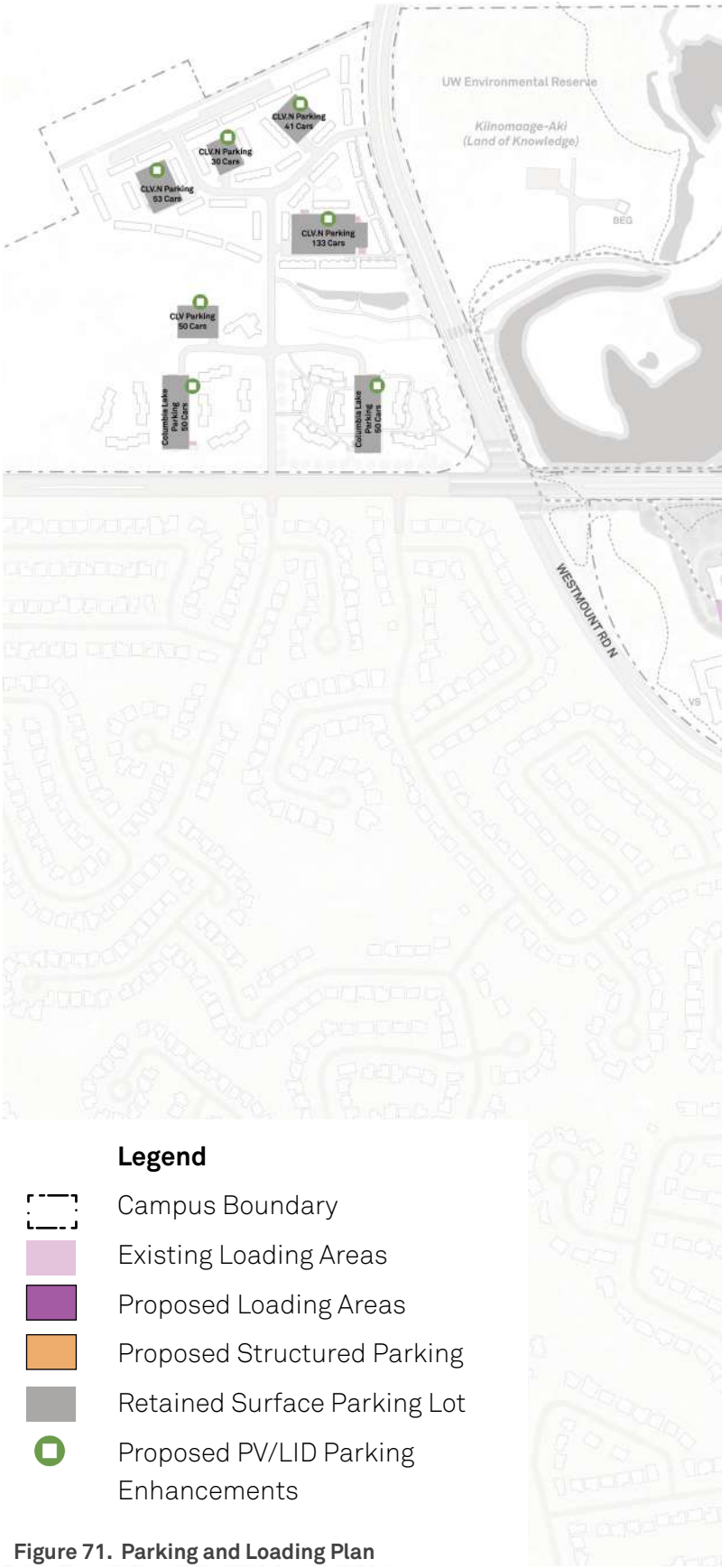
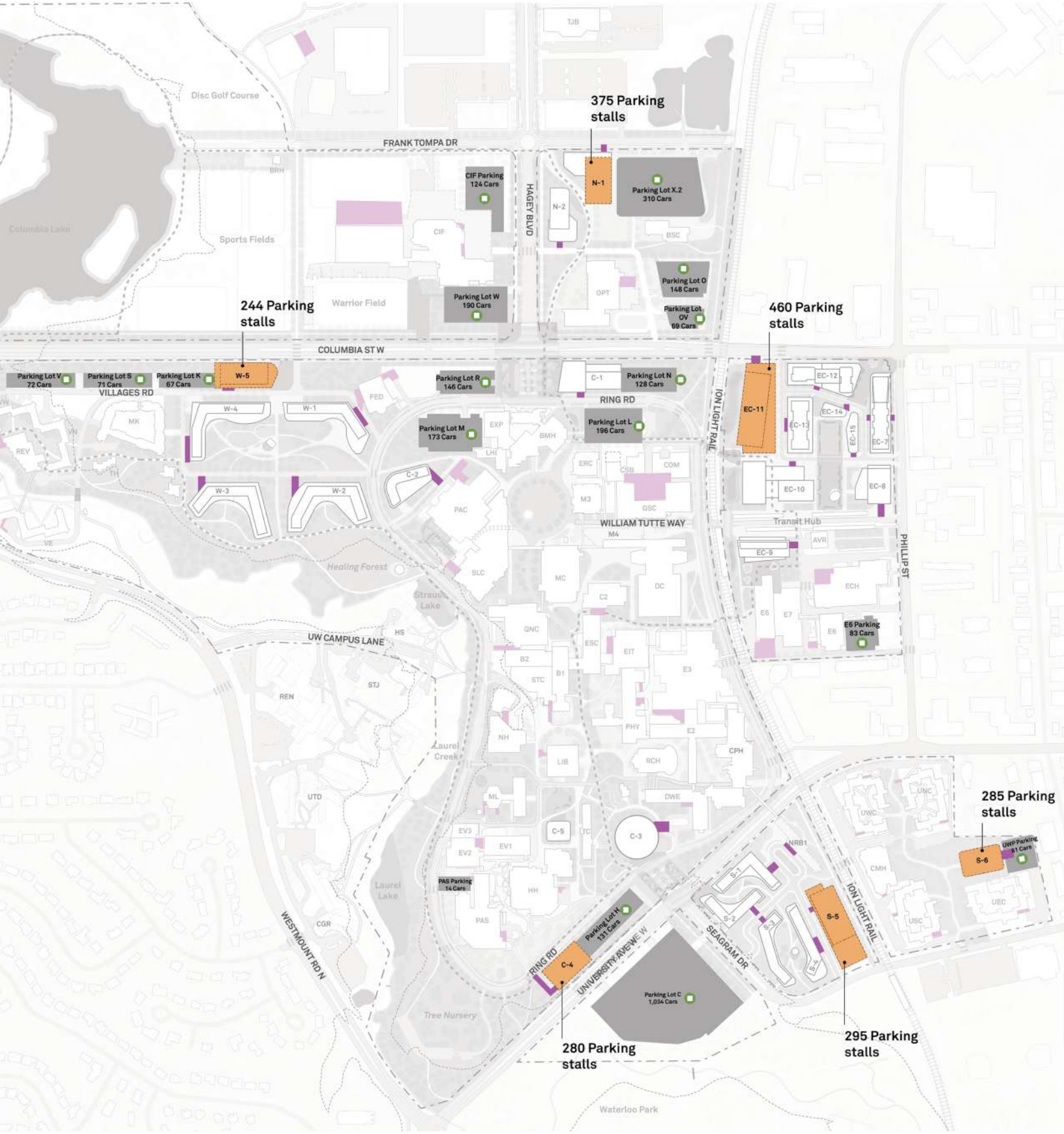


Figure 71. Parking and Loading Plan


375 Parking stalls
244 Parking stalls
460 Parking stalls
285 Parking stalls
280 Parking stalls
295 Parking stalls
FRANK TOMPA DR
COLUMBIA ST W
RING RD
WILLIAM TUTTE WAY
UW CAMPUS LANE
VILLAGES RD
HAGEY BLVD
ION LIGHT RAIL
PHILLIP ST
WESTMOUNT RD N
SEAGRAM DR
UNIVERSITY AVENUE W
Disc Golf Course
Sports Fields
Warrior Field
Columbia Lake
Healing Forest
Strauss Lake
Laurel Creek
Laurel Lake
Tree Nursery
Waterloo Park
Transit Hub
N-1
N-2
C-1
C-2
C-3
C-4
C-5
W-1
W-2
W-3
W-4
W-5
S-1
S-2
S-3
S-4
S-5
S-6
EC-7
EC-8
EC-9
EC-10
EC-11
EC-12
EC-13
EC-14
EC-15
CIF Parking 124 Cars
Parking Lot X.2 310 Cars
Parking Lot O 148 Cars
Parking Lot OV 69 Cars
Parking Lot W 190 Cars
Parking Lot V 72 Cars
Parking Lot S 71 Cars
Parking Lot K 67 Cars
Parking Lot R 146 Cars
Parking Lot N 128 Cars
Parking Lot M 173 Cars
Parking Lot L 196 Cars
Parking Lot H 131 Cars
Parking Lot C 1,034 Cars
PAS Parking 14 Cars
E6 Parking 83 Cars
UW Parking 91 Cars

Tunnel and Bridge System

The existing pedestrian campus tunnel system connects Inner Campus and West Village, allowing students, faculty, and staff to traverse many existing campus buildings without exiting indoor temperatures. The system allows for shelter from inclement weather. An additional tunnel system within the UWP Courts connects existing buildings. The existing bridge system connects buildings through the Inner Campus, and connects Inner Campus to South Village and the East Village.

The Campus Plan has recommended new buildings **C-2, C-4,** and **C-5** in locations that can be tied into the tunnel system to ensure contiguous access to the existing network. The tunnel system is envisioned to connect West Village to the Inner Campus. The Campus Plan recommends consideration of wayfinding signage and artwork within the pedestrian tunnel network to help students, faculty, and staff to navigate the network with ease. Upgraded lighting could support comfort and safety within the tunnel system, and a system-wide study is recommended.

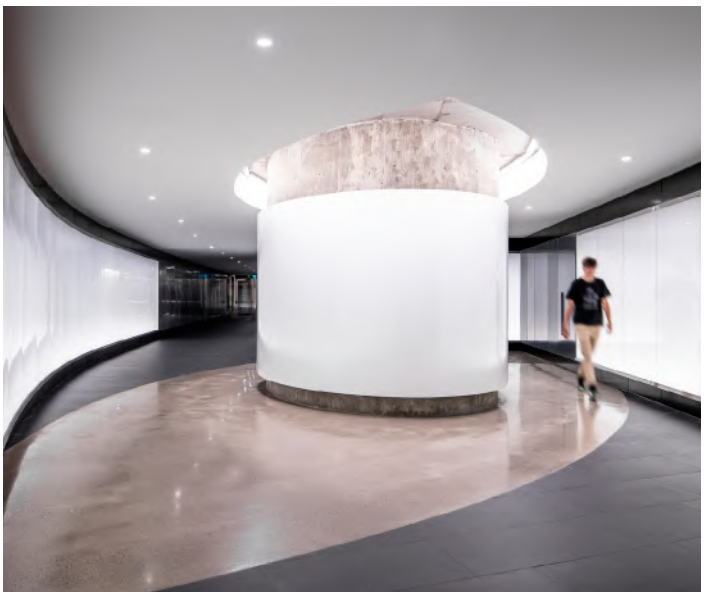


Figure 72. Upgraded tunnels can enhance pedestrian comfort and safety (EXP University of Montreal)

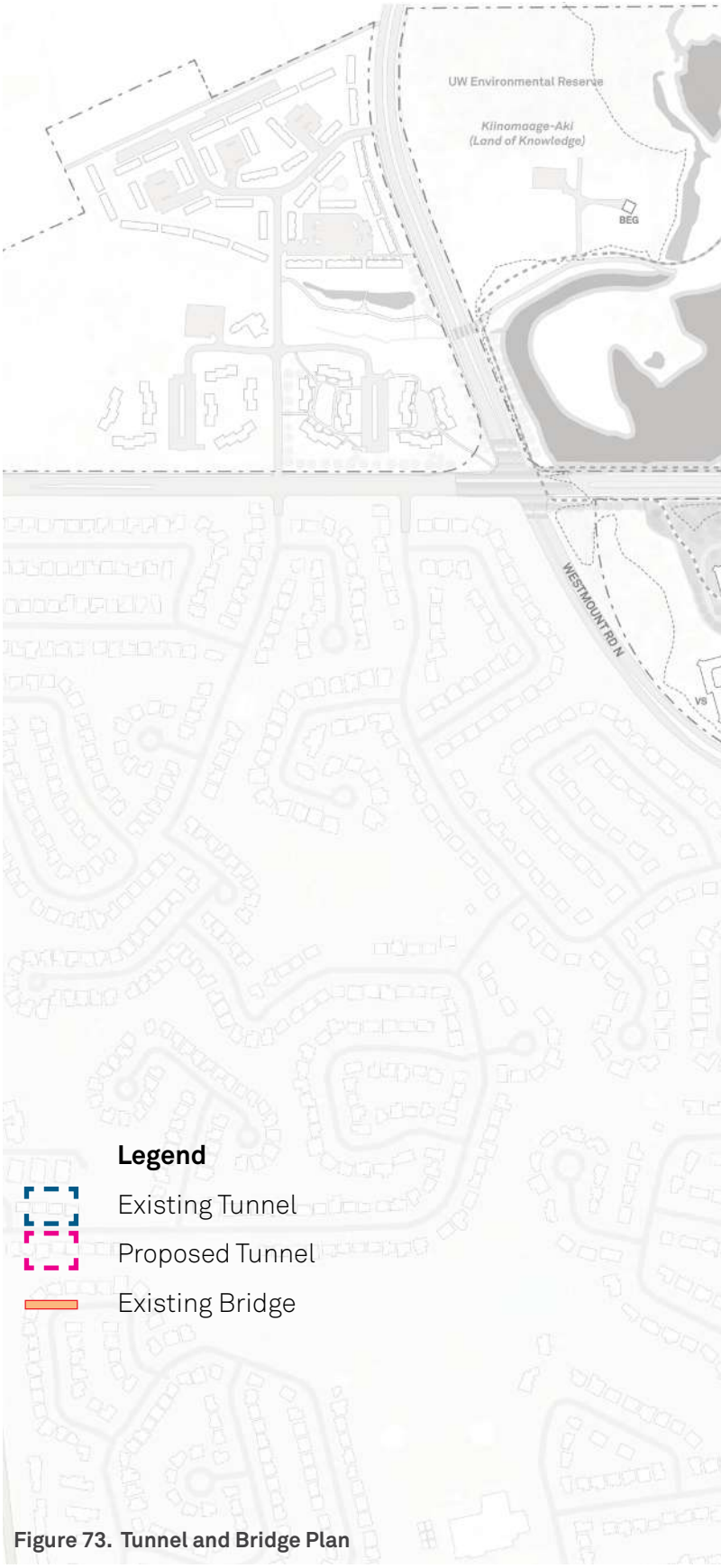


Figure 73. Tunnel and Bridge Plan

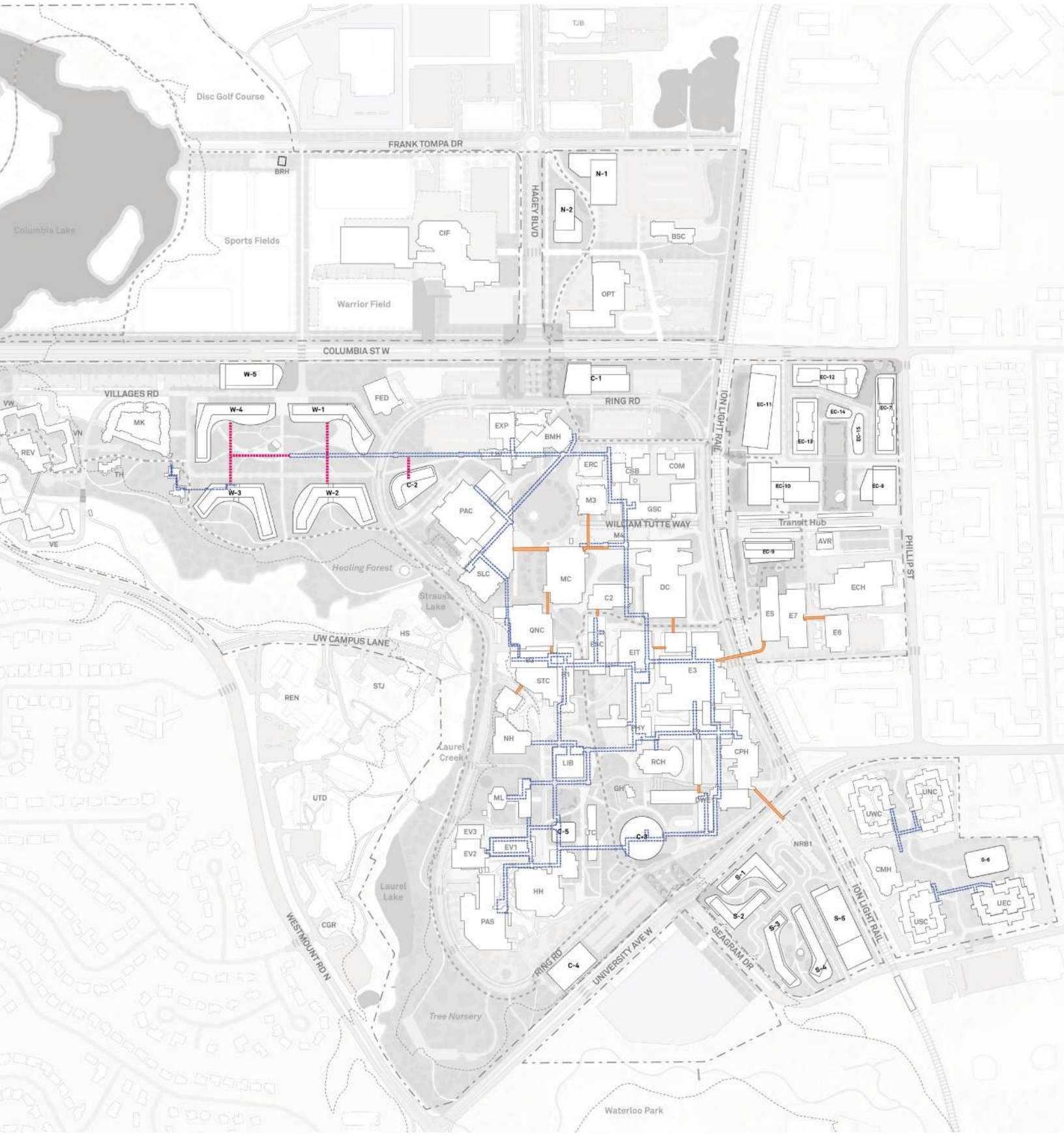

Disc Golf Course
FRANK TOMPA DR
BRH
Columbia Lake
Sports Fields
CIF
HAGEY BLVD
N-1
N-2
BSC
OPT
Warrior Field
COLUMBIA ST W
W-5
VILLAGES RD
VW
MK
W-4
W-1
FED
C-1
RING RD
ION LIGHT RAIL
EC-12
EC-11
EC-14
EC-13
EC-15
EC-7
EXP
BMH
REV
VN
TH
W-3
W-2
C-2
ERC
CSB
COM
EC-10
EC-8
M3
GSC
PAC
WILLIAM TUTTE WAY
M4
Transit Hub
AVR
EC-9
PHILLIP ST
VE
Healing Forest
SLC
MC
C2
DC
ECH
E5
E7
E6
Strauss Lake
HS
UW CAMPUS LANE
QNC
ESC
EIT
E3
STC
STJ
REN
NH
PHY
CPH
Laurel Creek
LIB
RCH
GH
UTD
ML
EV3
EV2
EV1
C-5
TC
C-3
NRB1
UNC
UWC
CMH
S-6
S-1
S-2
S-3
S-5
S-4
UEC
USC
Laurel Lake
HH
PAS
CGR
WESTMOUNT RD N
RING RD
C-4
UNIVERSITY AVE W
SEAGRAM DR
Tree Nursery
Waterloo Park

Figure 74. Conceptual rendering of Ring Road and the West Village.

Mobility Recommendations:

General

- Establish a clear hierarchy of paths throughout campus that cultivate community integration and interactions.
- Ensure that all paths, streets, and trails are fully accessible and promote universal design, fostering connections and creating an inclusive campus environment.
- Maintain sightlines along pedestrian pathways, with multiple points of entry and exit, and continuous lighting to increase safety for vulnerable campus users.
- Transform lanes and service routes into shared streets that promote active transportation, safely move pedestrians into the core of campus, and animate the public realm.
- In collaboration with the City and Region of Waterloo, strengthen external connections to campus by implementing enhanced street crossings, traffic calming measures, and improved pedestrian infrastructure at key intersections.
- Balance the functional requirements of the campus, including vehicle movement, loading/deliveries, pick-up/drop-off, and transit needs, with the need for an inclusive and safe public environment for pedestrians and cyclists.
- Create campus gateways that are clear destinations that welcome people into the campus environment.
- Support the ongoing analysis of parking demand as the campus develops.

Public Roads

- Collaborate with the City and Region to improve street design and crossing of collectors and arterials (Phillip Street, Columbia Street, University Avenue, Westmount Road, Seagram Drive, Hagey Boulevard, Frank Tompa Drive) as multi-modal corridors.
- Expand the widths of existing grade-separated cycling lanes (minimum 1.8 m) and introduce multi-use paths (minimum 3.5 m) along surrounding streets.
- Provide universal accessibility through additional curb cuts, tactile paving, and barrier-free design elements.
- Enhance safety and visibility with pedestrian-scale lighting and improved signalization (e.g., leading pedestrian intervals, or activated signals).
- Improve Hagey Boulevard by reducing the amount of driving lanes and providing protected bike lanes to allow for better access to north campus, R+T Park, and the future hospital site.

Ring Road

- Redesign Ring Road as an inclusive, safe corridor that accommodates all modes of transportation while still facilitating vehicular traffic.
- Consider minimizing vehicular movement to one-way direction at key segments of Ring Road, allowing for a redesign of the surface treatment, functionality, and programming of the road.
- Consider moving the curb inward toward the centreline at crosswalks to shorten crossing distance and improve visibility.
- Enhance and create new pedestrian street crossings that integrate traffic calming features. Designs can include local flora/fauna motifs.

- Provide consistent, barrier-free pedestrian clearways of at least 3.0 metres where pedestrian volumes are high.
- Integrate site furnishings, planting zones, and public artwork that enhance the sense of place, including at primary gateways.
- Introduce high-visibility, textured crosswalks and distinctive paving treatments at key intersections to calm traffic.
- Standardize curb heights (maximum 6") to improve accessibility.
- Introduce grade-separated, buffered cycling lanes to ensure safety and comfort.
- Consider raised crosswalks as an enhanced traffic calming at key locations where vehicle-pedestrian conflict frequency is higher.
- Create new outdoor study areas, pavilions, and gathering nodes fronting Laurel Creek, linking learning environments to the campus mobility network.

Shared Streets

- Prioritize people over vehicles on shared streets by calming traffic, narrowing vehicular travel lanes,and creating curbless pedestrian clearways in strategic locations to support accessibility and inclusivity.
- Integrate sustainable design elements, including permeable paving, native landscaping, bioswales, and other LID practices that improve ecological performance while enhancing campus character.
- Activate the public realm with integrated seating, pedestrian-scale lighting, and flexible outdoor spaces that encourage social interaction and programming.
- Reinforce the William Tutte Gateway and cross-campus connections by designing shared streets as welcoming, permeable entry points into campus. Include enhanced crossings where shared streets intersect with Ring Road.

Parking and Loading

- Design parking structures to include a mix of uses. Consider integrating residential, recreational facilities, mobility hubs, academic programs, and campus life amenities such as food courts, social spaces, and entertainment at-grade or directly above parking decks.
- Incorporate public art, vertical landscaping, or unique architectural elements to reduce the visual impact of parking and loading on the public realm.
- Design parking structures to be adaptable and flexible, allowing for potential future retrofits.
- Integrate smart parking technologies to encourage more efficient use of the parking supply.
- Install electric vehicle chargers in alignment with best practices or the Shift:Neutral goals.
- Site pick-up and drop-off areas along Ring Road to allow people of all abilities to access campus via ride share or taxi.
- Locate barrier-free parking and drop-off areas as close as possible to primary accessible entrances.
- Locate accessible parking in proximity to building entrances where possible.
- Consider providing paratransit drop-off zones adjacent to accessible entrances. Explore the implementation of a continuous shuttle service along Ring Road to connect all campus areas
- Design service lanes as flexible shared spaces that can safely accommodate both pedestrian use and service vehicle access, depending on time of day.

- Use consistent, high-quality materials (i.e., brick, stone, metal) for service elements to visually align with adjacent buildings.
- Incorporate landscaping elements such as trees, hedges, planters, or green walls to soften the visual impact of service areas and create buffers from public spaces.
- Use green screens and plantings to conceal loading docks, waste bins, and mechanical equipment, while ensuring they remain fully accessible for operations.

Pathways and Crossings

- Provide intuitive, direct, and accessible routes to and from key areas, building entrances, and transit stops.
- Construct pathways of firm, stable, and slip-resistant materials and provide adequate drainage to ensure a barrier-free environment.
- Provide direct connections from sidewalks and parking areas to building entrances and open spaces, allowing for unimpeded mobility through a site.
- Where grade changes cannot be avoided and existing stairs are present (such as the path network surrounding RCH), provide ramps with a running slope not exceeding 5% (1:20).
- Ensure all curb cuts and pedestrian crossings are aligned and marked with bright white lines or contrasting materials and colours. Raised crosswalks are encouraged in high-traffic locations that support high pedestrian volumes such as Ring Road.
- Maintain lines of sight along pedestrian pathways, with multiple points of entry and exit, and continuous lighting to increase safety for vulnerable campus users.

Primary Pathways

- Establish the central north-south pedestrian corridor as a highly navigable, interconnected route through the heart of campus.
- Provide a minimum width of 6.0 metres, with distinctive paving and abundant seating to support social activity and outdoor learning where possible.
- Reinforce the Two Row Path as an inclusive and vibrant corridor that supports accessibility and year-round activity.

Secondary Pathways

- Standardize path widths, paving treatments, lighting, and furnishings to establish a cohesive campus identity. Secondary paths should provide a minimum width of 3.0 metres.
- Address accessibility concerns by improving inconsistent paving and grade changes using universal design principles.
- Provide clear, navigable and barrier-free connections to buildings, open spaces, and surrounding transit stops.
- Support smaller-scale social use by incorporating seating, shade, and moments for pause and reflection within landscapes.
- Integrate paths into gardens, courtyards, and naturalized areas to enhance ecological connectivity and provide alternative routes through campus.

Building Entrances

- Ensure primary building entrances are fully accessible, clearly identified with signage, well lit, and weather protected.
- Ensure that entrances connect directly to accessible exterior routes and are free of steps or abrupt grade changes where possible. If steps cannot be avoided, highly visible and accessible entrances should be located nearby.
- Incorporate automatic or power-assisted doors and ramps with best-practice slopes and safety standards at main entrances for equitable access.
- Locate signage that identifies building entrances where it is fully visible from pathways, streets, and open spaces.

Wayfinding

- Support and enhance the existing wayfinding strategy through a comprehensive wayfinding audit to investigate redundancy or points of conflict at the campus and exterior/interior building levels.
- Establish clear and navigable wayfinding standards to communicate the hierarchy of path networks on campus.
- Locate high contrast wayfinding signage along pedestrian corridors.
- Integrate cultural and educational markers, including Indigenous wayfinding and interpretive signage, at key destinations such as the Peter Russell Rock Garden, the Indigenous Gathering Space, and campus gateways.
- The Moccasin Identifier project can serve as a cultural landmark and educational tool to reinforce the University's commitment to reconciliation in visible and lasting form.
- Integrate dual-language signage and interactive digital maps that centre Indigenous place-names alongside settler history, revealing the layered historical and cultural narratives of the campus.
- Digital initiatives such as the Office of Indigenous Relations self-guided walking tour can highlight and connect Indigenized spaces on campus.

Figure 75. The campus can further support active transportation in the City of Waterloo

3.6 Innovation and Creativity Framework

The Campus Plan envisions a campus-wide ecosystem of innovation and creativity that connects students, faculty, and alumnae across the campus. This network will include indoor and outdoor spaces for collaboration and idea exchange, integrating departments, schools and programs across the campus.

New and renovated spaces will transform the campus into a place that fosters collaboration and innovation across faculties and disciplines. By enabling knowledge sharing, the Innovation and Creativity Framework will help the University meet its mission to address the challenges facing society, health, the environment, technology, and economic development, in line with the University's **Global Futures Vision**.

In alignment with **Waterloo at 100**, the Innovation and Creativity Framework will reinforce the University's commitment to co-op and work-integrated learning, innovation and entrepreneurship, as well as fundamental and applied research. The campus-wide Innovation network establishes innovation hubs and creativity spaces that bridge disciplinary boundaries creating spaces for collaborative solutions to the complex challenges of the 21st century.

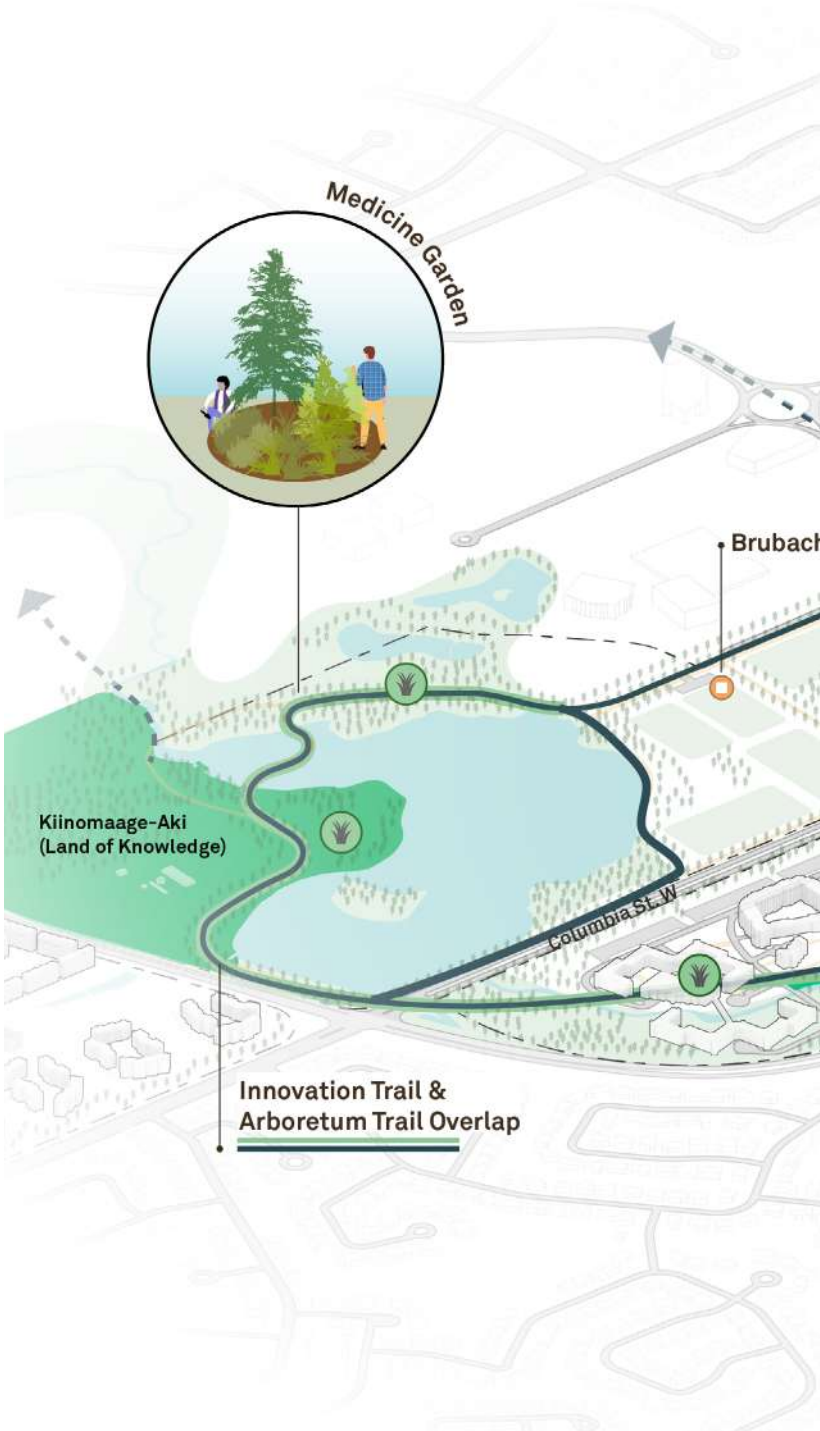
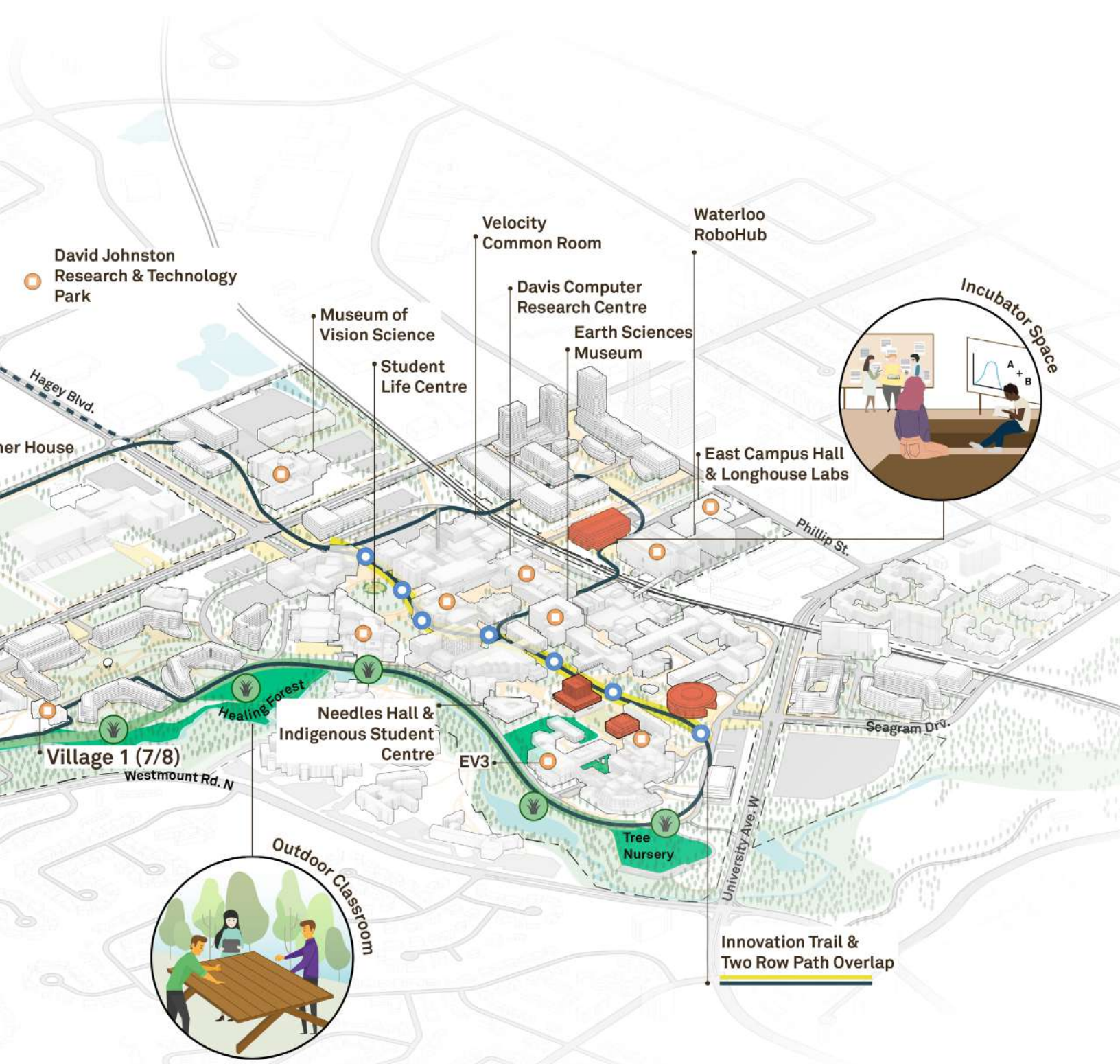


Figure 76. Innovation and Creativity Framework

- Campus Boundary
- Purpose-built Innovation Hub
- Land-based Learning
- Innovation Trail
- Two Row Path Marker
- Land-based Learning Facility
- Indoor Exhibition and Discovery


David Johnston Research & Technology Park
Velocity Common Room
Waterloo RoboHub
Davis Computer Research Centre
Museum of Vision Science
Earth Sciences Museum
Student Life Centre
Incubator Space
Hagey Blvd.
East Campus Hall & Longhouse Labs
Phillip St.
Healing Forest
Needles Hall & Indigenous Student Centre
Seagram Drv.
Village 1 (7/8)
Westmount Rd. N
EV3
Tree Nursery
University Ave. W
Outdoor Classroom
Innovation Trail & Two Row Path Overlap

Interior Innovation and Creativity Spaces

To support the campus's ecosystem of innovation and creativity, the Campus Plan envisions new and renovated buildings with new, flexible spaces that encourage creativity in non-traditional learning environments, such as incubator spaces, maker spaces, exhibition and studio spaces, creating opportunities for creative expression and collaboration.

Highly visible innovation spaces should be designed to welcome and encourage use by students, faculty, and staff of all educational fields. While the creation of high-quality and flexible innovation spaces is a recommendation of the Campus Plan, the management and programming of innovation spaces is equally important to ensure their success in encouraging collaboration across faculties. The use of innovation spaces can be programmed into curricula across all faculties.

1. Innovation Hubs

As flexible ecosystems, Innovation Hubs support the testing of ideas through access to specialized labs, prototyping facilities, collaboration areas, and studio environments. Strategically located along key pedestrian corridors and campus gateways, Innovation Hubs should feature active, transparent ground floors that invite participation and animate the public realm. A mix of uses, including study zones, classrooms, maker spaces, and food services, encourage spontaneous interaction and strengthens community connections.

The Campus Plan proposes the development of four Innovation Hubs at key nodes on campus: the proposed **C-3** and **C-5** buildings, Dana Porter Library, and the proposed **EC-9** building. The Campus Plan recognizes the **Library Master Plan Update** is presently underway, and anticipates the transformation of Dana Porter Library into an Innovation Hub.

The proposed **C-3** building in its location at the site of South Campus Hall provides an opportunity for an Innovation Hub with new space to exhibit

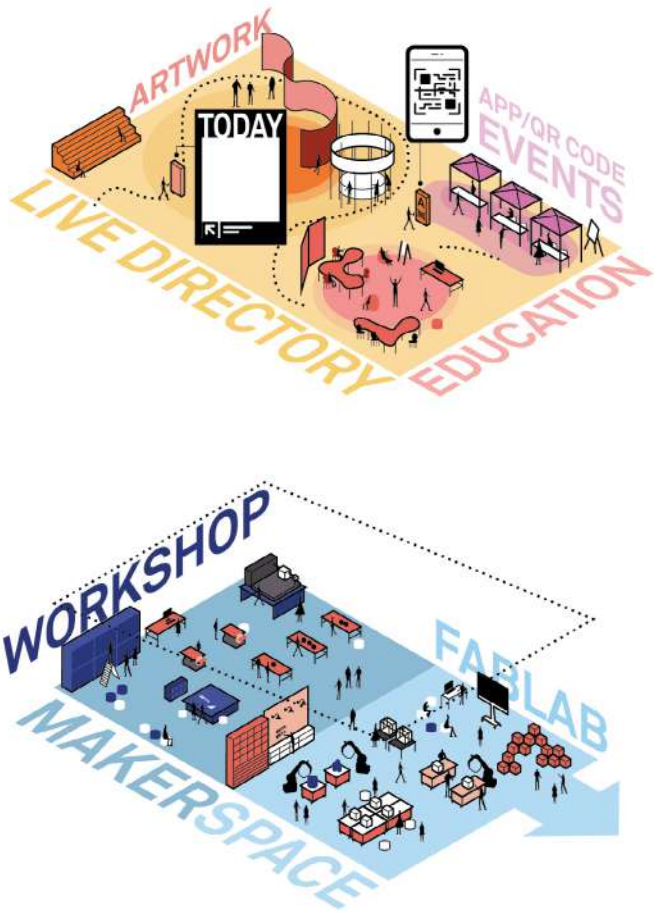


Figure 77. Innovation hubs can support the University's existing innovation ecosystem (Harvard Innovation Labs)

alumnae, student, faculty and staff innovation and creativity. The Hub should be welcoming to visitors and accommodate event spaces, lecture halls, and galleries.

The proposed **C-5** building is envisioned to replace the Arts Lecture Building and its program of classrooms and lecture theatre. The Campus Plan envisions the building to showcase the creative side of innovation, supporting spaces that bridge technology and the human imagination. Studio spaces and digital innovation labs are recommended.

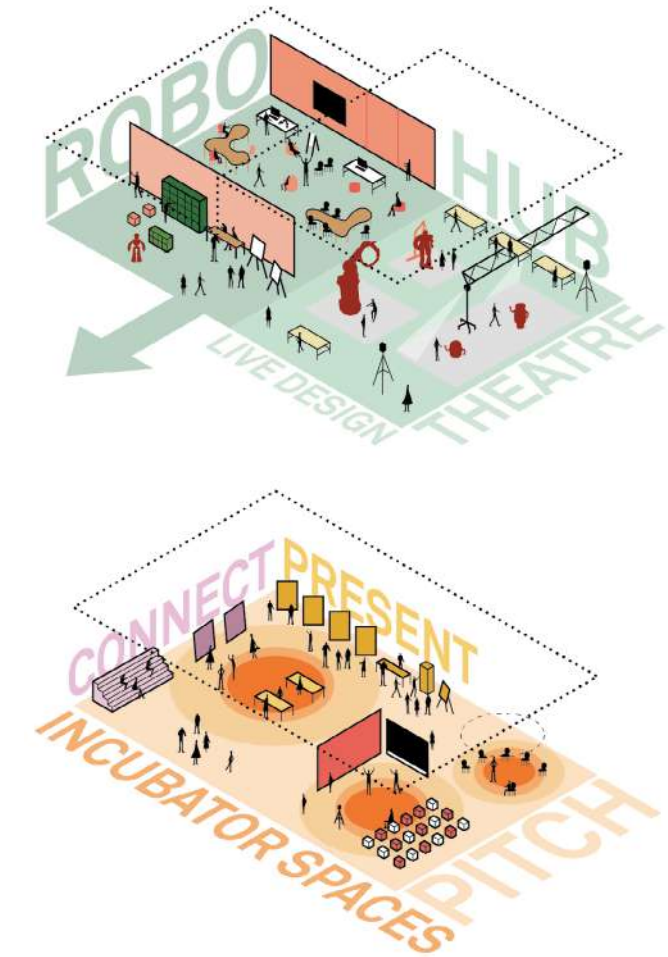
In the proposed **EC-9** building, the Campus Plan envisions a building with both Transit Hub and Innovation Hub uses to activate the William Tutte Gateway. A highly visible program of both specialized and flexible labs is envisioned in this building.

The programming of new Innovation Hubs are envisioned to encourage collaboration across educational fields, and may be grouped according to strategic research goals, such as those within the **Global Futures Vision**. New Innovation Hubs can also serve the University's existing incubators and centers, including The Problem Lab, GreenHouse, and Velocity, supporting their continued growth and fostering greater integration across campus innovation and entrepreneurial ecosystems.

2. Exhibition Spaces

The Campus Plan envisions dedicated spaces within and adjacent to academic and ancillary buildings, where faculty projects, research, historical documents, and artwork are displayed. Existing academic buildings should be retrofitted to provide dedicated ground-floor exhibition space that highlights research, innovation, and creative outcomes of each faculty. These spaces should be augmented by innovation workspaces and labs.

Existing exhibition and Innovation spaces should be reviewed to ensure alignment with the vision of providing landmark spaces for creativity and the celebration of student and alumnae success.



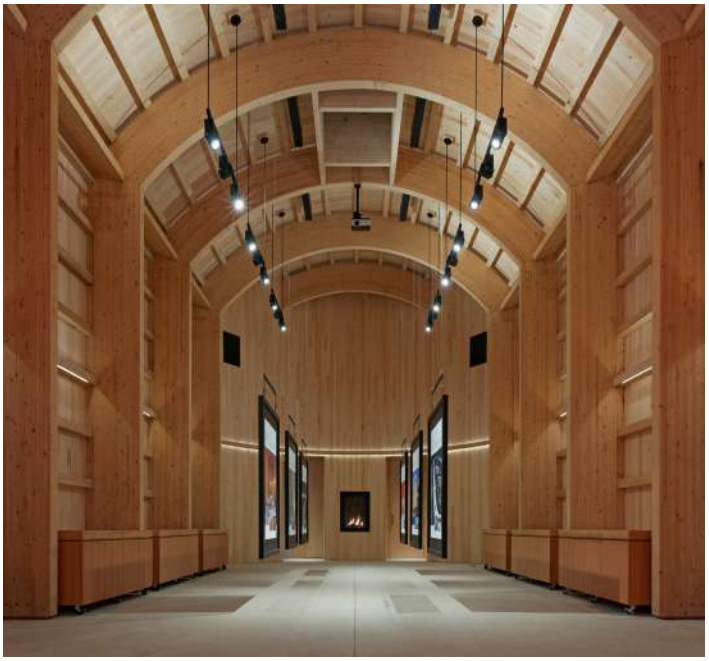


Figure 78. Exhibition and Innovation spaces should be welcoming and reflective of their purpose (David Whittaker)

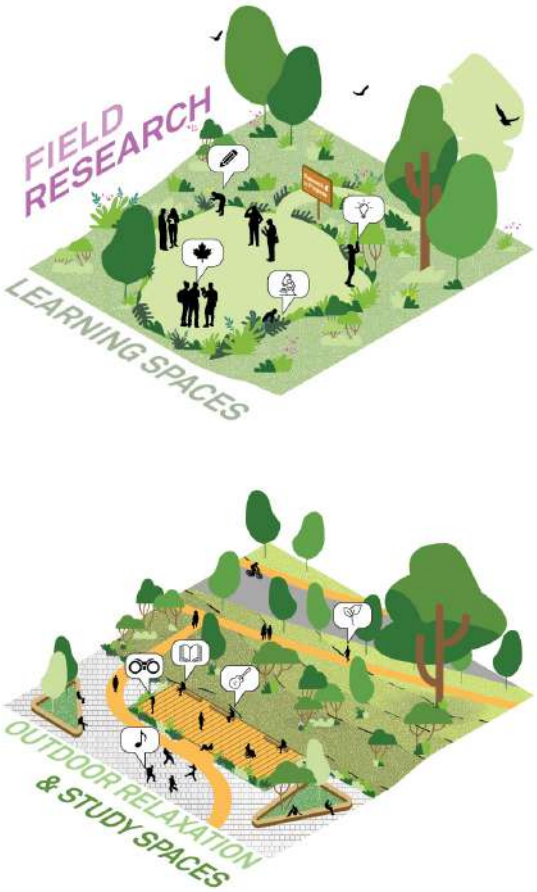
Outdoor Innovation and Creativity Spaces

The Campus Plan envisions outdoor innovation and learning spaces, including study pavilions, outdoor classrooms, field research areas, and collaborative art and learning installations to enliven the campus, support placemaking, and foster creativity.

1. Outdoor Teaching and Learning Spaces

The Campus Plan envisions outdoor learning spaces strategically placed in areas with ecological value, such as Laurel Creek, Laurel Lake, Strauss Lake, Columbia Lake, and adjacent to the Healing Forest. Opportunities for land-based learning spaces include formal outdoor classrooms, fieldwork stations, gardens or test plots.

The Campus Plan supports outdoor classrooms with permanent or flexible seating for both lecture and seminar configurations to account for a range of class sizes. Recognizing the University of Waterloo's unique year-round study schedule, these outdoor classrooms can provide novel teaching and learning spaces and allow flexibility as existing indoor classrooms are upgraded in the summer months.



2. Study Spaces and Pavilions

The Campus Plan supports informal study spaces and pavilions located throughout the Arboretum Trail, creating dedicated spaces for informal study and learning in the natural environment. These study pavilions are envisioned as light structures that can support year-round use.

3. Collaborative Art and Learning Installations

The Campus Plan envisions outdoor interactive, semi-permanent exhibitions that merge art, education, and interdisciplinary collaboration. Exhibitions at campus gateways, academic building forecourts and courtyards, and along key pedestrian routes transform the campus into a dynamic environment of interdisciplinary projects. Examples of collaborative art and learning stations include augmented reality tours, interactive murals, light installations, physical structures and other displays.

Figure 79. Outdoor classrooms and teaching and learning spaces reconnect students and faculty with the landscape and enhance well-being

Innovation and Creativity Recommendations:

- Design accessible and visible collaboration spaces in buildings that encourage the convergence of students, staff, and faculty members from all faculties and departments.
- Activate ground floors of new and existing buildings with learning, social, and community uses, and strategically align these spaces with adjacent academic buildings to cultivate a dynamic and flexible culture of cross-collaboration and knowledge exchange.
- Highlight ongoing projects from departments and faculties through displays, installations, and interactive exhibits in both indoor and outdoor spaces as opportunities for passive learning and inspiration.
- Integrate these features into the broader built form and open space network to create a campus environment that sparks curiosity and reflects the University's culture of innovation and experimentation.
- Provide either permanent or flexible seating for outdoor classrooms, accommodating both lecture and seminar configurations to account for a range of class sizes.
- Design outdoor classrooms to provide sun and rain protection.
- Fieldwork stations, located in ecologically rich areas, should operate as dedicated sites that support data collection, research, and education in a practical, hands-on environment.
- Integrate learning opportunities for students while undertaking upgrades to campus infrastructure and buildings, using the campus as a living lab.

Figure 80. Locating labs in highly visible locations encourages a sense of discovery on campus

Figure 81. Campus open spaces reflecting the University's branding promote wayfinding (University of Waterloo)

4.0

Key Focus Areas and Gateways

4.1 Gateways

Campus gateways function as key entrances into campus and often define people's first impression of the campus. A well-designed and integrated gateway orients visitors, provides a sense of arrival, and defines the boundaries and character of the broader campus. Today, many existing campus entry points lack clarity, resulting in undefined entry points that weaken the overall arrival experience. Illustrated on the Plan to the right are primary and secondary gateway opportunities that will function as key pedestrian entry points into campus.

Primary Gateways serve as the campus's main points of arrival, expressing institutional identity and creating a strong sense of placemaking through prominent design, signage, and public space along major streets and transit corridors.

Secondary Gateways support everyday access to the campus edge, prioritizing walkability and connections to surrounding neighbourhoods through more modest, consistent design treatments.

Together, primary and secondary gateways balance clarity and identity with accessibility, re-inforcing the campus and integrating it within the context of the City of Waterloo.

Figure 82. Primary gateways establish a strong first impression and signal arrival. By integrating safe crossings, seating, and cohesive architectural, open space, and landscape features, gateways become recognizable entry points that anchor the campus experience (Northwestern University)

Figure 83. Well-designed campus gateways become memorable entry points that help define the campus experience

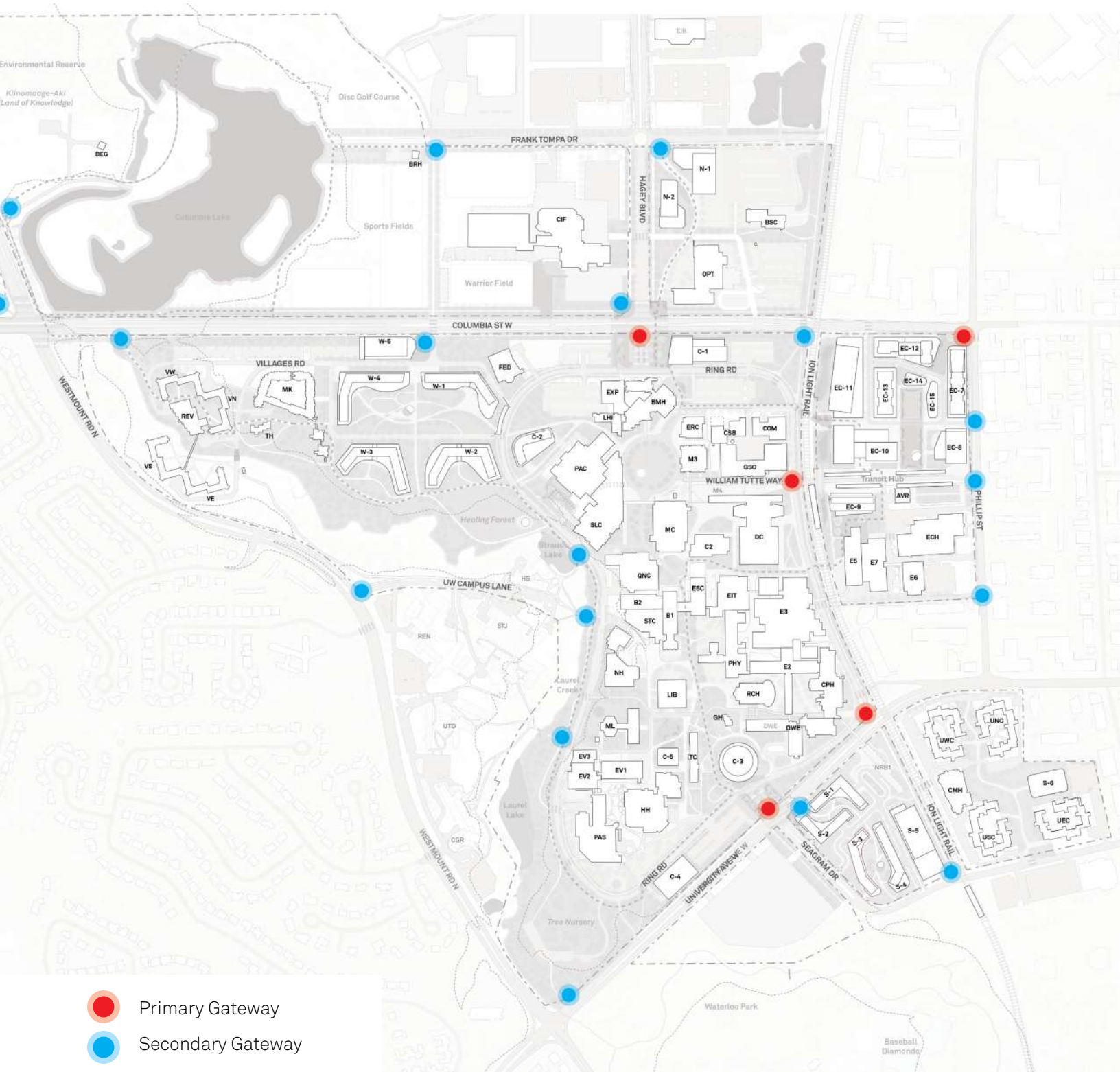


Figure 84. Campus Gateway Plan highlighting primary and secondary gateways

4.1.1 North Gateway

The North Gateway at Columbia Street West is re-imagined as a vibrant, welcoming campus entry for both the North and Inner Campus. The proposed plaza and upgraded paving can extend across Columbia Street West. A new building (C-1) presents an opportunity to combine academic and ancillary uses and create a prominent and engaging campus frontage.

The existing landmark signage is set in a new context, with a pedestrian-focused plaza containing verdant planters and seating. New pavement treatments help to calm traffic entering the campus, while a University branded banner program helps signal arrival into campus. Pavers extend across Ring Road can further calm traffic and allow for safer pedestrian crossing at the north access to the Two Row Path.

Tree plantings, landscaping elements, lighting, and seating provide a welcoming setting along this interface with the City and local community.

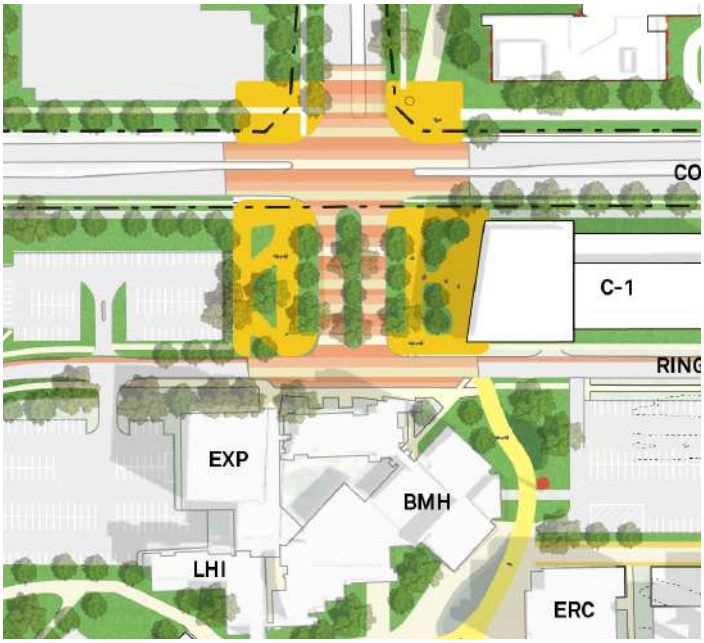


Figure 85. North Gateway Concept Plan

Figure 86. North Gateway Axonometric view

4.1.2 William Tutte Gateway

The William Tutte Gateway joins the Transit Hub and East Village more seamlessly with the Inner Campus. The Gateway treatment responds to the pedestrian flow from the Transit Hub and East Village across the ION LRT to the Core Campus. A widened pedestrian crossing is proposed to accommodate safer access to the Inner Campus. Collaboration with transit authorities on the design and implementation of an enhanced crossing would be required.

A raised crossing and accent pavement can support traffic calming, complementing recommended one-way vehicular movement at this section of Ring Road. Design strategies are intended to ensure that William Tutte Way is viewed by drivers as a pedestrian-primary entrance while allowing service vehicles to access the area. Adjacent pick up and drop off areas ensure accessibility is maintained.

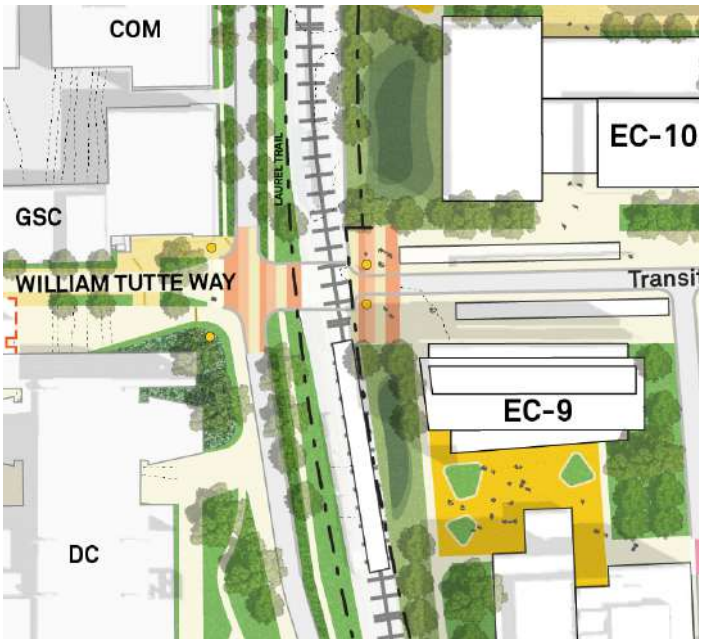


Figure 87. William Tutte Gateway Concept Plan

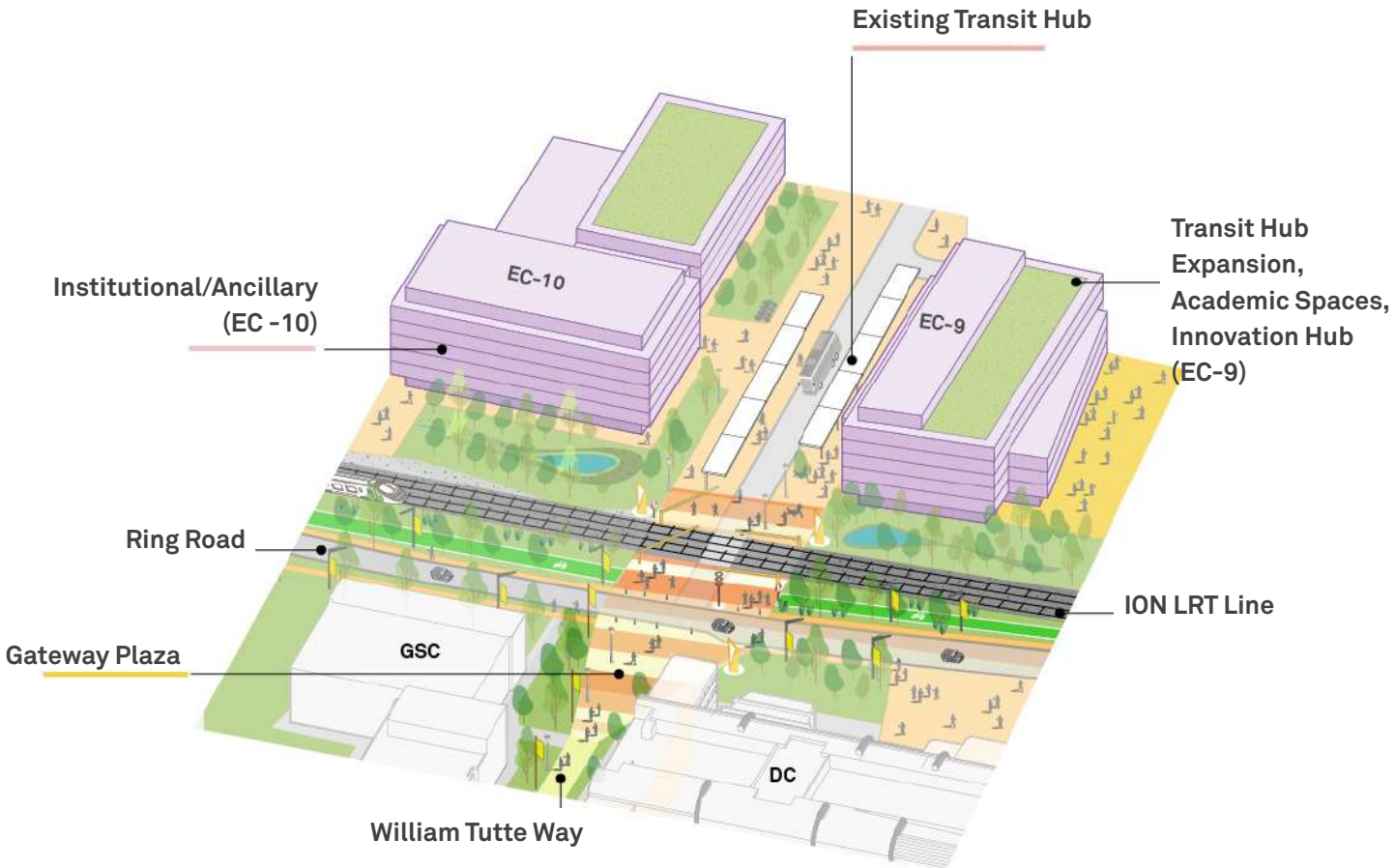


Figure 88. William Tutte Gateway Axonometric view

4.1.3 South Gateway

The South Gateway at University Avenue is re-imagined as a vibrant entrance to campus at the south end of the Two Row Path. The new **C-3** building is envisioned to bridge the significant grade change and provide ramped access within and on the exterior of the building, introducing a prominent new campus building. The Gateway is imagined as a meeting place for campus tours, drawing prospective students and community members into a welcoming plaza. The Gateway design can integrate the future design of the Two Row Path and incorporate Indigenous placemaking elements, creating a space for reflection, learning, and innovation.

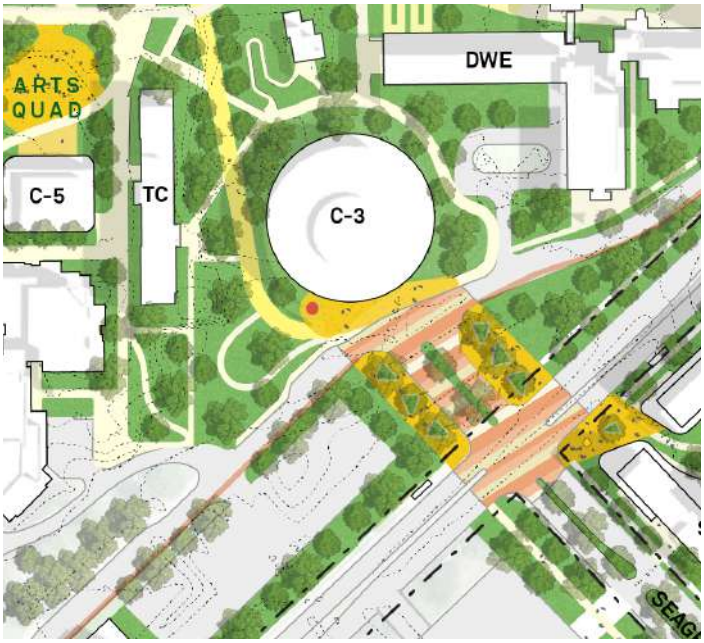


Figure 89. South Gateway Concept Plan

The Campus Plan recommends setting the existing gateway signage within an enhanced pedestrian-focused plaza with significant tree planting, seating, and art installations. New pavement treatments and a banner program will further enhance arrival into campus. Upgrades to the University Avenue crossing are suggested to bridge the South Village with the Inner Campus.

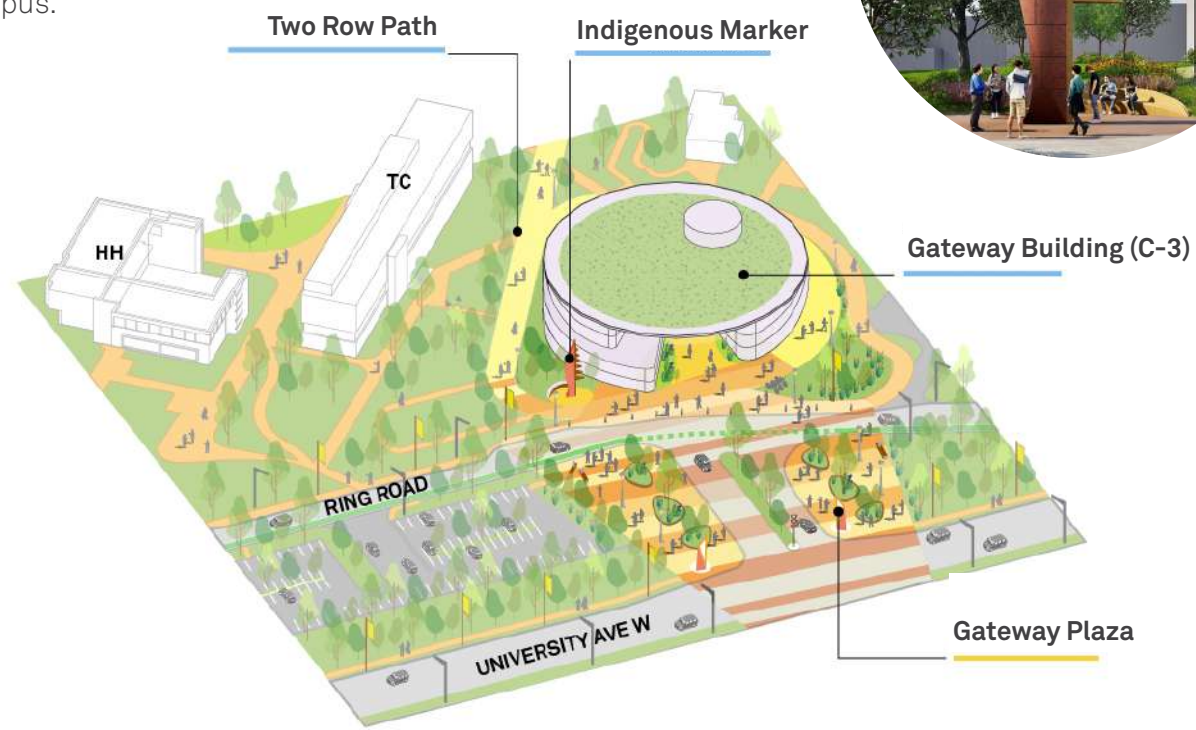


Figure 90. South Gateway Axonometric view

4.1.4 South East Gateway

The South East Gateway envisions an enhanced crossing at University Avenue, supporting safer pedestrian and cycling access between these segments of Laurel Trail. As a frequent site of pedestrian access to the campus, the Gateway is imagined to include upgraded pavers at this segment of Ring Road to promote traffic calming and enhance pedestrian safety at this highly used campus entrance. The gateway area extends to the rail crossing north of University Avenue. The addition of lighting and campus security emergency buttons is recommended to support pedestrian safety.

The Campus Plan recommends providing gateway signage to enhance the University's presence along the University Avenue West corridor. The addition of trees and planting beds will enhance arrival and preserve views to the campus. Seating and furnishing is suggested to provide users of the Laurel Trail with space for rest and recovery.

Figure 91. South East Gateway Concept Plan

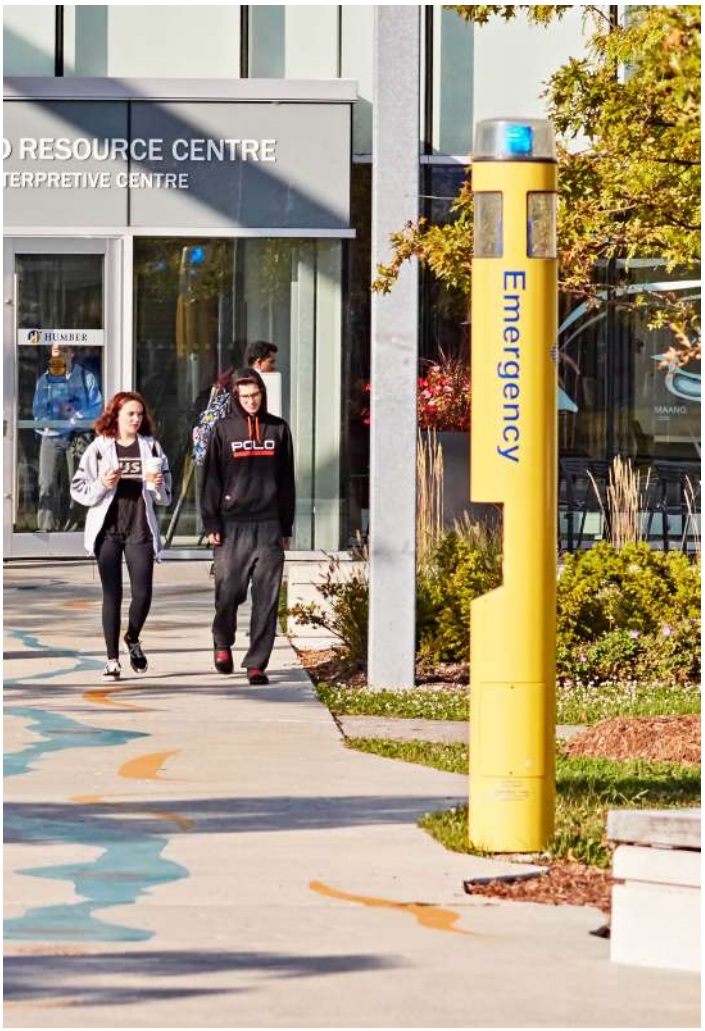


Figure 92. Campus security emergency buttons support campus safety (Tom Ridout)

4.1.5 Secondary Gateways

Secondary gateways are generally located at campus edges. These gateways reinforce pedestrian access and encourage traffic calming to create a safer environment for entering the campus. Signage that complements the existing signage at the North and South Gateways is recommended. Secondary gateways provide, where desirable, seating, lighting, and plantings that promote placemaking and places for pedestrians to rest and socialize.

Internal secondary gateways are envisioned to emphasize a connection to their context. Secondary gateways that bridge the campus and Affiliated and Federated Institutions have the opportunity to integrate design elements that reference the unique characteristics of the Affiliated and Federated Institutions and their importance to the University of Waterloo.

Following a co-design process, outdoor areas and plazas can include paving designs, custom seating, and cultural markers can honour the Affiliated and Federated Institutions' contribution to the Waterloo region, while intuitive wayfinding and signage can assist visitors and students in navigating the Affiliated and Federated Institutions. These internal gateways can welcome students and visitors to explore historic and ongoing connections between the Affiliated and Federated Institutions and the University of Waterloo.

Figure 93. Secondary gateways should contain signage with a related but secondary hierarchy to existing gateway signage

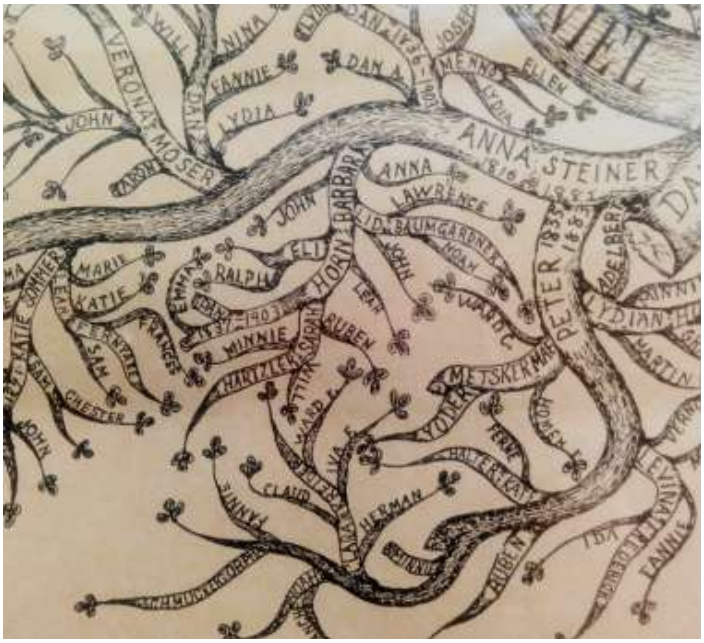


Figure 94. Relevant cultural iconography should be explored in the design of internal secondary gateways and plazas (Mennonite Archives of Ontario)

Secondary gateways in the North Campus include the entrance to R+T Park from Hagey Boulevard at Frank Tompa Drive. As part of the Innovation Trail, the design of this gateway could provide interpretive elements relating to the University of Waterloo's many contributions to research and innovation. A secondary gateway at Brubacher House is recommended to be co-designed with the Brubacher House Museum to interpret Mennonite history in the area, complementing this 1850s Pennsylvania German Mennonite farmhouse in-situ and extending its educational mission.

Figure 95. Footbridges connecting the campus with the Affiliated and Federated Institutions are secondary gateways that provide strong placemaking opportunities

4.2 Key Focus Areas

While the Campus Plan takes a holistic approach, key focus areas have been identified to provide more detailed guidance for potential development sites.

These key focus areas are conceptually illustrated as one way of reflecting the highest and best use of the campus lands as well as the vision and guiding principles of the Campus Plan, and demonstrating how a balance of built form and open space can be achieved over time.

1. East Village illustrates a long-term concept which includes new mixed-use, residential and academic/ancillary buildings as well as a Transit Hub and Innovation Hub. The urban character envisions mixed-use redevelopment for potential revenue generation.

2. South Village complements the under construction NRB1 building with envisioned student residence buildings to support supportive amenities at scale.

3. West Village explores the planned removal of V1 and envisions replacement with contemporary residence buildings and an open space commons and greater connection to the Healing Forest.

4. The Inner Campus envisions culturally inclusive open spaces and new buildings that emphasize accessibility, well-being, and connection between the Inner Campus and the surrounding areas. Replacement of select buildings within the Inner Campus offers the opportunity for new academic and innovation-focused buildings and complementary open spaces.

5. North Campus is envisioned to connect the Inner Campus, Research and Technology (R+T) Park, and future hospital through upgraded streets and pathways as well as new buildings to support the campus's growth, complementing the expanding CIF and Optometry buildings.

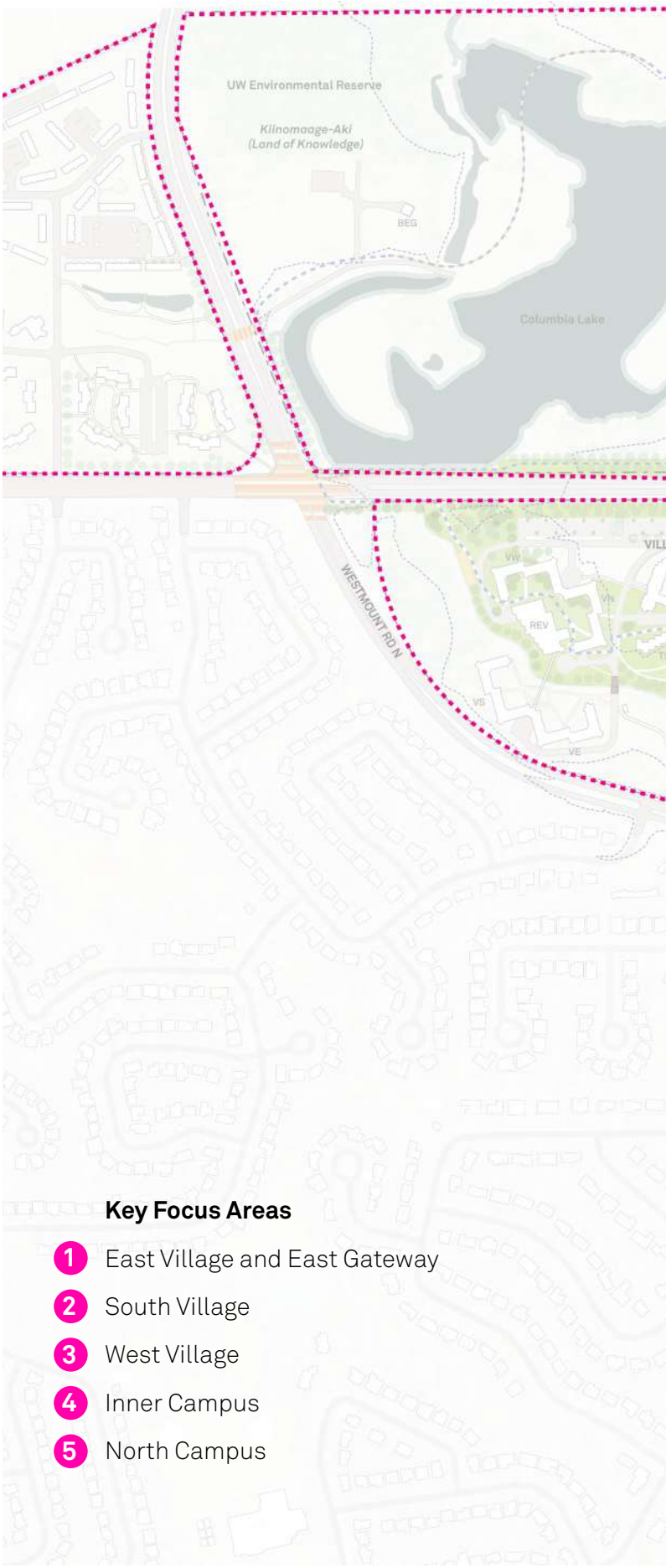


Figure 96. Campus Gateway and Focus Area Map highlighting key building and landscape interventions

4.2.1 East Village and East Gateway

Phillip Street is an important boundary that mediates the campus's relationship with the city. This campus edge is a common pedestrian access point and introduces the campus's transit hub. The East Village is envisioned as a mixed-use academic and residential pedestrian-oriented village. The East Village focus area is north of the existing Transit Hub, framing a north-east village gateway at Columbia Street East and Phillip Street, the East Village has the potential to balance dense urban forms at the campus edge with mid-scale buildings that frame a proposed East Commons.

A shared street network within the East Village promotes active transportation, with people arriving primarily by foot and transit. The Campus Plan recommends an additional rail crossing north of William Tutte Way, and the widening of the existing at-grade rail crossing to distribute pedestrian activity and reduce safety concerns.

Potential Programming & Community Well-Being:

- **The East Commons:** Serving as the heart of the East Village, a central open space is envisioned to connect with the East Gateway and serve as a versatile open space for multiple events, including concerts, orientation events, outdoor classes, and pop-up markets. A covered structure is envisioned to support year-round activity, with the potential to include a skating loop and host art installations.
- **An Innovation Hub and Transit Hub (EC-9):** A new building is envisioned to contain a ground-floor transit hub with amenities for transit riders and academic spaces. A co-located Innovation Hub is envisioned to welcome all faculties, students, and local community members to experiment, explore, and learn. Facilities including high-tech research labs, exhibition spaces, incubators, and maker spaces are recommended. Locating centrally-managed and flexible classrooms in the upper floors is recommended.

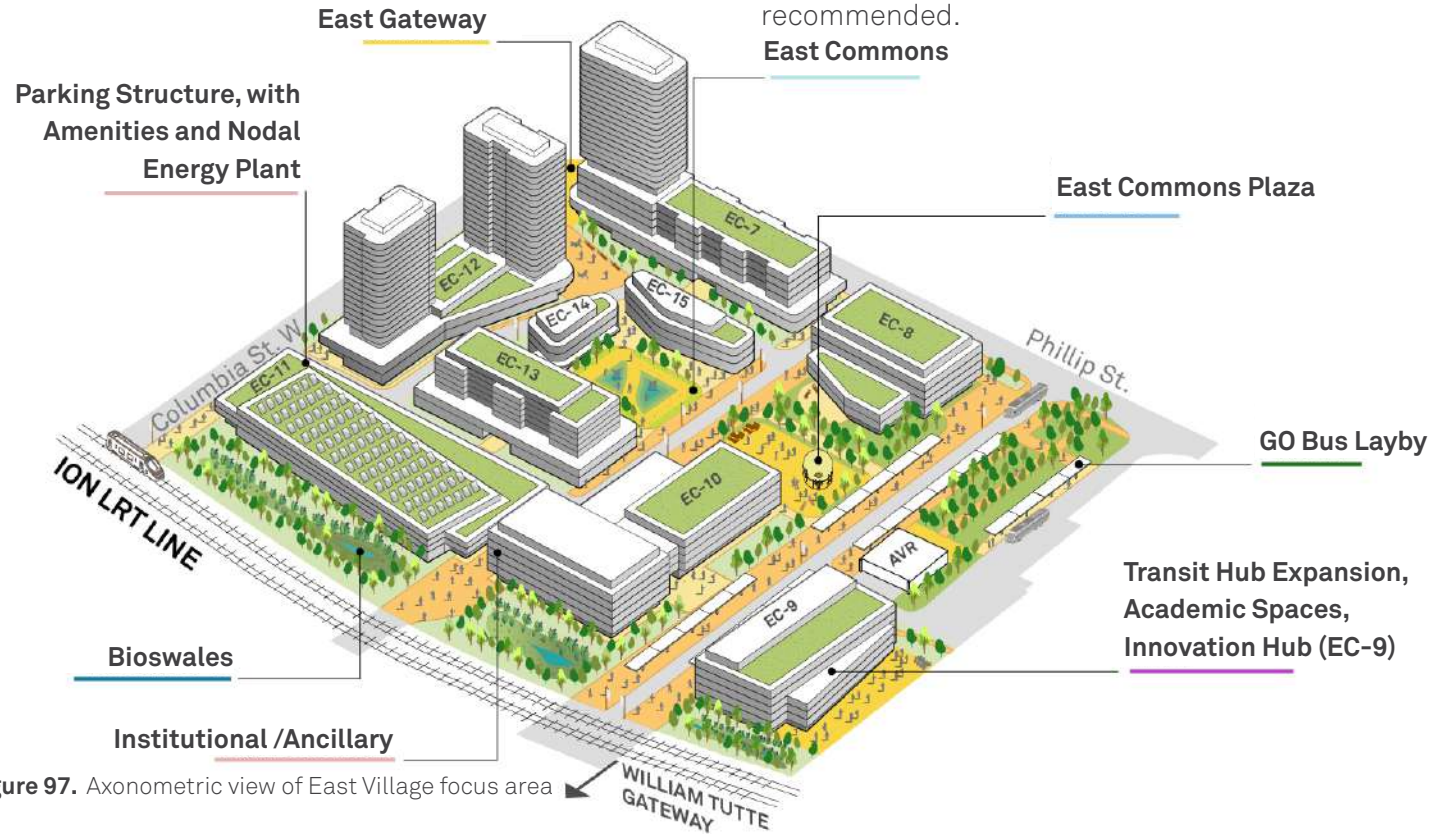


Figure 97. Axonometric view of East Village focus area

- **Mixed-use Village:** The East Village is envisioned to become an integrated mixed-use campus enclave with highly integrated commercial, residential, and cultural uses. Potential programming for the East Village includes student housing, faculty or staff housing, and housing with diverse options for different tenures and affordability levels. Academic spaces, and administrative offices can also be accommodated. A range of services is envisioned to enhance the campus experience, including a grocery store, cafés, health and wellness facilities, bike storage and repair, childcare services, study spaces, community venues, an energy node, and spaces for small-scale start-ups. A mix of programming and active ground floors is key to a flexible and urban vision of the East Village.
- **Academic/Ancillary Buildings (EC-8/EC-10):** New buildings with ground-floor amenities can provide space for increased academic and ancillary buildings. Proximity to the Transit Hub supports academic or office uses in these sites.

Connections:

- Integrate shared streets to promote active mobility and prioritize pedestrian-oriented movement while allowing access for service and emergency vehicles.
- Create a new at-grade pedestrian crossing over the ION rail line to connect the East Village with the Inner Campus in collaboration with transit authorities.
- Enhance connections to the nearby residential neighbourhood east of Phillip Street and north of Columbia St West through active frontages and Gateways.
- Enhance William Tutte Way as a primary gateway into campus, with safety and accessibility upgrades such as widening the crossing to support pedestrian volumes.
- Encourage pedestrian access north and south of William Tutte Way, through wayfinding and pathway upgrades and the strategic location of new buildings and plazas.
- Create a new GO Bus Lay-by Area adjacent to the Autonomous Vehicle Research (AVR) building to support transit capacity on campus.

Figure 98. Transparent and flexible ground-floor spaces support gathering, studying, and socializing

Figure 99. Green interfaces between the buildings and landscape (Perkins & Will)

Figure 100. Example of a flexible open space designed to capture, clean, and reuse water

Figure 101. Gateway marking arrival and strengthening campus identity (Antoni Grassl)

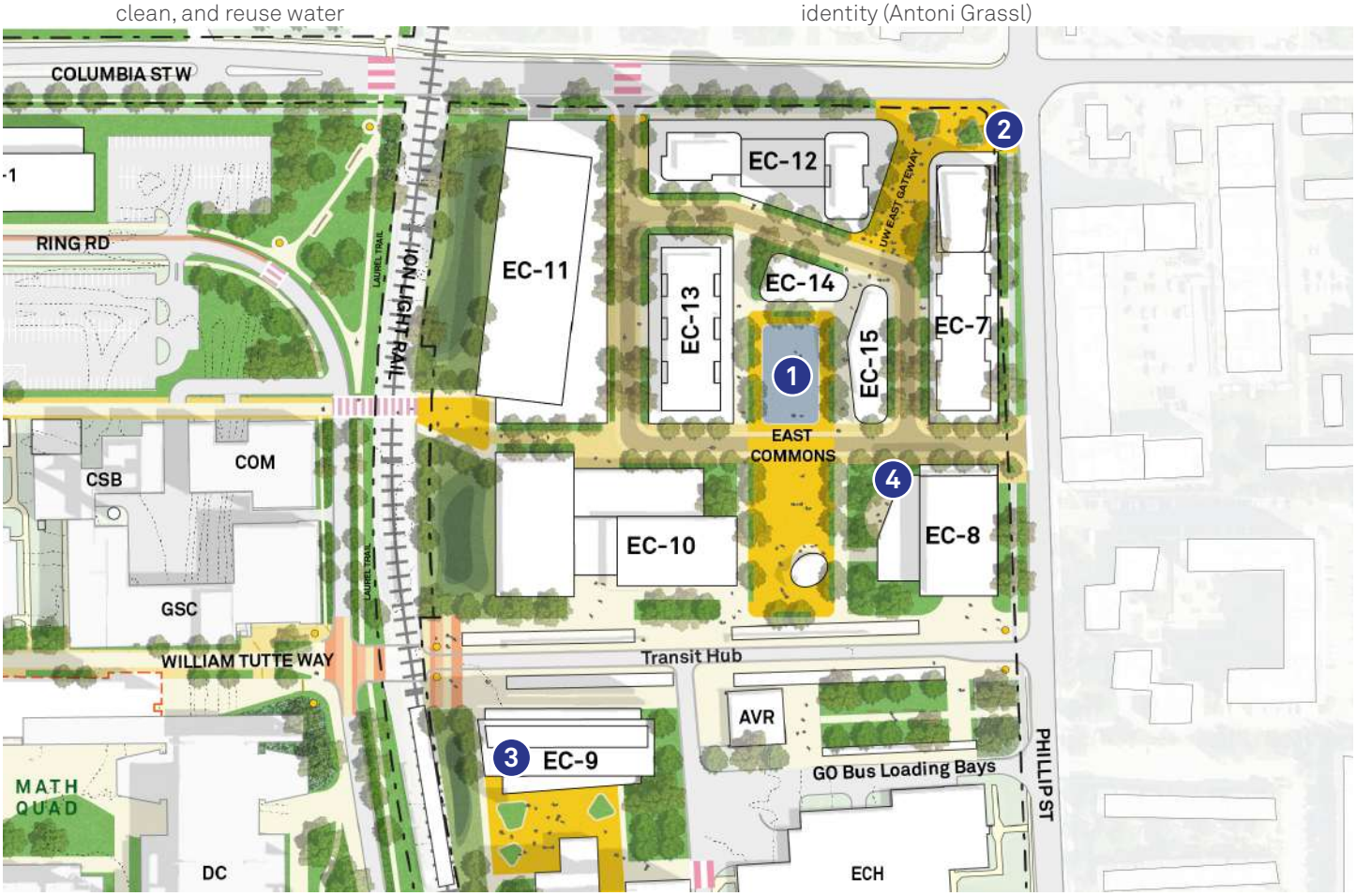


Figure 102. East Village Concept Plan

Figure 103. Integrated Transit Hub (KPMB)

Figure 104. Intimate green and pedestrian-oriented spaces provide space for gathering (Yianni Tong)

Sustainability and Built Form Design:

- Consider mass timber buildings to reduce the embodied carbon of new construction.
- Promote circular and sustainable building practices, such as re-using demolished building material in new building developments.
- Integrate circular water practices, including rainwater harvesting, grey water re-use, water-efficient technologies, and integrated water management.
- Create an East Village energy station connecting to the campus geo-exchange or a municipal district energy system.
- Development should transition in scale from taller building opportunities at Columbia St W to mid-scale buildings further south on the block.
- Building massing, grade level and podium design should employ setbacks that promote an active, pedestrian scale public realm.
- Provide architectural design elements that promote well-designed façades facing the public realm. Design elements may include recesses, projections, and the placement of doors and windows. Minimize blank façades facing a street, open space, or publicly-accessible building edge.
- Design buildings that include engaging, transparent, and active at-grade uses and incorporate canopies and breezeways.
- Study the logistics, goods movement and storage on campus to determine an optimal location for consolidating these uses at the campus periphery, such as the Bauer Warehouse.
- Explore the potential to adaptively re-use ECH for teaching and learning, lab, or swing space.

Figure 105. East Village concept, view towards northeast.

Performance Standards:

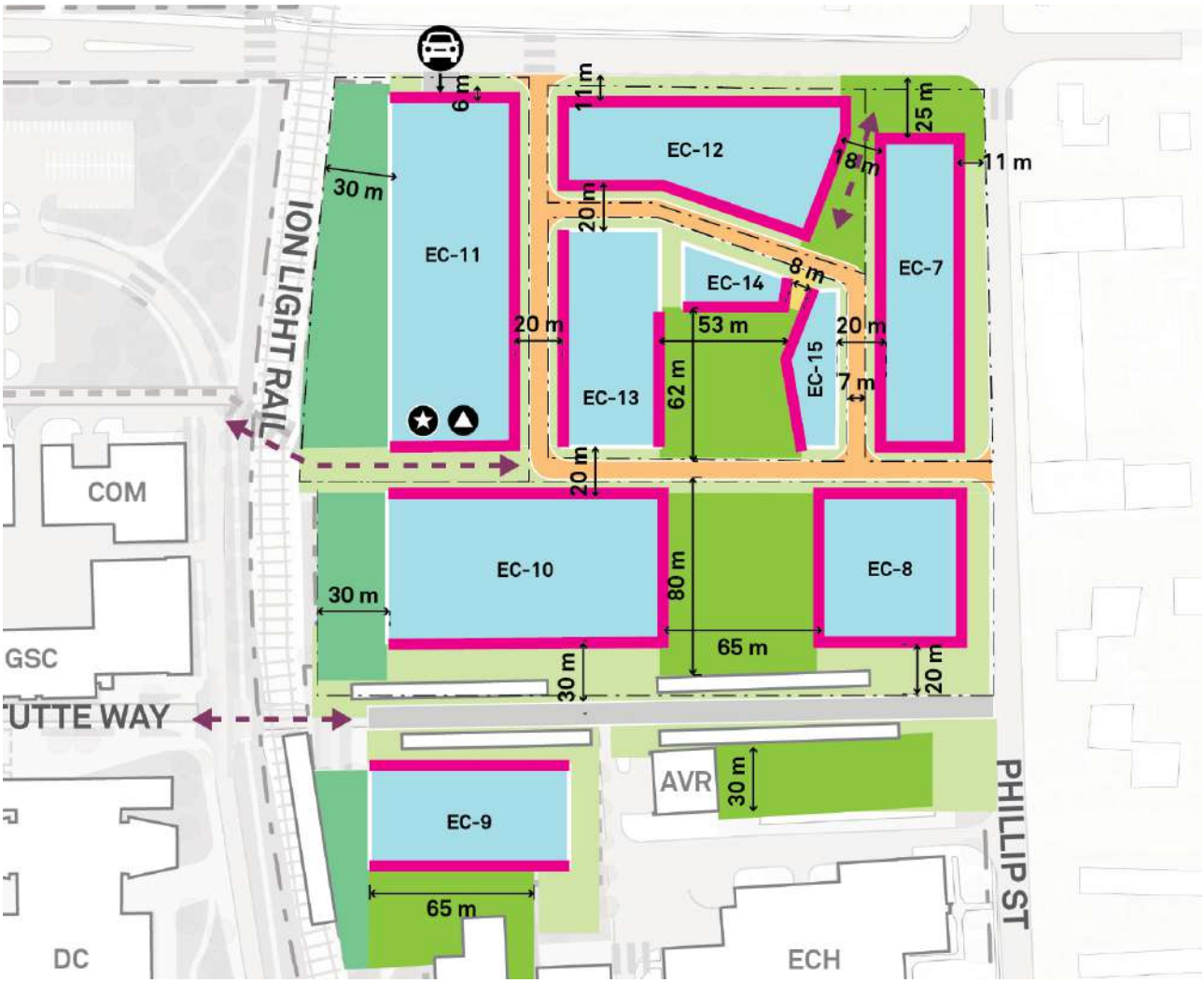


Figure 106. East Village Site Opportunities Plan. Highlighting key site plan, setbacks, open space and building development opportunities.

- Existing Buildings
- Potential Buildable Area
- Open Space Buffer
- Parcel Boundary
- Open Space Opportunities
- Bioswales/SWM corridor
- Flexible/Shared Street
- Enhanced Pedestrian Connection
- Animated Frontage
- Nodal Energy Plant
- Vehicular Access to Parking Structure

Proposed Building Development	Maximum Recommended Height (m)	Potential GFA (m^2)	Potential Programming
EC-7	88m	32,300 m^2	Mixed-use
EC-8	25m	15,400 m^2	Transit Hub, academic and institutional
EC-9	29m	12,950 m^2	Innovation Hub, academic and institutional
EC-10	29m	32,450 m^2	Mixed-use
EC-11	20m	26,750 m^2	Parking with Mixed-use (460 parking spaces)
EC-12	73m	37,350 m^2	Mixed-use
EC-13	27m	17,300 m^2	Mixed-use
EC-14	17m	2,350 m^2	Mixed-use
EC-15	17m	3,600 m^2	Mixed-use

Figure 107. East Village key statistics. Actual building heights and GFA should be informed by future site-specific studies, context, and confirmed building uses.

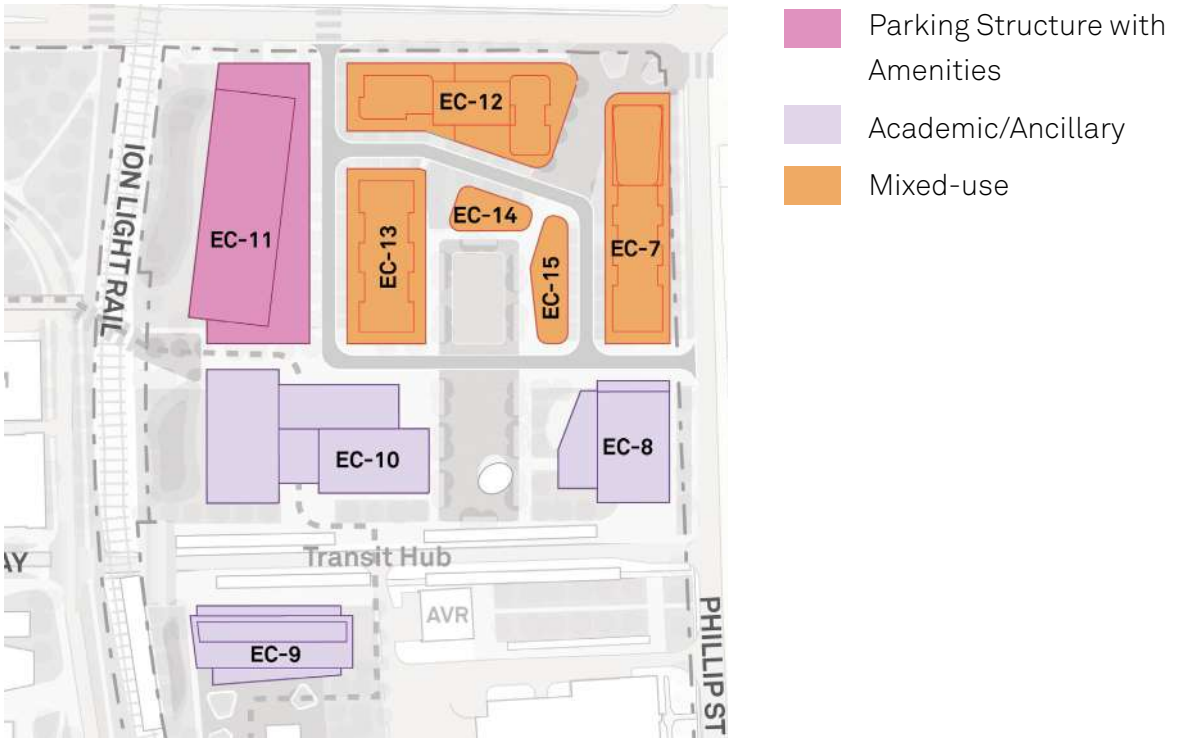


Figure 108. East Village Program Key Map.

Figure 109. Rendering of the north east gateway at the corner of East Village

4.2.2 South Village

The South Village is envisioned as a new mixed-use development situated in a park-like setting between the South Gateway, Waterloo Park, **NRB1** (under construction), and the UWP Courts. Located south of University Avenue West, the South Village offers an ideal location for a wide range of outdoor amenities, access to transit connections at the Laurier-Waterloo Park Station, connection to Laurel Trail, and nearby commercial facilities at the University Shops Plaza.

Currently, the South Village Focus Area includes Parking Lot A. The South Village is envisioned in phases, allowing for flexibility to meet the evolving needs of the University. The South Village concept offers a blend of nature, community, and urban convenience with the integration of generous green spaces, tree canopies and outdoor amenities to create a restorative environment supporting well-being and active living.

Potential Programming & Community Well-Being:

- **Two Central Courtyards:** new open spaces with year-round functionality support seating, shade, placemaking elements, lighting, and improved winter accessibility. The courtyards are envisioned as shared outdoor 'rooms' for casual and social events, group study, and access. These social nodes support flexible programming for informal activity, community gardens, and spill out spaces from adjacent buildings.
- **Mixed-use Village:** new building programming can foster a mix of housing and ancillary spaces, cafés, convenience stores, grocery stores, theatres/galleries, and offices. Currently, the University is in discussion with the City of Waterloo to explore a potential integrated emergency services and mixed-use building on the site. New campus housing buildings are encouraged to incorporate shared amenities such as study lounges, communal kitchens, recreational areas, laundry facilities, gyms, common rooms, and spaces for socialization and relaxation.

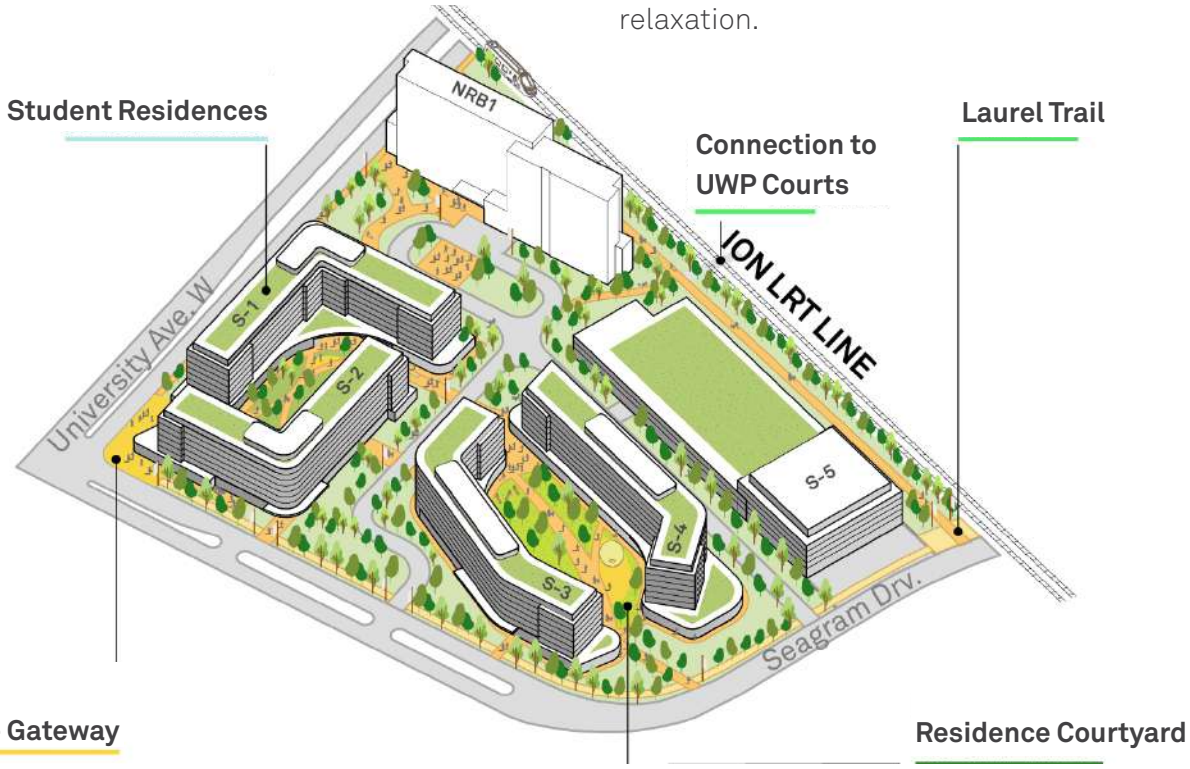


Figure 110. Axonometric view of South Village focus area

- **Re-naturalized landscapes throughout South Village:** Outdoor spaces are intended to link the South Village to the surrounding region's natural systems by weaving landscapes that manage water, support biodiversity, and expand environmental stewardship through daily experience. Site-specific features can promote awareness about food sourcing and waste reduction.
- **Creating a prominent gateway** and connection to the Inner Campus at the intersection of University Avenue West and Seagram Drive. Further connect the new South Village residences to the existing UWP Courts over the ION rail line in coordination with transit authorities.

Connections:

- Leverage South Village's proximity to Waterloo Park and the City of Waterloo by extending trails, cultural destinations, and everyday services to enhance walkability.
- Strengthen connections to adjacent residential neighbourhoods, UWP Courts, and promote safe crossings into Inner Campus.
- Upgrade pedestrian crossings at the intersection of University Avenue West and Seagram Drive, ION LRT Crossing, and the bridge between Carl A. Pollock Hall and NRB1. Consider high-contrast, textured paving, enhanced lighting, and gateway markers are envisioned to clearly signal campus entry.
- Enhance Laurel Trail as a linear space for socialization and recreation, ensuring overlook from new buildings and lighting treatments to enhance safety.

Figure 111. Thoughtfully designed courtyards can support diverse uses including quiet reflection, cultural gatherings, accessible seating and biodiverse landscapes (Yianni Tong)

Figure 112. Intimate courtyard between residences

Figure 113. Open ground floor design promotes activation

Figure 114. South Village Concept Plan

Figure 115. Flexible seating and planting

Figure 116. Laurel Trail as a linear recreation and socialization space

Sustainability and Built Form Design:

- Consider mass timber buildings to reduce the embodied carbon of new construction.
- Integrate circular water practices, including rainwater harvesting, grey water re-use, water-efficient technologies, and integrated water management.
- Buildings should appropriately transition in scale to adjacent streets, open space, and buildings, University Ave W, UWP Courts, Inner Campus and Waterloo Park through the use of setbacks and stepbacks.
- Design residences and other buildings at the base level to frame streets and open space courtyards.
- Integrate engaging, transparent, and active at-grade uses and incorporate ground floor treatments including canopies and breezeways.
- Ensure building design, orientation, and massing allow for appropriate levels of sunlight for the inner courtyards.

Figure 117. South Village concept, view towards southeast.

Performance Standards:

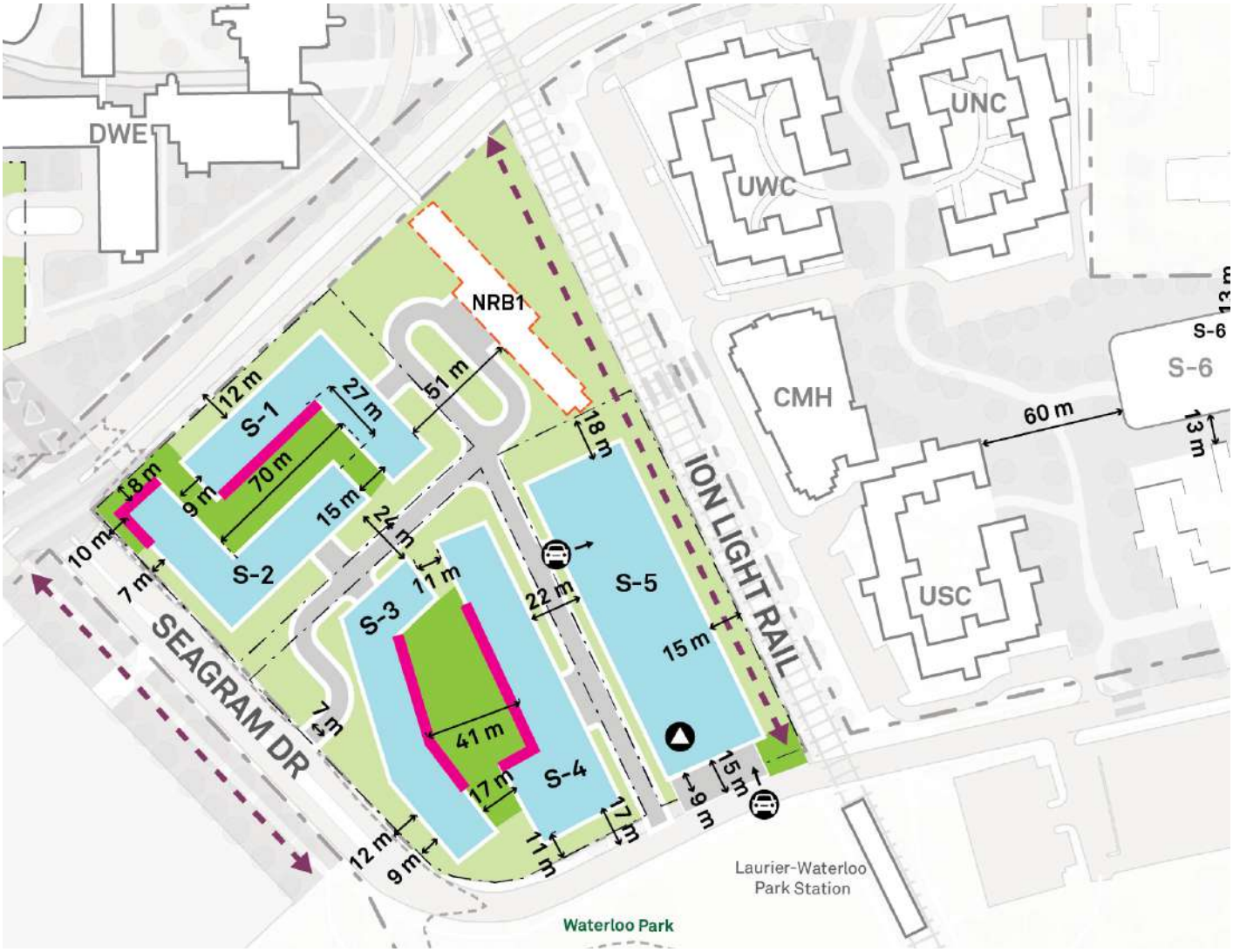


Figure 118. South Village Site Opportunities Plan. Highlighting key site plan, setbacks, open space and building development opportunities.

- Existing Buildings
- Potential Buildable Area
- Open Space Buffer
- Parcel Boundary
- Open Space Opportunities
- Enhanced Pedestrian Connection
- Animated Frontage
- Vehicular Access to Parking Structure

Proposed Building Development	Maximum Recommended Height (m)	Potential GFA (m^2)	Potential Programming
S-1	26m	16,700m^2	Campus Housing
S-2	26m	15,000m^2	Campus Housing
S-3	26m	16,000m^2	Mixed-use
S-4	26m	15,000m^2	Mixed-use
S-5	21m	29,000m^2	Parking Structure with amenities (295 parking spaces)

Figure 119. South Village key statistics. Actual building heights and GFA should be informed by future site-specific studies, context, and confirmed building uses.

Figure 120. South Village Program Key Map.

Figure 121. Rendering of a residential courtyard in South Village

4.2.3 West Village

The West Village includes the existing REV and MKV residence buildings. The anticipated demolition of V1 creates an opportunity for the West Village focus area to replace 24 of the 26 V1 residences, with V1-7 and V1-8 remaining to commemorate the architectural style of the V1 complex.

The new campus residences are envisioned to connect with the surrounding Laurel Creek and Healing Forest to the south, to encourage connections between daily campus life and the natural setting. The buildings are sited around a large West Commons which can provide a major new campus green for both student residents and the broader campus community. Ground-level common areas are recommended to extend onto patios and landscaped outdoor spaces, offering seating for study, play, socialize, and relax in nature.

Potential Programming & Community Well-Being:

- **The West Commons:** Featuring the largest open space on the campus, the West Commons is envisioned as an area for both passive and active recreation and socialization. This includes open fields, gardens, dedicated seating areas, multi-sport fields and outdoor exercise circuits. In the winter, a portion of the active play area can be converted into a skating loop or a shinny rink. A central pavilion structure is envisioned to provide equipment storage space and shelter for all seasons. Other potential landscape typologies include sensory gardens, groves, meadows, and community, rain, and pollinator gardens.
- **Mixed-use Village:** Providing a mix of undergraduate and graduate student housing, health and wellness facilities, central dining hall facilities, flexible event spaces, and ancillary uses. There are four proposed new campus housing buildings, and one mixed-use

Figure 122. Axonometric view of West Village focus area

building (C-2). New residences are encouraged to incorporate shared amenities such as study lounges, communal kitchens, recreational areas, laundry facilities, gyms, and common rooms.

- **Multi-functional Parking Structure and Energy Infrastructure:** Integrate photovoltaic arrays and green infrastructure with existing surface parking lots. The construction of structured parking with photovoltaics and integrated ground floor amenities can provide required parking for the adjacent campus residences and visitors of Columbia Ice Fields (CIF).

Connections:

- Design the Arboretum Trail and Innovation Trail with defined signage, lighting, and furnishings to connect the West Village to the Healing Forest, Columbia Lake Village, Columbia Lake, Environmental Reserve, and CIF. The West Village is proposed to be adjacent to land-based learning experiences within the Laurel Creek watershed to provide convenient access to teaching and learning facilities and strong east-west pedestrian connections into Inner Campus.
- Enhance pedestrian crossings at the re-imagined Ring Road to support safe and accessible pedestrian movement from the West Village into Inner Campus.
- Create a new signalized crossing at Columbia Street West and Villages Rd to provide safe connections for students and visitors.
- Consider a bridge connection across Laurel Creek to the Affiliated and Federated Institutions.

Sustainability and Built Form Design:

- Consider mass timber buildings to reduce the embodied carbon of new construction.
- Promote circular and sustainable building practices, such as utilizing demolished building material in new building developments.
- Integrate circular water practices, including rainwater harvesting, grey water re-use, water-efficient technologies, and integrated water management.
- Integrate solar photovoltaic arrays on south-facing rooftops and create an energy node at the current site of the University Club to generate energy for the West Campus.

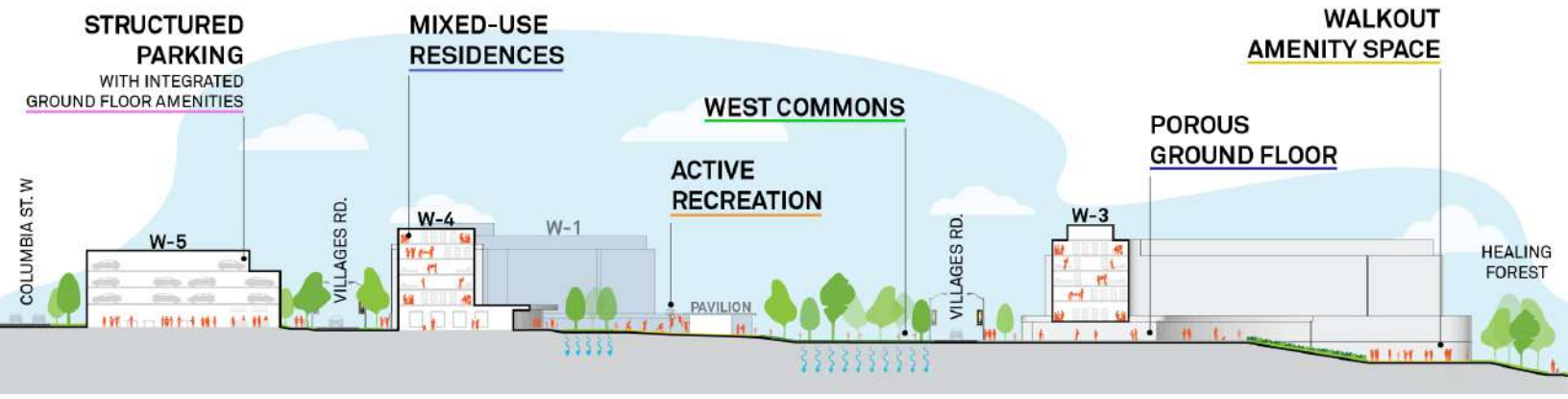


Figure 123. Conceptual Section of West Village focus area

Figure 124. Contemporary buildings frame the West Commons (Montgomery Sisam Architects)

Figure 125. Integration of community gardens and recreation in the West Commons

Figure 126. West Village Concept Plan

Figure 127. Sensory gardens for teaching and learning (Kristine Autzen)

Figure 128. Supporting flexible multi-season programming (Bascon)

- Create defined and active building bases framing the West Commons and Villages Road. Buildings with engaging, transparent, and active at-grade uses facing the West Commons can support animation and overlook.
- Ensure that developments transition in scale, massing, setbacks, and stepbacks to Columbia Street West, existing residences, Inner Campus, and the natural landscape.
- Locate buildings to enhance views to the Healing Forest, Laurel Creek Watershed and the surrounding natural landscape.
- Articulate the massing of longer residence buildings to break up the length of the façade through design elements including through building connections/paths, recesses, projections, and the placement of doors and windows.
- Blank façades facing a street or open space are strongly discouraged.
- Consider undertaking site specific environmental studies and mitigation strategies to determine impacts to existing ecology, wildlife habitat within the Healing Forest and areas adjacent to the Laurel Creek watershed.

Figure 129. West Village concept, view towards northwest.

Performance Standards:

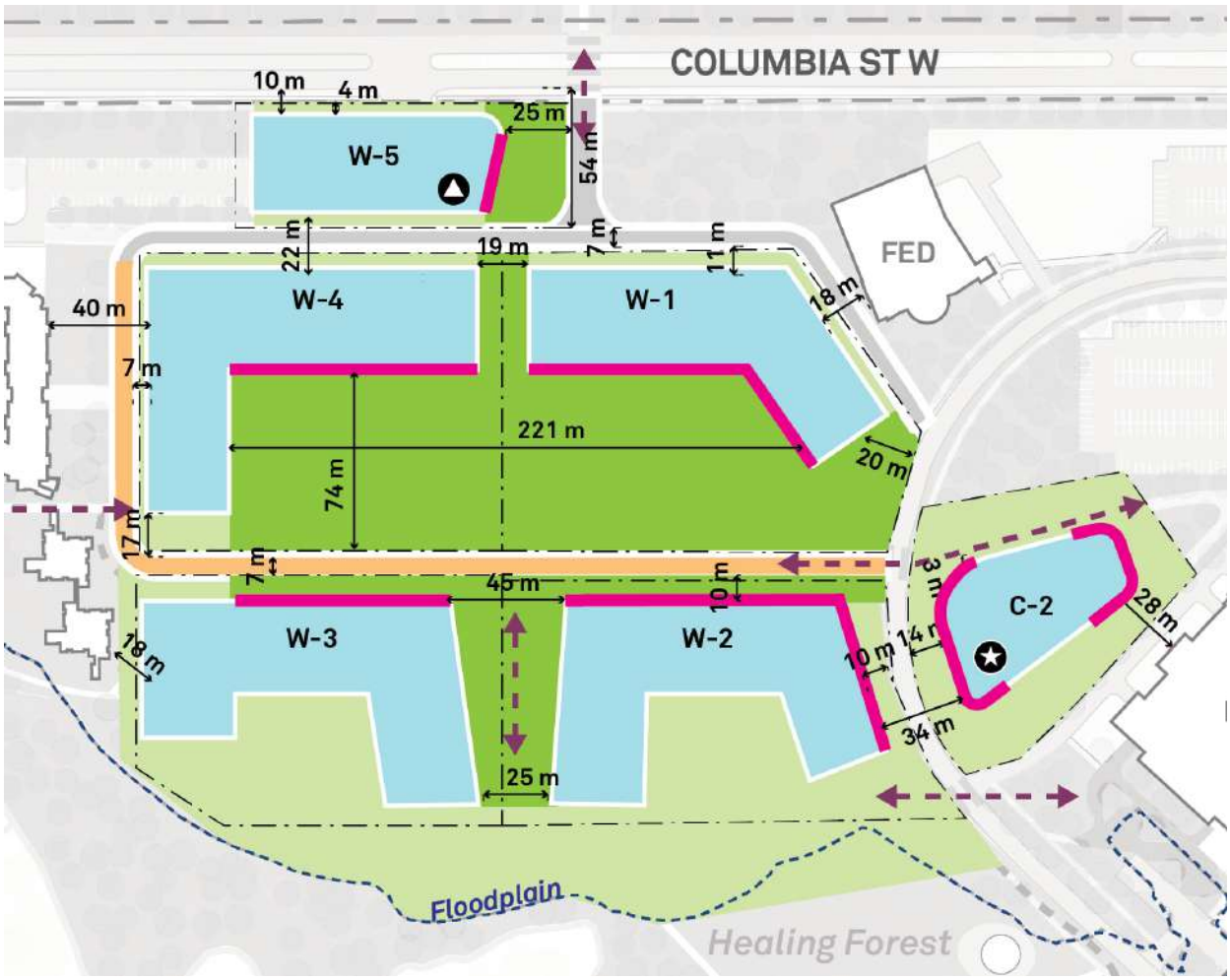


Figure 130. West Village Site Opportunities Plan. Highlighting key site plan, setbacks, open space and building development opportunities

- Existing Buildings
- Potential Buildable Area
- Open Space Buffer
- Parcel Boundary
- Open Space Opportunities
- Enhanced Pedestrian Connection
- Animated Frontage
- Nodal Energy Plant
- Vehicular Access to Parking Structure

Proposed Building Development	Maximum Recommended Height (m)	Potential GFA (m^2)	Potential Programming
W-1	23m	18,200m^2	Campus housing
W-2	23m	19,900m^2	Campus housing
W-3	23m	18,500m^2	Campus housing
W-4	23m	18,300m^2	Campus housing
W-5	15m	13,150m^2	Parking structure with amenities (244 parking spaces)
C-2	32m	15,600m^2	Academic and ancillary

Figure 131. West Village key statistics. Actual building heights and GFA should be informed by future site-specific studies, context, and confirmed building uses.

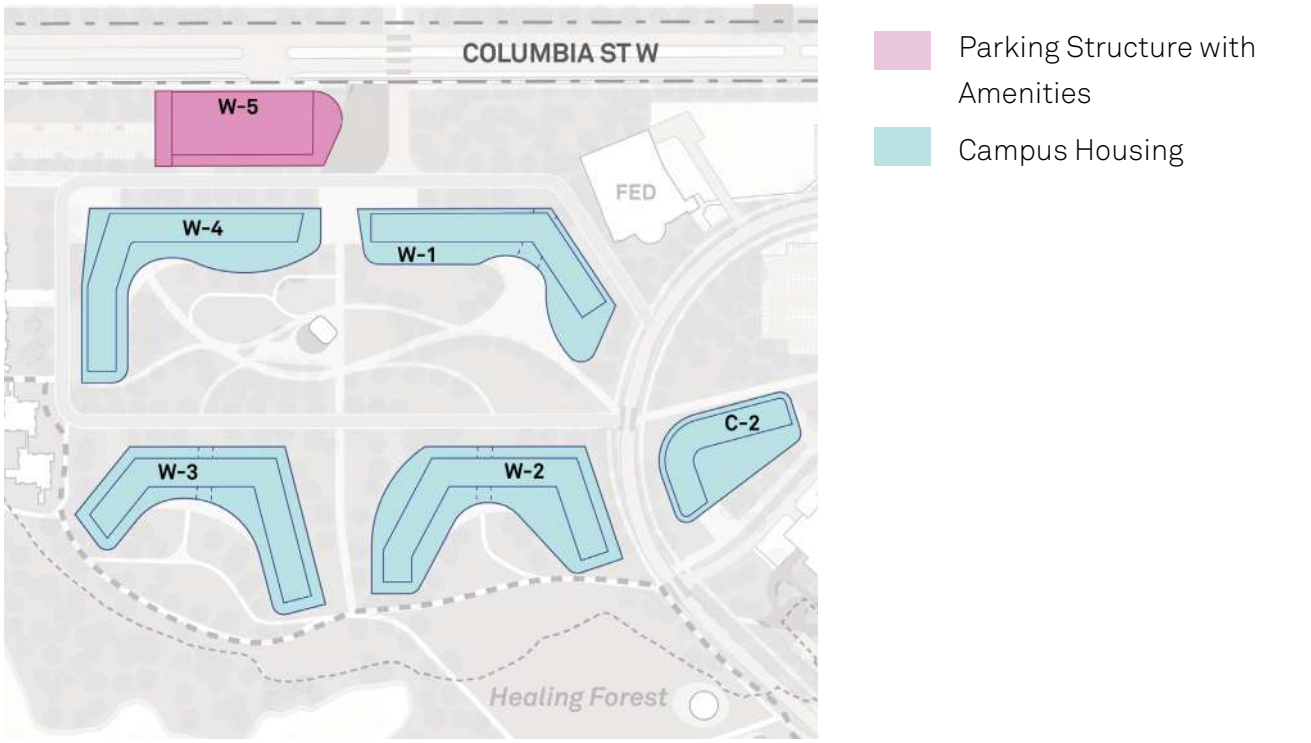


Figure 132. West Village Program Key Map.

Figure 133. Rendering of the West Commons

4.2.4 Inner Campus

The Campus Plan establishes two focus areas within the Inner Campus where opportunities for building replacement and open space upgrades are significant. New buildings within the Inner Campus can accommodate multiple faculties, ensuring an efficient and collaborative use of space. It is recommended that Inner Campus buildings be designed to meet the highest standard of design excellence, accessibility, and sustainability achievable by the University, creating a positive image of the campus's aspirations.

Proposed development within Inner Campus should limit the erosion of open spaces and open space buffer areas, which provide important common space vital to well-being and the legibility and wayfinding of the campus.

Potential Programming & Community Well-Being:

- **Mixed-Use Building (C-2):** A new building on the site of University Club is envisioned to introduce the campus community to the West Village. The building is proposed to have academic uses within a podium containing a central dining facility and student residences in upper floors. A green roof terrace is recommended to provide outdoor social and dining areas, and expansive views towards Laurel Creek and the Healing Forest. The new building is envisioned to integrate an energy nodal plant, providing a connection to the district energy system and existing tunnel infrastructure.
- **Landmark Open Spaces:** The Inclusive Circle and Arts Quad are proposed to re-define open spaces on campus. The Inclusive Circle is envisioned to reference and enhance the existing Indigenous Gathering Structure and reinforce the Two Row

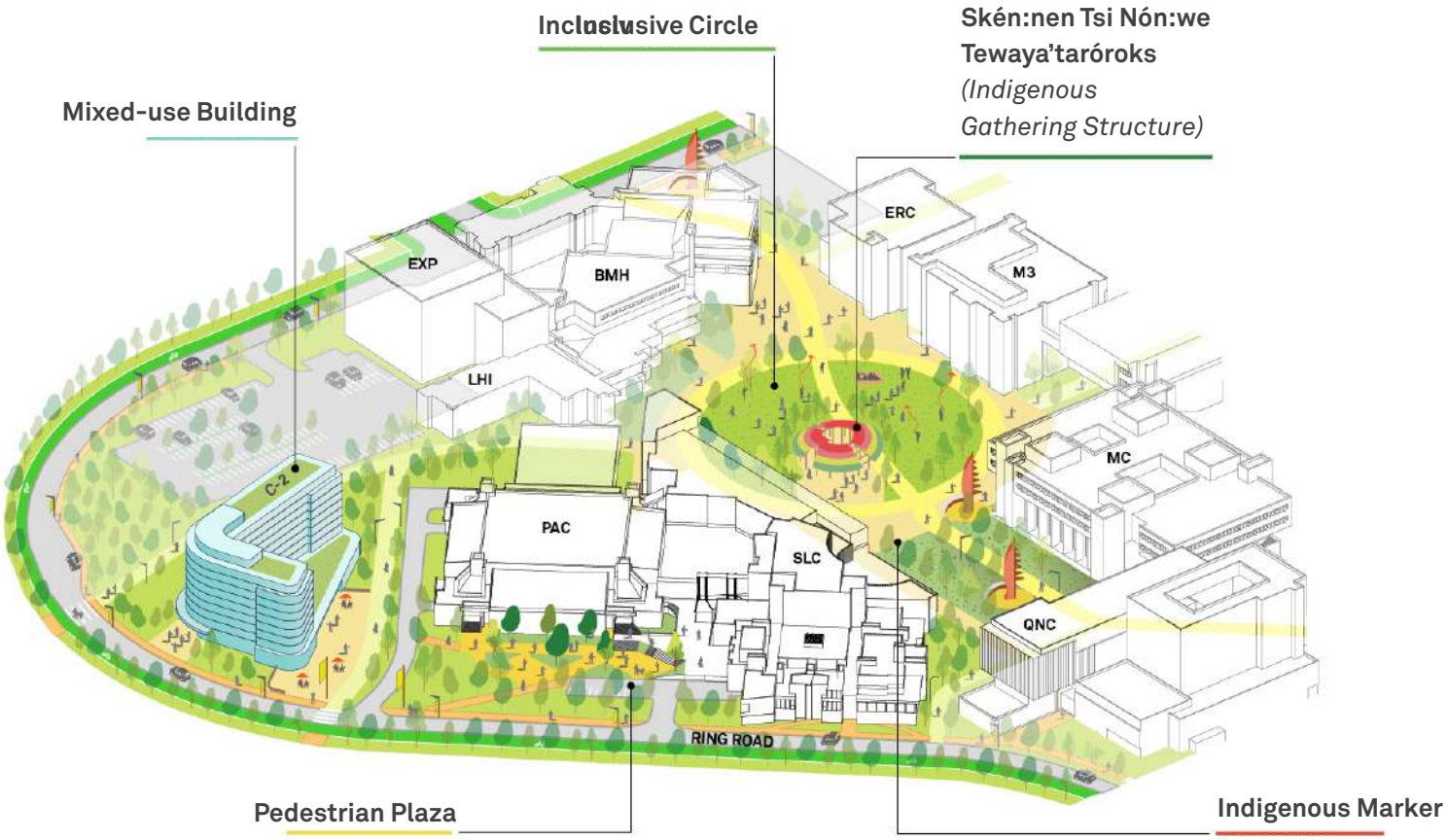


Figure 134. Axonometric view of north Inner Campus focus area

Path. The Arts Quad concept embraces existing grade changes to form an even grade for flexible programming areas for gathering, innovation and creativity, including space for experimentation and temporary installations.

- **South Campus Hall (C-3):** The replacement of South Campus Hall provides an opportunity for a new landmark building to revitalize the South Gateway. The building concept includes welcoming alumni spaces, exhibition and gallery spaces, and lecture halls collectively functioning as an Innovation Hub. The building site is well-connected to the existing tunnel network and can integrate an energy nodal plant, providing a connection to the district energy system.
- **Innovation Hub (C-5):** To replace Arts Lecture, a new Innovation Hub is envisioned with classrooms and lecture theatres. The building provides a strong opportunity to showcase creativity and innovation, supporting spaces that bridge technology and the human imagination with studio spaces and digital innovation labs open to the campus community.
- **Placemaking:** The Inner Campus offers ample opportunity for student projects and placemaking structures within existing and enhanced open spaces. Student competitions to design playscapes, and artwork installations are envisioned to enliven the Inner Campus.

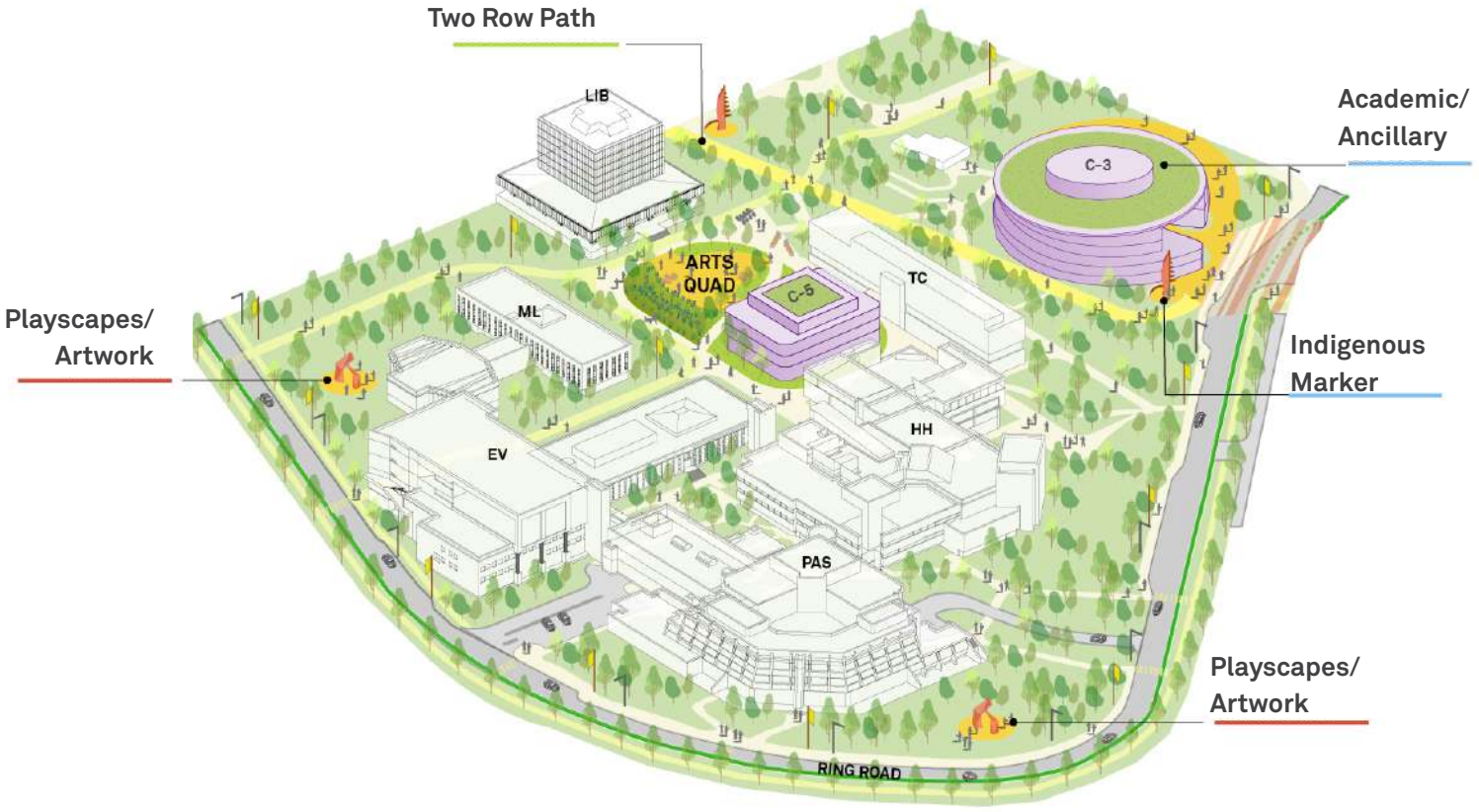


Figure 135. Axonometric view of south Inner Campus focus area

Figure 136. New mixed-use residence building bridges West Village and Inner Campus (Montgomery Sisam Architects)

Figure 137. Skén:nen Tsi Nón:we Tewaya'taróroks Gathering Structure

Figure 138. Inner Campus Concept Plan

Figure 139. Inclusive circle re-defines north Inner Campus

Figure 140. Math 4 framing William Tutte Way (Moriyama Teshima Architects)

Figure 141. Plazas acknowledging the Affiliated and Federated Institutions can complement the existing footbridges

Figure 142. Playscapes and structures animate open space

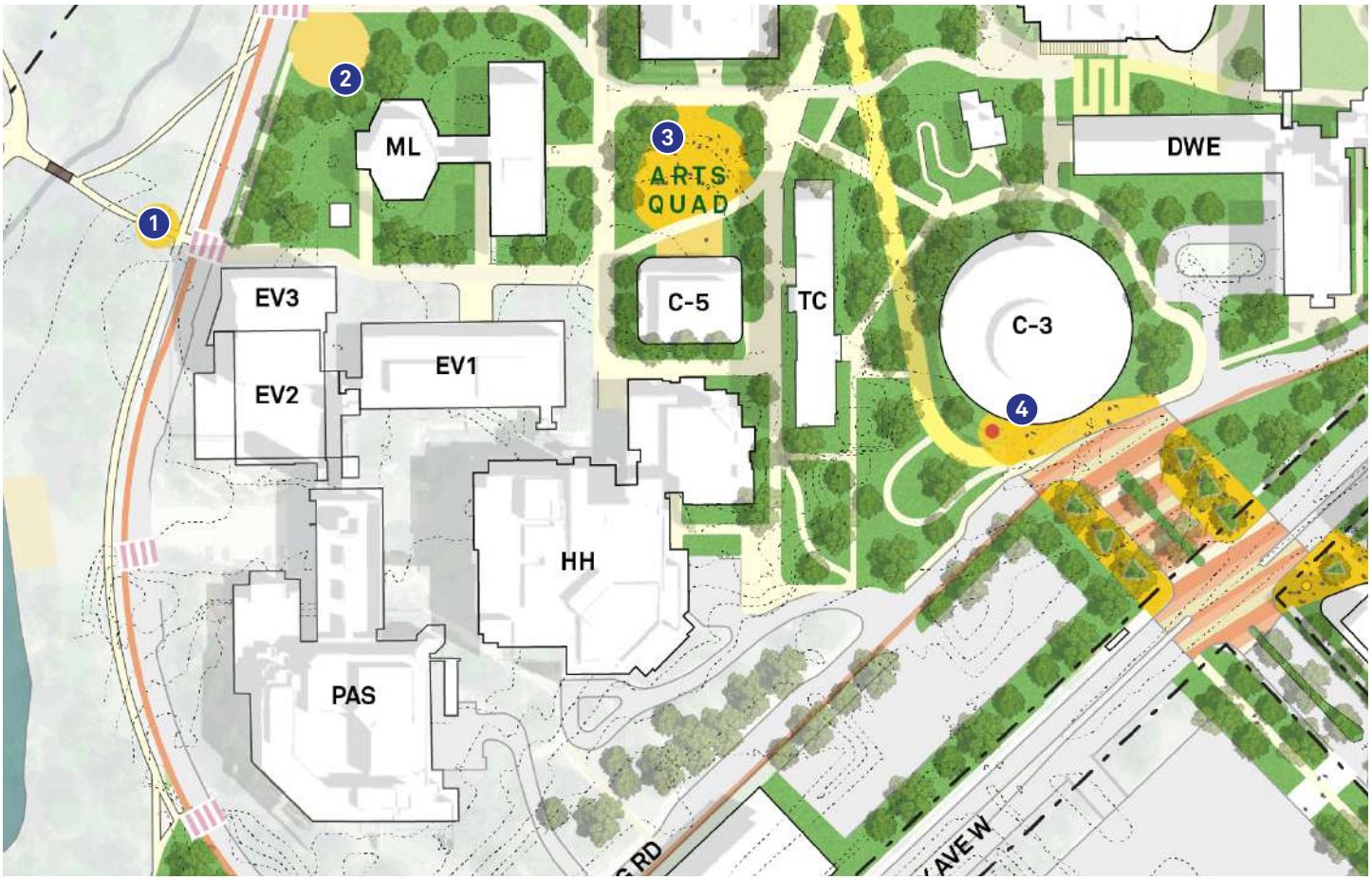


Figure 143. Inner Campus Concept Plan

Figure 144. Arts Quad integrates new C-5 Building

Figure 145. Marker and benches along Two Row Path

Connections:

- Traffic calming measures including contrasting pavers, and placemaking measures including banners, seating, lighting, and planting to create plaza-like spaces at the North and South Gateways.
- Support Two Row Path with clear wayfinding through customized Markers, seating, and lighting that offers a cohesive and inspiring north-south connection through campus. Opportunities for land-based learning, native plants, and interpretation should be co-designed with the campus and Indigenous communities.
- Enhance east-west connections through Inner Campus and prioritize universal accessibility.

Sustainability and Built Form Design:

- Promote circular and sustainable building practices, such as re-using demolished building material in new buildings and open spaces, where feasible.
- Integrate circular water practices, including rainwater harvesting, grey water re-use, water-efficient technologies, and water management across buildings.
- Consider solar photovoltaic arrays and creating an energy node at the new **C-3** building to generate clean energy for the Inner and South Campus.
- Avoid the erosion of existing and planned open spaces and open space buffers through the prohibition of building additions on Inner Campus, instead supporting the efficient and equitable use of existing buildings and the construction of new mixed-faculty buildings as needed.
- Building heights and forms should transition well to existing campus buildings and protect the utility of open spaces year-round through the mitigation of shadow impacts and appropriate building setbacks and separation distances.

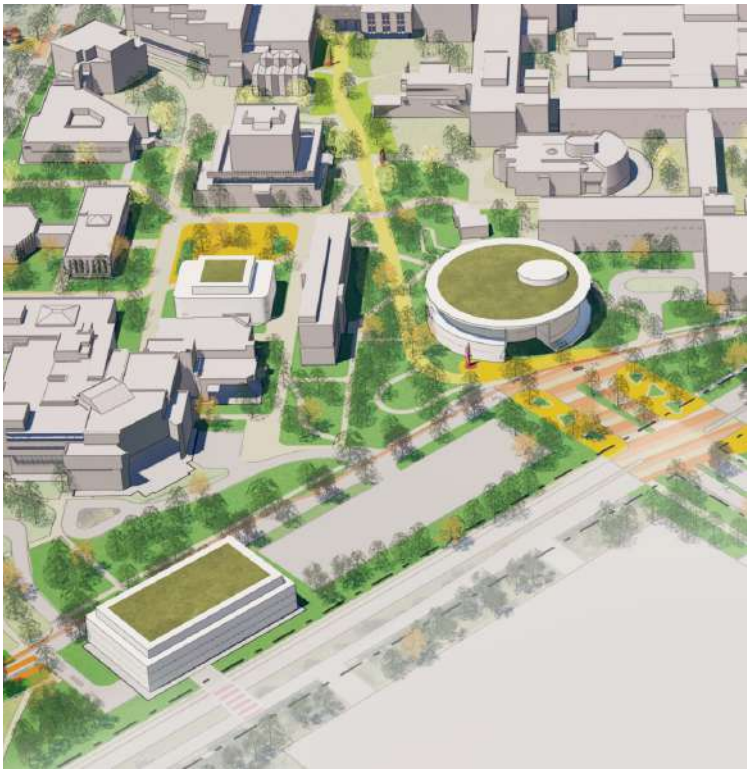


Figure 146. Potential Inner Campus buildings.

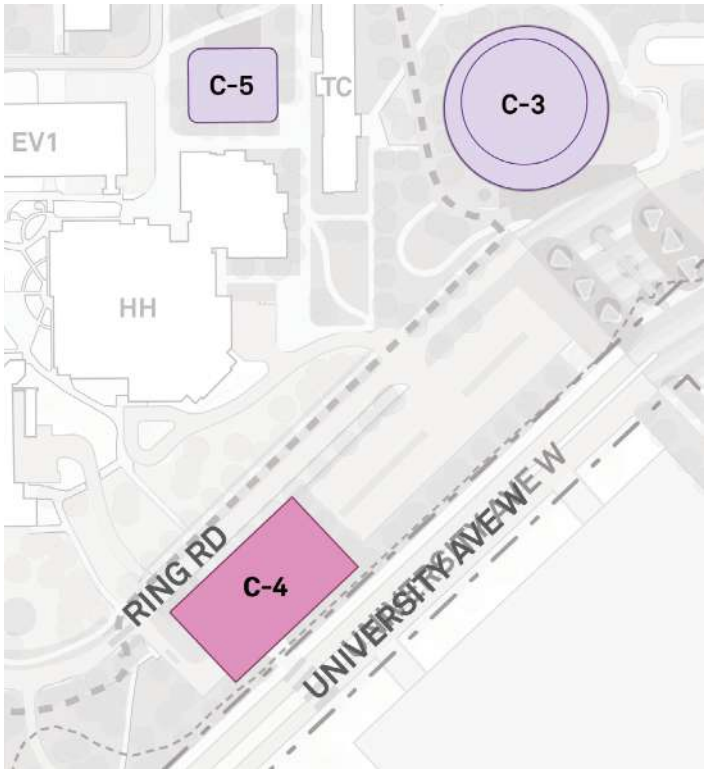


Figure 147. South Inner Campus Program Key Map.

Academic/Ancillary

Parking Structure with amenities

Proposed Building Development	Maximum Recommended Height (m)	Potential GFA (m^2)	Potential Programming
C-3	21m	16,400m^2	Academic, ancillary, Innovation Hub, art gallery, and alumni spaces, and nodal energy plant
C-4	16m	11,200m^2	Parking structure with amenities (280 parking spaces)
C-5	17m	4,150m^2	Academic and ancillary

Figure 148. South Inner Campus key statistics. Actual building heights and GFA should be informed by future site-specific studies, context, and confirmed building uses.

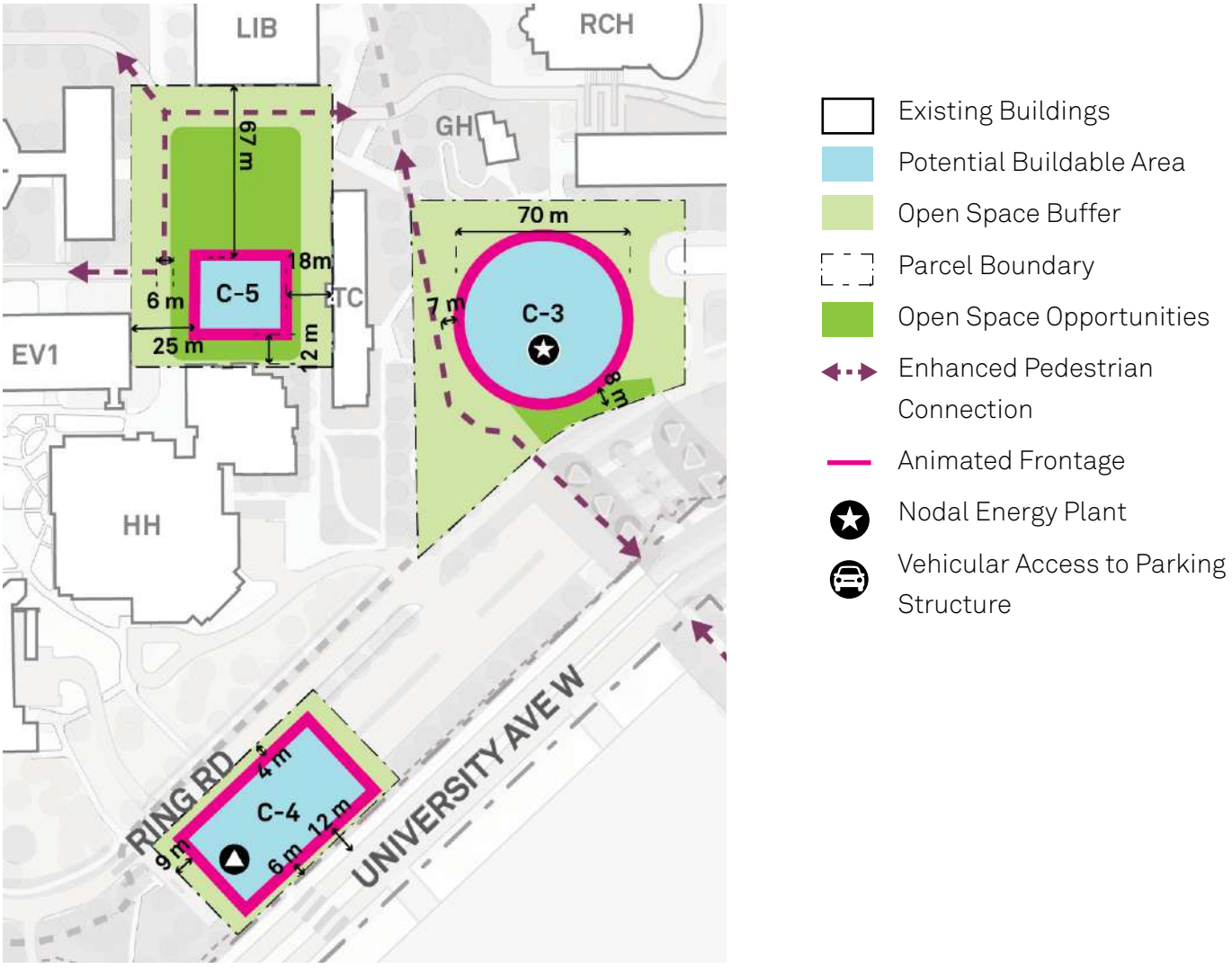


Figure 149. Inner Campus Site Opportunities Plan. Highlighting key site plan, setbacks, open space and building development opportunities

Figure 150. Potential Inner Campus buildings.

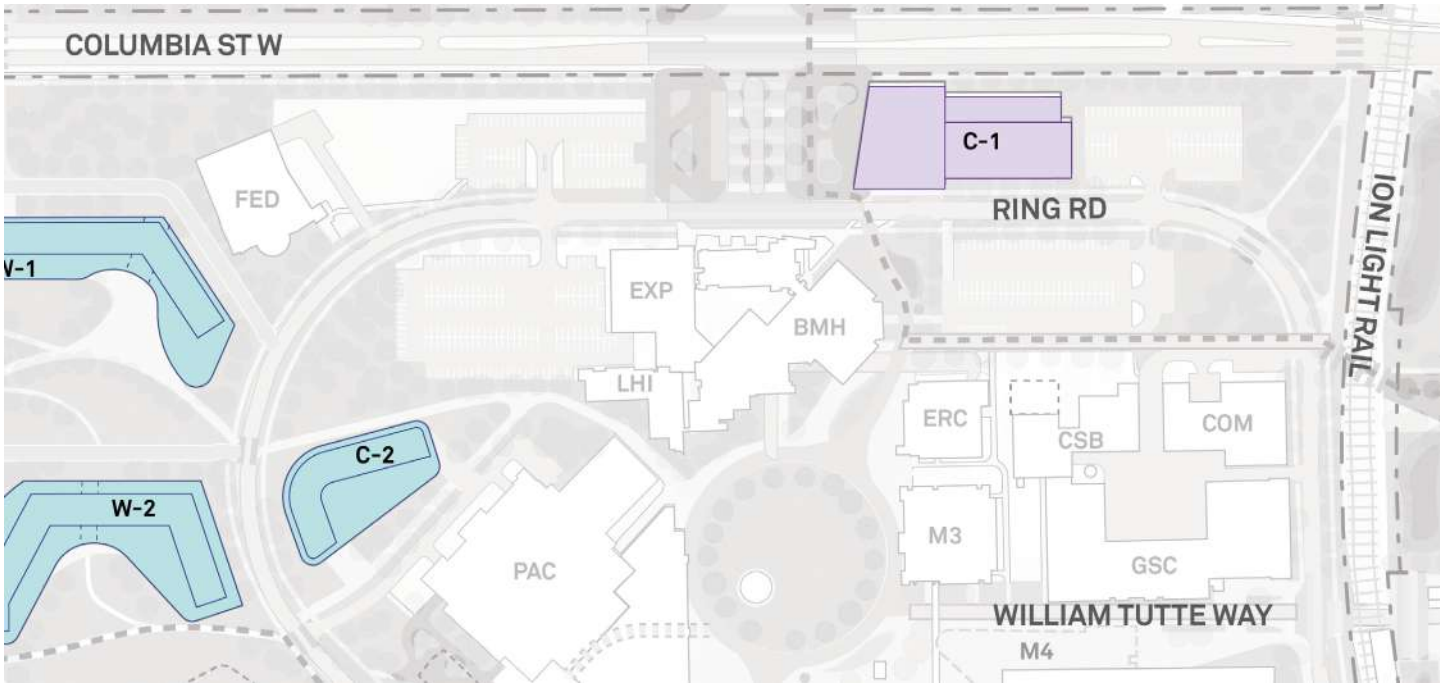


Figure 151. North Inner Campus Program Key Map.

- Academic/Ancillary
- Campus Housing

Performance Standards:

Proposed Building Development	Maximum Recommended Height (m)	Potential GFA (m^2)	Potential Programming
C-1	25m	19,600m^2	Campus Housing with mixed-use and energy nodal plant
C-2	32m	15,600m^2	Academic and ancillary

Figure 152. North Inner Campus key statistics. Actual building heights and GFA should be informed by future site-specific studies, context, and confirmed building uses.

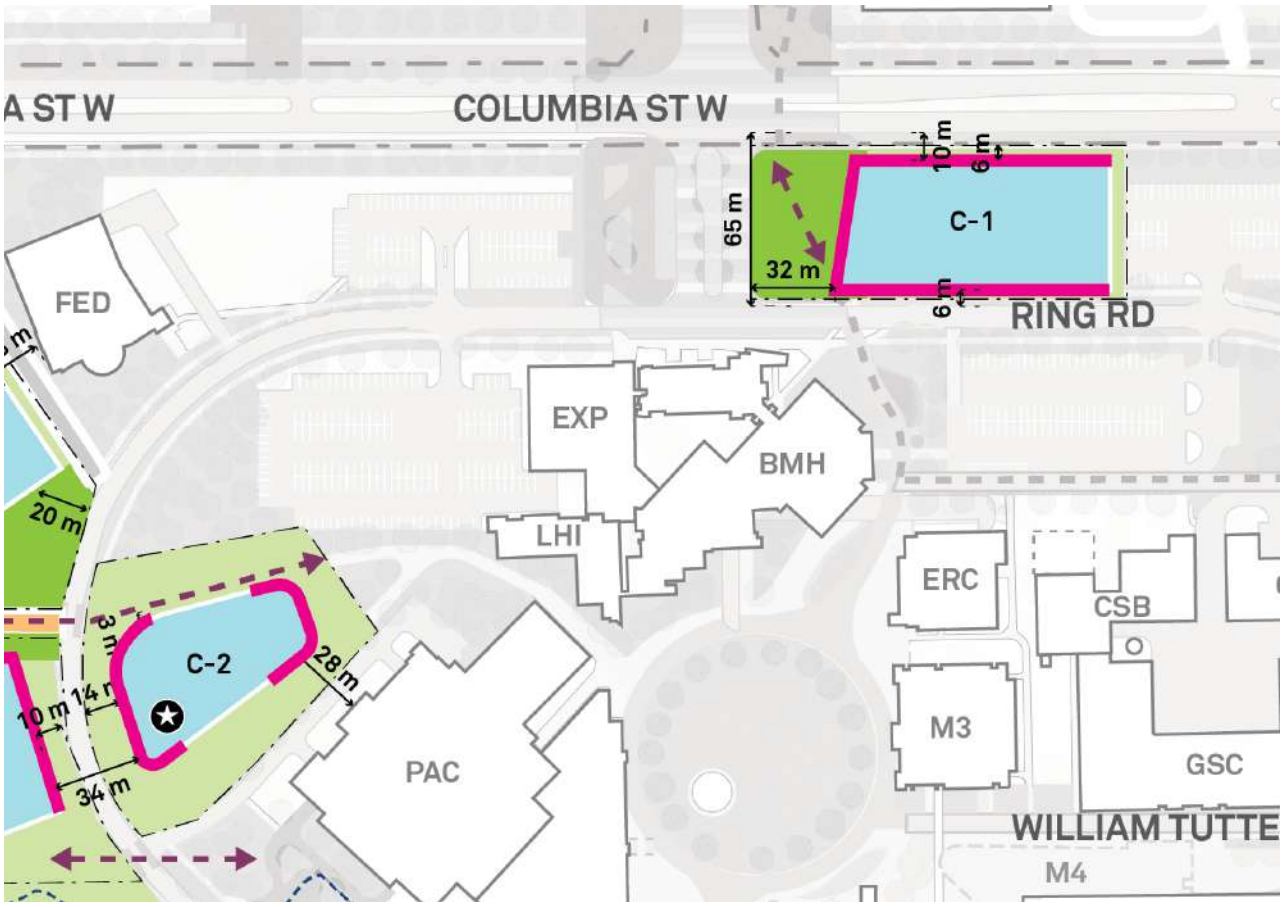


Figure 153. Inner Campus Site Opportunities Plan. Highlighting key ROW, setbacks, open space and building development opportunities

- Existing Buildings
- Potential Buildable Area
- Open Space Buffer
- Parcel Boundary
- Open Space Opportunities
- Enhanced Pedestrian Connection
- Active Frontage
- Nodal Energy Plant
- Vehicular Access to Parking Structure

4.2.5 North Campus

The North Campus is bound by Frank Tompa Drive to the north, and Columbia Street West to the south, abutting the Environmental Reserve. The Campus Plan envisions a North Campus that has significant campus growth opportunity The North Campus will be knit into the fabric of the campus, with enhanced pedestrian connections through the existing Laurel Trail, and the extension of the Innovation Trail, Arboretum Trail, the Land of Knowledge, and Environmental Reserve. These connections have the opportunity to extend to the R+T Park and future hospital to the north, where integration with the city and broader community is anticipated.

New buildings within the North Campus should balance existing recreational and academic uses with a mix of faculties to ensure the efficient and collaborative use of space. Some existing surface parking will be removed and replaced with structured parking to accommodate events at the Columbia Ice Fields recreation complex.

Potential Programming & Community Well-Being:

- **Academic Facilities (N-1 and N-2):** New academic/ancillary buildings at the North Campus are located to frame and enhance Hagey Boulevard and surrounding open space, and allow for an increase in food service and student amenities in the area. Social and study spaces should be located to take advantage of views to the Innovation Trail. Amenities should be highly visible from building exteriors to ensure legibility and activate the public realm, inviting users from R+T Park to patronize these services. Structured parking is recommended to ensure adequate parking for events at CIF.
- **CIF Master Plan:** The Campus Plan adopts the recommendations of the CIF Master Plan, which includes additional recreation and spectator space for the University of Waterloo.

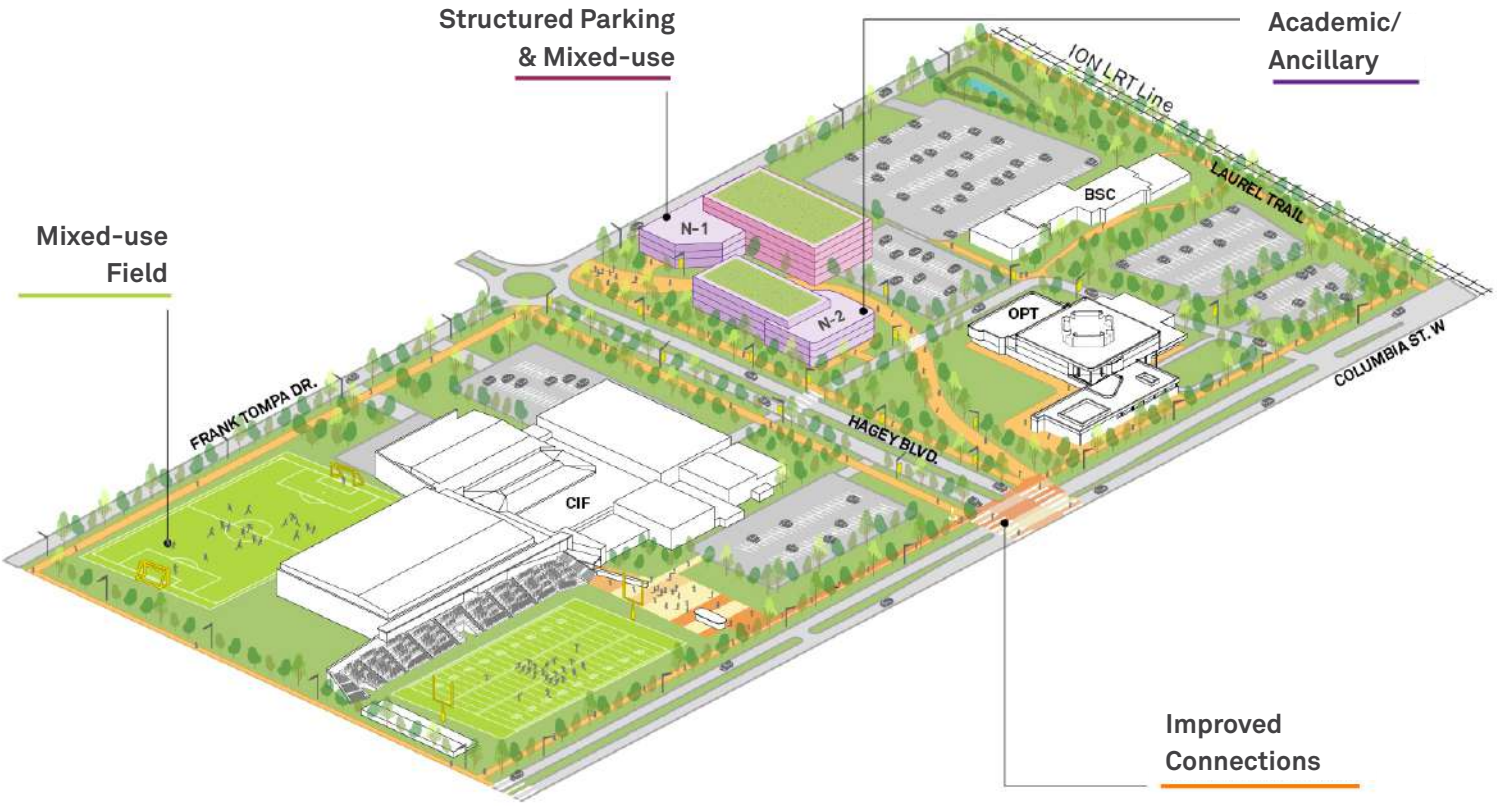


Figure 154. Axonometric view of North Campus focus area

- **Innovation Trail:** The extension of the Innovation Trail ensures a strong pedestrian connection to the North Campus and Environmental Reserve from the Inner Campus and West Village. The trail provides opportunities for digital and multi-media panels educating pedestrians on the University of Waterloo's many contributions to innovation, research and technology.
- **Brubacher House:** The 1850s Pennsylvania German Mennonite farmhouse is an important landmark in North Campus and provides ample opportunities for a secondary gateway that interprets the historic and ongoing contribution of Mennonite communities to the Region of Waterloo.
- **Kiinomaage-Aki (Land of Knowledge):** The Land of Knowledge will be an outdoor learning and ceremonial space providing land-based learning and Indigenous ways of knowing opportunities for Indigenous and non-Indigenous students. The space will be located in the Environmental Reserve, and will include a teaching gardens and gathering place, ceremonial fire pit, learning lodges, a sweat lodge, and other facilities. The Land of Knowledge will be connected to the campus through the Innovation and Arboretum Trails, with recommended connections to the future hospital and R+T Park.
- **Environmental Reserve:** The Environmental Reserve is an important open space used for research, leisure and recreation. The Reserve is a critical part of the Laurel Creek Watershed. In addition to the Innovation Trail, the Arboretum Trail has the opportunity to connect the Reserve with the wider campus through technology and placemaking initiatives to enable learning about campus ecosystems, plants and ongoing field research within the Laurel Creek and Columbia Lake areas.

Figure 155. Ground floor study spaces taking advantage of views to outdoor trails and pathways.

Figure 156. QR code opportunities along the Arboretum and Innovation Trail to learn more about plants, wildlife, innovation, and ongoing University projects.

Figure 157. New buildings can frame and enhance the Innovation Trail (Turf Design Studio)

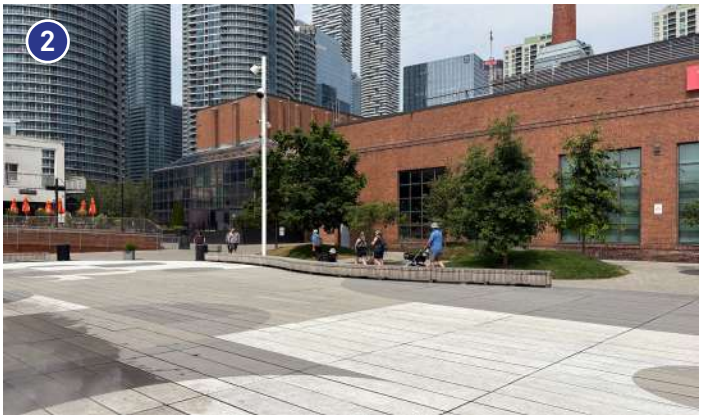


Figure 158. Secondary gateway terraces and open spaces should support pedestrian safety and placemaking

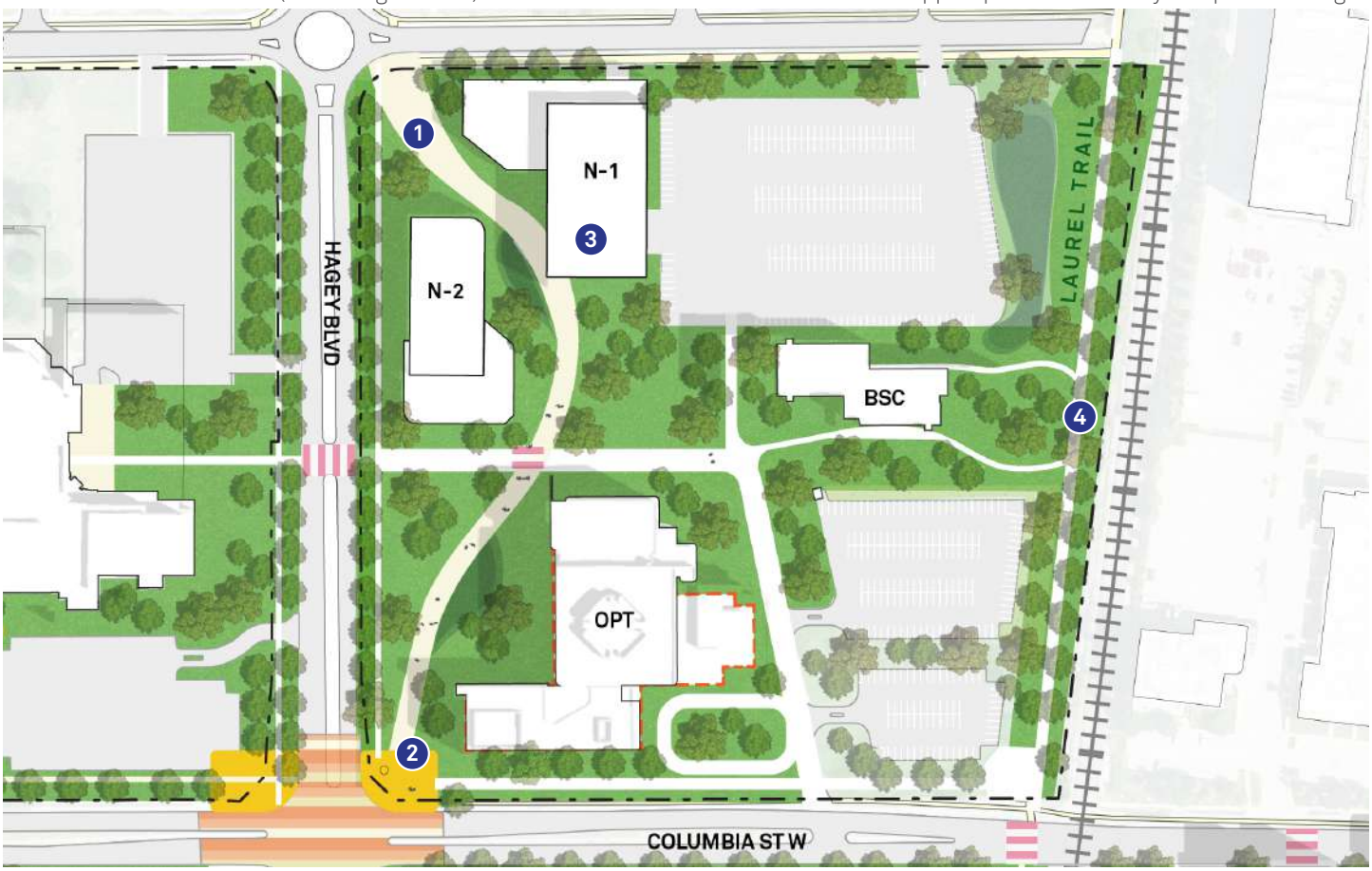


Figure 159. North Campus Concept Plan

Figure 160. Structured parking with screening

Figure 161. Laurel Trail enhancements

Connections:

- Enhance the crossings at Columbia Street West and Hagey Boulevard, as well as Westmount Road and Columbia Street West, in cooperation with the City and Region of Waterloo to ensure safer pedestrian and cycling connections to the North Campus and North West Campus.
- Create a pedestrian-focused and enhanced Hagey Boulevard in combination with the intersection at Columbia St W including linear tree-planting and street furnishings (seating, banners, upgraded lighting).
- Support delineation of the Innovation Trail and Arboretum Trail through clear wayfinding signage, seating, and lighting for a cohesive pathway network.

Sustainability and Built Form Design:

- Consider mass timber buildings to reduce the embodied carbon of new construction.
- Promote circular and sustainable building practices, such as utilizing demolished building material in new buildings and open spaces, where feasible.
- Integrate circular water practices, including rainwater harvesting, grey water re-use, water-efficient technologies, and integrated water management across buildings.
- Integrate solar photovoltaic arrays on south-facing rooftops.
- Ensure that built forms transition well to existing campus buildings and protect the utility of open spaces year-round through the mitigation of shadow impacts.
- Limit hardscaping in the Environmental Reserve to ensure maximum stormwater infiltration.

Figure 162. North Campus southeast view

Performance Standards:

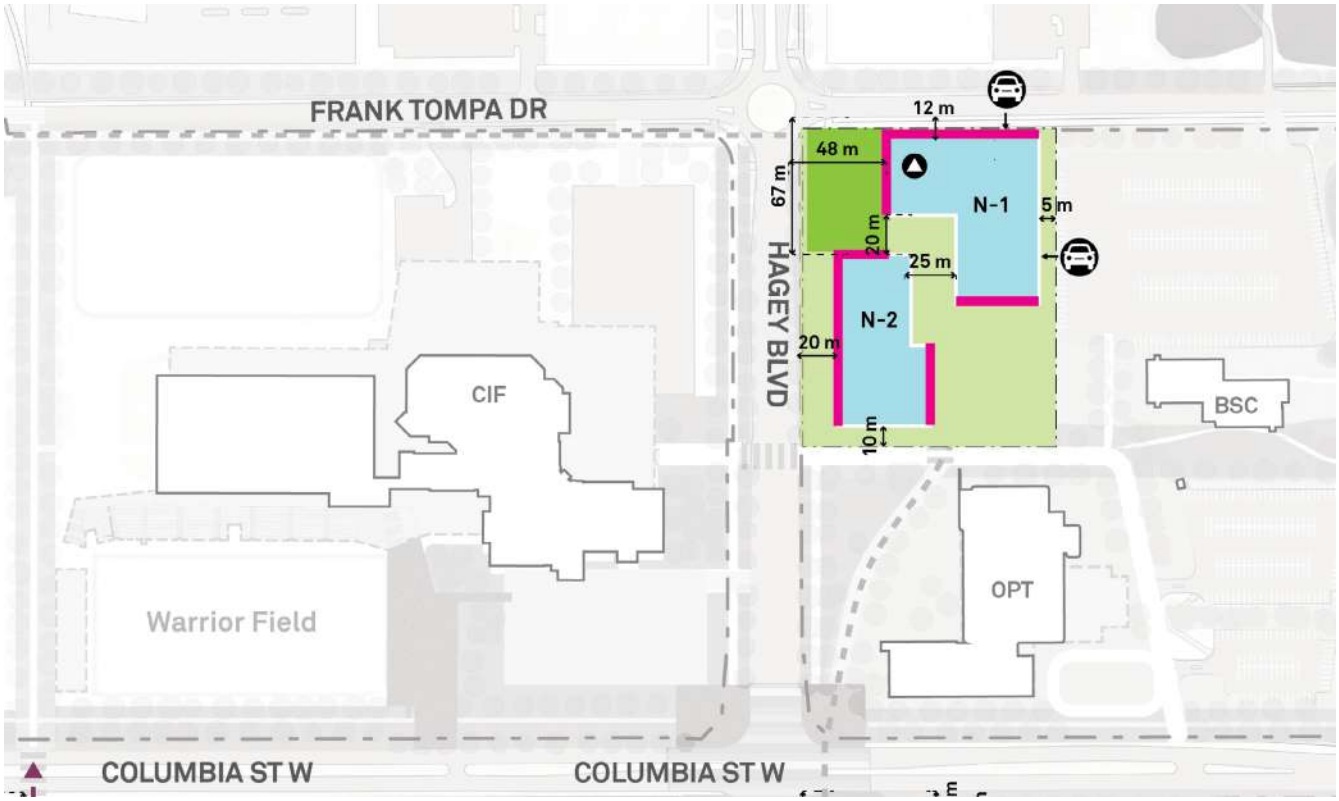


Figure 163. North Campus Site Opportunities Plan. Highlighting key site plan, setbacks, open space and building development opportunities

Legend

- Existing Buildings
- Potential Buildable Area
- Open Space Buffer
- Parcel Boundary
- Open Space Opportunities
- Enhanced Pedestrian Connection
- Active Frontage
- Nodal Energy Plant
- Vehicular Access to Parking Structure

Proposed Building Development	Maximum Recommended Height (m)	Potential GFA (m^2)	Potential Programming
N-1	21m	19,700m^2	Parking structure with amenities (375 parking spaces)
N-2	17m	11,000m^2	Academic/Ancillary

Figure 164. North Campus key statistics. Actual building heights and GFA should be informed by future site-specific studies, context, and confirmed building uses.

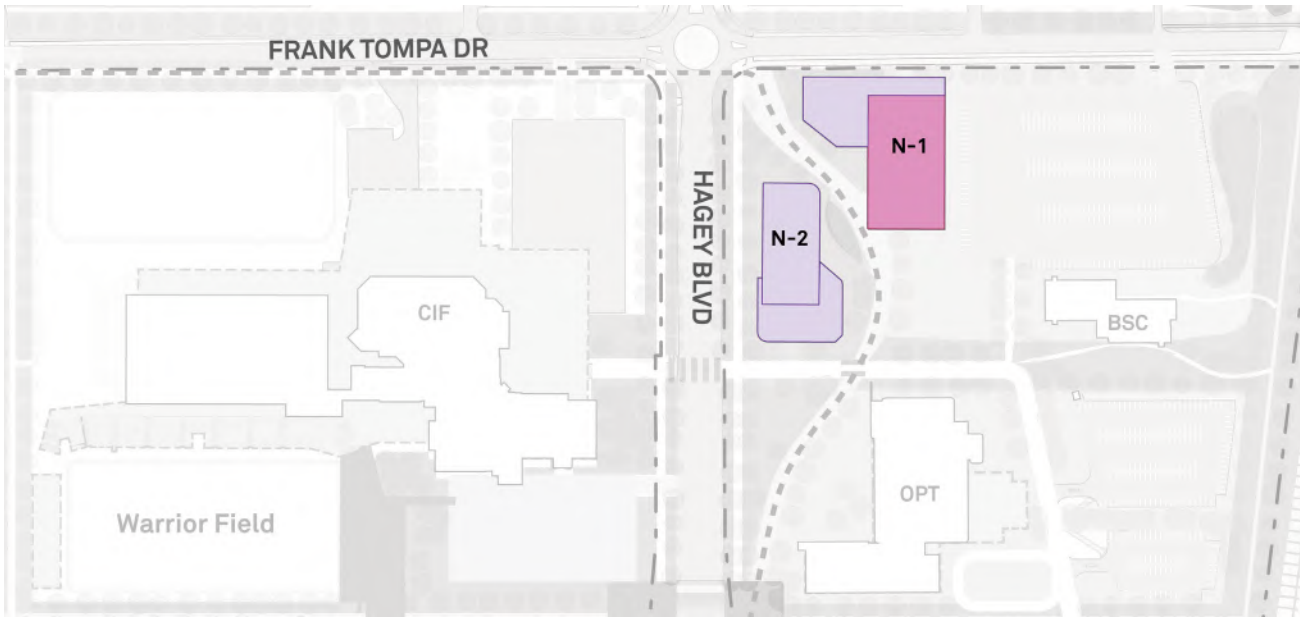


Figure 165. North Campus Program Key Map.

Parking Structure with Amenities

Academic/Ancillary

Figure 166. Conceptual rendering of the campus

5.0

Implementation

5.1 Priorities, Phasing, and Implementation Recommendations

- Quick Wins
- Flexible Projects
- Short-Term (0-10 years)
- Mid-Term Projects (10-20 years)
- Long-Term Projects (20+ years)

Throughout the campus planning process, the University's leadership team emphasized the importance of developing an implementable, practical, and cost-effective plan that meets the evolving needs of the University.

The Campus Plan's phasing strategy outlines opportunities for 'quick wins', a flexible phase, as well as short-, mid-, and long-term recommendations to address current needs while programming for future goals and enhancements. The recommended phasing strategy will evolve over time to align with the University's priorities and funding availability. This approach ensures that the campus capitalizes on emerging opportunities while still moving toward a cohesive long-term vision.

Proposed Projects

- Short-Term (0-10)
- Medium-Term (10-20)
- Long-Term (20+)
- Flexible
- Planned/Under Construction/ Future Campus Projects

Figure 167. Phasing Plan showing phasing for proposed building, open space, and landscape interventions.

The phasing strategy for the programmatic space allocation is dynamic and may shift in response to evolving space needs, priorities, funding, partnerships, and research opportunities. The phasing strategy accommodates the proposed timeline for new Campus Housing buildings (CHFS, 2025) and Shift: Neutral Report. As part of the campus planning process, building renovations, and deep energy retrofits have been identified for the remaining campus buildings. The phasing strategy does not provide the exact timeline for when these initiatives and projects should occur.

The long-term growth potential for future mixed-use institutional, residential, and retail developments, as well as integrated multi-level parking will have a significant impact on the campus. The Campus Plan acknowledges that each development project will occur incrementally over several years as a response to immediate priorities and needs. Initiatives must be addressed holistically with improvements to the public realm, open space, landscaping, campus accessibility, and circulation. Future building footprints have been illustrated for long-term planning purposes, and their realization will follow the strategic direction established by the University of Waterloo's leadership team and Board.

During the implementation planning process, strategic decision-making should prioritize the following initiatives:

- Create people-focused health and wellness, social, and study spaces throughout campus, to enhance the overall campus experience
- Enhance sustainable and equitable transportation through the redevelopment of Ring Road
- Prioritize upgrades that address deferred maintenance issues. New and existing buildings and infrastructure should undergo continuous Building Condition Assessments and energy audits and ongoing commissioning to ensure strong stewardship of the campus
- Prioritize Indigenization and environmental stewardship with key initiatives such as the Two Row Path, Healing Forest, and Land of Knowledge
- Improve safety and accessibility across campus and ensure AODA compliance. A comprehensive accessibility audit is recommended
- Promote active mobility and enhanced connections to the campus's natural setting
- Respond to partnership opportunities with the City, Region, and Affiliated and Federated Institutions to strengthen integration with surrounding neighbourhoods and enhance cross-campus connections

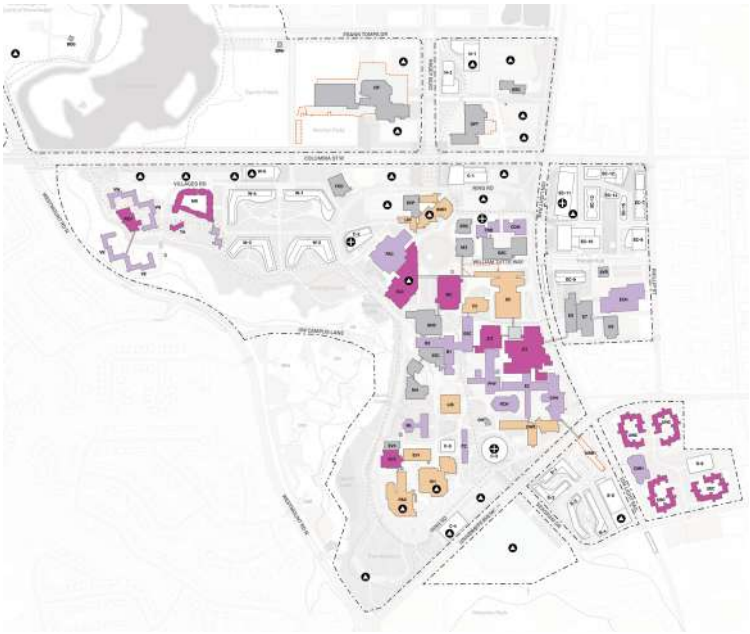


Figure 168. Key map of the campus highlighting buildings that require renovations, deep energy retrofits, and upgrades. A larger map can be found in **Section 3.4.**

5.1.1 Quick Wins

Quick-win projects are relatively low-cost, have fewer barriers to initiate, and can serve as catalysts for change across the campus.

These projects include public realm interventions that would increase the visibility, safety, accessibility, and permeability of the campus. They can be accomplished as funding becomes available and can be addressed in the short-, medium-, or long-term.

Projects:

- Ongoing maintenance and accessibility upgrades to campus pathways and curbs
- The design and implementation of the Arboretum and Innovation Trail, including:
  - Creation of a tree nursery adjacent to MHR
  - Tree planting along Laurel Creek
  - The placement of seating, lighting, and signage in the Healing Forest
  - Construction of docks, outdoor learning pavilions, land-based learning areas, and outdoor classrooms along Laurel Creek and the Arboretum Trail
- Plazas that connect the campus with the Affiliated and Federated Institutions, honouring the historic and ongoing relationship between the institutions
- Test speed reductions and a one-way pilot project on Ring Road (see **Section 3.5** for further detail)
- Landscape upgrades to Mackenzie King Village, Ron Edyt Village, and UWP Courts in tandem with planned renovations or renewals
- Install secondary gateway signage supported by lighting, furnishing, and paving upgrades
- Incorporate public art, playscapes, and improved indoor signage and wayfinding
- Enhance the existing East Campus area through the installation of legible and accessible pathways to support safer pedestrian access in the area. Clear wayfinding signage, elevated road crossings, barrier-free curb cuts, and priority winter maintenance are recommended in recognition of the high number of students, faculty, and staff that walk through East Campus to enter the Inner Campus.

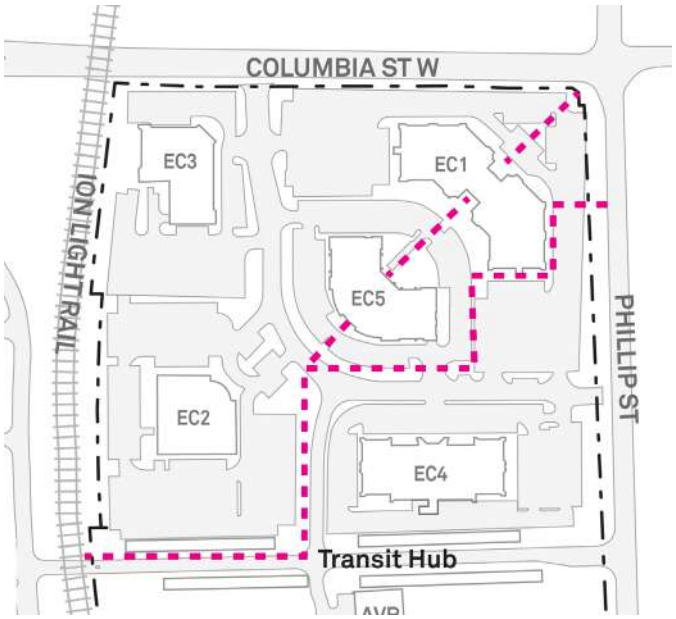


Figure 169. Pedestrianization of East Campus is a quick win to improve access to campus from Phillip Street and high density residential neighbourhoods beyond.

5.1.2 Flexible Projects

The following Flexible Projects may shift in priority in response to changing enrollment patterns, funding availability, operational needs or external partnerships.

The phasing strategy reflects potential projects that can be implemented in partnership with developers or municipal/regional partners as opportunities arise.

Flexible projects for the campus include:

Buildings and Interiors

1. Development of potential emergency services facility with integrated parking structure **(S-5)** and residential development **(S-3 and S-4).** Use, programming, and layout are subject to change
2. Explore innovative long-term development approaches in East Village with uses such as hotel, commercial/retail, residential, grocery stores, and child care
3. Construction of a parking structure with photovoltaics, integrated ground floor amenities, and a Energy Nodal Plant **(EC-11)**. This parcel should be prioritized ahead of other projects in the East Village to alleviate surface parking pressures. Swing spaces for existing uses should be secured prior to the construction of East Village, with potential to use renovated existing buildings or new buildings to accommodate existing uses
4. Remove and replace EC1-5 with **EC7- 15**, as part of the East Village development

Landscape and Open Spaces

5. Plan for and implement arterial streetscape upgrades and enhanced traffic signals, subject to discussion with the City and Region of Waterloo
6. Potential at-grade LRT crossing between East Village and Inner Campus, and within South Village, contingent upon collaboration with transit authorities
7. Potential LRT platform upgrades to promote sustainable modes of transportation on campus and increase capacity
8. Establish pathways across Lot C, connecting the campus to Waterloo Park. This project is subject to future discussions with the Grand River Conservation Authority
9. Upgrades to Laurel Trail. Subject to discussions with the City of Waterloo
10. Implement the CIF Master Plan

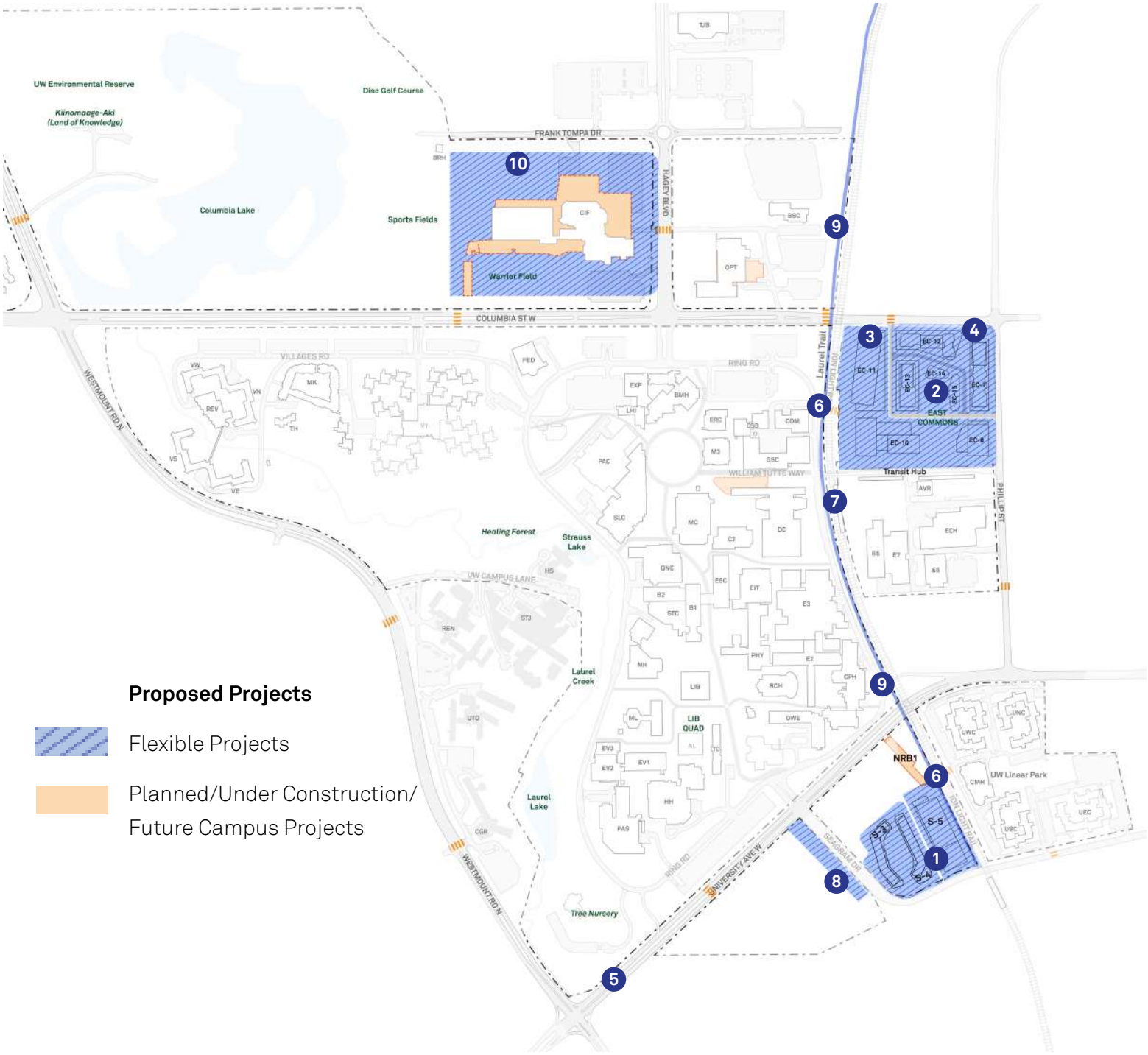


Figure 170. Overview of the Flexible Phasing Plan. Existing campus conditions are shown for areas that are not designated for flexible or future phased development. The numbers indicated on the plan are to be used for illustrative purposes only and do not indicate the sequential order of implementation.

5.1.3 Short-Term Projects

The phasing strategy recommends that short-term projects be completed within 1 to 10 years. These initiatives include sites with fewer implementation constraints and that act as catalysts for future phases. Short-term projects for the University of Waterloo include:

Campus Housing

1. Phased removal of Beck and Eby Hall, Minota Hagey Residence, and V1 East and South
2. Construction of **NRB1** and residence buildings in the South Village **(S-1 and S-2)**

Buildings and Interiors

3. Completion of Math 4, Optometry expansion, and landscaping upgrades to the Math 4 Quad
4. Removal of University Club to facilitate construction of mixed academic and residence building **(C-2)**
5. The construction of a new Transit Hub and Innovation Hub with academic facilities, institutional uses, classrooms and labs, allowing swing space to accommodate removal of SCH and AL **(EC-9)**
6. Removal and replacement of South Campus Hall with a new landmark building **(C-3)** constructing an energy plant connecting to south campus, innovation hub, campus bookstore, alumni centre, and lecture halls
7. Construction of structured parking **(C-4)**, as required

Landscape and Open Spaces

8. Ring Road streetscape upgrades with associated plantings and furnishings
9. Pedestrianization of William Tutte Way and William Tutte Gateway
10. Construction of South Gateway plaza
11. South portion of Two Row Path
12. Inclusive Circle
13. Healing Forest pathways, furnishings, and structures
14. Implement pathways, plantings, and structures throughout the Land of Knowledge,
15. Renovation and landscaping improvements to the linear open space following the removal of Beck and Eby Hall

A. Rooftop and photovoltaic installation

In addition to the above noted short-term projects, it is recommended that the highest-priority and high-risk deferred maintenance and renewal projects, preliminary major renovations, and piloting of deep energy retrofits of academic and ancillary buildings be undertaken by the University within 1 to 10 years. The Campus Housing Facilities Strategy directs the intent to renovate and renew existing student residence buildings.

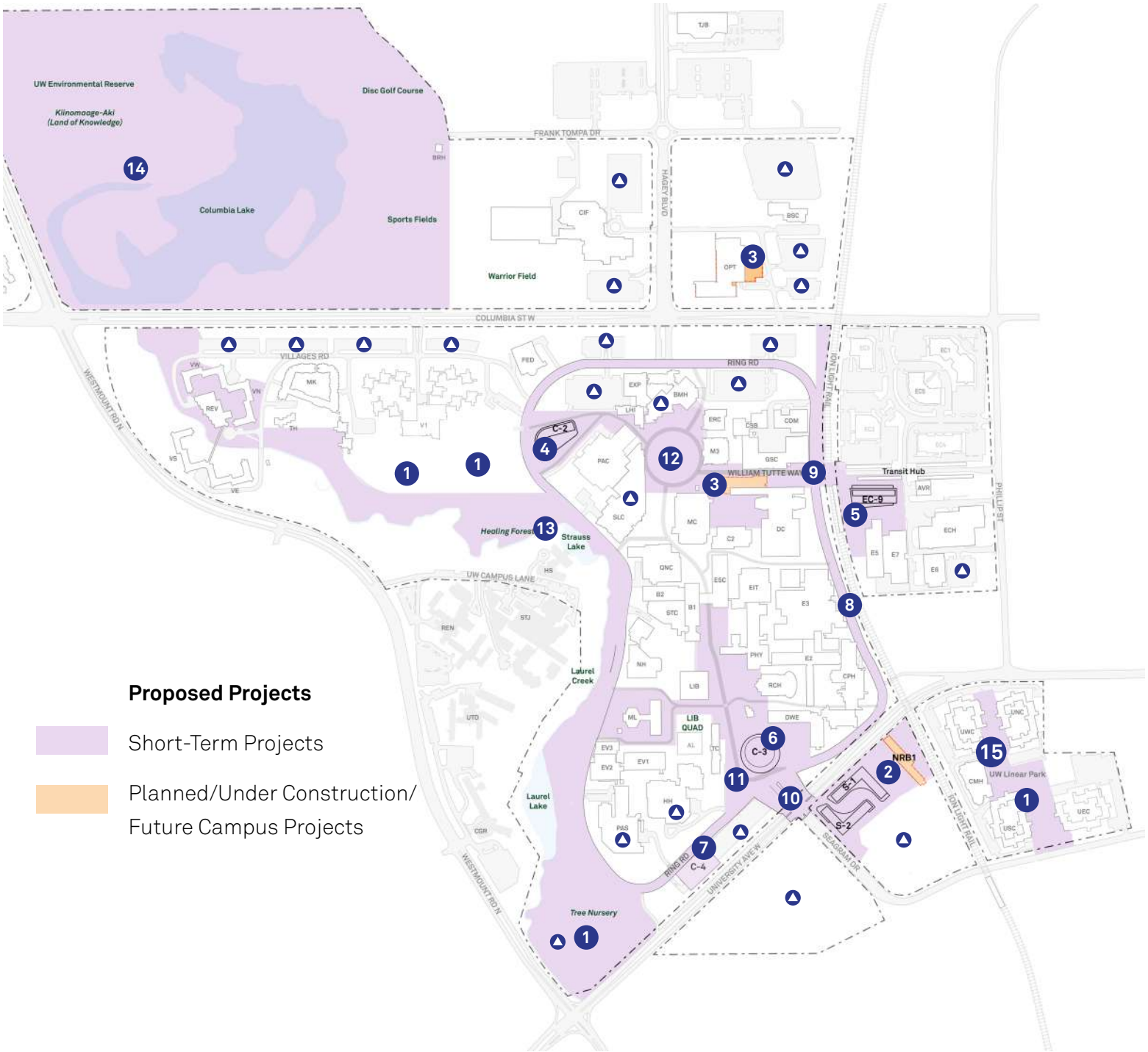


Figure 171. Short-Term Phasing Plan showing proposed building, open space, and landscape interventions. Recommended parking structures to be constructed based on demand and priority. The numbers indicated on the plan are to be used for illustrative purposes only and do not indicate the sequential order of implementation.

5.1.4 Medium-Term Projects

The phasing strategy recommends medium-term projects be completed within 10 to 20 years, or by 2050. Medium-term projects for the University of Waterloo include:

Campus Housing

1. Removal and replacement of V1 with West Village **(W-1, W-2, W-3, and W-4)**

Buildings and Interiors

2. North Gateway Building **(C-1)** that has an opportunity to include administrative offices, academic facilities, and flexible swing spaces
3. Construction of one structured parking building **(W-5)**, as required
4. Removal and replacement of Arts Lecture Hall (AL) with **C-5,** featuring indoor and outdoor innovation spaces, in response to its close proximity to the Dana Porter Library
5. Construction of the west energy node connecting to West Village

Landscape and Open Spaces

6. Upgrades to the rear of PAC/SLC with architectural improvements, a new plaza, and accessible entrances
7. Transform the Engineering Service Lane into a flexible shared street with enhanced landscaping and pedestrian pathway through CPH/E2/RCH courtyards
8. Upgrades to Arts Quad
9. North Gateway upgrades and plaza
10. Construction of new Go Bus layby south of the Transit Hub. Subject to discussions with transit authorities
11. Upgrades to landscaping buffer and pathways connecting East Village to Inner Campus, anticipating nodal energy plant at GSB
12. Extension of Innovation Trail and Arboretum Trail connections in North Campus

In addition to the above noted medium-term projects, it is recommended major renovations and deep energy retrofits of academic and ancillary buildings be undertaken by the University within 10 to 20 years.

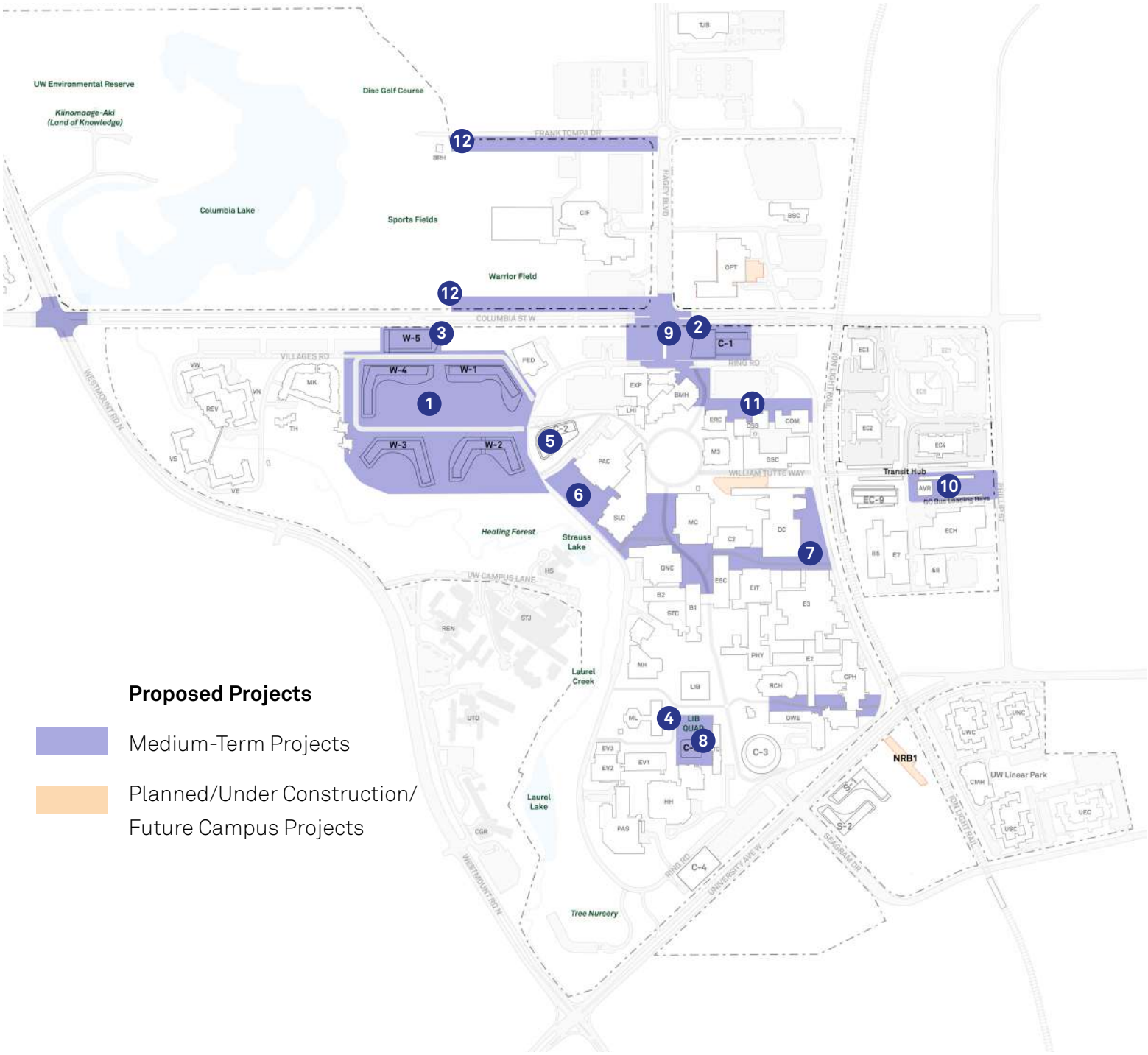


Figure 172. Medium-Term Phasing Plan showing phasing for proposed building, open space, and landscape interventions. Recommended parking structures to be constructed based on demand and priority. The numbers indicated on the plan are to be used for illustrative purposes only and do not indicate the sequential order of implementation.

5.1.5 Long-Term Projects

The phasing strategy recommends long-term projects to be completed beyond 20 years. Long-term projects for the University of Waterloo include:

Buildings and Interiors

1. Construction of academic/administrative building **(N-2)** and structured parking **(N-1)**, as required, with consideration for the creation of an energy nodal plant, pending further analysis
2. Construction of structured parking **(S-6)**, as required
3. Construction of a nodal energy plant and district energy conversion at the north side of the CSB

Landscape and Open Spaces

4. Extension of Innovation Trail aligned with construction of new buildings **(N-1 and N-2)**

In addition to the above noted long-term projects, it is recommended ongoing renovations and renewals of academic and ancillary buildings be undertaken by the University beyond 20 years.

Figure 173. Long-Term Phasing Plan showing phasing for proposed building, open space, and landscape interventions. Recommended parking structures to be constructed based on demand and priority. The numbers indicated on the plan are to be used for illustrative purposes only and do not indicate the sequential order of implementation.

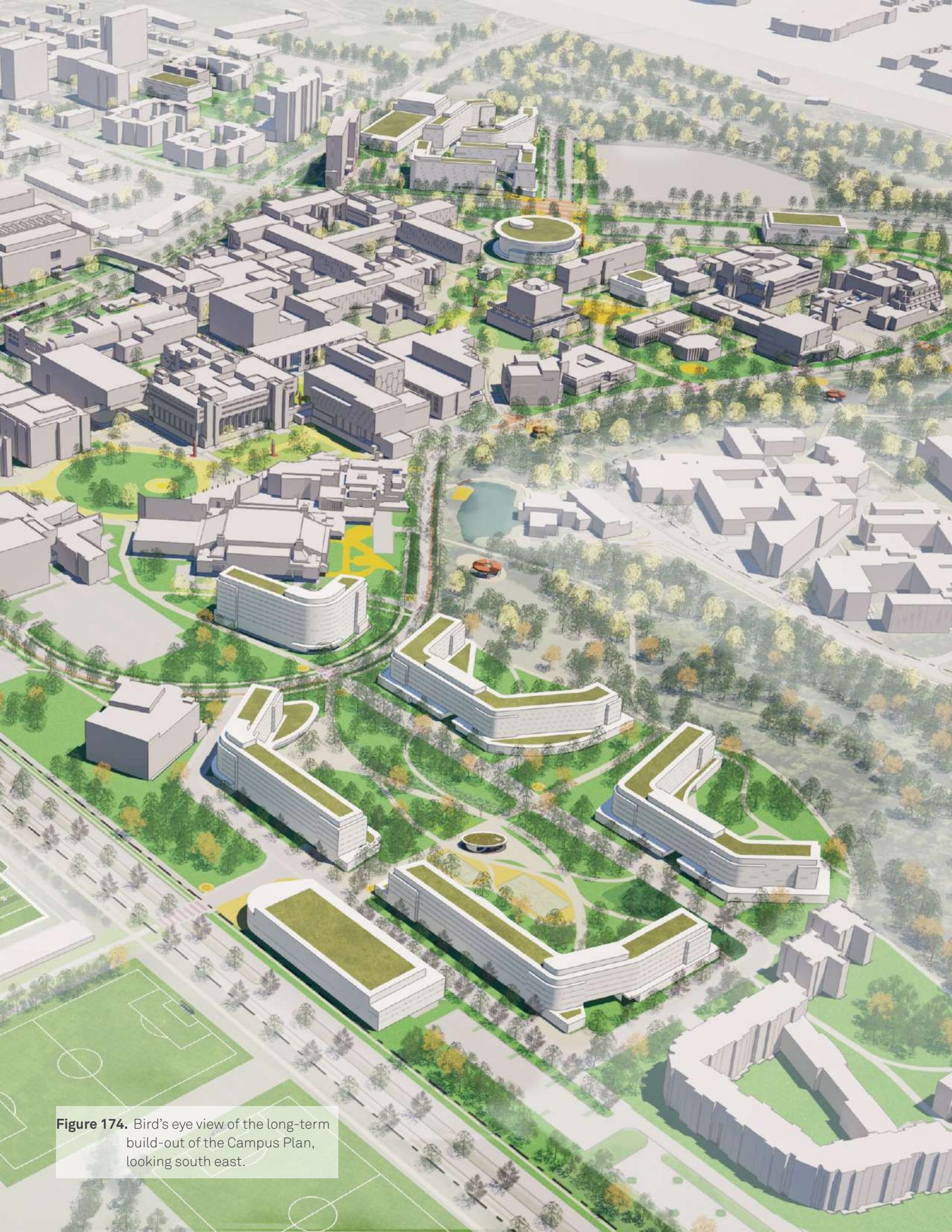


Figure 174. Bird's eye view of the long-term build-out of the Campus Plan, looking south east.

5.2 Plan Review and Update

The Campus Plan provides a comprehensive and flexible framework to help guide future design and development decisions for new buildings, landscaped open spaces, and circulation routes.

A thorough review and update to the Campus Plan should be undertaken by the University regularly to ensure ongoing reference to the Plan. Regular updates are recommended in response to the evolving needs and priorities of the University. Community and stakeholder engagement should be undertaken when future changes are proposed to ensure the successful implementation of the Campus Plan. It is recommended that the review of other plans, guidelines, and standards should be coordinated in a manner that increases consistency and alignment with the Campus Plan.

To ensure continuity and successful implementation of the Campus Plan, the Capital Projects and Space Allocation (CaPS) Committee should review major capital projects in alignment with the Campus Plan. It is recommended that the CaPS Project Proposal Form be updated to include a section requesting identification of how the proposed project supports the vision and principles of the Campus Plan. Project submission to the Building Properties Committee should explain alignment with the Campus Plan.

It is also recommended that the University of Waterloo maintain a Campus Plan landing page on its website that outlines in-progress and upcoming projects from the plan. The page should include key facts, figures, and scheduling information identifying project status. This page will heighten awareness of projects and help to advertise, share, and promote campus-wide projects.

Governance Recommendations:

- Consider creating a Campus Planning team to advance and monitor the development of the University of Waterloo's campuses in an integrated manner.
- Review and revise the financial responsibility and decision-making processes between faculties and Operations to enable future project proformas to capture operational cost savings resulting in up-front capital premiums, ensuring visionary projects are realized.
- Develop and implement an accountability program that communicates the University's targets, roles and responsibilities, and incentives for achieving the targets, which should align with strategic documents.
- Review opportunities to connect the campus with satellite campuses through programming, branding, and increasing collaboration through swing spaces and bookable spaces to encourage the flow of staff, students, and faculty between campuses.

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