

University of Guelph

Campus Master Plan | Guelph Campus | Volume 1



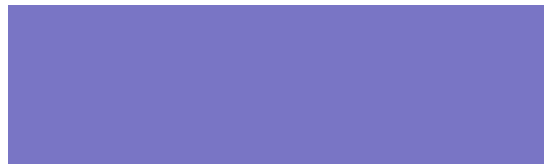
January 2013

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Executive Summary

Chapters 1, 2: Project Overview

A Campus Master Plan update is a major undertaking and a significant milestone in the University of Guelph's evolution. The planning process allows a re-examination of the framework and directions for physical changes that support the university's far-reaching academic goals while enhancing the campus experience for students, staff, faculty and neighbors.

This Plan is an evolution and update to the 2002 Campus Master Plan, reinforcing and building on the many important principles and initiatives identified ten years ago. It provides a long-term framework for the next 50+ years of the evolution and growth of the campus, with specific direction for the 20-year planning horizon

This Plan has been integrated with a series of ongoing initiatives and capital projects. The Integrated Plan was developed concurrently with this Plan, and this Plan is informed by it and supports its implementation. This Plan is informed by the existing Master Plans for Athletics, OVC and the Arboretum and it is also positioned to support the proposed vision of the BetterPlanet Project. Specific capital projects have moved forward in various stages of design and construction, which are reflected in this Plan.

While the university is anticipating a period of low or even no growth, historic trends suggest that some growth may be expected over the next 20 years. The Campus Master Plan will establish a campus development framework that can accommodate growth but does not rely on growth, ensuring the university is prepared for the future, however uncertain.

The University of Guelph will encounter many opportunities and challenges over the coming decades, perhaps most importantly the need for campus and building renewal. Guided by this Plan, the university will be positioned to positively respond to these challenges and opportunities in a way that supports the academic mission and promote the evolution and growth of campus.

Chapter 3: Campus Vision

Four broad-based and mutually supportive planning principles provide comprehensive direction for the Plan and a means for evaluating future amendments and updates.

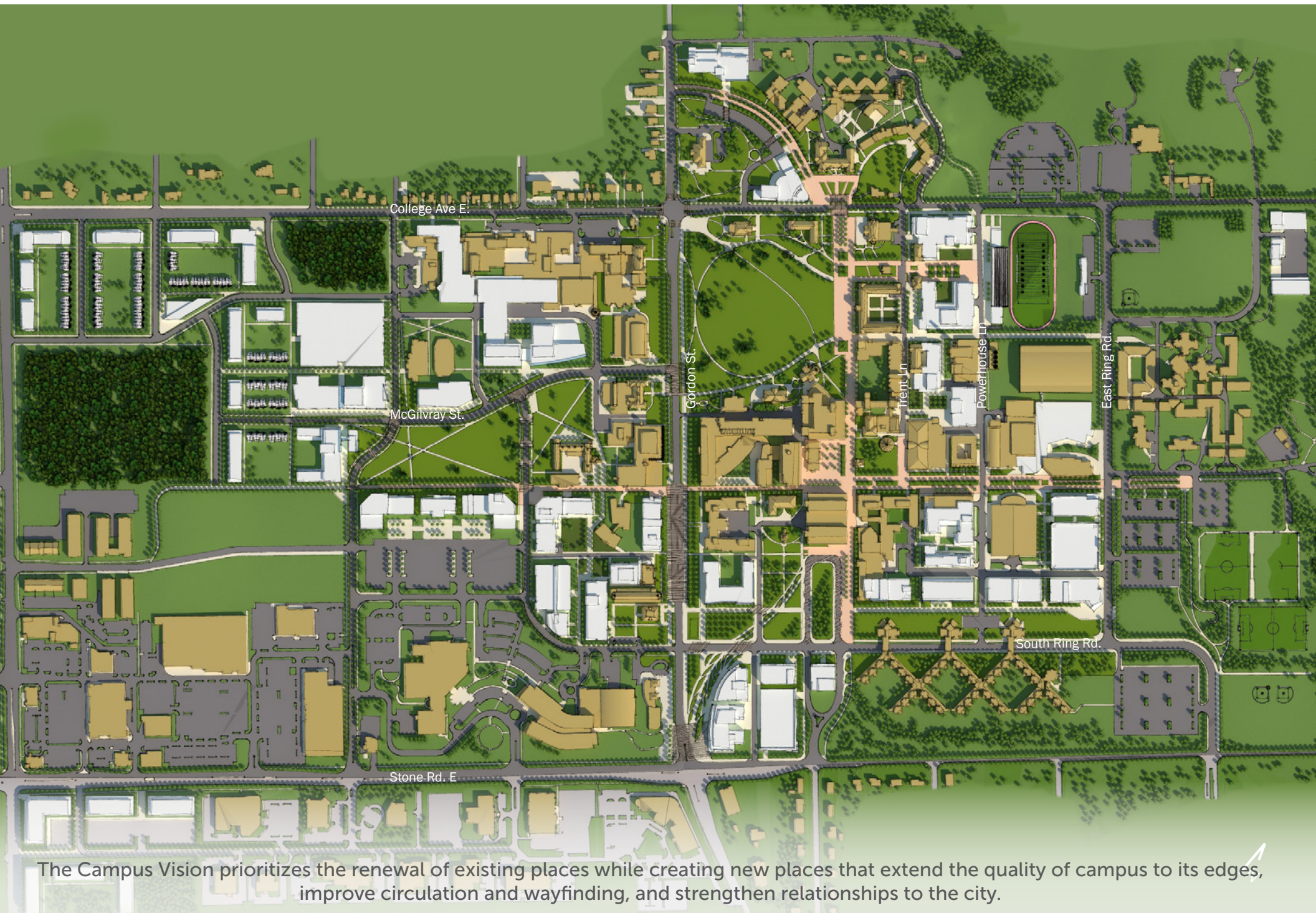
1. **Support the University of Guelph's Academic Mission**
2. **Enhance the Image and Experience of Campus**
3. **Foster a Better Campus to Achieve Sustainability**
4. **Integrate the Campus**

The campus of the future will be modeled on the best features of the campus of today. It will be compact and sustainable: renewed, walkable and integrated to ensure a high quality campus image and experience. It will be a place that past, present and future members of the university community will recognize and cherish.

The historic core campus will continue to be the focal point for the evolution and growth of campus. New development will occur through intensification and redevelopment around this core to support a compact campus footprint. The university will renew the historic buildings and landscapes that define the campus, realigning buildings with appropriate users and creating new opportunities for student activity. Academic activities will co-mingle within a compact campus environment, supporting multi-disciplinary learning.

The campus will be well integrated, both internally and externally. Existing patterns of place-making and development will be extended to the edges of campus to ensure a consistent and high quality campus experience, supported by new walks and street connections.

A compact, mixed-use and well-connected campus is inherently sustainable. Higher development densities in a mixed-use environment will support the academic mission and community-building while reducing land and resource consumption. Increased transportation opportunities will enhance connectivity and accessibility while reducing fuel consumption and emissions. Open space enhancements will create places of respite and reflection within the busy campus environment, and integration with the surrounding city will support community building and place-making. The illustrated long-term demonstration plan is shown in Figure ES.1.





Illustrated view of the long-term demonstration plan looking east



Illustrated view of the long-term demonstration plan looking southwest

The Campus Vision provides a long-term framework for the growth and evolution of campus. The following pages outline more detailed directions for the major systems that contribute to this framework, including land use and development, landscape and open space, and movement, and identify a series of University Projects that will contribute to the realization of the Vision.

Section 4.1: Land Use, Renewal and Development

The land use strategy identifies a broad structure for the organization of uses and activities across campus, outlining in general terms where uses should and should not go. The land use strategy, shown in Figure ES.2, supports a compact campus, where renewal and new development will be concentrated in the core. Academic disciplines and activities will continue to intermingle across campus, and multi-disciplinary projects will be encouraged to promote interaction and ensure efficient patterns of development and space utilization. Existing residential communities and athletic areas will be protected and expanded, and the Reynolds Walk mixed use 'campus main street' will be reinforced. The Edinburgh and College area and Wellington Woods offer long-term opportunities for residential and mixed use development.

While there are significant opportunities for new campus development, focused investment in improving the quality of existing campus buildings is the major priority. A comprehensive facility renewal strategy will promote campus sustainability, improve building conditions, and better align space and users. This strategy will be

coordinated with new capital projects to ensure implementation. The combined facility renewal and new development strategy is illustrated in Figure ES.3.

The capacity and range of development and renewal sites illustrated in this Plan exceed the need anticipated in the 20-year planning horizon. This is to provide a variety of opportunities and a long-term structure for both near-term and future campus growth.

Legend

- Study Area
- Academic Core
- ▨ Mixed Use Core: The Campus Main Street
- OVC (Subject to 2009 Master Plan)
- Athletics and Recreation (Subject to 2007 Master Plan)
- Arboretum (Subject to 2004 Master Plan)
- Residences
- Mixed Use (Stone Road)

Legend

- Renewal
- Renewal and repurposing
- Demolition (Due Fit-to-Fuction and/or Condition Issues)
- ▨ Demolition (Due to Site Underutilization)
- Areas that can accommodate new development

University Projects

- 1 Dairy Barn Re-purposing
- 2 University Centre Re-purposing and Administration Relocation

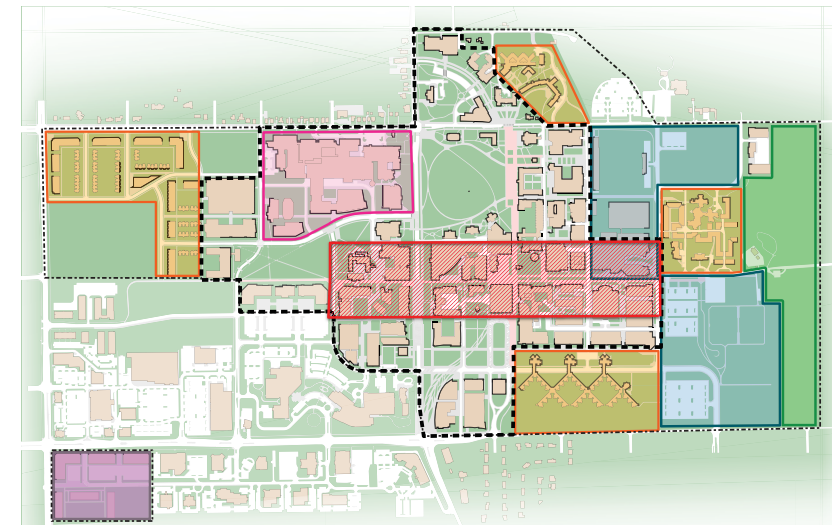


Figure ES.2: Campus land use strategy

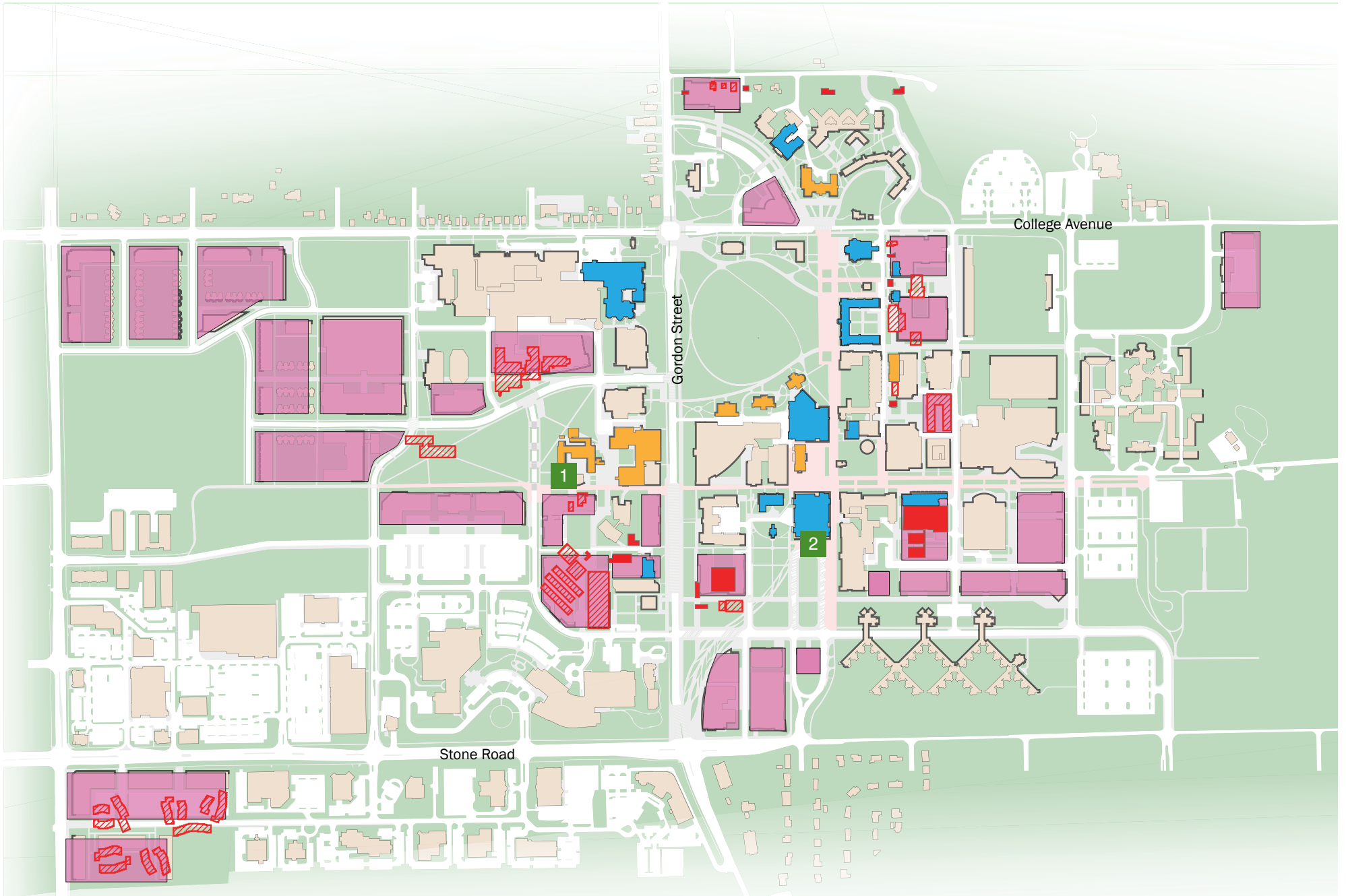


Figure ES.3: Facility renewal and new development strategy

Section 4.2: Landscape and Open Space

Campus landscapes and the open space network define the unique character of University of Guelph campus. Highly valued by the university community, the campus character is the fruit of previous landscape design decisions, purposefully implemented with full awareness of the long-term benefits that would accrue.








Adding to the existing open space network, new landscapes will extend the character of the core campus to the campus edges, reflecting the heritage landscapes such as Johnston Green, the university's agricultural heritage, and the modern landscapes of the 1960's and 70's (e.g. Branion Plaza and the Walks). Despite a variety of uses and physical elements, the open space network will have a cohesive identity and design. It will play an important role in shaping the future campus experience, shaping campus building development patterns, and establishing movement and wayfinding patterns. The open space network is shown in Figure ES.4.

To better understand the structure of the open space network and provide consistent landscape design, a broad pattern of landscape types has been identified. These types reflect the general role, function and hierarchy of places within the larger network and include

- Natural Areas
- Iconic Greens
- Playing Fields
- The Walks and Branion Plaza
- Key Streets
- Small Greens
- Gateways

Recognizing the role and function of these places will help guide maintenance and renewal of existing places, inform the design of new places and provide a clear understanding of the context into which new building and infrastructure development must fit.

Legend

-  Natural Areas
-  Iconic Greens
-  Small Greens and Courts
-  The Walks and Branion Plaza
-  Key Streets
-  Athletics
-  Gateways

University Projects

- 1 Johnston Green Renewal
- 2 The Pastures
- 3 South Mall
- 4 Entry Plaza
- 5 Branion Plaza Renewal
- 6 Winegard Walk Extension and Renewal
- 7 Reynolds Walk Extension and Renewal
- 8 Alumni Walk Renewal
- 9 Gordon Street Renewal
- 10 College Avenue Improvements
- 11 Smith Lane
- 12 Stadium Green

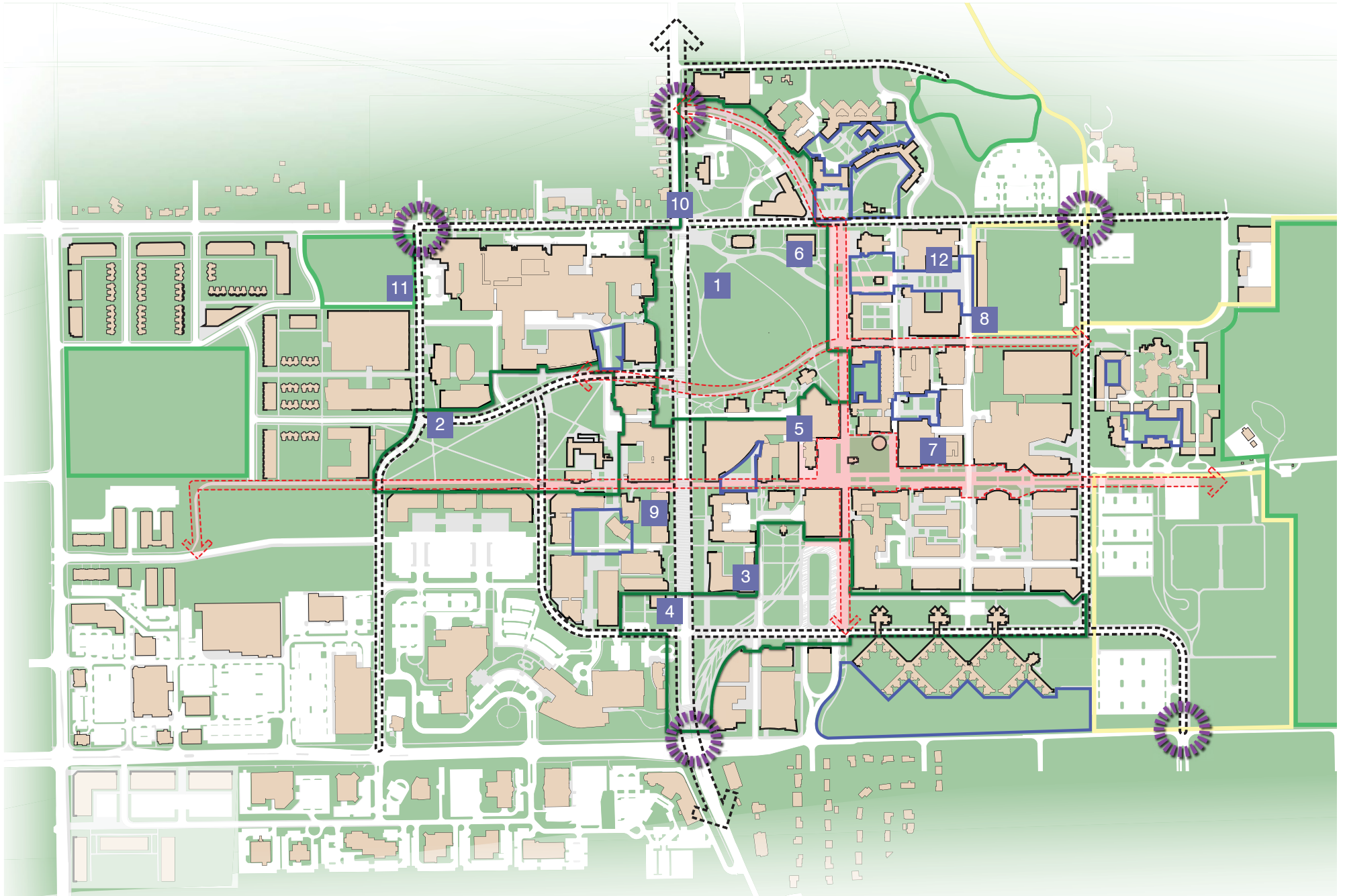


Figure ES.4: Landscape and open space network

Section 4.4: Movement













As a large and complex institution with the population of a small city, the University of Guelph accommodates thousands of pedestrian, vehicle, transit and bicycle trips every day. Complex movement systems, ranging from busy streets to small pedestrian walks, together provide a network that ensure people can move around and connect efficiently. The campus movement network supports the many trips and connections made on campus everyday. The pedestrian network itself is a means for connecting people with people and play an important role as part of the campus open space and landscape network. Ensuring the entire campus is connected, welcoming and walkable is a high priority.

Arrival at campus occurs through a variety of means, including cars, buses, bicycles and on foot. The university will continue to support sustainable means of transportation, especially with a growing commuter population. Guelph is widely recognized for its travel demand management (TDM) program, which has made excellent progress in reducing single-occupant vehicle trips in favour of more sustainable means. Figure ES.5 illustrates the primary components of the movement network.









Section 4.5: Energy, Infrastructure and Utilities

The university is committed to fostering an institutional culture of sustainability and empowering individuals to put this commitment into practice. Sustainable systems and efficient operations will further contribute to campus sustainability. The university will expand and improve the district energy network and other utility systems to support new campus development and users. Continued attention to water conservation and waste management will reduce resource consumption, and increased on-site stormwater management will minimize downstream impacts.

Legend

-  Primary Vehicle Route
-  Primary Vehicle Route (proposed)
-  Secondary Vehicle Route
-  Primary Pedestrian Route
-  Primary Pedestrian Route (proposed)
-  Secondary Pedestrian Route (proposed)
-  Bicycle Lane
-  Parking/Servicing Access
-  Parking Structure
-  Transit Zone
-  Pedestrian/Vehicle Mediation Zone
-  Gateway

University Projects

-  1 Extension of Chancellors Way to McGilvray Street
-  2 Extension of South Ring Road north to McGilvray Street
-  3 Convert Macdonald Street to local access
-  4 Remove through access on Reynolds Walk
-  5 Extension of Powerhouse Lane to South Ring Road
-  6 Bus loop and transit improvements
-  7 Parking structures
-  8 University Welcome Centre

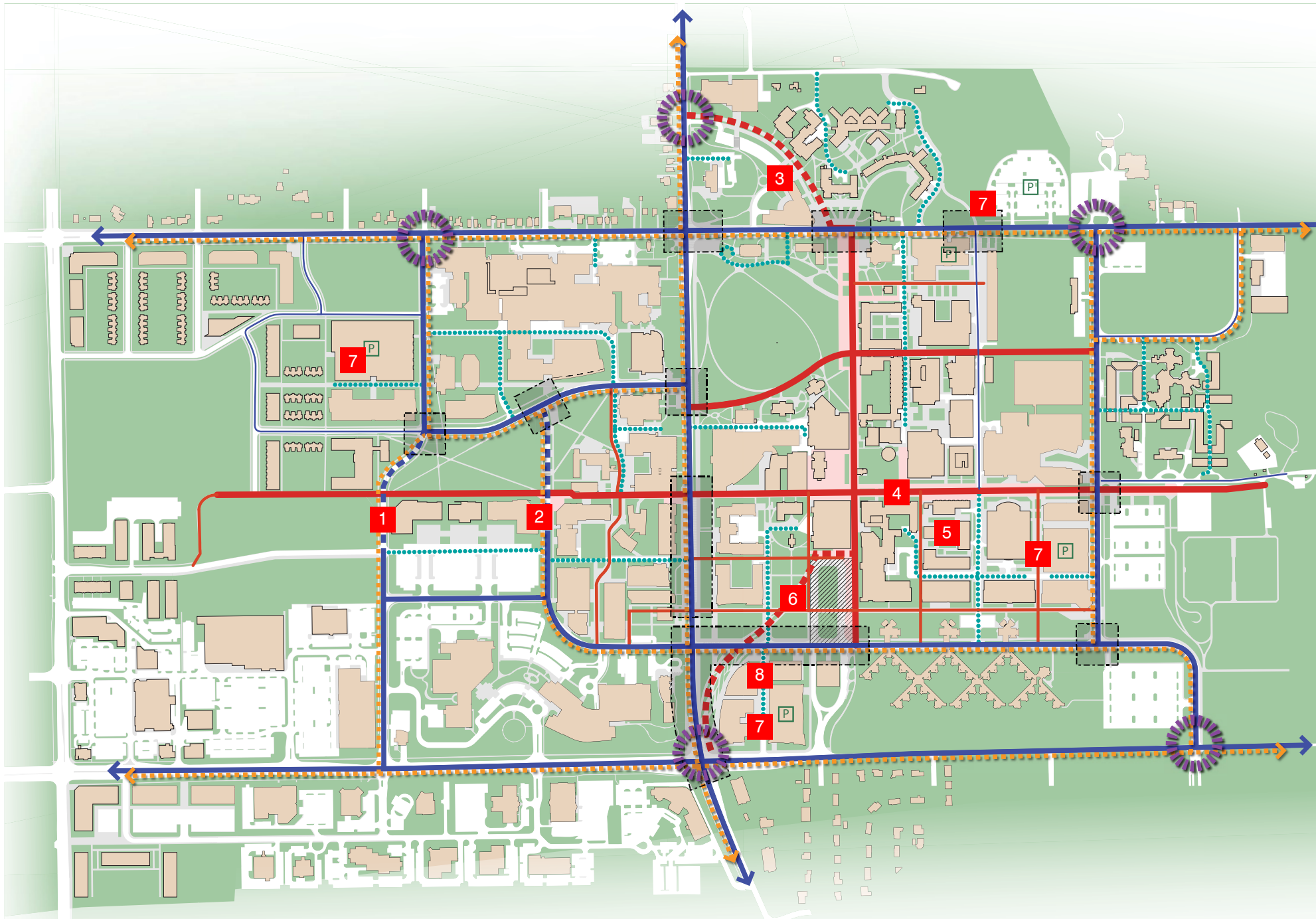


Figure ES.5: Movement network

Chapter 5: Implementation

This Plan identifies a long-term framework for growth that can slowly be achieved over many decades. This framework will be reinforced and achieved through countless decisions that impact campus-building, ranging from small-scale planting improvements to site selection for large development projects. As the campus evolves and grows, elements of this Plan will slowly be implemented to meet the ongoing needs of the university.

Specific ‘University Projects’ are further described, which are the larger campus-building projects that will be centrally implemented and managed by the University. These projects are called out on the facility renewal and new development, landscape and open space, and movement network drawings (Figures ES.3 - ES.5).

Within the The Campus Master Plan’s long-term vision and framework, the demonstration plan (Figure ES.6) highlights a series of development opportunities that provide adequate capacity to support any required development over the next 20 years. While the development sites are aligned with University objectives and place-making priorities, they are not fixed. Other opportunities

may arise that are consistent with the Campus Master Plan framework. A series of initiatives and University Projects have also been identified as priority projects for implementation within the 20-year planning horizon. Implementation of these will ensure the evolving campus environment supports and protects new development opportunities and reinforces the long-term vision for campus.

Volume 2: Design Guidelines and Precinct Plans

Volume 2 of the Plan provides further implementation direction for specific development projects and initiatives. It is an integral part of the Plan, serving as a detailed implementation manual for Volume 1. Volume 2 provides design direction for new development and initiatives to ensure they are implemented within the larger campus planning framework and is intended to assist project managers and decision makers with decision-making around the growth and evolution of campus.

The building design guidelines provide widely applicable built form direction to ensure campus developments are built to an appropriate standard. The Precinct Plan divides the campus into precincts in order to consolidate the opportunities and requirements for campus evolution on a place-by-place basis. The precinct plans essentially establish the rules for development and identify the enabling and coordinated projects that must be considered in new building and renewal projects.



Figure ES.6: 20-Year demonstration plan



Introduction 1



1.1 Overview of the Master Planning Process

A Campus Master Plan update is a major undertaking and a significant milestone in the University of Guelph's evolution. The planning process allows a re-examination of the framework and directions for physical changes that support the university's far-reaching academic goals while enhancing the campus experience for students, staff, faculty and neighbors.

This plan is an evolution and update to the 2002 Campus Master Plan, reinforcing and building on the many important principles and initiatives identified ten years ago. It provides a long-term framework for the next 50-plus years of the evolution and growth of the campus, with specific direction for the 20-year planning horizon

Study Team

Managed by the Office for Space and Facility Renewal, the Campus Master Plan project was guided by the Campus Master Plan Steering Committee. The Steering Committee included administrative, academic and student representatives that met regularly to review and refine the Plan as it was developed.

A team of consultants appointed to the project brought a variety of skills and expertise to assist the university. The team was led by Urban Strategies, which provided master planning, urban design and landscape design expertise. Educational Consulting Services was responsible for space programming, and Paradigm Transportation Solutions and Braun Consulting Engineers provided transportation and engineering expertise, respectively.

Study Process

The Guelph Campus Master Plan update for the main campus was completed at the end of 2012 following a 14-month master planning process. Under the continued guidance of the Campus Master Plan Steering Committee, the planning process involved a wide variety of opportunities for input from university and community stakeholders. These included a Stakeholder Visioning Workshop, public Open Houses in the spring and fall of 2012, meetings with City staff, presentations to the Physical Resources and Planning Committee of the Board of Governors, and ongoing engagement through the project website: www.uoguelphcmp.com.

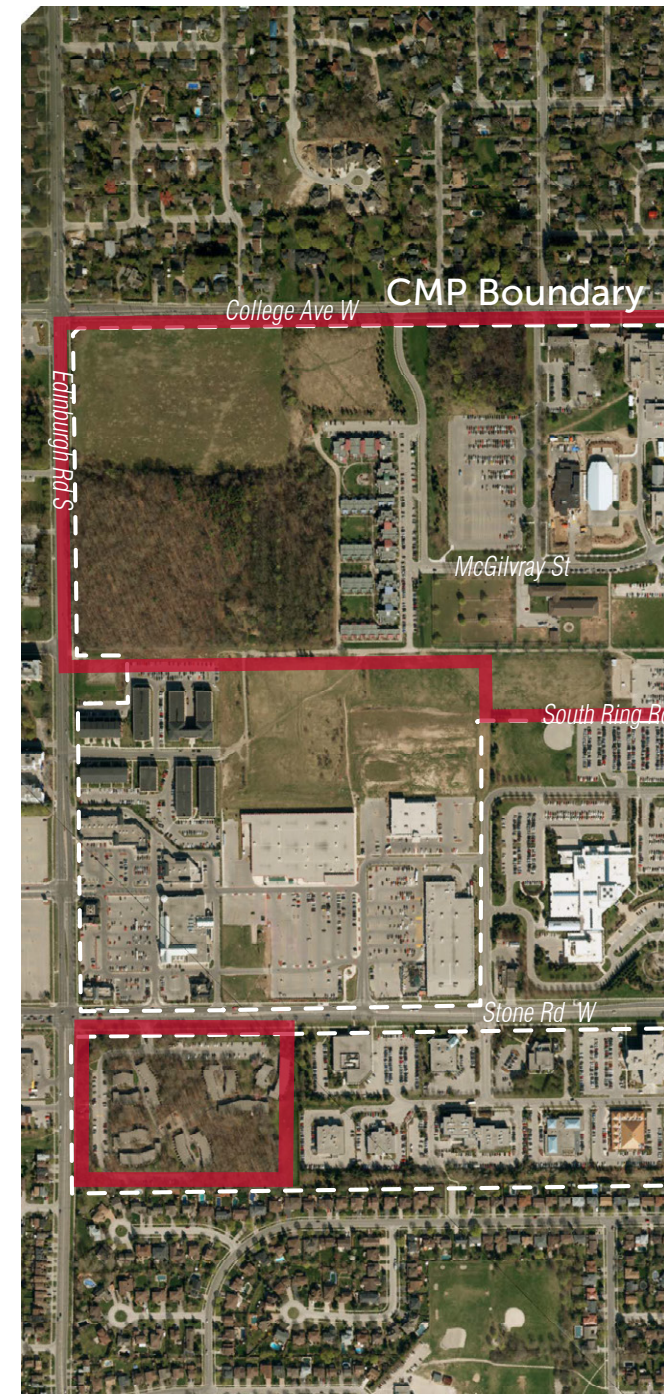
Steering Committee Membership

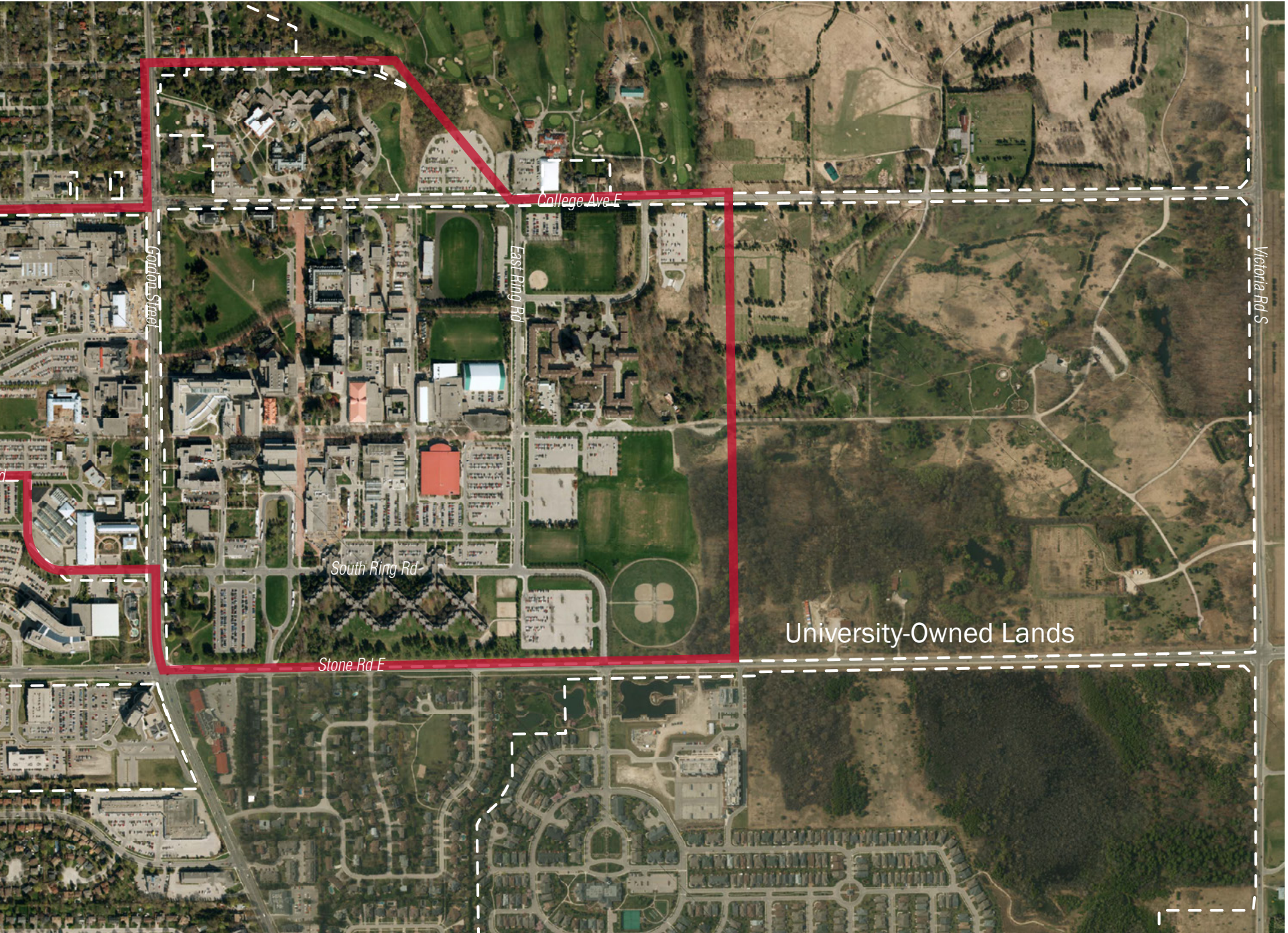
Kevin P. Golding (Chair)	Chair, Physical Resources and Property Committee (PRPC) Board of Governors
Don O'Leary (Vice Chair)	Vice-President, Finance & Administration
Chris Archibald	Undergraduate Student Representative
Laurie Arnott	Human Rights Advisor, Human Rights & Equity Office
Rosanna Beattie	Undergraduate Student Representative
Robin Begin	Director, Campus Community Police, Fire Prevention and Parking Services
Bob Carter	Assistant Vice-President, Physical Resources
Anthony Clarke	Assistant Vice-President, Graduate Studies & Program Quality Assurance
Dan Columbus	Graduate Student Representative
Chuck Cunningham	Assistant Vice-President, Communications & Public Affairs
Gord Gavrilovic (Coordinator)	Manager, Space & Facility Renewal, Physical Resources
Kerry Godfrey	Member of Senate Planning and Priorities Committee (SPPC) Director, School of Hospitality & Tourism Management
Kevin Hall	Vice-President, Research
Maurice Nelischer	Sustainability Director
Joshua Ofori-Darko	Undergraduate Student Representative
Brad Rooney	Alumni Representative
Joanne Shoveller	Vice-President, Advancement
Lyndon Stewart	Chief Operating Officer, Advancement Services
Brenda Whiteside	Associate Vice-President, Student Affairs

1.2 The Campus Context and Study Area

In a constant state of change since its founding nearly 140 years ago, the campus has grown dramatically to support one of the largest research institutions in the Province. Stretching from Edinburgh Road in the west to Victoria Street in the east, the campus occupies a large part of the City of Guelph and is among the City's largest economic drivers, supporting a diversity of university and non-university activities.

While this plan considers only the Guelph campus as outlined in the accompanying map, University land ownership extends beyond the area considered to be the main university campus. The Arboretum is a treasured resource that is valued by the university and surrounding community. The original Research Park on Stone Road is leased to non-university tenants, but the university retains ownership. The same is true for the retail areas on the north side of Stone Road and the Village by the Arboretum community south of the Arboretum. These developed areas are considered part of the Heritage Trust lands and are not required to carry out the academic mission. Some of these lands are not currently under the university's direct control and the Arboretum is subject to its own master plan. These lands are not considered in this Plan. However, the relationship of these lands to the academic campus is important, as is the relationship to the surrounding city.









8



9



10

1. Alexander Hall
2. Alumni Walk
3. Branion Plaza
4. Science Complex
5. The Bull Ring
6. Organic Food Market
7. Engineering Complex
8. Lennox and Addington Hall
9. Johnston Hall
10. Gryphon Centre
- 11 The greenhouses
12. Branion Plaza



3

11

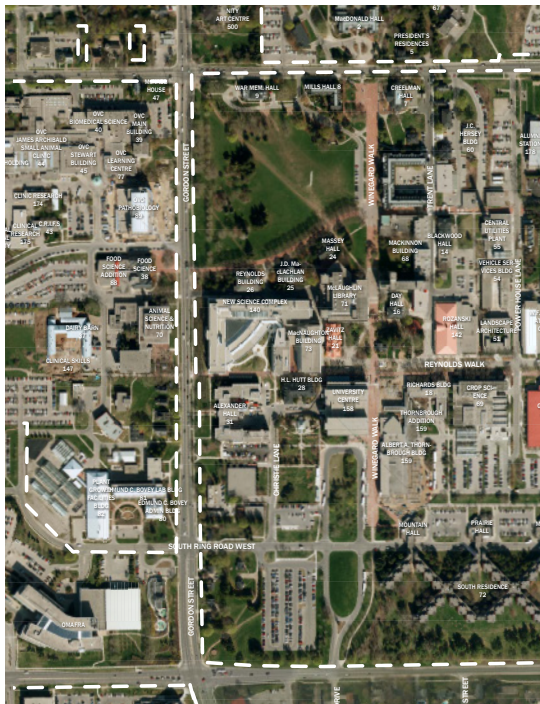


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1.3 How to Read the Plan

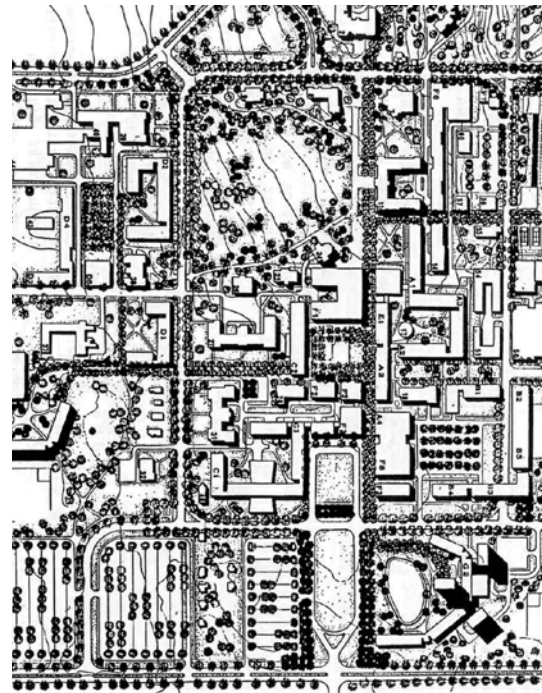
Chapter 1 Introduction

This chapter outlines the process involved in creating this Campus Master Plan update.



Chapter 2 Campus Evolution

This chapter traces the history of campus into the present, outlining the many issues and opportunities facing campus today and in the future that shaped the Campus Master Plan update.



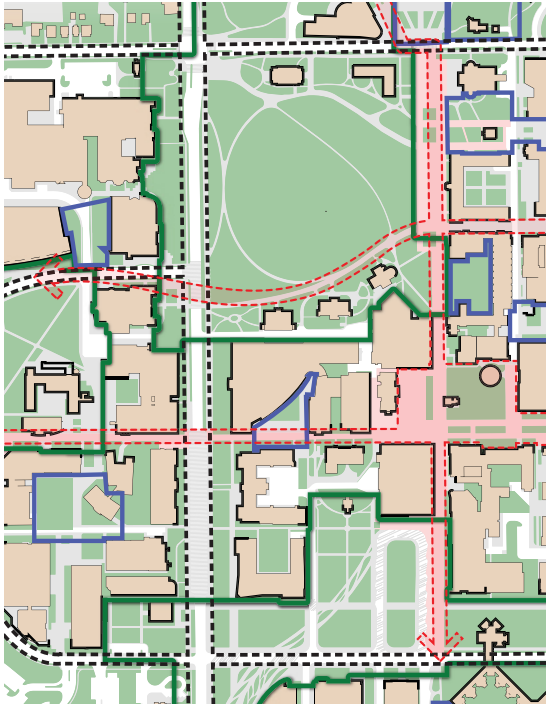
Chapter 3 Campus Vision

This chapter outlines the planning principles and key moves that served as the foundation for the Plan and illustrates the long-term campus vision.



Chapter 4 The Campus Master Plan

This chapter provides detailed direction for the major systems that contribute to the master plan framework, including land use and development, landscape and open space, movement and utilities.



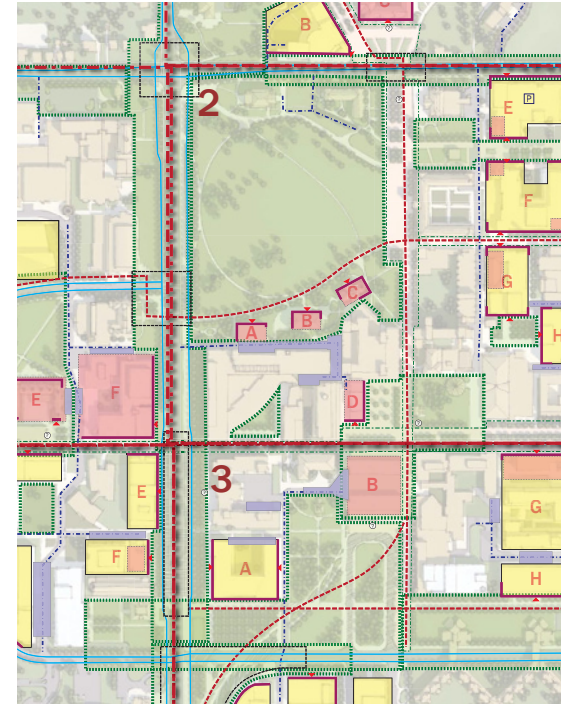
Chapter 5 Implementation

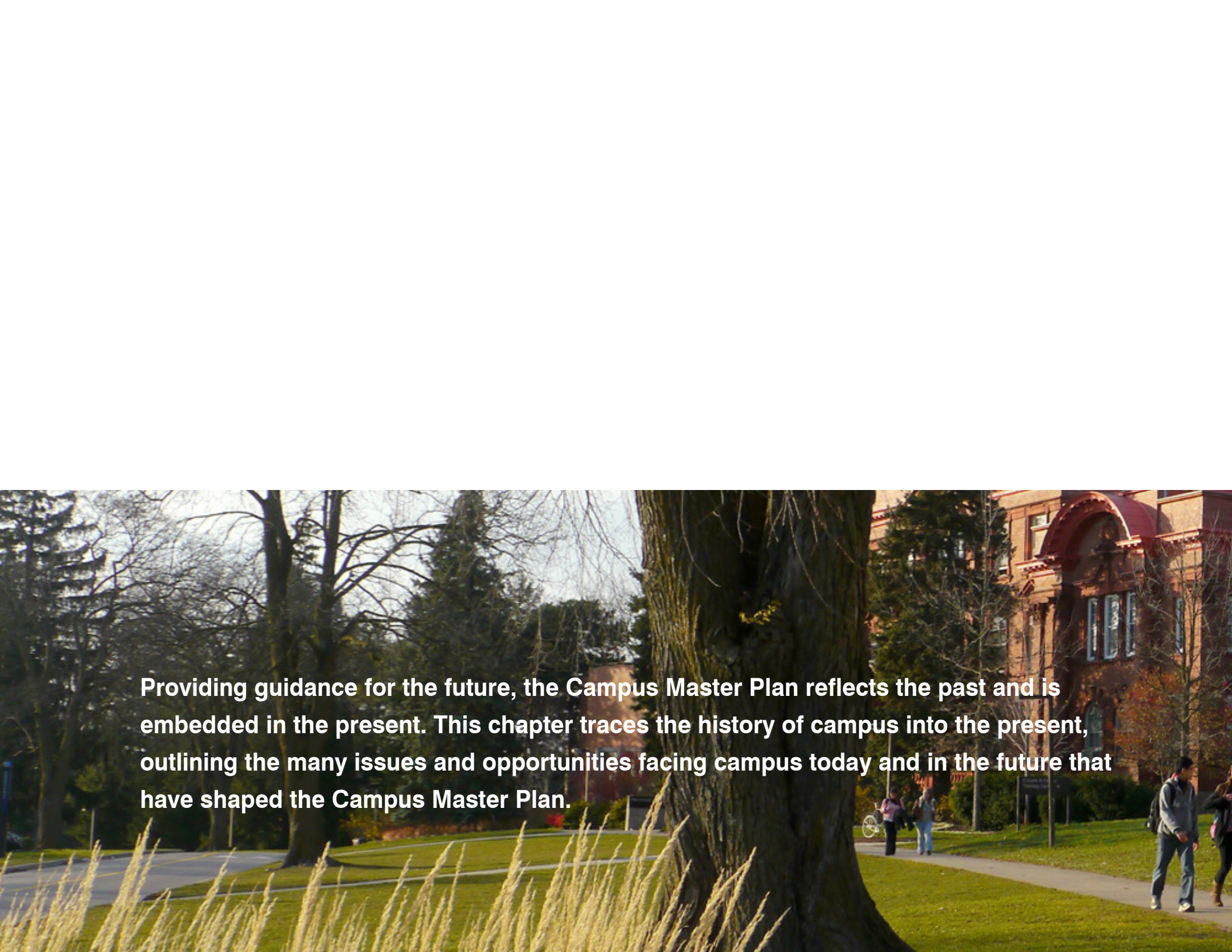
This chapter outlines how the vision and specific intentions of the Campus Master Plan can be implemented, highlighting the larger 'University Projects' and a 20-year demonstration plan.



Volume 2 Design Guidelines and Precinct Plans

Volume 2 serves as an implementation manual for the plan, providing specific design direction for projects to ensure they are successfully implemented within the larger campus planning framework



A photograph of a campus scene. In the foreground, there is a large, dark tree trunk on the right and some tall, thin, yellowish grasses on the left. A paved path leads from the bottom right towards the background. Several people are walking on the path. In the background, there is a large, multi-story brick building with a prominent arched entrance. The sky is overcast.

Providing guidance for the future, the Campus Master Plan reflects the past and is embedded in the present. This chapter traces the history of campus into the present, outlining the many issues and opportunities facing campus today and in the future that have shaped the Campus Master Plan.

Campus Evolution 2



2.1 History of Campus Growth and Development

The University of Guelph was originally founded as the Ontario School of Agriculture in 1874, located on a five hundred-acre farm outside of the City of Guelph. In 1882, a master plan was developed for what was now called the Ontario Agricultural College and Experimental Farm Master Plan. The plan established a street network and development framework for academic facilities, organized around Johnston Green. This original campus structure and the Johnston Green landscape remain as an important legacy that continues to shape the campus experience today.

In 1964, the University of Guelph was created as a single institution, consolidating the Ontario Agriculture College (OAC), the Ontario Veterinary College (OVC) and the Macdonald Institute. At that time, a Long Range Development Plan was created to establish a unified campus framework for the new institution and to accommodate the extensive university growth of the 1960's and 1970's. This plan was a significant departure from the original campus structure, envisioning a distinct university community separated from the surrounding city by concentric ring roads. While this vision (and subsequent amendments) was only partially realized, its lasting impact was to formally establish Winegard and Reynolds Walks as key structuring elements of campus.

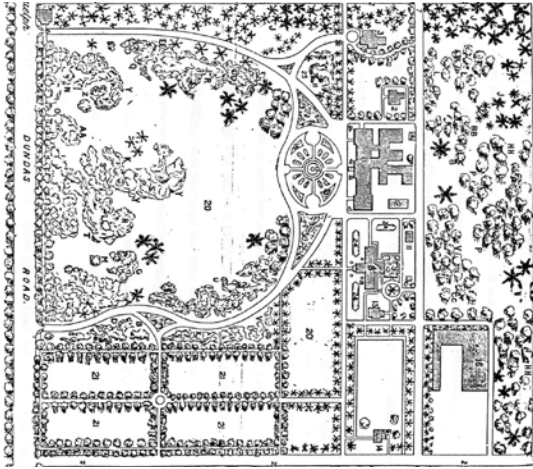
The 2002 Campus Master Plan abandoned the ring road vision in favour of better integration of the campus within the surrounding City. This plan proposed an incremental pattern of campus enhancement, including a new southern gateway to campus and a knitting together of the campus across Gordon Street. Development sites were inserted carefully within the existing campus framework. While many of the development sites identified in the Plan's were built out, some of the larger campus building elements, such as the renewal of Gordon Street and the new south entry, have yet to be realized.



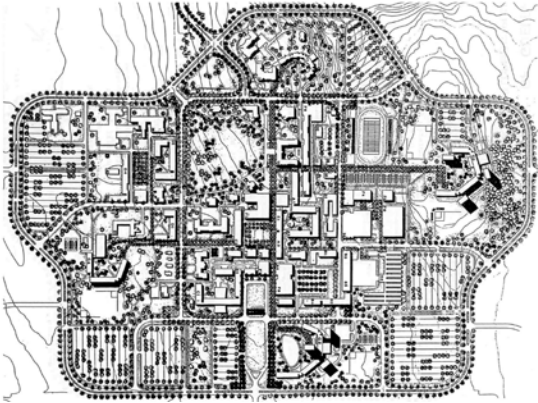
Johnston Green ca. 1950



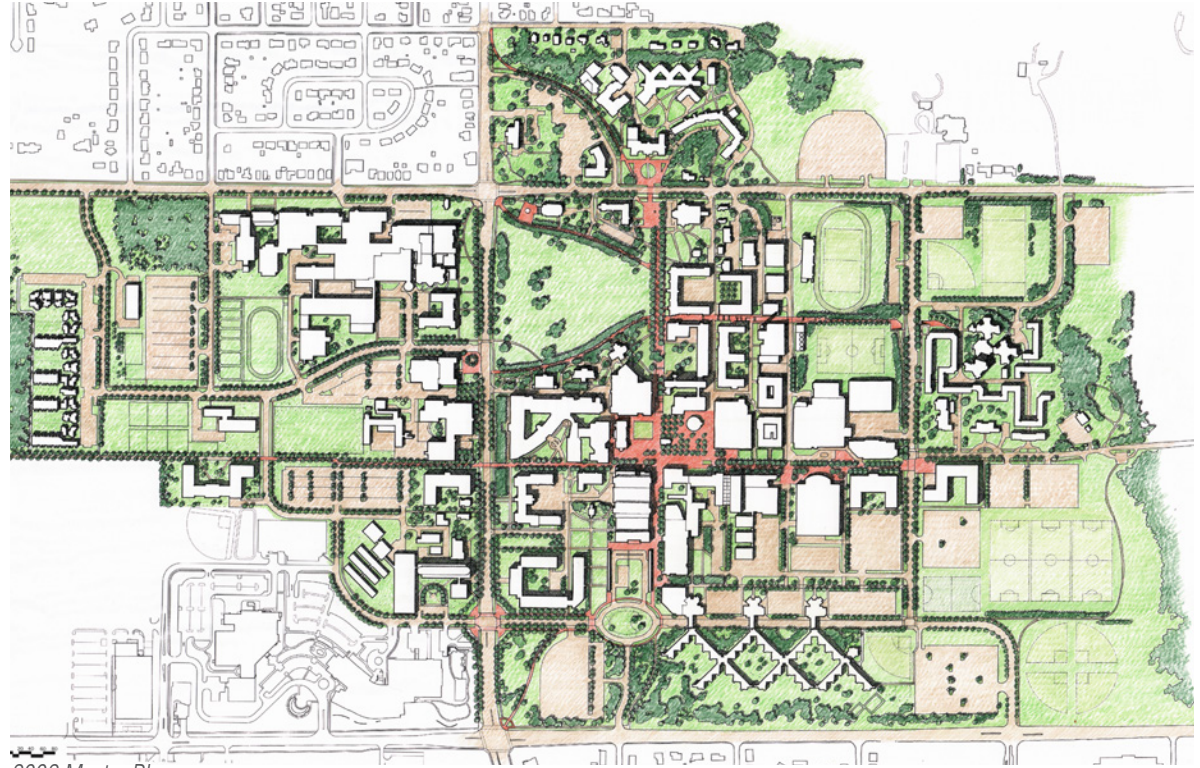
Johnston Green ca. 1970



1882 Master Plan



1964 Master Plan



2002 Master Plan

2.2 Coordinated Initiatives

Throughout the master planning process, a number of capital projects moved forward in various stages of design and construction. Wherever possible, the master planning process engaged with these projects to ensure alignment with the long-term vision for the campus.

This Plan is informed by and integrates the existing 2004 Arboretum Master Plan, 2006 Athletics Master Plan and the 2009 OVC Master Plan.

Projects such as the Centre for Biodiversity Genomics, the Engineering Complex, and the planned College of Management and Economics building were approved under the direction of the 2002 Campus Master Plan.

A series of other capital projects moved forward under the direction of the other applicable master plans. The Athletics Field House and new athletics fields were guided by the Athletics Master Plan. The OVC Primary Health Care Facility and Pathobiology/AHL building were developed under the direction of the OVC Master Plan. These plans continue to be relevant and have been integrated within the Campus Master Plan.

The Integrated Plan was developed concurrently with this Plan. The Integrated Plan is a multi-year approach to institutional planning which emphasizes transparency, predictability, accountability, and effectiveness. Five goals are highlighted in the Integrated Plan, including:

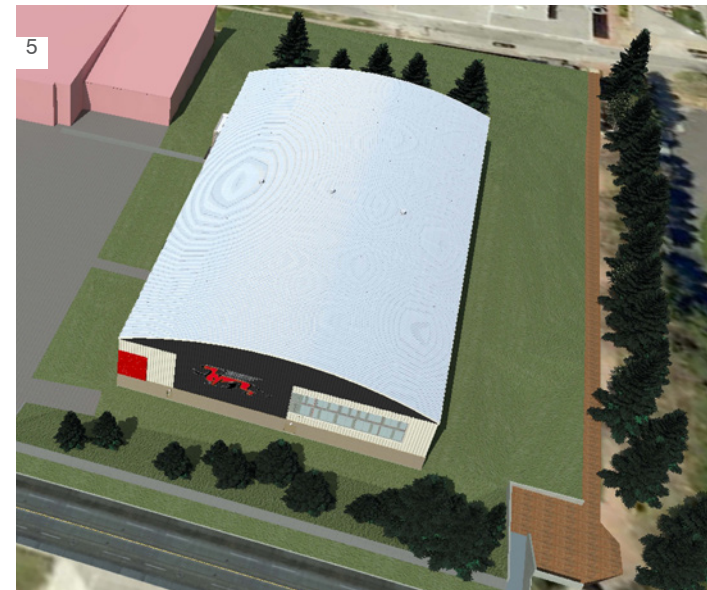
1. Student Success
2. Engagement
3. Knowledge Creation, Mobilization and Impact
4. Transformative Program Innovation
5. Institutional Capacity and Sustainability

The Campus Master Plan is informed by and supports the implementation of the Integrated Plan, providing a framework for the growth and evolution of campus that will support the above-mentioned goals

The BetterPlanet Project proposes a vision of how teaching and research achievements at the University of Guelph can spark positive change in the world. The Project identifies areas that require support, including facilities and infrastructure, stating that:

“The University of Guelph is committed to creating and nurturing a place of innovation, activity, stimulation and beauty in the 21st century and beyond. Demonstrating excellence in design and environmental stewardship, our facilities and infrastructure will provide a safe, accessible and appealing setting that inspires and attracts students, faculty and staff.”

Much like the Integrated Plan, the Campus Master Plan is positioned to support the university in achieving the objectives of the BetterPlanet Project as they relate to the structure and function of the campus, including facilities and infrastructure.



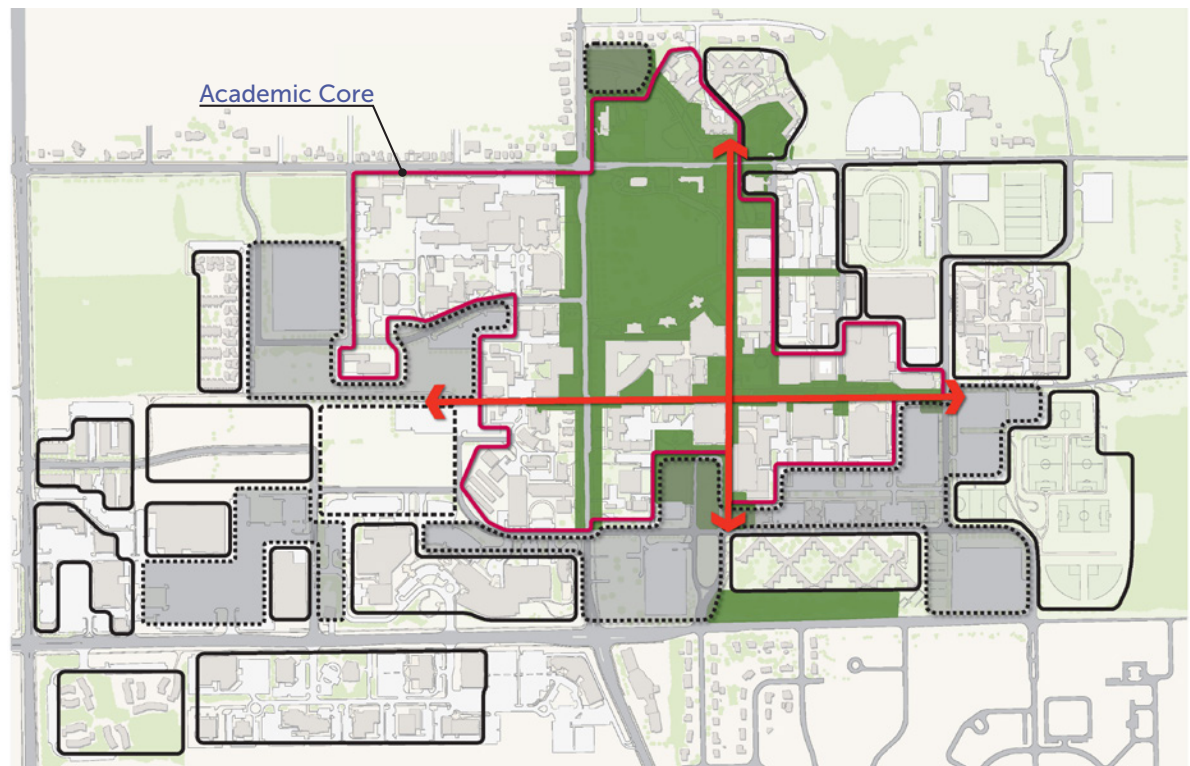
1. Athletic Fields, Phase 1
2. Alumni Stadium
3. Engineering Complex
4. Animal Cancer Building
5. Athletic Field House
6. Biodiversity Geonomics Building

2.3 Key Opportunities and Challenges

The University of Guelph will encounter many opportunities and challenges over the coming decades. Guided by this Plan, the university will be positioned to positively respond to these challenges and opportunities in a way that supports the academic mission and promote the evolution and growth of campus.


Campus Image and Identity

The physical structure at the heart of campus is very cohesive and well-loved. It provides an excellent setting for campus redevelopment and renewal. Beyond the academic core, much of the physical setting is not as cohesive, and does not have a clear sense of identity and hierarchy. A major challenge for the Campus Master Plan was to extend the physical and spatial structure and character of the academic core to the campus boundary, to enhance the campus experience and create a clear and positive framework for future development.



The heart of the campus is well loved and understandable, but the physical setting at the edges of campus is less clear.

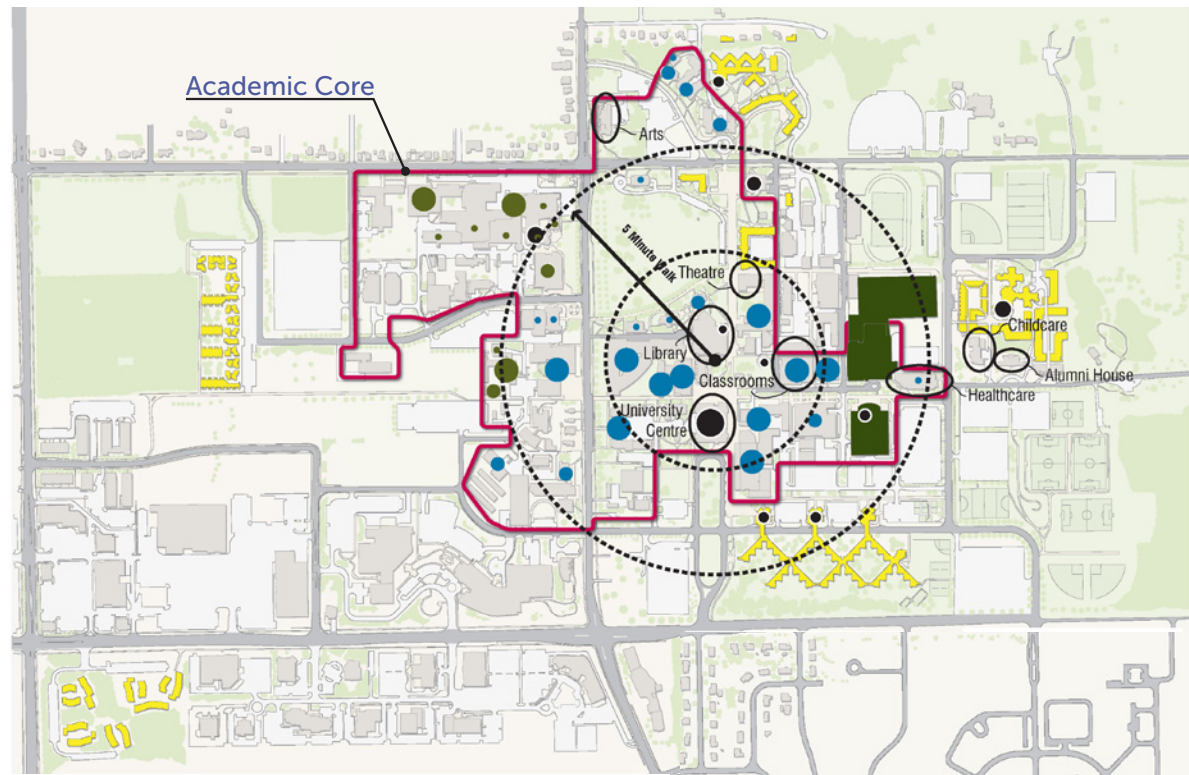
Legend

-  Core Campus Landscape
-  Primary Pedestrian Axes
-  Areas of Defined Land Use
-  Poorly Defined Physical Spaces



Campus Activities and Hubs

Campus activities are dispersed through the many research, teaching, housing, recreation, administration and other campus buildings. However, the most intense uses are primarily located in the campus core. Most of the university's large instructional spaces are located within a few minutes' walk of Branion Plaza. The same is true of student life facilities, many of which are clustered in close proximity to Branion Plaza and along Reynolds Walk. This pattern should be strengthened and expanded toward campus edges to reach more of the campus. It should always remain convenient and walkable for the majority of the campus community.



Services and instructional spaces are heavily concentrated in the campus core. Housing is located on the periphery.

Legend

- Athletics
- Student Residences
- Campus Services
- Food Services

Instructional Space

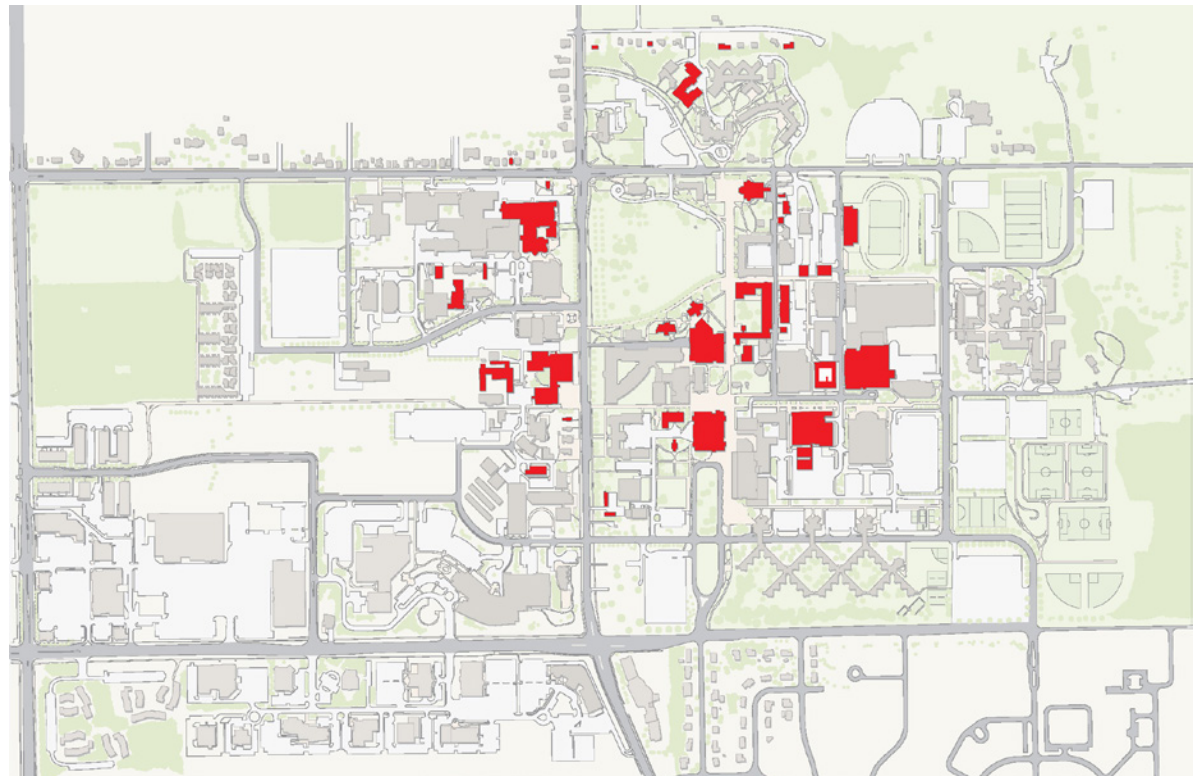
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- 500-1,000 nasm
- > 1,000 nasm



Campus Renewal: Building Condition

While there are significant opportunities for new campus development, the quality of existing campus buildings is a major issue. Many buildings are in poor physical condition, including important buildings such as the McLaughlin Library and University Centre. These buildings require significant investment simply to maintain their current functions and extend their useful lives.

Legend
Poor Physical Condition

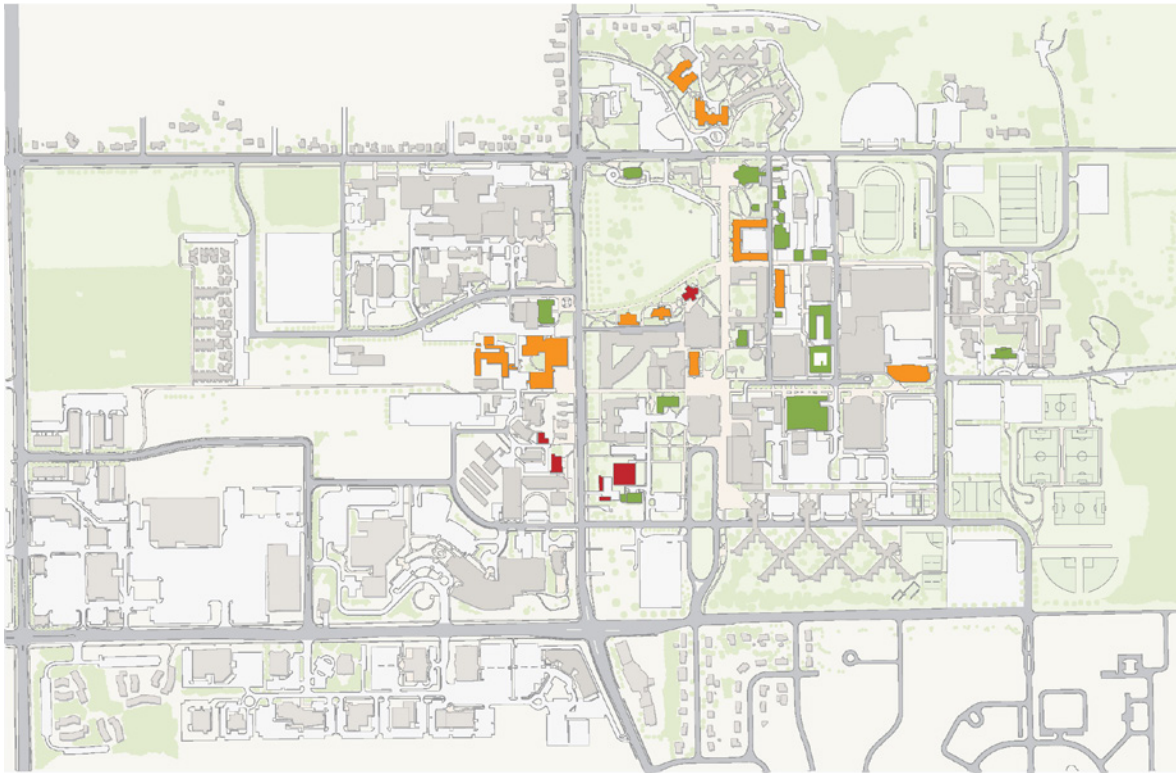


Campus buildings that are in poor physical condition (source: University of Guelph)



Campus Renewal: Space Quality

In addition to building condition issues, many campus buildings cannot properly accommodate their current uses. Educational Consulting Services undertook a qualitative 'fit-to-function' assessment of 29 identified campus buildings. The assessment determined the suitability of these spaces for their current uses, identifying buildings as fit, deficient for current use, or wholly unfit for current use. Illustrated here, a number of buildings are either deficient or unfit for current use. Together, the building condition and fit-to-function assessments identify a the need for significant investment in existing resources to maintain the condition and quality of university facilities.



Space quality assessment outcomes for selected campus buildings. Buildings shown in orange and red are considered deficient or unfit.

Legend

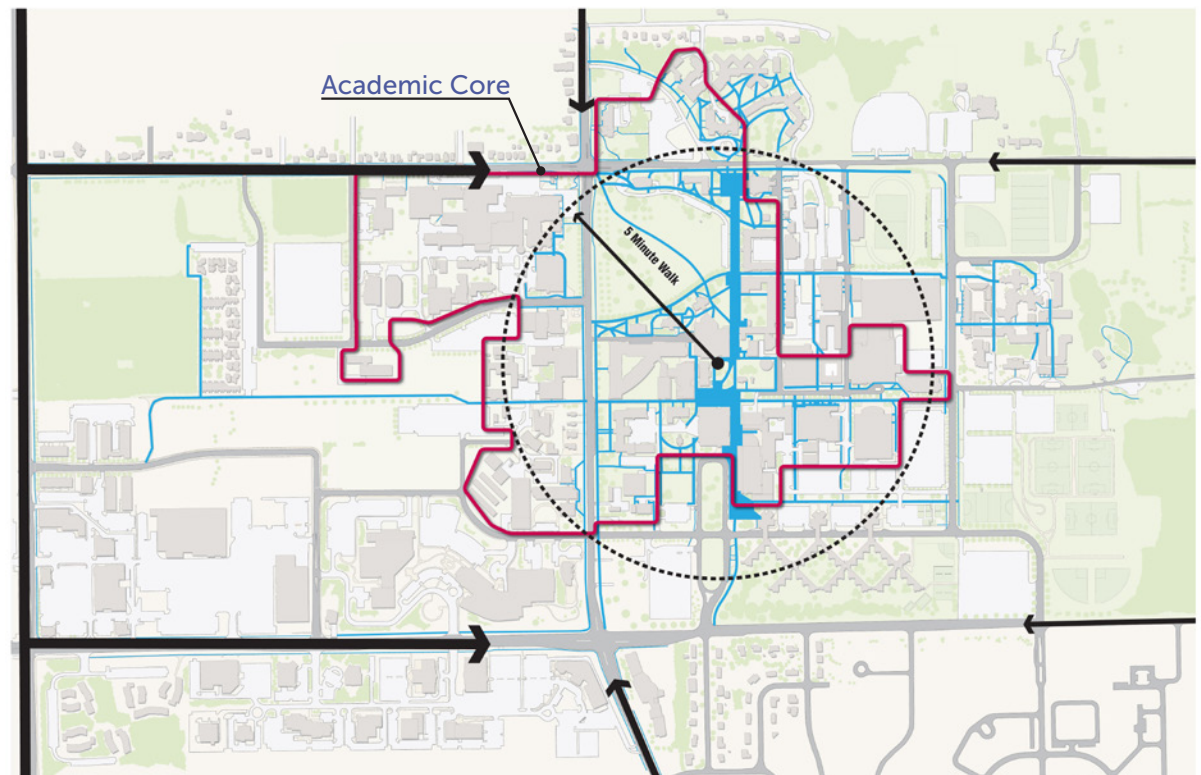
- Fit
- Deficient
- Unfit



Movement and Arrival

While the process of arrival from Downtown Guelph and along College Street is clear, the arrival sequence from Stone Road is not. This important arrival point requires intervention to better indicate university territory and to clarify how to access the campus. Once on campus, wayfinding and parking can still be a challenge, especially for visitors. As the commuter population increases, the importance of efficient movement and arrival patterns will grow.

Within the campus core, Winegard and Reynolds Walk provide a very clear and understandable means for pedestrian circulation and wayfinding. However, west of Gordon Street, comprehensive pedestrian and street networks have not evolved to support campus development. Gordon Street itself remains a significant barrier, dividing the campus in half.



Arrival from the campus is from several main points; north or south from Gordon Road and east or west from Stone Road and College Avenue

Legend

- Arrival Routes
- Pedestrian Routes
- ⊕ Gateways



Sustainability

The BetterPlanet project establishes the university's vision of how teaching and research achievements can spark positive change in the world. The concept of sustainability is embedded in the Campus Master Plan, building on an existing foundation that includes current initiatives such as the highly successful travel demand management program, the campus district energy system, the arboretum and the compact, mixed-use campus core. New initiatives to achieve sustainability could be big or small, such as increasing naturalized landscape management or ensuring all buildings, new and old, are sustainably constructed/renovated and operated. Even more important, patterns of campus growth and evolution should continue to ensure sustainability by remaining compact and mixed in use to allow activities to easily overlap.








1. Guelph Centre for Urban Organic Farming
2. Athletic Fields, Phase 1
3. Guelph Centre for Urban Organic Farming

The Campus and the City

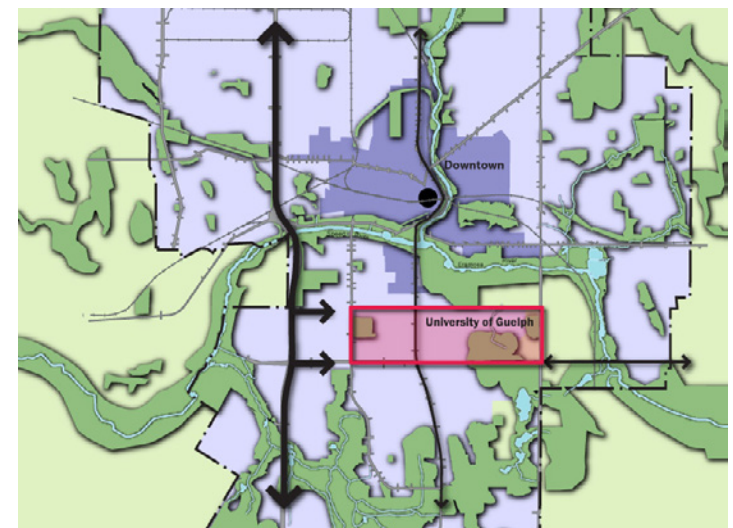
The campus was originally founded on a farm outside of the City of Guelph. Since that time, the city has grown to surround the campus, and land-based agricultural activities have shifted off-campus to surrounding rural areas. The draw of the university has attracted new and proposed developments, which will continue to change the surrounding lands. Some of the campus lands have even been developed as non-university retail, office and residential uses. The campus is not an island and must successfully align its planning with its context, and vice versa.

Legend

-  Rural/ Agricultural
-  Natural Heritage
-  Urban Extent
-  Downtown
-  University



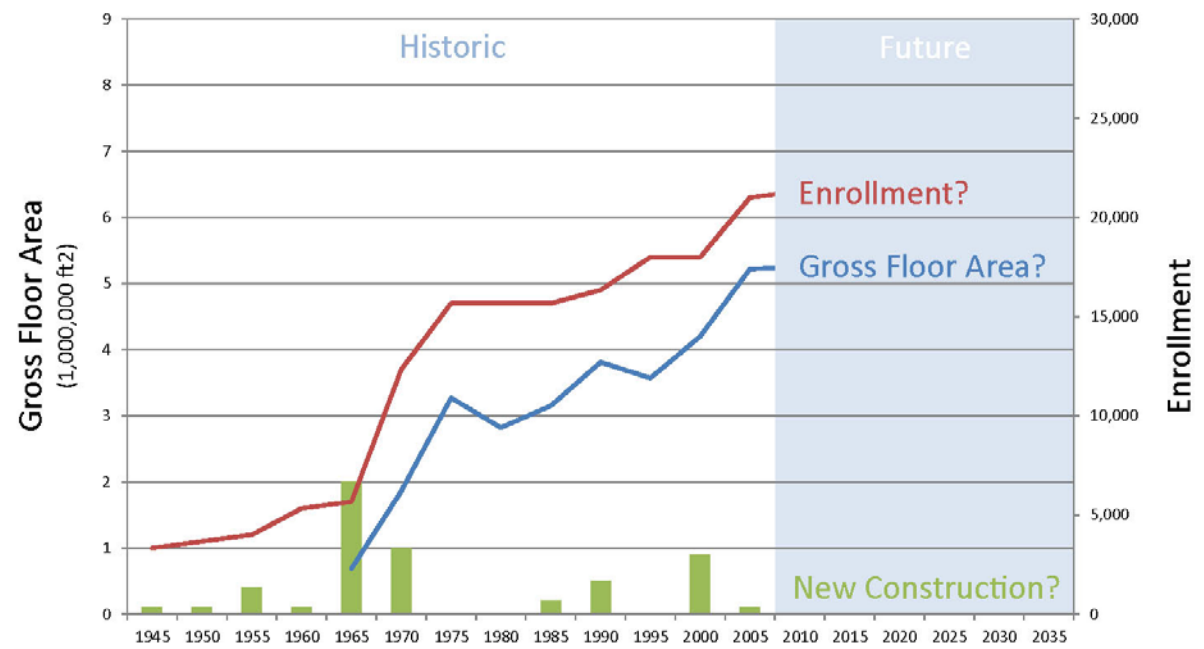
The Town of Guelph and campus in the 19th Century

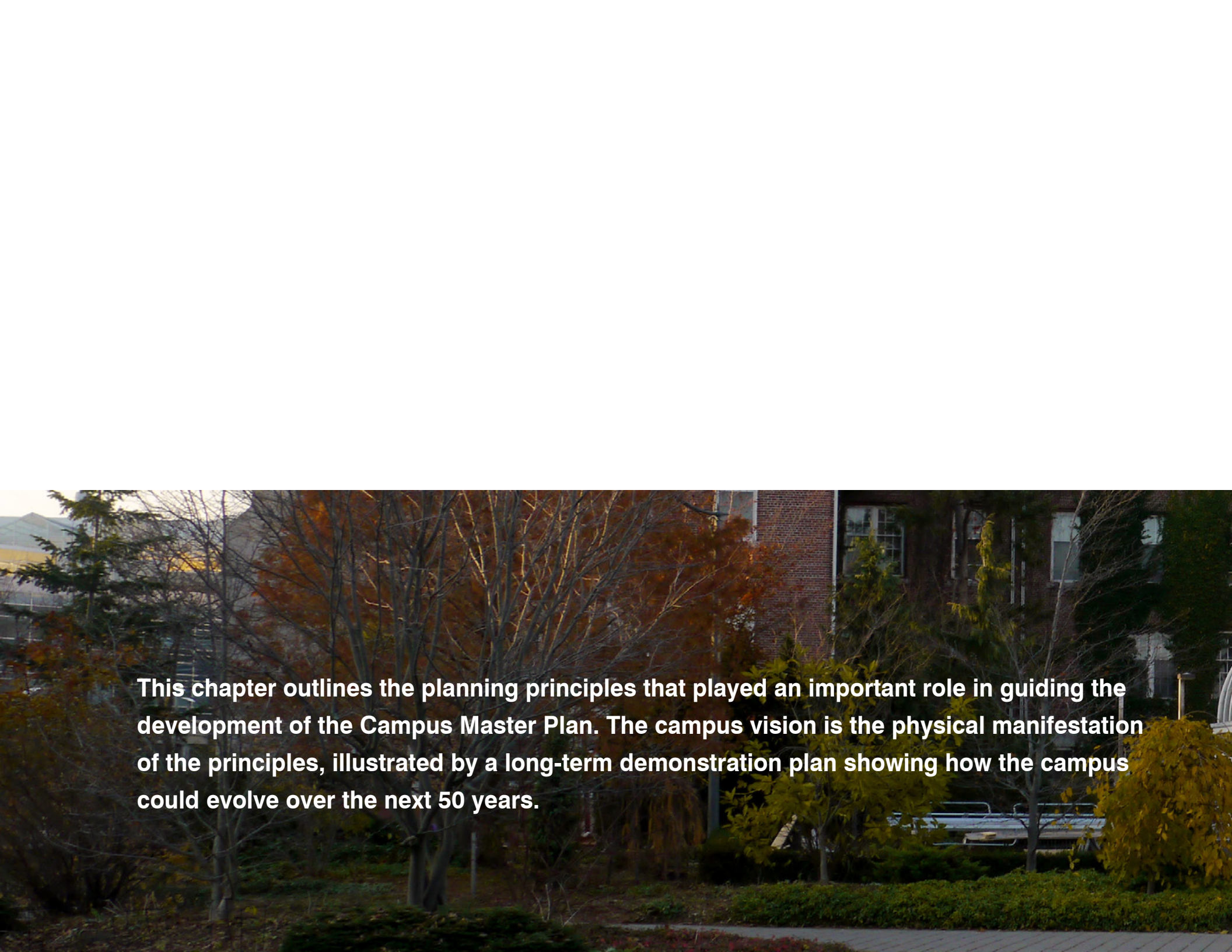


The City of Guelph and campus today

Growth assumptions and trends

While the university is anticipating a period of low or even no growth, historic trends suggest that some growth may be expected over the next 20 years. The Campus Master Plan will establish a campus development framework that can accommodate growth but does not rely on growth, ensuring the university is prepared for the future, however uncertain.



The background image is a photograph of a campus. In the foreground, there are several trees with autumn-colored leaves in shades of orange, yellow, and brown. Some trees are bare, showing their branches. Behind the trees, a multi-story brick building with several windows is visible. The sky is a pale, hazy blue. The overall scene is a typical university campus landscape during the fall season.

This chapter outlines the planning principles that played an important role in guiding the development of the Campus Master Plan. The campus vision is the physical manifestation of the principles, illustrated by a long-term demonstration plan showing how the campus could evolve over the next 50 years.

Campus Vision3



3.1 Planning Principles

The planning principles are broad-based and mutually supportive to provide comprehensive direction for the Campus Master Plan and a means for evaluating future amendments and updates to the plan.

** The Campus Master Plan study boundary is illustrated on page 5.*

1 Support the University of Guelph's Academic Mission

- 1.1 Align campus planning with the university's academic mission to cultivate academic excellence.
- 1.2 Enhance and create open, collaborative and adaptable environments for the exchange of ideas and the nurturing of innovation.
- 1.3 Provide sufficient and appropriate space to allow for innovative, efficient and effective academic discovery.
- 1.4 Support interdisciplinary teaching, research and discovery with appropriate space, facilities and campus resources.
- 1.5 Provide an effective campus environment in which to promote student engagement and development.

2 Enhance the Image and Experience of Campus

- 2.1 Enhance and grow the open space network to ensure a legacy of diverse and memorable landscapes and to support a coherent, consistent and vibrant campus identity.
- 2.2 Ensure consistency and quality in campus settings and landscapes to reflect the university's reputation for excellence.
- 2.3 Provide long-term clarity and certainty for all of Guelph's landholdings and interests.
- 2.4 Manage the larger land base to support the academic mission while serving the needs of the university community, campus neighbours and the larger ecosystem.

3 Foster a Better Campus to Achieve Sustainability

- 3.1 Increase building heights and densities to support a compact campus footprint and a mixed-use and integrated campus environment.
- 3.2 Prioritize the renewal and maintenance of existing building assets before new development and invest in buildings of enduring quality.
- 3.3 Grow and enhance social and cultural infrastructure necessary to ensure a vibrant campus life for the entire university community.
- 3.4 Extend the quality of the campus experience to all areas of campus and to all members of the university community and its neighbours.
- 3.5 Embed near-term campus-building decisions within a long-term campus development framework.
- 3.6 Plan and design campus development to ensure efficient and effective services and utilities.
- 3.7 Minimize energy use and emissions through campus renewal, development and operations, and pursue a commitment to climate neutrality.
- 3.8 Continue to reduce the proportion of single-occupant vehicle trips by targeting no growth in the number of parking spaces and enhancing pedestrian, cycling and transit infrastructure.
- 3.9 Implement campus planning processes that integrate with and engage multiple disciplines and communities, and contribute to the enhancement of the greater campus environment.

4 Integrate the Campus

- 4.1 Create a unified, connected and pedestrian-oriented campus environment to support movement and access, eliminate barriers and appropriately integrate with the surrounding context.
- 4.2 Enhance campus gateways, wayfinding and facilities to provide an inviting, accessible and safe environment for visitors and the university community.
- 4.3 Embed the campus within the surrounding community and contribute to the vibrancy and success of the City of Guelph.
- 4.4 Strengthen the university's presence in Downtown Guelph as opportunities arise.



3.2 The Campus Vision

The campus of the future will be modeled on the best features of the campus of today. It will be compact and sustainable: renewed, walkable and integrated to ensure a high quality campus image and experience. It will be a place that past, present and future members of the university community will recognize and cherish.

The long-term demonstration plan (Figure 1) is an illustration of how the campus of the future might look if the vision were to be fully implemented over the next fifty or more years.



Compact and Walkable

The historic core campus will continue to be the focal point for the evolution and growth of campus. New development will occur through intensification and redevelopment around this core to support a compact campus footprint. Campus amenities and activities will continue to be focused on Reynolds Walk, which will serve as a mixed use corridor or ‘main street’ for the entire campus. Expansion and improvement of campus pedestrian walks will ensure a pedestrian supportive environment.

Illustrated view of the long-term demonstration plan
looking southwest



Renewed and Integrated

The university will renew the historic buildings and landscapes that define the campus, realigning buildings with appropriate users and creating new opportunities for student activity. The campus will be well integrated, both internally and externally. Academic activities will co-mingle within a compact campus environment, supporting multi-disciplinary learning. Landscape and development opportunities will establish a new entry at Stone and Gordon, linking to the surrounding city and reinforcing both ends of Gordon Street as front doors to campus. Existing patterns of place-making and development will be extended to the edges of campus to ensure a consistent and high quality campus experience, supported by new walks and street connections.

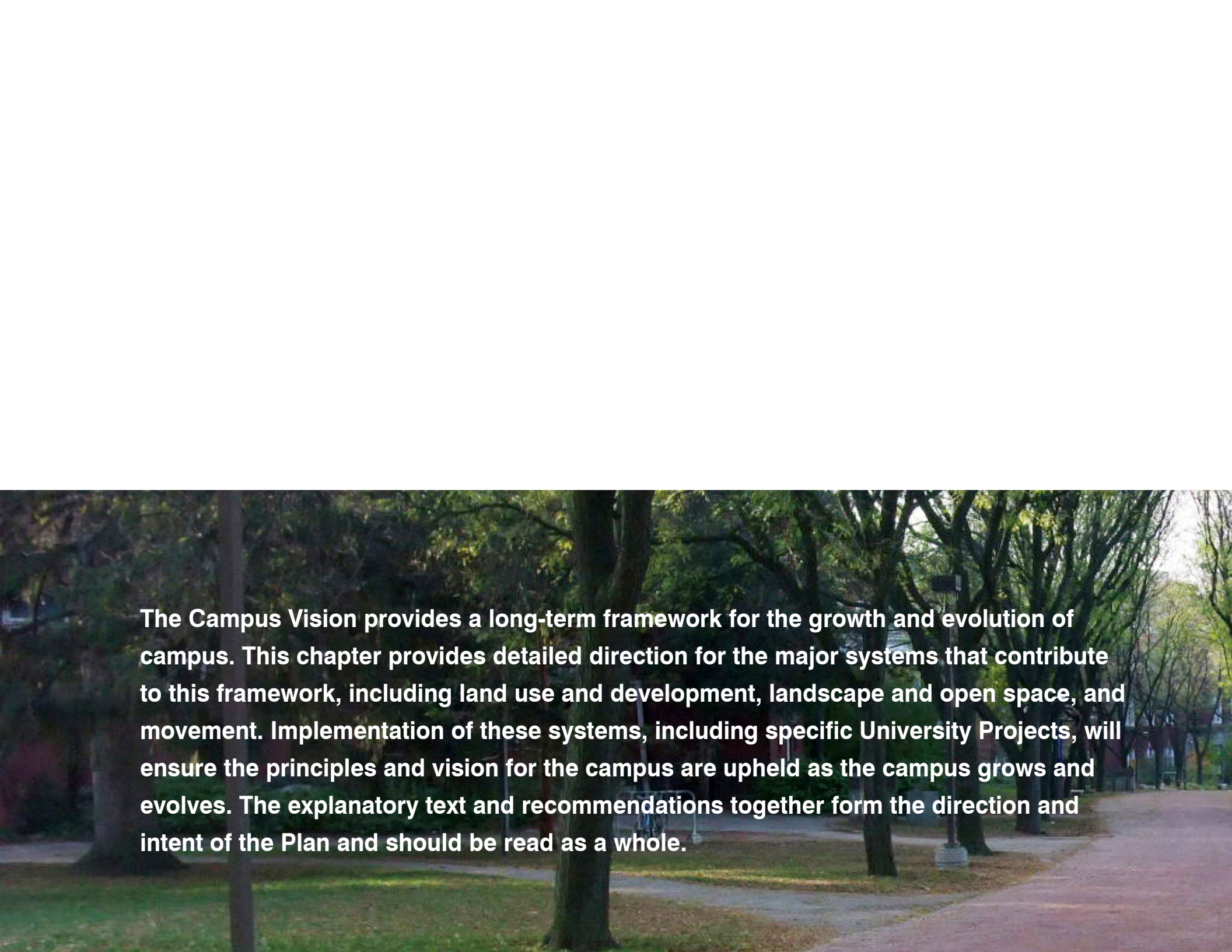
Illustrated view of the long-term demonstration plan
looking northwest



Sustainable

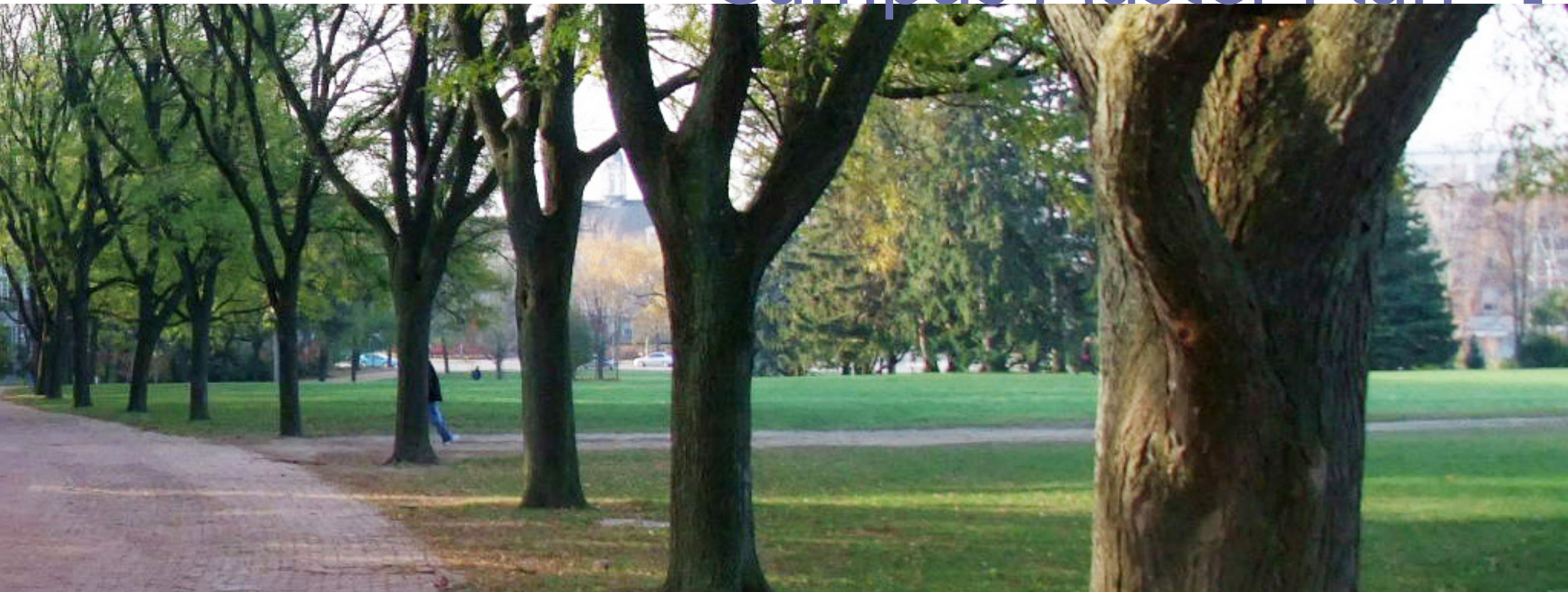
A compact, mixed-use and well-connected campus is inherently sustainable. Higher development densities in a mixed-use environment will support the academic mission and community-building while reducing land and resource consumption. Increased transportation opportunities will enhance connectivity and accessibility while reducing fuel consumption and emissions. Open space enhancements will create places of respite and reflection within the busy campus environment, and integration with the surrounding city will support community building and place-making.

Illustrated view of the long-term demonstration plan
looking east

The background image is a photograph of a university campus. It features a wide, reddish-brown brick path that curves from the bottom right towards the center. To the left of the path is a green lawn with several large, mature trees with dense green foliage. In the background, a multi-story brick building is partially visible through the trees. The sky is overcast and grey.

The Campus Vision provides a long-term framework for the growth and evolution of campus. This chapter provides detailed direction for the major systems that contribute to this framework, including land use and development, landscape and open space, and movement. Implementation of these systems, including specific University Projects, will ensure the principles and vision for the campus are upheld as the campus grows and evolves. The explanatory text and recommendations together form the direction and intent of the Plan and should be read as a whole.

Campus Master Plan⁴



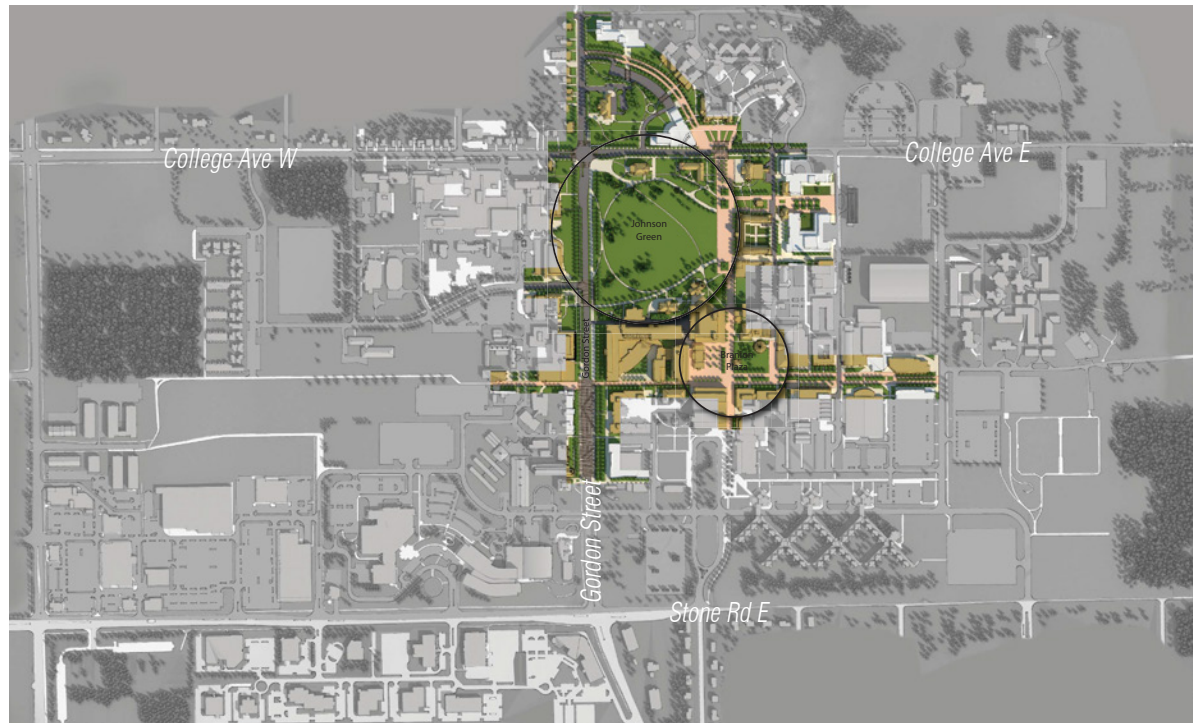
4.1 Physical Structure – Key Moves

1 Prioritize the renewal of existing places

The historic campus core is well loved, but it has significant challenges related to building condition and space utilization. The university will focus on the renewal and enhancement of existing buildings to improve their condition, better align facilities and uses, support the university's evolving academic mission, and reinforce a compact and walkable campus.

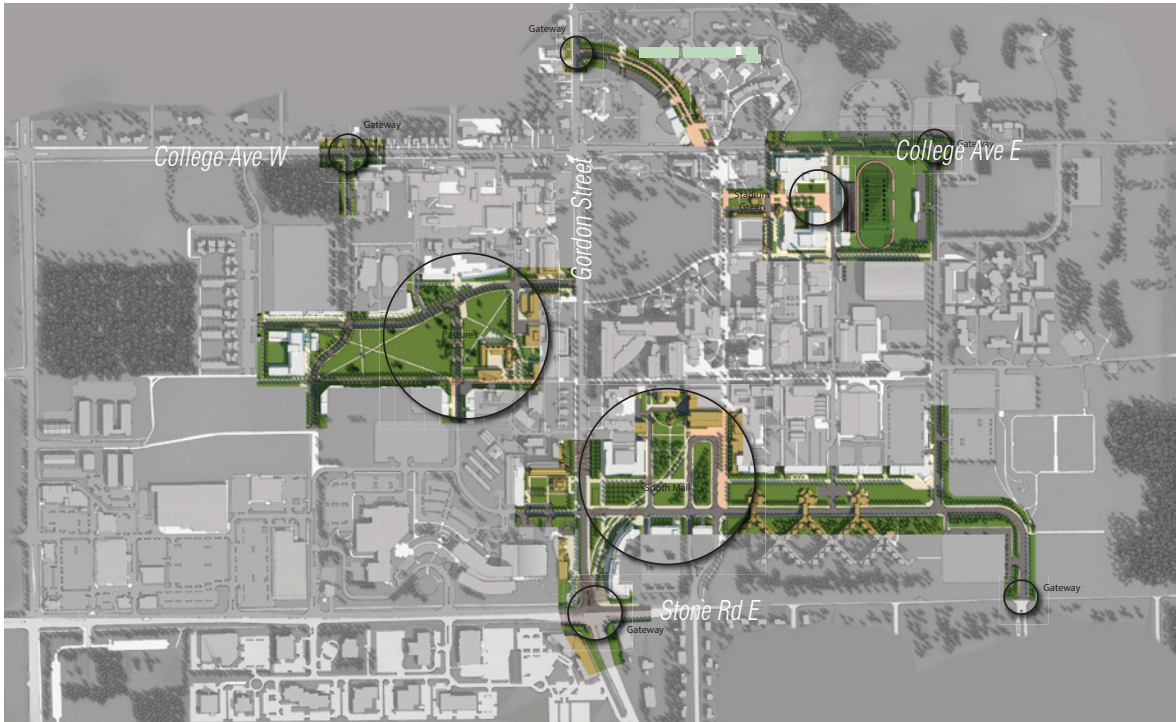
2 Enhance the campus experience and extend the quality of campus

The university is widely recognized for providing an excellent student experience, due in large part to the quality of its campus. Continued attention is required to maintain and improve the campus experience, especially to ensure quality and consistency in campus landscapes and grounds. This is particularly evident in the west campus, which requires significant pedestrian, landscape and place-making improvements. Transformation and creation of student space - study, social, indoor, outdoor - will be a priority in facility renewal and new construction across the campus.



Prioritize the renewal of existing places...

Guided by the planning principles, four key moves establish the major physical intentions for the Campus Master Plan.



...while creating new places that extend the quality of campus to its edges, improve circulation and wayfinding, and strengthen relationships to the city.

3 Improve campus arrival, circulation and wayfinding

While the core campus is clear and understandable, the periphery of the campus is less so. Circulation and wayfinding measures will be improved to enhance the campus experience and improve arrival and walkability. Gordon Street will be embraced as a means to unite the entire campus and create safe pedestrian crossings. The southern entry and arrival will be transformed. Transit ridership will continue to grow, with a continued focus on travel demand management.

4 Strengthen relationships to the city

The City and the University have a mutually beneficial relationship that will continue to be supported. On-campus programming - recreation facilities, cultural and athletic events, the Arboretum - bring the city into the campus. Conversely, the University can strengthen its relationship within the City and downtown through an increased physical and programmatic presence. Development, landscape and movement improvements at the periphery of campus will encourage integration with the city and make campus more welcoming. Development on the Heritage Trust lands will reflect the general character and qualities of the core campus.

4.2 Land Use, Renewal and Development

This plan provides direction for the appropriate evolution and growth of the campus to support the University's academic mission. The land use strategy identifies a broad structure for the organization of uses and activities across campus, outlining in general terms where uses should and should not go.

The campus land use strategy shown in Figure 2 supports a compact campus, where renewal and new development will be concentrated in the core. Academic disciplines and activities will continue to intermingle across campus, and multi-disciplinary projects will be encouraged to promote interaction and ensure efficient patterns of development and space utilization. The boundary of the academic core establishes the limits for academic development. It will ensure that academic uses are the priority use within a compact campus setting, supported by other uses that promotes learning and campus life.

The focus on renewal of existing facilities will reinforce the goal of a compact campus. Many academic development opportunities are concentrated near the heart of campus, with the potential for renewal and repurposing of a variety

of existing buildings for new uses. Strategic demolition will create further opportunities to intensify academic development in the core and enhance the campus environment. While the capacity and range of development and renewal sites exceed the need anticipated in the 20-year planning horizon, they provide a variety of opportunities and a long-term structure for both near-term and future campus growth.

A compact academic campus has many advantages, including:

- Promoting inter- and cross-disciplinary learning
- Contributing to vibrant campus life and community;
- Optimizing utilization of existing buildings, services and open spaces;
- Reducing environmental impacts from land and energy consumption;
- Reducing travel times and increasing proximity and convenience; and
- Freeing up campus lands for other functions, including open space, athletic facilities and parking.

Legend

	Study Area
	Academic Core
	Mixed Use Core: The Campus Main Street
	OVC (Subject to 2009 Master Plan)
	Athletics and Recreation (Subject to 2007 Master Plan)
	Arboretum (Subject to 2004 Master Plan)
	Residences
	Mixed Use (Stone Road)

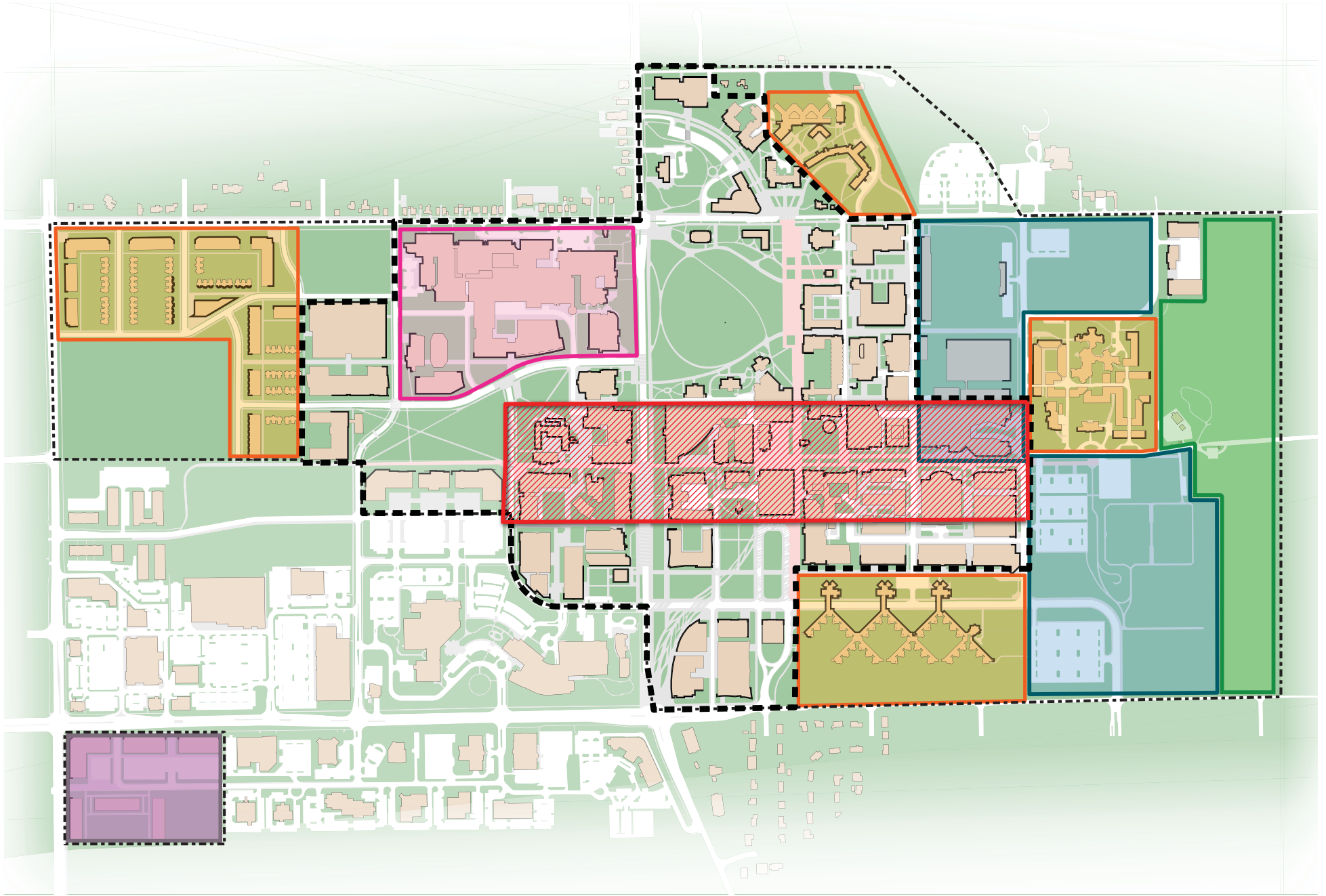







Figure 2: Campus land use strategy

4.2.1 Facility Renewal and New Development



While there are significant opportunities for new campus development, focused investment in improving the quality of existing campus buildings is the major priority. A comprehensive facility renewal strategy will promote campus sustainability, improve building conditions, and better align space and users. This strategy will be coordinated with new capital projects to ensure implementation.

Future campus growth will see the evolution of facilities over time through a combination of renewal and new construction, illustrated in Figure 3. Buildings shown in blue require significant investment, but will continue to support their current, or similar, uses. Buildings shown in orange require significant investment to address building condition. Due to the limitations of the spaces within these buildings, they should also be converted to more appropriate uses. This includes many historic facilities that no longer have the capacity to accommodate intensive academic uses. Strategic demolition, shown in red, should be considered in some areas of campus to remove buildings that have significant building condition and space quality issues and in some cases to allow more intensive development. The large pink areas show those areas of campus that can accommodate new development opportunities in the near and long-term future.

Legend

-  Renewal
-  Renewal and repurposing
-  Demolition
(Due Fit-to-Function and/or Condition Issues)
-  Demolition
(Due to Site Underutilization)
-  Areas that can accommodate new development

University Projects*

-  1 Dairy Barn Re-purposing
-  2 University Centre Re-purposing and Administration Relocation

* University Projects are further described in Section 5.1

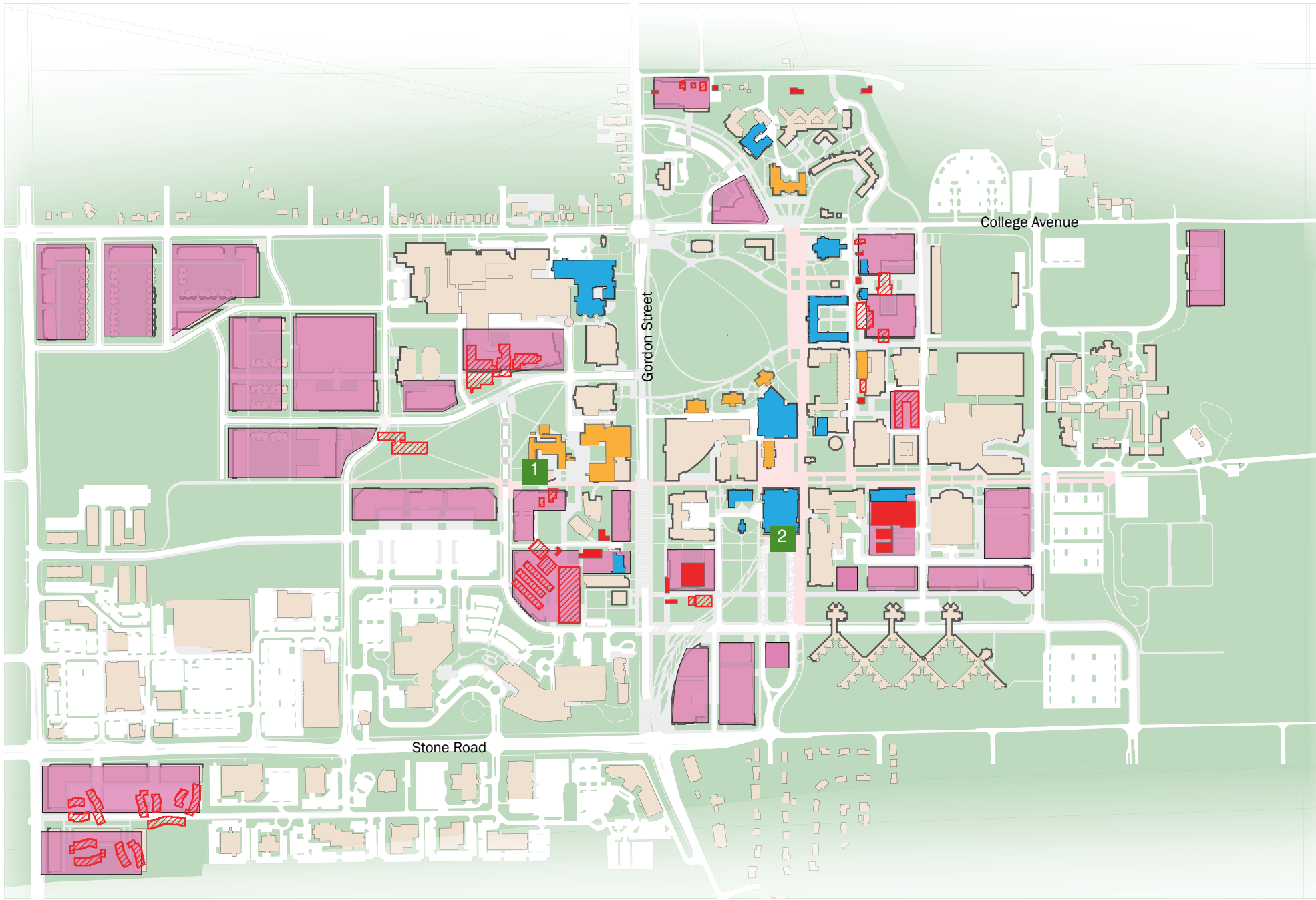


Figure 3: Facility renewal and new development strategy



1



2

Renewal

Many campus buildings are in poor physical condition, and many of these were never designed to serve the uses and users that they currently accommodate. This is a particular issue for the historic buildings that surround Johnston Green. Buildings targeted for renewal and repurposing are identified in Figure 3.

Further direction for new development is provided in Volume 2 of this Plan, Design Guidelines and Precinct Plans.

University Project S2: University Centre Repurposing

As part of facility renewal strategy, front line and central administrative functions could be relocated to the historic buildings within the core, such as Massey Hall and the MacLachlan Building, providing a more appropriate use for these spaces. The University Centre could then be reclaimed for student services and amenities to address student space needs.

Recommendations:

1. Displaced users from many of the small, historic facilities should be consolidated in a more appropriate facility, such as a new development project in the Trent Lane area.
2. Similar conversion projects may be implemented in other areas of campus, including conversion of the Animal Science and Nutrition Building to dry research uses and conversion of Macdonald Hall to academic uses.

1. J.D. MacLachlan Building 2. Zavitz Hall

New Development

Though near-term growth will be concentrated in the core and focused on renewal, the campus lands provide many opportunities for growth and development. Identification of the long-term development opportunities provides structure and clarity for future campus growth within and beyond the 20-year time frame of this Plan, ensuring that all sites are developed to their full potential. Areas that can accommodate new development are identified in Figure 3.

Further direction for new development is provided in Volume 2 of this Plan, Design Guidelines and Precinct Plans.

Recommendations:

1. The Trent Lane area can provide several significant development sites close-in to the heart of campus. Historic structures require protection/integration, and displaced uses and parking will have to be relocated. A new consolidated maintenance facility and yard would be accommodated at College Avenue and Dundas Lane.
2. Campus lands west of Gordon Street offer many development sites for academic and residential development. Investment in movement and open space networks will be critical to unlocking the potential of these lands.
3. The intersection of Stone Road and Gordon Street is the front door to the university and can support landmark development opportunities along with a potential parking structure.
4. Existing surface parking areas east of the engineering buildings provide many sites for large footprint academic buildings. Displaced parking must be relocated, likely in a parking structure.



1. Engineering Thornbrough Addition 2. OVC Pathobiology/AHL Building



4.2.2 Expanded Mixed-Use Core: The Campus Main Street

Centred on Branion Plaza, the heart of campus contains many services, amenities and communal uses, such as the University Centre, McLaughlin Library, the bookstore, and the Bullring Pub. This concentrated mix of uses establishes a distinct social centre for the campus, effectively serving as ‘downtown’ for the university.

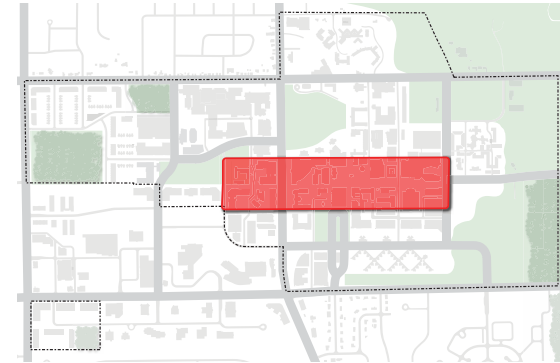
The pattern of centralized services and activities extends out along Reynolds Walk. East of Branion Plaza, Reynolds Walk includes the Rozanski classroom building, the majority of campus recreation and athletics buildings, and, further east, the child care facility and Alumni House. West of Branion Plaza includes the new mixed-use atrium space in the Science Complex and major teaching spaces in the Science Complex and Alexander Hall.

Branion Plaza will continue to be the social and physical centre of campus. The University Centre plays an important role within the centre, and its role in providing for student services and activities will grow. Zavitz Hall’s location in Branion Plaza may allow it to play a more communal role in the long-term, especially with the focus on student services and amenities around Branion Plaza. With the anticipated development of a Library Space Master Plan, the McLaughlin Library will continue

to evolve to meet the needs of the university community. Nearby buildings, including the University Centre, may offer opportunities to accommodate overflow from the library, including study spaces, learning commons or other library needs. Branion Plaza itself will see renewal through a comprehensive landscape initiative, as discussed in Section 4.3.

Reynolds Walk will be enhanced as a ‘main street’ for campus life, supporting social, cultural, recreational and major teaching spaces especially at the ground floor. As the university evolves, new student services and amenities should be directed to Reynolds Walk. Minor changes to existing spaces along Reynolds Walk could target new student study and lounge space to address the current shortfall and reinforce the importance of this corridor.

While Reynolds Walk and Branion Plaza will be the focal point for community services and infrastructure, they will not be the only locations for these uses. The residential villages and other areas of campus will continue to provide such uses for local users. Space within existing and new facilities should be programmed for study space, food service and other student services to meet demand.



University Project S1: Dairy Barn Repurposing

The Dairy Barn should be protected for eventual transformation into a hub for student services and amenities. This will address the shortage of campus life infrastructure west of Gordon Street and enhance the relationship between OVC and the surrounding campus.



Communal Space

The campus has a deficit of communal space, including independent study areas, group study and meeting rooms, lounges and eating areas. The priority location for these spaces will be in the mixed use core. However, new communal space should also be dispersed throughout campus to ensure convenience and meet the needs of the entire campus population. A comprehensive approach to implementing communal space improvements is required, targeting communal spaces of all types and sizes within existing and new facilities. Opportunities for new communal spaces range from new construction and renewal projects to small-scale improvements to existing spaces, such as new furniture and electrical outlets.

Administrative Uses

Front line and central administrative uses will remain in the core. Student service functions will be centrally located in the University Centre or along Reynolds Walk. Central administrative uses should be relocated from the University Centre to nearby historic facilities as part of a larger building renewal strategy (see Section 4.2.6).

Back-of-house administrative functions can be located to more peripheral areas of campus, Stone Road or possibly downtown Guelph. However, front-line functions related to these services may continue to be located in the mixed use core. Peripheral administrative functions should be supported by efficient pedestrian, bicycle and, where appropriate, transit connectivity to campus.

1. Common Student Space, Princeton University

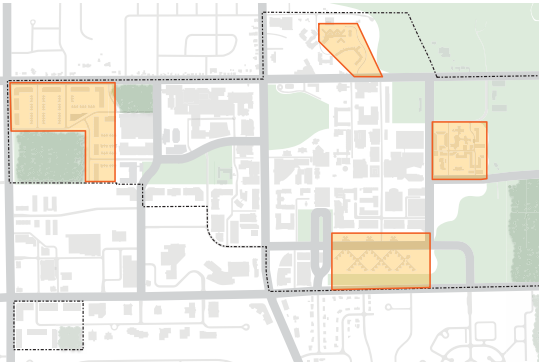
Recommendations

1. Branion Plaza and its surrounding buildings will continue to be the focal point for university services and amenities. In particular, the University Centre could be reclaimed for increased university services and student amenities.
2. New services, amenities and cultural functions that serve the entire campus community will be located primarily along Reynolds Walk.
3. High profile and large-scale classroom facilities, major event spaces, large recreational facilities and other similar functions will be located on or accessible from Reynolds Walk.
4. Development and renewal projects on Reynolds Walk will include active and/or public uses at grade facing onto Reynolds Walk. Primary building entrances will be located on Reynolds Walk.
5. In the long-term, the Dairy Barn could be the primary home for university services and amenities west of Gordon Street, oriented toward Reynolds Walk.
6. Smaller, locally-serving university services and amenities, such as food services, will continue to be dispersed throughout campus and, where possible, clustered with related functions.
7. A comprehensive strategy to improve and grow communal space across campus will be implemented. Planning and design of all new and renewed major academic buildings should accommodate communal uses, preferably located on the ground floor.
8. Back-of-house administrative functions should be relocated to more peripheral areas of campus, supported by necessary infrastructure. Campus services displaced from the Trent Lane area, including physical resources, parking service and some campus community police functions, could be relocated to a new facility at College Avenue East and Dundas Lane.



1. Sproul Hall and Plaza, University of California, Berkeley 2. Joseph A. Steger Student Life Center, University of Cincinnati

4.2.3 Housing



Student housing is fundamental to the great student experience the University of Guelph provides, particularly for first-year students. Residence halls are key sites for both academic and social engagement, contribute to the sense of community and support a 24-hour campus environment.

The university provides high quality housing in a variety of forms and locations across campus. Much of this is found in the four 'villages' at the periphery of the academic campus, located approximately at the ends of the Reynolds and Wingard Walks. While most housing is in the form of mid-rise apartment-type buildings, buildings range from low-rise townhouses of East Village to the high-rise Lennox Addington tower in the north residences. Smaller residence buildings are located along Trent Lane and in Johnston Hall, and the university owns a series of Graduate Houses around the perimeter of campus.

The university will continue to invest in housing and will maintain the first-year residence guarantee. The villages will be the primary focal point for existing and new housing, and will be protected for residential and related uses. Mostly built-out, the villages will see new residential development

primarily through redevelopment and intensification. In particular, the College Avenue Residences, west of the OVC paddocks, have the potential for further intensification and renewal. This site offers opportunities to integrate with other potential new residential development in the area, including development of the university lands at College Avenue and Edinburgh Road.

Opportunities for new residential uses include development sites mostly surrounding the existing villages. This includes the development sites immediately north of the South Residence building along the South Lawn and the new development sites surrounding the planned Pastures open space. Residential uses can be developed as standalone buildings or in the upper storeys of a mixed-use, academic and residential building. In particular, residential uses are encouraged in the Trent Lane area as part of a mixed-use redevelopment. Generally, residences west of Gordon Street should be limited to upper-level and graduate students.

Wellington Woods, located at the corner of Stone Road and Edinburgh Road, provides housing for international graduate families. The low density townhouse development is no longer appropriate for the site, which is surrounded by large-scale retail and office developments along Stone Road. In the long-term, the site should be redeveloped as a high density mixed-use development, accommodating residential, retail and/or office uses. International family housing uses that currently occupy this site may be accommodated within the new development or relocated to lands closer in to campus. Appropriate sites for relocation include the College Avenue Residences site and surrounding residential development sites.

Recommendations:

1. The continued renewal of the existing residential villages will occur through renewal, redevelopment and intensification, including opportunities for expanded or new residences at the edges of the existing villages.
2. The College Avenue Residences will be redeveloped and intensified through renewal or new development. Comprehensive site planning should consider integration with additional university and non-university residential development on surrounding parcels, including integrated with the development of the College and Edinburgh lands.
3. Wellington Woods could ultimately be redeveloped as a higher intensity, mixed use development.
4. Ongoing maintenance and renewal is expected to ensure university housing meets the needs of the campus population.

1

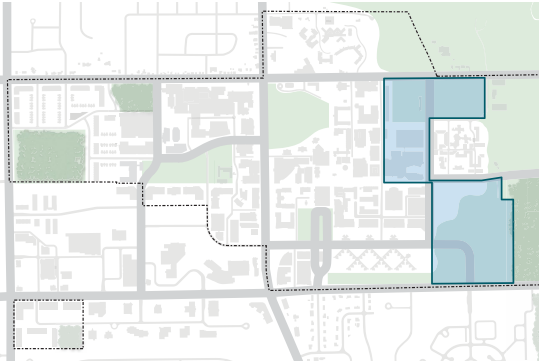


2



1. University of California, San Diego 2. Towle Student Housing, University of California, Berkeley

4.2.4 Athletics and Recreation

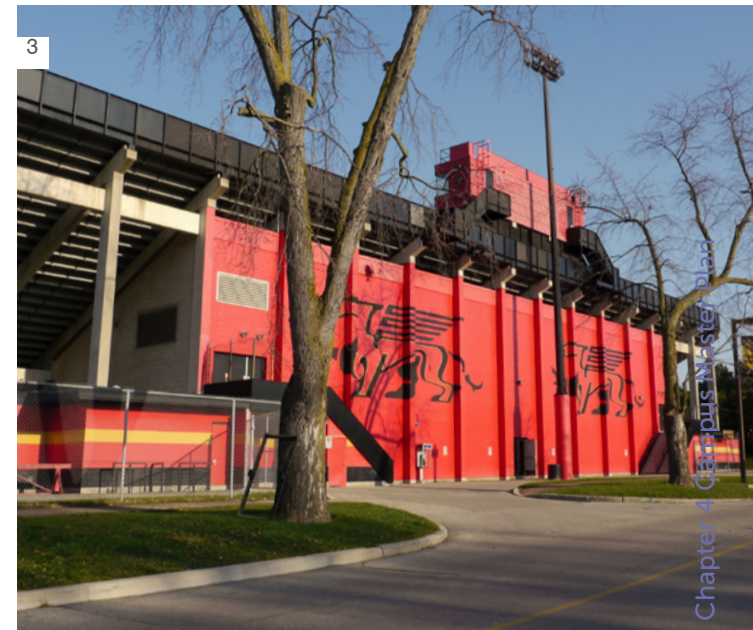


Athletics and recreation activities are a defining part of the university and are important for campus life, healthy living and a well-rounded education. The university offers varsity sports, a wide range of intramural offerings, recreational facilities for students and community. Athletics and recreation attracts members of the university and surrounding community, whether for major athletic events or just a workout session. While conveniently located in close proximity to Branion Plaza and along Reynolds Walk, athletic fields and facilities also serve as a defined edge to campus and a buffer for the natural areas within the Arboretum.

Athletics and recreation are priority uses within the designated athletics land use area, and this Plan supports the continued implementation of the 2007 Athletics Master Plan. However, the university must continue to balance the provision of athletic facilities with the need to accommodate surface parking, improve open spaces and locate new development projects. Recent landscape improvements in the southern athletic field area are an excellent example of how to integrate open space investments while investing in athletic infrastructure.

Recommendations:

1. Continue to implement the 2007 Athletics Master Plan to renew and expand athletic and recreation fields and facilities, including renewal of the Alumni Stadium, expansion of the Mitchell Centre and ongoing field upgrades.
2. Consider opportunities for low impact recreational uses in the design and management of campus open spaces.
3. Encourage small-scale athletic and recreation infrastructure, such as beach volleyball and half basketball courts in proximity to the residential villages.



4.2.5 Heritage Trust Lands

University ownership extends to a large portion of the lands along Stone Road up to Edinburgh Road. Known as the 'Heritage Trust lands', these areas are not currently required for academic purposes and are leased to third parties with profits supporting the academic mission. A large portion of these lands have been developed for research park, commercial retail and residential uses. Development of the Research Park South lands has reached capacity, but development and intensification continues to occur in the retail plaza on the north side of Stone Road. Planning and subdivision are currently underway for the Research Park North lands behind the Canadian Tire and Target stores.

Currently in long-term leases to non-university users, the Heritage Trust lands will revert back to university ownership in the long-term future. The evolution of these lands presents an opportunity to connect the academic campus with the surrounding urban environment and to ensure appropriate infrastructure and development patterns are in place for future university use. Integration with campus movement and open space networks should be considered in all new development, and further intensification and enhancement of existing sites is encouraged.

The vacant lands at the southeast corner of Edinburgh Road and College Avenue are also considered surplus and form part of the Heritage Trust lands. They should be developed for primarily residential uses, with some retail uses at and near the major intersection. Comprehensive planning will ensure that the site is integrated into other surrounding university residential developments, including the proposed renewal or redevelopment of the College Avenue Residences. Open space and circulation patterns should encourage integration with the academic campus, and the Dairy Bush should be protected.

Recommendations:

1. Ensure new development on Heritage Trust lands is fully integrated with campus open space and movement networks. High quality materials and finishes that reflect the character of campus should be encouraged.
2. Should redevelopment or intensification of the OMAFRA lands occur, the university should encourage better integration within the campus movement network and a stronger presence on Gordon Street.

3. Leasing strategies should also maximize opportunities for research partnerships and provision of services and amenities that serve the university community.
4. The proposed Heritage Trust Lands at the southeast corner of Edinburgh Road and College Avenue should be developed as a mixed use, higher density community that is fully integrated with surrounding university residential uses.
5. The Dairy Bush should be protected in any new development, including through the use of buffers from streets or new development. A new street network will support connectivity to the academic campus and will minimize impacts to natural heritage, including a restriction on developments that back directly against the Dairy Bush.

4.2.6 Downtown Guelph

A vibrant city contributes to a vibrant campus. Conversely, the university provides many economic and cultural benefits to the City of Guelph. Downtown Guelph offers opportunities for an enhanced university presence, including partnerships for cultural and performing arts facilities and programming, discrete academic or research units, partnership research activities and back-of-house administrative functions. The City is interested in redeveloping the south downtown lands, offering very real opportunities to the strengthen university's urban presence.

Recommendations

1. The university may explore potential programmatic or development initiatives as opportunities arise and in consultation with the City of Guelph. Such initiatives may include small-scale academic, cultural or administrative functions.
2. Relocation of major academic programs to downtown Guelph is not anticipated.

Downtown Guelph



4.3 Landscape and Open Space

Campus landscapes and the open space network define the unique character of University of Guelph campus. Highly valued by the university community, the campus character is the fruit of previous landscape design decisions, purposefully implemented with full awareness of the long-term benefits that would accrue.

Adding to the existing open space network, new landscapes will extend the character of the core campus to the campus edges, reflecting the heritage landscapes such as Johnston Green, the university's agricultural heritage, and the modern landscapes of the 1960's and 70's (e.g. Branion Plaza and the Walks). Despite a variety of uses and physical elements, the open space network will have a cohesive identity and design. It will play an important role in shaping the future campus experience, shaping campus building development patterns, and establishing movement and wayfinding patterns.








To better understand the structure of the open space network and provide consistent landscape design, a broad pattern of landscape types has been identified. These types reflect the general role, function and hierarchy of places within the

larger network. For example, there are ceremonial places for large campus gatherings, such as Johnston Green; places primarily defined by movement patterns, such as streets; places of environmental preserve, such as Dairy Bush; and smaller places more closely associated with discrete communities within the university, such as the small courtyard encircled by Lambton Hall.

Recognizing the role and function of these places will help guide maintenance and renewal of existing places, inform the design of new places and provide a clear understanding of the context into which new building and infrastructure development must fit.

A number of landscape University Projects have been identified within each of the landscape types, as shown in Figure 4. These initiatives may be created through new development projects or infrastructure renewal, or may simply evolve incrementally over time. Implementation of these initiatives is further described in this section and supported by the Volume 2 Precinct Plans.

Legend

-  Natural Areas
-  Iconic Greens
-  Small Greens and Courts
-  The Walks and Branion Plaza
-  Key Streets
-  Athletics
-  Gateways

University Projects*

- 1 Johnston Green Renewal
- 2 The Pastures
- 3 South Mall
- 4 Entry Plaza
- 5 Branion Plaza Renewal
- 6 Winegard Walk Extension and Renewal
- 7 Reynolds Walk Extension and Renewal
- 8 Alumni Walk Renewal
- 9 Gordon Street Renewal
- 10 College Avenue Improvements
- 11 Smith Lane
- 12 Stadium Green

* University Projects are further described in Section 5.1

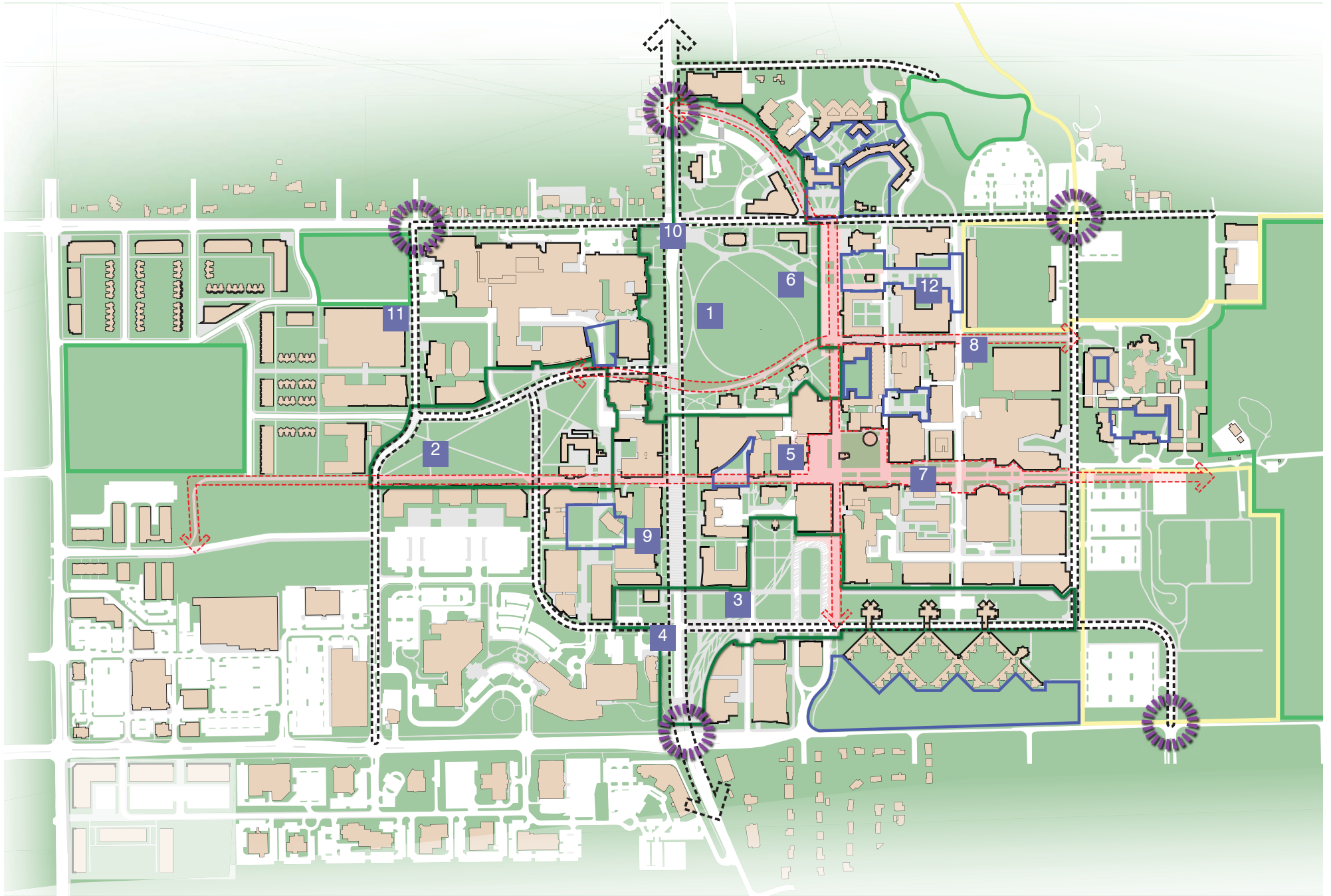


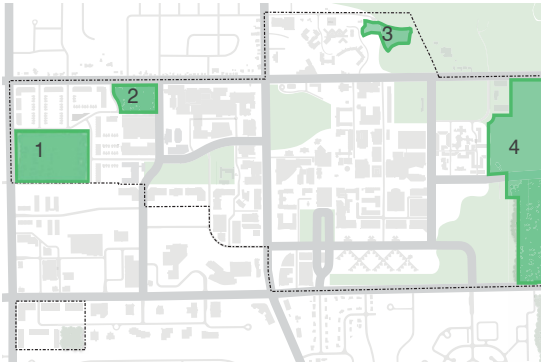
Figure 4: Landscape and Open Space Network

Recommendations

1. A Landscape Master Plan should be developed as a comprehensive guide to landscape investment. Priority open space investments for the 20-year planning horizon have been identified in Section 5.1, and can be implemented according to university objectives and funding opportunities.
2. New projects and landscapes will reinforce the established character, image and spatial structure of the campus. Individual landscape projects should be planned and designed to contribute to the sense of a whole campus as well as meeting particular site and program requirements.
3. With the exception of the natural and environmental lands, the location and design of building entrances, active uses at ground level and visual connection between interior and exterior of buildings should promote appropriate movement patterns through, and the animation of, the open space network.
4. A material palette of concrete and red brick pavers has been used to great success in some places of the campus, most notably on Winegard Walk. This palette should be augmented to include furnishing and design details and be consistently applied to ensure that individual development or replacement projects are successfully integrated. This will be particularly important on large capital projects, which may very likely be implemented in phases, over several years.
5. The campus contains a number of historic and highly valued tree specimens. An up-to-date arborist report should be maintained to promote tree health and to provide input to campus development initiatives.
6. The design of landscapes should take into account the kind and extent of the maintenance they will receive. Some landscapes may justify intense maintenance by virtue of their special purpose or value, but these should be the exception. In general, landscape design should be required to demonstrate that their solutions can be maintained economically and with the procedures normally employed on the campus.
7. Opportunities for reducing maintenance requirements and costs should be explored. Landscape maintenance programs, including turf management, plant replacement, paving repair and exterior furnishing maintenance should be periodically reviewed to ensure that they are in compliance with the Plan and reflect best practices.



4.3.1 Natural Areas



1. *The Dairy Bush*
2. *Brown's Woods*
3. *North Campus Ravine*
4. *The Arboretum*

With urban growth now surrounding the campus, the University continues to play an important role in the stewardship of the natural environment. A number of remnant woodlots, environmental preserves and places of ecological significance fall within the purview of this Plan. These places not only play an ecological role in the campus, but also support teaching and research. They are a unique campus resource distinguishing the University of Guelph from its peers. These assets are virtually impossible to replace or replicate.

The Dairy Bush, Brown's Woods the small woodlot at the east end of University Avenue are remnant woodlots. Dairy Bush has a core of original growth trees over 230 years old, but is largely second-growth. Brown's Woods is a plantation forest dating back to 1887 and is significant to the history of the University as it is one of the earliest ecological restoration projects in North America. The Arboretum is a well-loved campus asset and plays an important role in learning and recreation. In addition to the environmental aspects of the Arboretum, it also plays a role in research, teaching and recreation.

Recommendations:

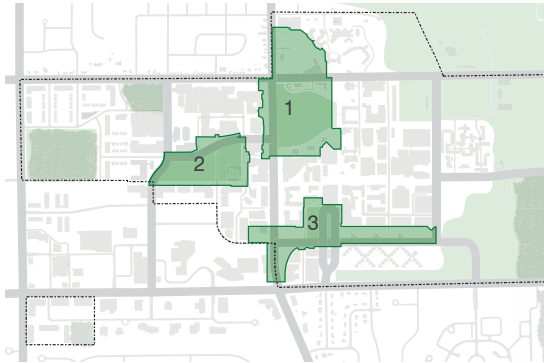
1. Unless associated with natural heritage research activities, academic development is not permitted within the municipally-designated natural heritage lands.
2. Natural heritage and environmental lands should be protected and, where possible, expanded. In particular, where they are contiguous, they should be linked to support natural connectivity.
3. Roadways through environmental lands should be minimized, if permitted at all. They should be rural in character and naturalized to the extent possible through such means as porous paving, natural drainage, native planting and other means.
4. Trails may be permitted, but must be designed to avoid environmental degradation.
5. Light and noise pollution should be minimized so as to not disrupt natural habitats, and adjacent works yards, outdoor storage areas or parking lots should be screened from view.

6. Optimal groundwater conditions must be maintained within and adjacent to natural areas by minimizing impermeable surfaces and ensuring appropriate setbacks.
7. Development should not encroach within 10 meters of natural areas. These buffer areas should be allowed to naturalize and should be managed as part of the larger natural area.
8. The inclusion of environmentally sensitive lands in the university's academic and research programs should be promoted.



1. North Campus Ravine 2. The Arboretum 3. The Dairy Bush

4.3.2 Iconic Greens



1. Johnston Green
2. The Pastures
3. South Mall and Entry Plaza

Iconic greens are some of the most memorable and significant open spaces on a campus. They become synonymous with the university and are the setting for the highest profile buildings. Due to their large size, they often contain a number of smaller gardens, pavilions, walks and other elements, yet they are clearly one significant place. They are often built over an extended period of time and are the location for community rituals, like commencement and other celebrations, as well as passive and active recreation.

Johnston Green is a perfect example of an iconic green. It is the main iconic place on campus, graced with some of its most valued and historic buildings, such as Johnston Hall. It contains walks, gardens, and even parking, yet its overall identity is clear. Two new iconic greens are proposed in addition to Johnston Green – the South Mall and the Pastures. These will also be key places of representation for the university and encompass a number of existing and proposed landscapes, gardens and infrastructure. They also provide the setting for decades of future development.

Recommendations:

1. Landscape plans should be developed for each of the iconic greens in their entirety. This will ensure consistency and cohesiveness amongst smaller landscape initiatives with the larger landscapes and provide direction for siting and designing adjacent buildings.
2. Pathways within greens should support a fine-grained pedestrian network and facilitate diagonal movement through campus.
3. Where necessary, small parking lots and loading areas are permitted within these landscapes, but their visual impact should be minimized or they should be designed and detailed as key components of the public realm. Alternatives to asphalt paving, such as paving stones, permeable surfaces and other means that allow for ground water infiltration should be considered.



Iconic Greens Today: 1. South Mall 2. The Pastures 3. Johnston Green

University Project L1: Johnston Green Renewal



Johnston Green Today



An Enhanced and Expanded Johnston Green

Johnston Green is a picturesque ensemble of buildings, gardens, lawns and walks that projects a sophisticated and universal image of what university life is meant to be. This place is as highly valued by alumni who return to seek familiar experiences as it is by potential students who imagine walking in their predecessors' footprints. For decades it has been the front door to campus and hosted important ceremonies.

The experience of Johnston Green has evolved over time. Places around its perimeter have changed due to development pressures, encroaching parking, increased foot traffic and changes in landscape management practices. Over time, views to and from Gordon Street, which is an integral part of the Green, have been diminished due to unsuitable plantings and vegetation management.

The landscape typically considered to be Johnston Green is, in fact, much larger. Though not immediately apparent, the OVC Main Building faces across to Johnston Hall and forms the west edge of the Green. The design of gardens on the western most side of the Green should be made more consistent with the Green's historic imagery. The open space north of College Avenue also forms part of the larger Johnston Green landscape. The interplay of open and closed views to the north is changing and the spatial connection between these two places needs reinforcement.

As the campus intensifies, the expression of the historic buildings as pavilions-in-the-green should be protected. New development, such as the proposed CME building, should reinforce this condition to ensure the essential qualities of the Green endure.

Recommendations:

1. Parking areas, particularly where they visually impact the Green, will be selectively removed. Parking areas that remain should have improved paving and be designed to a standard consistent with a campus walk. The parking area north of College Avenue should be improved in conjunction with the development of the proposed CME building to support its place within the larger open space. This may include porous paving, extensive planting and pedestrian infrastructure.
2. Views through Johnston Green across College Avenue and Gordon Street should be enhanced through selective removal of understory planting and/or the introduction of footpaths.
3. Existing foot traffic should be better accommodated through improvements to the diagonal foot paths, including use of permeable or natural paving materials to upgrade the main footpath that extends from the intersection of College and Gordon.
4. A small plaza area on the southeast corner of Gordon and University may be designed as a gateway element and forecourt to Memorial Hall.



Cornell University

NEW BUILDING FRONTING
WINEGARD WALK

WINEGARD WALK
EXTENSION

NEW CME BUILDING

REDESIGNED PARKING
AND LANDSCAPING

ENHANCED CAMPUS
GATEWAY

MACDONALD
STEWART ART
CENTRE

SCULPTURE
GARDEN

EXPANDED
MEMORIAL HALL
PLAZA

GORDON ST

COLLEGE AVE



REDESIGNED PARKING/ACCESS

ENHANCED ALUMNI WALK

ENHANCED JOHNSTON GREEN

IMPROVED LANDSCAPE VIEWS

INTEGRATED GORDON
STREET LANDSCAPE

University Project L2: The Pastures



Existing Pastures area



A new Pastures Open Space

Although a part of the University of Guelph since its inception, the lands to the west of Gordon Street have not received the same attention to place-making as the lands to the east. While it previously was the home to livestock and agricultural activities, today the west part of campus is a place of leading-edge science and advanced technology. The creation of an iconic green here would simultaneously celebrate the area's history and create a setting that further promotes academic and research objectives. It would also raise the profile of both the university and the OVC while supporting functional and physical relationships with the neighboring research park and other uses.

A series of paddocks and parking lots are found at the heart of this part of campus. Incrementally unifying these places as a single landscape would be relatively straight-forward and not overly costly. This space will be the site of the Pastures landscape

Recommendations:

1. The paddock functions will remain until the large animal uses are relocated to off campus. At this time the lands should evolve to a more park-like setting.
2. The historic barn will be preserved as part of this setting and could eventually house university services and amenities and administrative uses, in much the same way the historic Bull Ring is used today.
3. Reynolds Walk will be extended westward along the southern edge of the Pastures, connecting this focal green across Gordon to the heart of campus.
4. On the northern side of the Pastures, McGilvray streetscape improvements will be extended along its entire length, reinforcing the northern edge of the Pastures and ensuring continuous pedestrian infrastructure.
5. New street connections will facilitate local movement within campus and surrounding areas.
6. New development should face the Pastures and Reynolds Walk, reinforcing their role as key places within campus' physical structure.



Yale University: New Haven Green



POTENTIAL
STRUCTURED
PARKING

SMITH LANE
RENEWAL

NEW ACADEMIC OR
RESIDENCE BUILDING

NEW OVC BUILDING
FRAMING THE OPEN
SPACE

McGILVRAY STREETSCAPE RENEWAL

THE PASTURES

FORMER PASTURES CONVERTED TO
FORMAL OPEN SPACE

NEW ACADEMIC OR
RESIDENCE BUILDING

SPECIAL PEDESTRIAN
CROSSING ZONE

CHANCELLOR'S WAY
EXTENSION

COWPATH RENEWAL

THE COWPATH

NEW ACADEMIC USES
FRAMING THE OPEN SPACE

CHANCELLOR'S WAY



University Project L3, L4: South Mall and Entry Plaza



Existing Stone and Gordon and South Ring Road area



A new South Mall and Entry Plaza

Historically, the campus has faced toward Gordon Street and northward to the centre of Guelph. The southern edges of the campus were rural and there was little need to formally define an entrance to campus from this direction. Recent development along Stone Road and suburban growth to the south have shifted the centre of gravity of the surrounding city southward. Increased commuter travel from the Greater Toronto Area has contributed to this pattern. Arrival from the south, whether from Gordon Street or Stone Road, has become the most important entry point to campus. The university has yet to realize a pattern of movement, development and place-making that responds to this dramatic change in its context.

Recommendations:

1. A new iconic green in the southern portion of campus will achieve a number of objectives:
 - Provide a face and gateway to the campus from the south that projects an image and identity in keeping with the stature of the university,

- Accommodate and balance all kinds of movement in a way that makes wayfinding intuitive and direct while supporting parking,
 - Respect the experience of existing landscapes, streets, and buildings and position these within the experience of the larger setting, and
 - Provide the setting for future growth to realize the full potential of the southern campus lands.
2. The South Mall landscape initiative will tie together many existing open spaces, including the Entry Plaza, the Conservatory garden and the bus loop area (UC Green). It will provide the setting for new landmark development that clearly delineates campus territory at this arrival point.
 3. Arriving from the south or west at the Stone Road and Gordon Gateway, the new Entry Plaza will frame diagonal views from the Stone Road and Gordon Street gateway northeast into UC Green and toward Branion Plaza.
 4. Car traffic will be encouraged to move north along Gordon Street to the intersection with South Ring Road, which will serve as the primary entrance to campus. This will also be the point of transition from a street network that is dominated by cars to one where pedestrians and cyclists are prioritized.
 5. Signage will reinforce patterns of vehicle movement. Integrated into these landscapes will be a diagonal pedestrian and bicycle path network that follows a direct desire line between the Gordon and Stone Road Gateway and Branion Plaza. This route will be aligned with traffic signals and cross-walks to ensure safety.
 6. The South Mall will create a strong linear spatial connection to the east, providing views to destinations deeper within campus and signaling that this is a main way forward, particularly for first time visitors. The South Mall will extend along the full length of South Ring Road to the athletic fields, improving the setting of the South Residences and reinforcing an open east-west connection across campus.



University of Arizona: A linear mall with plaza, landscaping, and vehicular access



GORDON STREET

GORDON STREET RENEWAL

SOUTH MALL LANDSCAPE INITIATIVE

SOUTH ENTRY WALK

SOUTH ENTRY WALK

UNIVERSITY CENTRE

UC GREEN

SOUTH RING ROAD

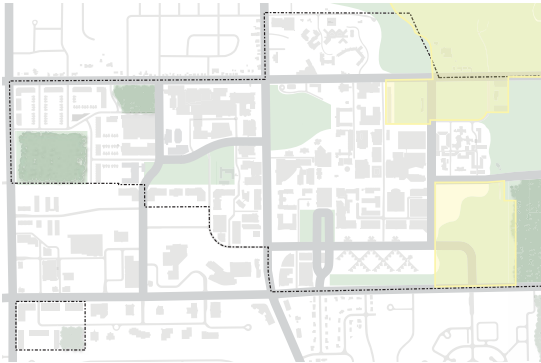
SOUTH ENTRY PLAZA

UNIVERSITY WELCOME CENTRE

POTENTIAL STRUCTURED PARKING



4.3.3 Playing Fields



Renewed Athletic Fields and the surrounding context

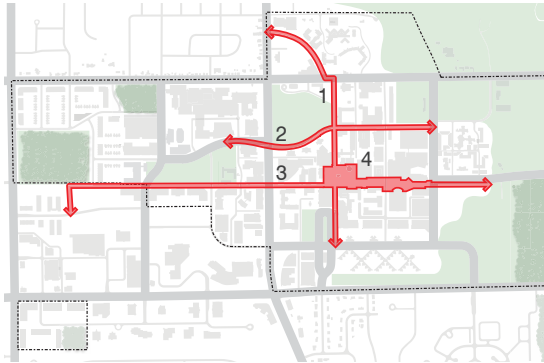
Athletic fields are an important part of the campus experience, both during active use and as part of the larger campus setting. Due to their openness and potential to accommodate natural functions, the playing fields are a fundamental part of the campus setting and open space network. Recent landscape investments in the south playing fields, including the mound landscape, are a great example of the integration of landscape and athletic resources.

The fields occupy a large proportion of campus land and are conveniently located to ensure active use. While central, the playing fields provide a buffer between the intensively developed campus and the natural Arboretum.

Recommendations:

1. Playing fields should be located and designed to promote integration into larger landscape patterns and to preserve significant views.
2. Continue to seek out opportunities to naturalize the setting of the playing fields and extend the natural qualities of the Arboretum around and in between fields.

4.3.4 The Walks and Branion Plaza



1. *Winegard Walk*
2. *Alumni Walk*
3. *Reynolds Walk/Cowpath*
4. *Branion Plaza*

Built in the late 1960's during a dramatic expansion of the campus, Reynolds Walk and Winegard Walk are modern, urban landscapes that successfully extended the campus setting beyond Johnston Green. They play a fundamental role in the image and experience of campus. The material palette of concrete and brick unify the old and the new campus while their long axes recall the hedgerows and linear landscapes of rural settings. Where Winegard and Reynolds intersect, Branion Plaza is the active setting for the campus life and considered the heart of the campus.

Recommendations:

1. Extend and restore existing walks and introduce new walks to further unify the campus and promote the pedestrian experience.
2. Retain the red brick motif as a unifying element for the campus and invest in repairs to improve paving quality and consistency. .
3. A consistent selection of street furniture and light standards should be used throughout the extent of the walks and plazas.
4. Walks and plaza areas should extend to building faces and the use of asphalt paving should be minimized.
5. Walks and plazas should be designed to accommodate the occasional movement of campus service and emergency vehicles but retain the quality and character of a pedestrian promenade. They should not be designed as service lanes that are open to pedestrian traffic.



University Project L5: Branion Plaza Renewal

Branion Plaza remains the heart of campus life. However due to extensive use, it requires further investment and renewal, reflecting the increasingly heavy pedestrian activity in this area.

The plaza will continue to be a beautiful and functional landscape and will retain its importance as the heart of the university. Design of the plaza will reflect its urban character, with appropriate hardscaping, extensive street furniture and seating areas, and other elements to address its intensive use. Circulation patterns should support desire lines, and appropriate space will be protected for gathering areas and displays. The cannon will continue to feature prominently in the plaza. It will continue to accommodate significant green attributes, especially on the east side of Winegard Walk. Investment in wayfinding measures will support the plaza's role in orienting visitors to campus.

Recommendations:

1. A landscape and renewal plan will be developed to address the recommendations described herein and allow for incremental improvements.
2. The quality of paving will be improved, likely using red bricks consistent with the walks. Trees should be surrounded by raised planting edges with appropriate infrastructure to ensure optimal growing conditions.
3. Bicycle storage should be located at the periphery of the plaza to ensure there is space and clear views through the Plaza.
4. The lawn behind Raithby House should be landscaped to recall the garden that was once there and to support the integration of this space into the larger plaza.
5. Service vehicle access should be restricted based on the servicing strategy identified in Section 4.4.



1. A renewed Branion Plaza 2. University of Washington, Tacoma Campus

University Project L6: Winegard Walk Extension and Renewal

Winegard Walk is the primary north-south pedestrian spine that connects the North Campus through to the new UC Green and South Ring Road. It is set within and connects a number of historic landscapes. The walk will be extended north along the alignment of Macdonald Street, which will be closed to general vehicular traffic.

University Project L7: Reynolds Walk Extension and Renewal

Reynolds Walk is the primary east-west pedestrian spine that connects the entirety of the campus from the Arboretum to Dairy Bush. It is a fundamental part of the pedestrian network and provides access to numerous academic facilities and campus life amenities. Reynolds Walk is envisioned as a vital, mixed-use corridor - the campus 'main street' - supporting the increasingly '24-7' nature of the campus. Its character and identity should be strengthened along the entire length by incrementally extending the red brick paving westward along the Pastures open space and eastward to the East Residences and Alumni House. Asphalt service roadways should be removed and redeveloped as pedestrian areas that can accommodate occasional use by campus service and emergency vehicles (See Section 4.4)

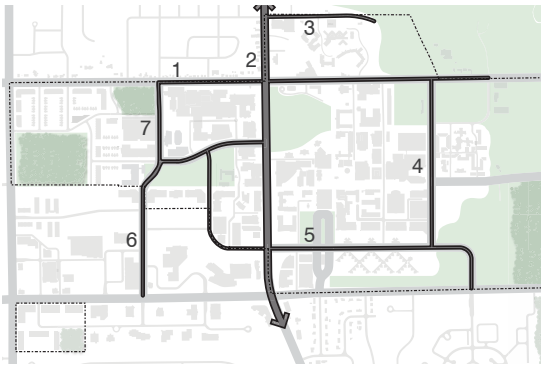
University Project L8: Alumni Walk Renewal

Although created concurrently with the same design vocabulary as the other walks, Alumni Walk does not have the same prominence within the campus landscape. As the Trent Lane area of the campus is redeveloped and improvements are made to the Athletic Precinct, there is an opportunity to heighten the role and presence of Alumni Walk. The planned signalized pedestrian crossing will extend patterns of movement across Gordon Street.



1. Locust Walk, University of Pennsylvania 2. Massachusetts Institute of Technology

4.3.5 Key Streets



1. College Avenue
2. Gordon Street
3. University Avenue
4. East Ring Road
5. South Ring Road
6. Chancellor's Way
7. Smith Lane

Streets do much more than just accommodate movement. They are campus community spaces that have a big impact on the character and experience of the university, often defining the territory of the university itself. Gordon Street is amongst the oldest places on campus, and like the natural areas, predated the development of the university. It is also the front door to the university and has played a role in the arrival to campus since the institution's inception.

Appropriately planned and designed streets will support place-making and enhance the larger open space network, address wayfinding issues and alleviate conflicts between users. Key streets have the potential for enhancement and represent an opportunity to better define the university's territory.

Recommendations:

1. In general, streets should help to achieve the desired movement patterns and support wayfinding through design, place-making and visual cues.
2. Campus streets should allow for all types of movement while maintaining or enhancing their character. Arrival routes to campus require more delineation and attention, especially in the provision and design of facilities for pedestrian and cyclists.
3. Regularly-spaced, uniform tree planting should reinforce the structure of major pedestrian and vehicular circulation routes, as proposed in the 1964 Campus Master Plan. In striking a balance between planting a monoculture and an inconsistent, mixed array of formal plantings, trees of a similar form, size, colour and branch and leaf character should be selected to identify the routes.
4. Streets should be designed to appropriately support trees. Building setback, soil condition, drainage and irrigation, and protection for injury, compaction and salt damage must all be addressed.
5. Best management practices to retain and treat stormwater with street rights-of-way should be considered.

University Project L9: Gordon Street Renewal

However unintended, the campus has, over time, turned its back toward Gordon Street. While Gordon is an important urban arterial, it is also the front door of the university and will play an important role in linking east and west. Consistent and high quality landscape treatment along the length of Gordon Street will reinforce the street as being part of the university and will integrate adjacent landscapes, such as Johnston Green, Reynolds Walk and the Entry Plaza. This will require a consolidated program of enhancement that includes landscape treatment and new development that faces onto and better relates to Gordon. The street should be redesigned in a way that continues to accommodate vehicles and anticipated traffic volumes, but better supports pedestrians, cyclists and transit users. This initiative is further describe in Section 4.4.



1. University of Toronto 2. Rutgers University 3. University of Toronto



University Project L10: College Avenue

College Avenue extends across the northern portion of campus, showcasing a diversity of campus places, including the Arboretum, Alumni Stadium, Johnston Green and the Veterinary College. Streetscape investments along College Avenue will ensure a consistent experience across the developed portion of campus and will reinforce the street's role as a major face for the university. Streetscape treatment can integrate with Gateway investments at East Ring Road and Smith Lane.

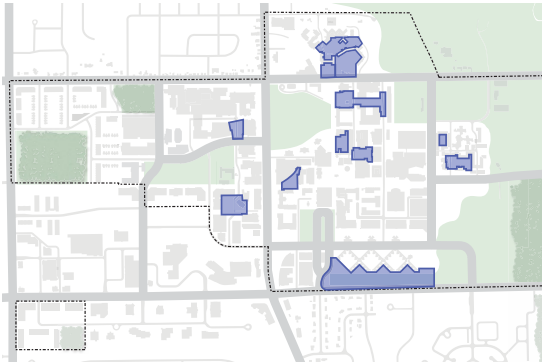


University Project L11: Smith Lane

As development increases west of Gordon, further improvements to the network will be required to manage traffic circulation and ensure development proceeds in a coordinated manner. Smith Lane will be highlighted as a new campus arrival route, reflecting its role as entrance to both the university and the College of Veterinary Medicine. McGilvray Street at College Avenue may remain, but could be considered for redevelopment in the detailed planning for these lands.

1. Streetscape and Pedestrian Crossings, Ottawa Convention Centre 2. Cornell University

4.3.6 Small Greens



As the campus has become larger and denser, the university will develop and improve small, well defined greens, courtyards and other spaces that relate to and complement the adjacent built environment. Some of these places present the opportunity for more quiet places set aside from the larger, more active spaces. These spaces also provide places for small community identity, build around a College or residential community.

University Project L12: Stadium Green

A new linear green will connect the Stadium to Johnston Green. This space will incorporate a number of existing historic buildings and provide a space for festivities related to Stadium events.

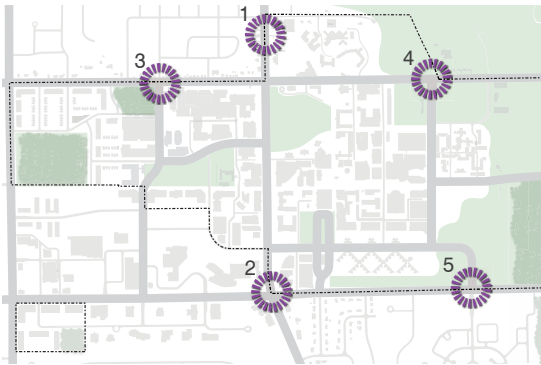
University Project L13: Local Courtyards and Greens

A number of small greens will be protected and created as small place-making initiatives across campus. Improvements will clarify investment around a landscape design, and services and other infrastructure will be removed and/or screened from view. Areas of improvement include the main pedestrian entrances to the Science Building and the OVC complex, where landscape investment will create an improved entry and better define the territory of these places. For the South Residence Green, small scale improvements to landscape and pedestrian infrastructure along Stone Road will create a more inviting environment for students in South Residences and a more inviting face along this edge of campus.



1. A terraced landscape plaza 2. Interior courtyard, Center for International Governance and Innovation, University of Waterloo

4.3.7 Gateways



1. Gordon Street and Macdonald Street
2. Gordon Street and Stone Road
3. College Avenue and Smith Lane
4. College Avenue and East Ring Road
5. Stone Road and East Ring Road

Gateways are the places within the larger open space network that mark the transition from city to campus. They are the places where you feel you have arrived at, or have left, campus. When properly designed, they support the identity and image of the university, enhance the visitor experience and assist in wayfinding. Not all gateways are the same, and each requires different treatment depending on the character of the surrounding landscape and built fabric. In improving gateways, the focus should be on the consistent creation of places. The deployment and massing of buildings, landscaping and movement patterns (not an actual gate) should reinforce the sense of arrival.

The five primary gateways to campus are described on the following page. The intersection of College Avenue and Gordon Street is often thought of a gateway, but is already mostly within the campus. The main point of arrival already happens at Gordon Street and Macdonald Street.

Gordon Street and Macdonald Street

This is where you first encounter the campus when arriving from Downtown Guelph. The gateway will be reinforced by a landmark development and the extension of the Johnston Green to this corner. Wayfinding signage should be present to direct visitors to various campus destinations and parking.

Gordon Street and Stone Road

South of South Ring Road, Gordon Street begins to widen to a four-lane street. The Entry Plaza will help tame this important gateway to the university, and landscape treatment can extend right across Gordon Street to reinforce the entry into university territory. This will also become the setting for a significant new landmark building.

The design of this intersection, its landscape, signage and future adjacent buildings will make arrival at the campus apparent, directing movement into South Ring Road and onward to campus destinations. A new entrance plaza and related landscape improvements along UC Plaza will provide views north and west into campus and provide the setting for direct pedestrian and cycle connections.

College Avenue and Smith Lane

Recent expansion of facilities for the College of Veterinary Medicine and the creation of additional parking in this area have increased activity in this portion of the campus. As development intensifies along College Avenue and Edinburgh Road in the coming decades, this area will need better definition as a campus face and point of arrival. This gateway will play a dual role as being an entrance to the University of Guelph and an important entrance for OVC. Brown's Woods, a protected natural area to the west of this gateway, will form part of the gateway sequence.

College Avenue and East Ring Road, Stone Road and East Ring Road

These gateways, connected by East Ring Road, are the primary access points to the largest surface parking lots on campus. These are also important gateways for those attending sporting events on campus, who may be infrequent visitors. The design and signage of these gateways should reflect this condition. Overtime, as the City of Guelph expands further east, arrival at these gates will increase.



1. Gateway Landscape, Vancouver 2. Columbia University
3. College Avenue Entry, University of Toronto

4.4 Movement

As a large and complex institution with the population of a small city, the University of Guelph accommodates thousands of pedestrian, vehicle, transit and bicycle trips every day. Complex movement systems, ranging from busy streets to small pedestrian walks, together provide a network that ensure people can move around and connect efficiently.













Great university campuses are highly walkable. The campus movement network supports the many trips and connections made on campus between classes, study areas, research labs, food service areas and residences, most of which are made on foot. The pedestrian network is also a means for connecting people with people. Active pedestrian routes serve as some of the most important venues for meeting friends and colleagues throughout the day, and play an important role as part of the campus open space and landscape network. Ensuring the entire campus is connected, welcoming and walkable is a high priority.

Arrival at campus occurs through a variety of means, including cars, buses, bicycles and on foot. The university will continue to support sustainable means of transportation, especially with a growing commuter population. Figure 5 illustrates the primary components of the movement network, which are further discussed in this section.

Travel Demand Management

Guelph is widely recognized for its travel demand management (TDM) program, which has made excellent progress in reducing single-occupant vehicle trips in favour of more sustainable means. Growth in transit, pedestrian and bicycle trips have supported sustainability while reducing the demand for land-intensive surface parking lots.

Legend

-  Primary Vehicle Route
-  Primary Vehicle Route (proposed)
-  Secondary Vehicle Route
-  Primary Pedestrian Route
-  Primary Pedestrian Route (proposed)
-  Secondary Pedestrian Route (proposed)
-  Bicycle Lane
-  Parking/Servicing Access
-  Parking Structure
-  Transit Zone
-  Pedestrian/Vehicle Mediation Zone
-  Gateway

University Projects*

-  1 Extension of Chancellors Way to McGilvray Street
-  2 Extension of South Ring Road north to McGilvray Street
-  3 Convert Macdonald Street to local access
-  4 Remove through access on Reynolds Walk
-  5 Extension of Powerhouse Lane to South Ring Road
-  6 Bus loop and transit improvements
-  7 Parking structures
-  8 University Welcome Centre

* University Projects are further described in Section 5.1

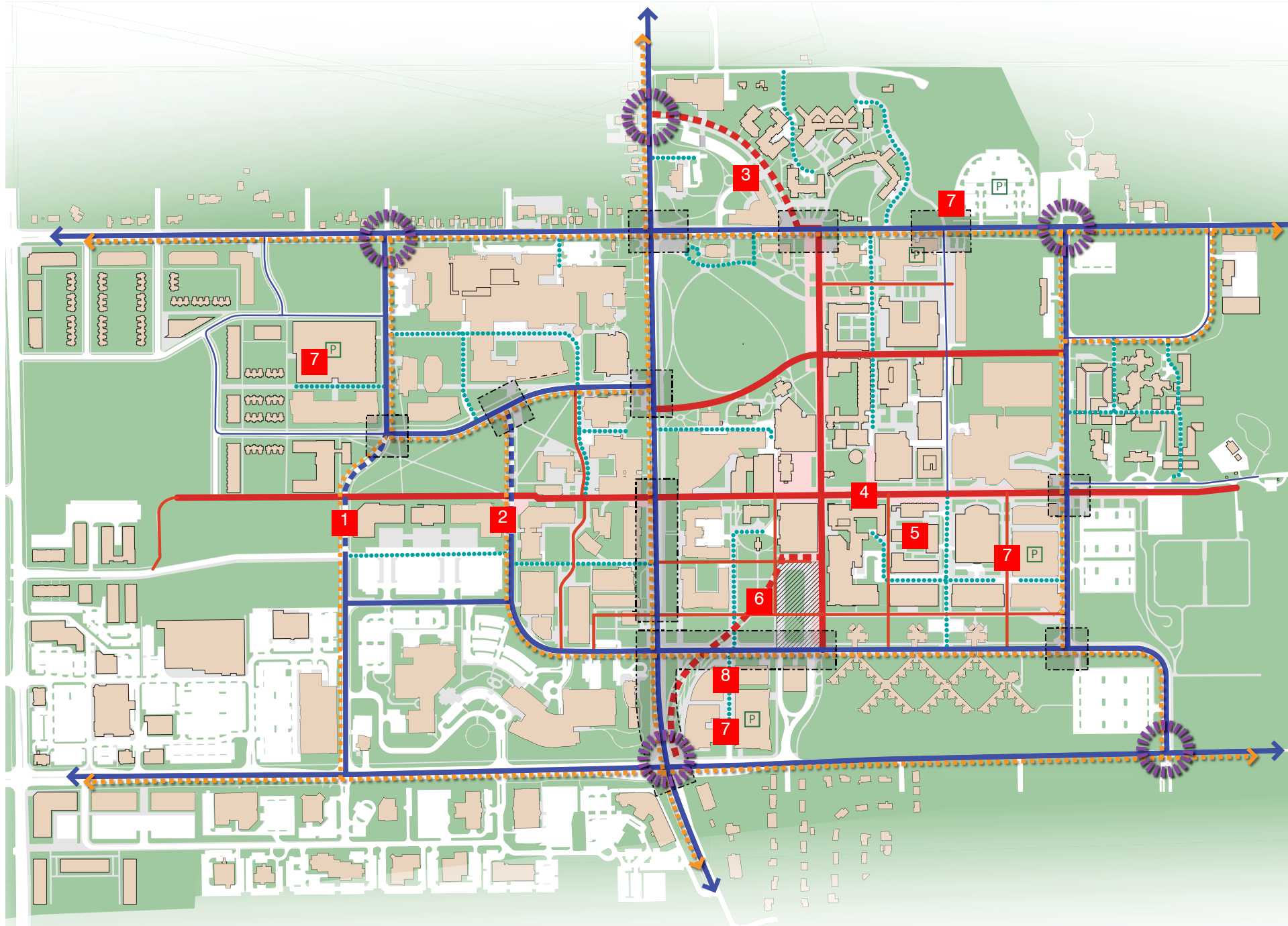
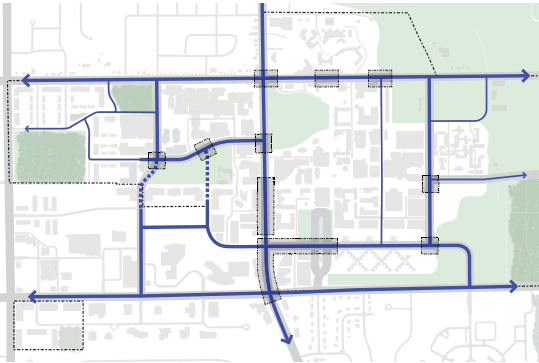


Figure 5: Movement network

4.4.1 Street Network



Designing environments on the campus for the pedestrians, cyclists, transit users and those with mobility related disabilities is a priority. The street network supports all ranges of movement, containing infrastructure for pedestrians, cyclists, and all types of motorized vehicles and transit. As the university is by necessity a pedestrian-focused environment, cars are accommodated but should not dominate. Campus streets will be designed as 'complete streets' that equitably accommodate all types of movement. Cars are accommodated on primary vehicle routes, though they are expected to act in a way that respects the pedestrianized environment.

The street network is also an important element of the public realm, providing many of the connections and open spaces that hold the campus together and connect it to the surrounding community. Simple enhancements such as continuous tree plantings will demarcate university territory and enhance the quality of place. Specific landscape initiatives have been identified for prominent streets and are discussed in Section 4.3.

A number of strategic improvements to the street network will create more efficient and effective circulation patterns and support place-making opportunities. The following improvements will be implemented as related landscape initiatives and development projects are undertaken.

University Project M1: Extension of Chancellors Way to McGilvray Street

With no formal north-south access through this part of campus, connectivity restrictions limit the full potential of this area. This new connection may reduce some pressure on Gordon Street from local campus traffic and service vehicles.

University Project M2: Extension of South Ring Road north to McGillvray Street

West of Gordon Street, South Ring Road currently serves as a parking lot access street without adequate circulation in this growing area of campus. Access north to McGillvray is complicated and inefficient. While Grange Lane would continue to provide service access to buildings in this area, McIntosh Lane will no longer be required.

University Project M3: Convert Macdonald Street to local access

Macdonald Street does little beyond providing access to the North Campus parking lot. With the planned CME building and resulting decrease in surface parking spaces, access to Macdonald Street from College Avenue should be closed. Parking lot access should be moved closer to Gordon Street. The unused right-of-way will be used to extend Winegard Walk into the North Campus.

University Project M4: Remove through access on Reynolds Walk:

East of Branion Plaza, Reynolds Walk is interrupted by a short segment of street intended to provide service access to campus buildings. The street is no longer required for service access, as there are no service and delivery areas directly accessed by this street. This street segment can be reclaimed as part of Reynolds Walk, creating new opportunities to enhance this important pedestrian route and open space. North-south vehicular access across Reynolds Walk may be maintained through an extension of Powerhouse Lane to South Ring Road..

University Project M5: Extension of Powerhouse Lane to South Ring Road

The area surrounding Gryphon Centre has the potential to accommodate significant campus development close in to the heart of campus. The large development sites require service access, especially with the closure of the service street that follows Reynolds Walk. The Powerhouse Lane extension will create through access for service vehicles, opening up these sites for development and creating more efficient service patterns for existing sites on Powerhouse Lane.



1. Shared service and pedestrian lane, Princeton University 2. Pedestrian only access, Arizona State University



Recommendations:

1. Prioritize pedestrian, bicycle and transit activity in improvements to all campus streets and advocate for these modes of transportation in any projects involving city streets.
2. Implement University Projects to enhance the street network as needed to support related landscape initiatives and development projects.
3. Implement a comprehensive redesign of the Gordon Street right of way and surrounding landscape. Engage the City of Guelph and Guelph Transit to ensure alignment of priorities and infrastructure.
4. New campus streets will be designed to City of Guelph standards but will continue to be owned by the University. All new streets will be designed to support healthy street trees.
5. Optimize on-campus signal light timing at intersections and pedestrian crossings to minimize traffic issues and support more efficient pedestrian crossings. Where signal lights are operated by the City of Guelph, coordinate with City staff to do the same.
6. Internal campus streets and adjacent city streets will be designed and landscaped to reinforce the character of campus, support pedestrian and bicycle activity, and contribute to place-making and the open space network.
7. With future increases in development and transit activity at the area of campus near Stone Road and Gordon Street, a detailed transportation study should be undertaken to determine appropriate circulation patterns and intersection design at campus entry points. The design and configuration of the bus loop access to Stone Road should be determined with the implementation of major transit changes or the development of the parcel located within the existing loop.

1. Public streetscape, Boston University 2. Pedestrian mediation zone, Emory University

Gordon Street

Gordon Street is one of the most enduring historic elements of the university and continues to function as the front door to campus. With the continued growth of OVC and expansion of other university activities west of Gordon, the street has become a physical barrier. Unification of campus requires intervention

Gordon Street will continue to support vehicular movement, though its capacity to accommodate additional pedestrians, transit vehicles and cyclists will be improved. A program of pedestrian, bicycle and vehicular improvements will be implemented on Gordon Street, fully integrated with a comprehensive landscape renewal strategy. Landscape improvements will reinforce its role as the front door to campus and reconnect the street with the larger open space network. Comprehensive transportation, infrastructure and landscape design will address the entire corridor, spanning Gordon Street from building face to building face.

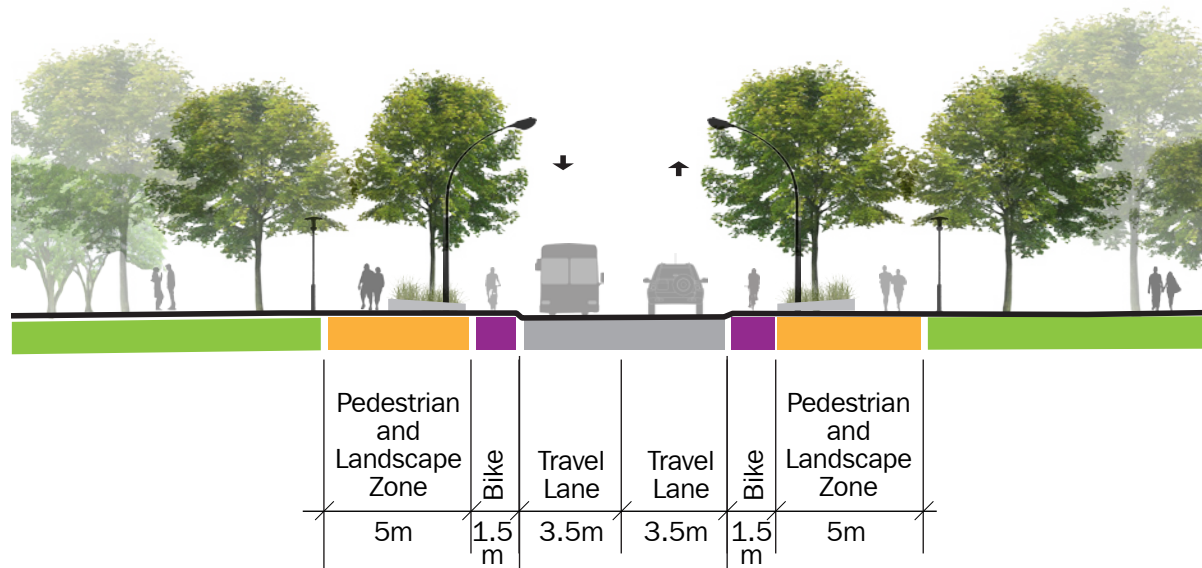
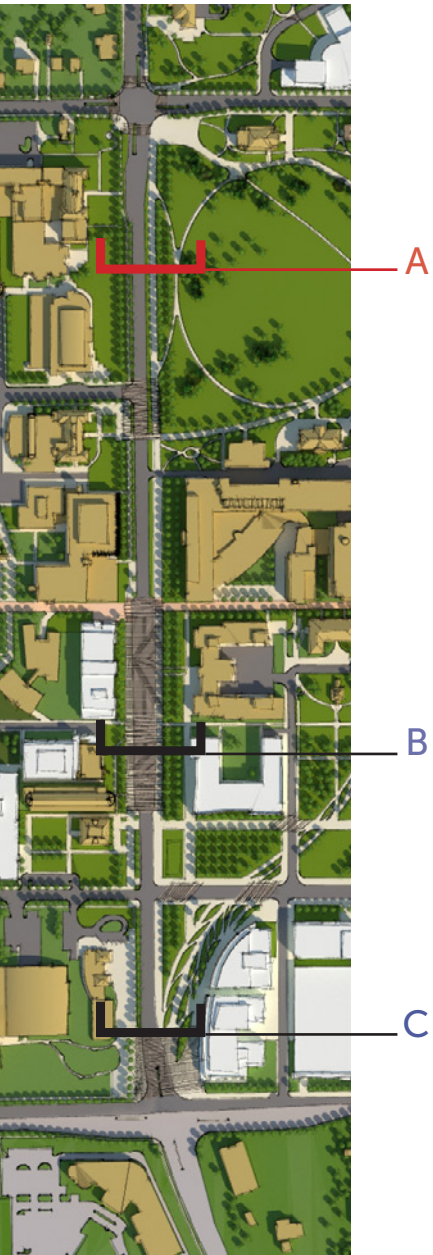
Options have been tested to determine feasible design opportunities for Gordon Street. The options allow for dedicated bicycle lanes, expanded sidewalks, potential bus bays near Reynolds Walk, upgrades to pedestrian crossings and a new pedestrian crossing at Alumni Walk. Vehicle travel lanes remain unchanged. The two options shown in Figure 6 include both on and off-road dedicated bicycle lanes and investigated opportunities to buffer sidewalks using raised beds and other landscape improvements.

The wide right-of-way and setbacks on Gordon Street allow for a number of combinations of approaches. The options shown in Figure 6 are not meant to be prescriptive. They simply illustrate a departure point for further investigation and testing. Further discussion of the Gordon Street landscape improvements can be found in Section 4.3.

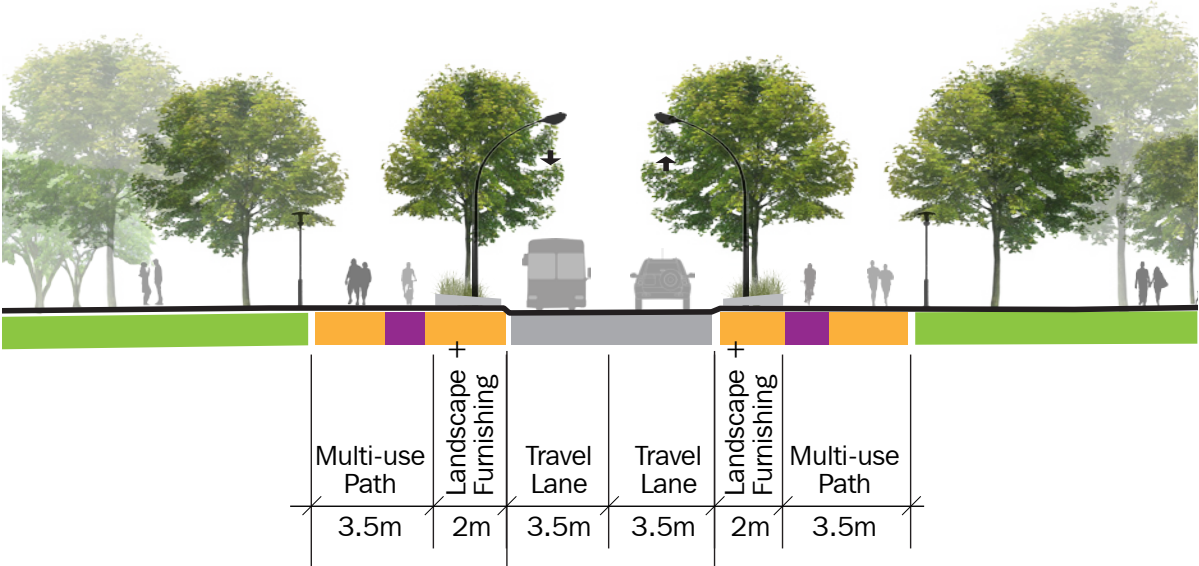


Section A At Johnston Green

Option 1: On-Street Dedicated Cycling Lane



Option 2: Off-Street Cycling Path

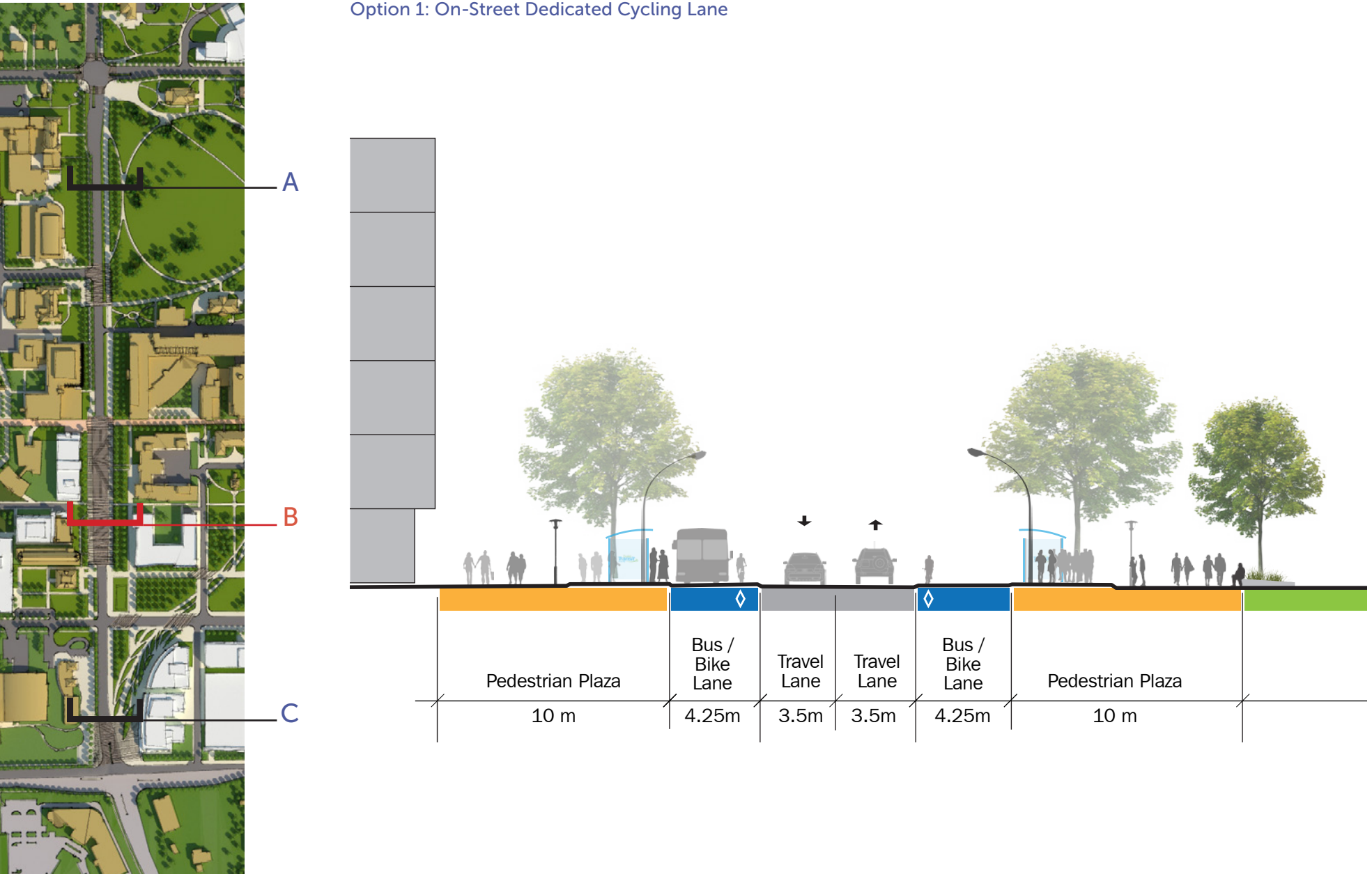


1. Complete Street, Charlotte NC 2. Stockholm, Sweden

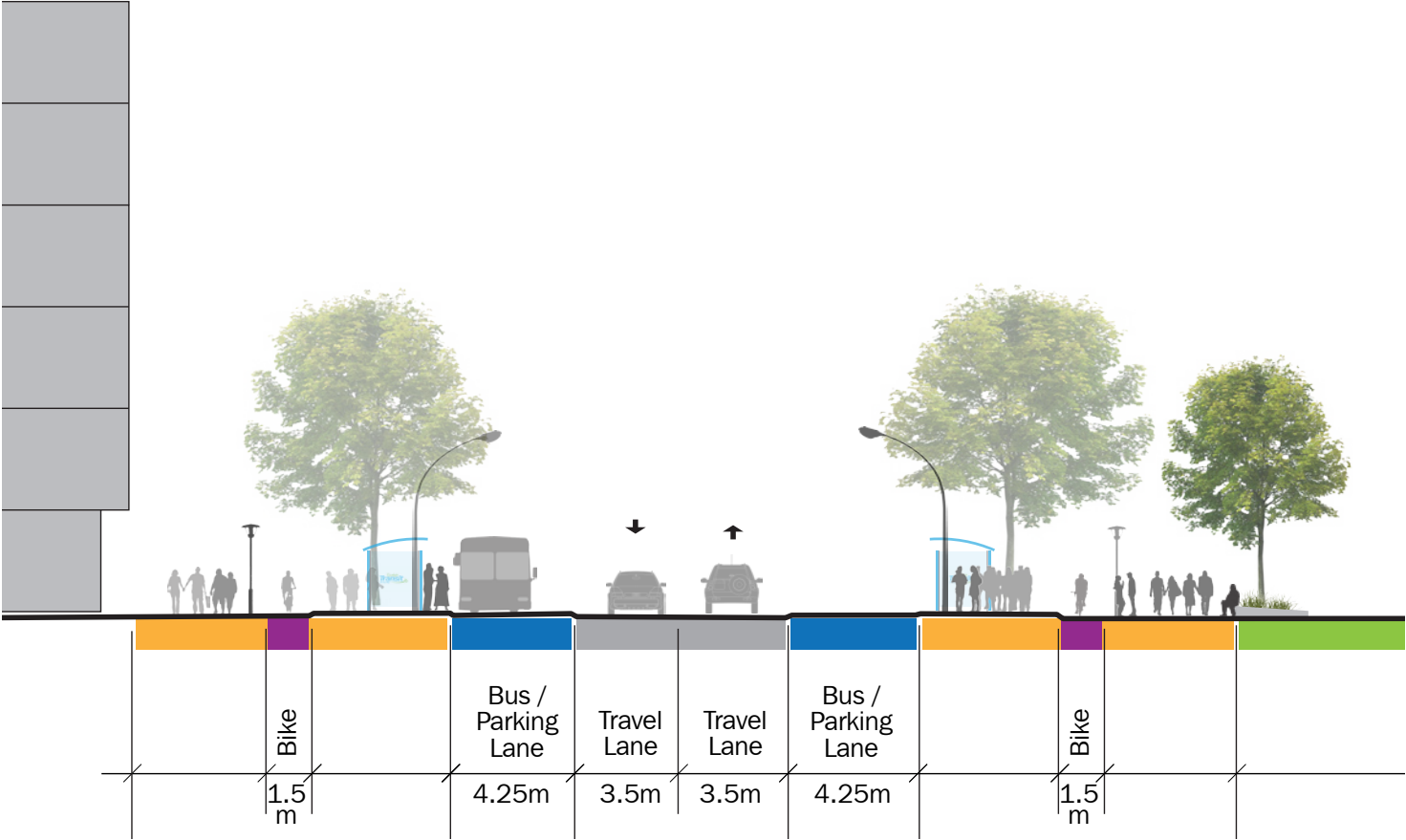


Section B At the Bus Stop

Option 1: On-Street Dedicated Cycling Lane



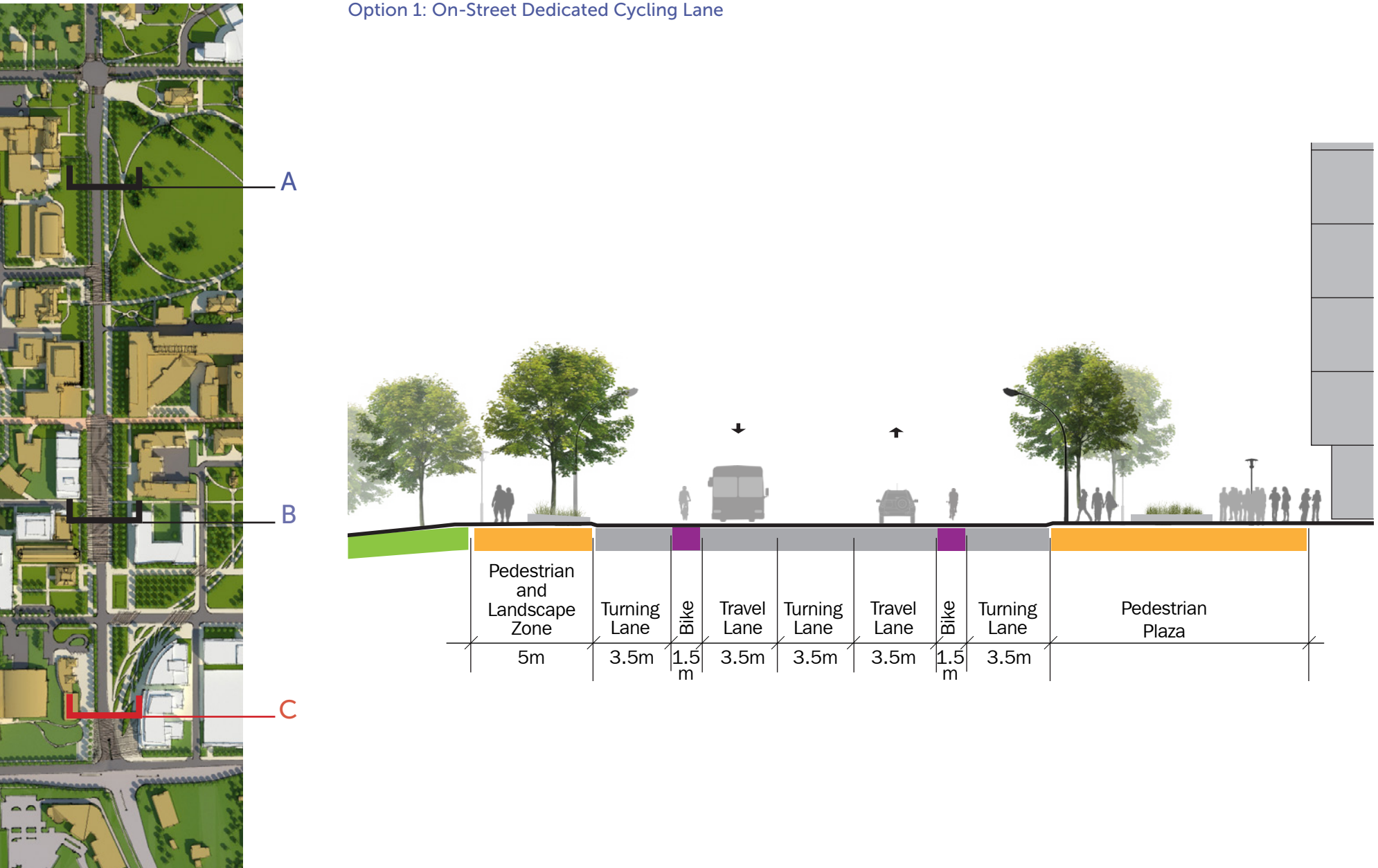
Option 2: Off-Street Cycling Path



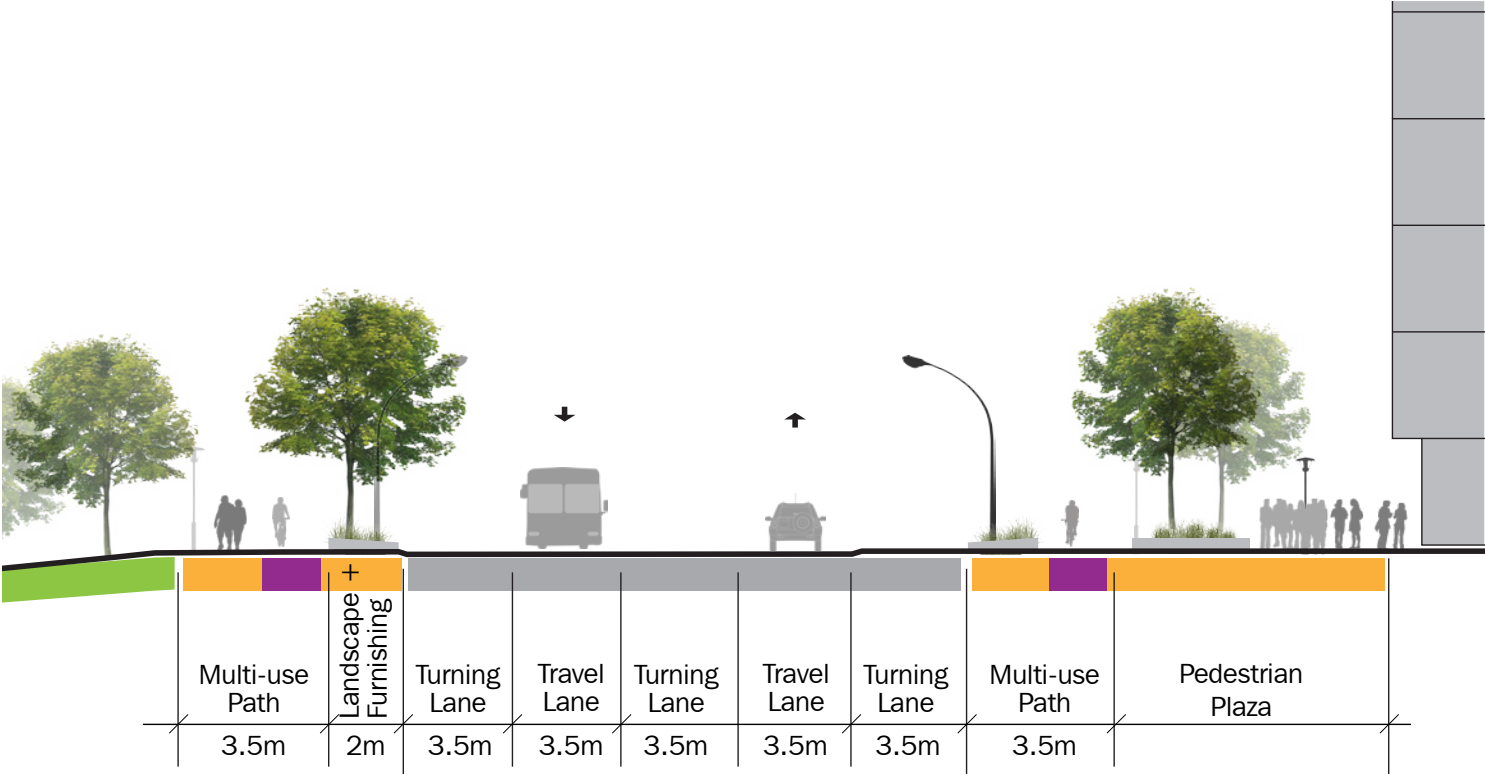
1. Roncesvalles Ave, Toronto 2. Stockholm, Sweden

Section C At the South Entry Plaza

Option 1: On-Street Dedicated Cycling Lane

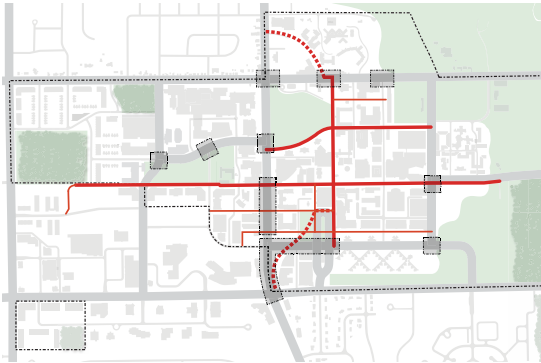


Option 2: Off-Street Cycling Path



1. Portland, Oregon 2. Battery Park, New York

4.4.2 Pedestrian Network and Accessibility



Winegard Walk, Branion Plaza and Alumni Walk are some of the most special places on campus and contribute to the most enduring memories held by alumni. More than just special places, pedestrian areas are the backbone of campus movement patterns and the basic structure for navigating the campus. The majority of the university community relies on walking to move around the campus, demonstrated by the thousands of students that crowd Winegard Walk and Reynolds Walk between class changes. These places also play an important role in community building, supporting the daily interactions and exchanges that make a campus special.

While the walks ensure the pedestrian network is very clear and understandable east of Gordon Street, this is not the case to the west. Comprehensive pedestrian and street networks have not evolved to support campus development, and Gordon Street remains a significant barrier.

Designing the campus for the pedestrians, cyclists and those with mobility-related disabilities is a priority. The academic core will continue to be defined as a pedestrian priority zone, where pedestrian activity is the most important mode of travel.

Where the pedestrian priority zone interfaces with vehicle routes, mediation is required to ensure safety and maintain pedestrian priority. Mediation can include more frequent and safer street crossings, enhanced landscape treatment and other means.

Recommendations:

1. The university will expand the existing network of pedestrian walks to ensure consistency and walkability throughout campus. Secondary pedestrian walks will be created to enhance walkability and support new development sites, and sidewalks will be provided on both sides of all streets. Generally, pedestrian activity should remain at grade to support a compact and walkable campus environment.
2. In particular, areas west of Gordon Street will see major improvements to pedestrian infrastructure in conjunction with improvements to the street network to ensure walkability.
3. Gordon Street will see a new signalized pedestrian crossing at Alumni Walk. College Avenue may also see a new pedestrian crossing Powerhouse Lane to better connect North Campus and the large surface parking

lot (P19). Campus-wide design standards will provide direction for major unsignalized pedestrian crossings on campus streets to clearly demarcate crossing zones and enhance pedestrian safety.

4. At the periphery of campus, pedestrian improvements will support integration with surrounding businesses, residential neighbourhoods and natural areas. Improvements to peripheral and off-campus areas may include alignment of campus walks and city sidewalks, new and/or improved pedestrian crossings at intersections and important mid-block locations, and streetscape improvements.
5. Trail and sidewalk design and construction should be coordinated with the City of Guelph to ensure seamless coordination with the city-wide pedestrian network and to embed the campus within the City's off-road trail network and mapping.
6. Municipal and provincial accessibility design guidelines should be aggressively implemented throughout the campus to ensure a universally accessible environment.

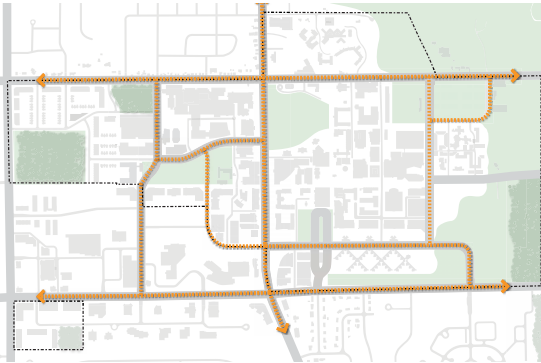
7. The following specific directions will be guide enhancements to existing major walks and the creation or extension of new walks.

- Reynolds Walk and the Cowpath will be extended and improved along its length from the Arboretum in the east through to the Dairy Bush in the west. The removal of the parallel vehicular street east of Branion Plaza offer significant opportunities for expanding Reynolds Walk and further investments in the landscape.
- With the removal of Macdonald Street, Winegard Walk will be extended north of College Avenue to better integrate academic and residential activities. Strategic improvements to stairs and ramps near Branion Plaza should be implemented to reduce bottlenecks and ensure pedestrian safety. Removal of permanent parking areas in front of Johnston Hall will reduce pedestrian and vehicular conflicts.
- Alumni Walk will continue to link the East Residences through to Gordon Street, and upgrades will be consistent with the other pedestrian walks. Crossings at

Powerhouse Lane and Trent Lane should be upgraded to prioritize pedestrian movement. Alumni Walk terminates on the west side of Gordon Street, but the functionality of the Walk will continue to be supported by sidewalks and bike lanes along the McGilvray Street right of way.

- The new South Entry Walk will provide a direct pedestrian link from the corner of Stone Road and Gordon Street into the heart of campus. Mirroring the curved path through Johnston Green, this walk will connect to Winegard Walk in front of the University Centre and will be a focal point for landscape investment in the South Lawn area. The pedestrian crossing at South Ring Road and Christie Lane will be given priority.

4.4.3 Bicycle Network and Infrastructure



As an economical, sustainable and convenient mode of travel, bicycle trips to campus have grown significantly in recent years. The campus and surrounding city have welcomed cyclists, with existing or planned dedicated bicycle lanes on many campus streets and streets surrounding campus. Extensive investment in bicycle parking, including weather protected parking areas, ensure convenient bicycle travel to and around campus.

Wherever possible, the university will construct dedicated bicycle lanes on all primary campus streets to create a complete bicycle network. Co-ordination with the City of Guelph will ensure the campus bicycle network is integrated with the surrounding city, including existing bicycle lanes on Gordon Street, Stone Road and College Avenue. Restrictions on bicycle use may be considered in areas of highest pedestrian activity, including Branion Plaza and portions of Reynolds Walk and Winegard Walk.

Bicycle parking investments will continue to meet demand through continued investment in new and convenient parking spaces. Weather-protected parking is encouraged, including parking inside or underneath buildings. Bicycle parking can be coordinated with shower and change facilities, including such facilities in existing athletics buildings. Generally, the design and location of bicycle parking should be carefully planned in campus greens, courts and other important open spaces to minimize adverse physical and visual impacts. Due to high pedestrian volumes and the importance of this open space, bicycle parking should be relocated from the centre of Branion Plaza to its periphery.

Recommendations:

1. Coordinate bicycle infrastructure improvements with the City of Guelph, including eastward expansion of bicycle lanes on Stone Road and College Avenue toward Victoria Road.
2. To eliminate pedestrian and vehicular conflict, consider restrictions to bicycle use in and around Branion Plaza during peak periods of pedestrian activity. Restrictions may include low speed limits, dismount zones or other means.
3. Develop a bicycle parking strategy to provide large-scale parking opportunities that are conveniently located near areas of high campus activity and directly accessible from bicycle routes but away from Branion Plaza.
4. Include bicycle parking considerations in site planning for new developments.



1. On-street Bicycle Lanes 2. Consolidated Bike Parking 3. Multi-use Path

4.4.4 Transit



Through implementation of a U-pass program and the comprehensive campus TDM program, the university has benefited from significant transit ridership growth. Estimated transit use has now reached approximately 120,000 trips to and from campus every week on local and regional transit services. While most transit trips involve local transit, GO Transit and other regional bus service have grown to meet the needs of a growing commuter population. The university will continue to work with Guelph Transit, GO and other regional transit providers to optimize transit service to campus.

University Project M6: Bus Loop and Transit Improvements

Extensive ridership growth has already outpaced the capacity of the recently-constructed bus loop. Additional platforms have been installed south of the bus loop, dispersing the transit terminal functions and creating potential safety concerns. While increased operational efficiency and timing adjustments may have the potential to increase the overall efficiency of the bus loop, the university and its transit providers may have to investigate opportunities to reduce bus traffic in the loop. This may include opportunities to relocate regional

transit services to nearby areas of campus, including South Ring Road east of the transit loop, East Ring Road near Reynolds Walk or another appropriate location.

Dedicated transit facilities would support the bus loop's growing importance as a transit terminal. A new facility would at minimum include a lunchroom and washrooms for drivers, but could feature a climate-controlled waiting area with real-time transit information and other transit-related services.

In the long-term, bus rapid transit is expected along the Gordon Street corridor. This may reduce the total number of buses coming into campus, but will shift some transit drop-off and pick-up into the Gordon Street right-of-way. At this time, the university and Guelph Transit may consider shifting some local bus activity to Gordon Street in order to consolidate transit service, ensure greater operational efficiency and reduce bus traffic on campus. Further study will be required to determine the feasibility of such an approach, ensure safe pedestrian crossings, and minimize impacts on vehicular flow. All decisions should ensure that transit remains a convenient and efficient means of transportation for the university community.

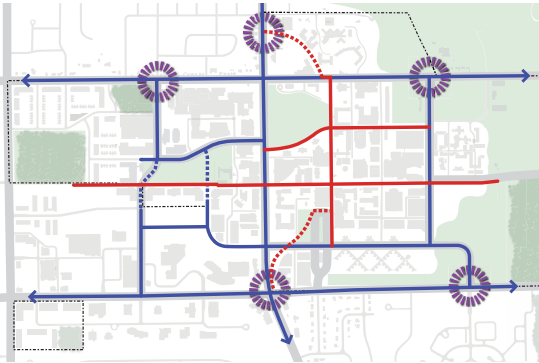
Recommendations:

1. Work with transit providers to Investigate options to streamline local transit service in the bus loop and the potential to relocate regional bus services to other appropriate areas of campus.
2. Coordinate with Guelph Transit in the development of a transit facility, potentially integrated in the base of a new or existing building.
3. Prioritize the inclusion of transit infrastructure in the renewal of Gordon Street, including sensitively designing for the capacity to accommodate bus rapid transit and potential additional local transit loading.



1. York University 2. Rutgers University 3. University of Michigan

4.4.5 Arrival and Wayfinding



While the process of arrival from Downtown Guelph and along College Street is clearly understood, in large part due to Johnston Green, the arrival sequence from Stone Road is not so clear. Appropriate signage and wayfinding are an important element of this arrival sequence. Signage should be seamlessly coordinated to ensure consistency and clarity from the outskirts of Guelph right in to the heart of campus, and visitor kiosks should be located at important entry points. The corner of Stone and Gordon is one of the most important entries to campus due to its location, a large visitor parking lot and proximity to the bus loop. A university welcome centre may be considered at this location.

While the heart of campus is a well-loved and remarkable pedestrian environment, the periphery is characterized in large part by automobile-oriented development and parking lots. Prominent gateways are important points of transition between the city and campus. Gateways will feature a consistent approach to landscape, street and pedestrian network design to signify arrival at campus and assist with wayfinding. Similar consistency in landscape treatment along the edges of campus will define the campus territory. Further discussion of gateway treatment is included in Section 4.3.

University Project M8: University Welcome Centre

To provide a consistent and welcoming arrival for visitors to campus, the University should consider the creation of a University Welcome Centre at the corner of Stone Road and Gordon Street as part of a larger development.

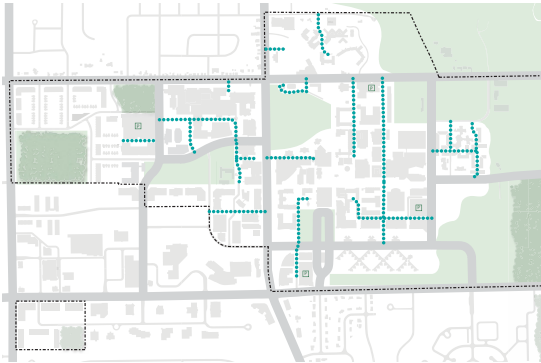
Recommendations:

1. Engage a wayfinding consultant to develop and implement a comprehensive wayfinding master plan to ensure a consistent and clearly understandable system of wayfinding, arrival and movement. The master plan should identify innovative means of supporting wayfinding, including the use of technology, and should be firmly embedded within the campus hierarchies of movement and places.
2. Wayfinding measures should, at minimum, provide an improved, consistent and comprehensive approach to pedestrian, vehicular and building signage.
3. Carefully plan, design and locate visitor information kiosks at important areas of transition onto campus. These can include signage and maps, electronic information, parking information and current lot status, or possibly a person to provide directions and parking passes.
4. Implement open space and landscape initiatives as identified in Section 4.3 to clearly indicate the campus territory, communicate important gateways and define important places on campus.



1. Wychwood Barns, Toronto 2. University of Toronto
3. Welcome Centre, Lawrence Tech University

4.4.6 Parking, Loading and Servicing



The success of the TDM program has allowed the university to hold the number of parking spaces constant despite a growing campus population. This practice will continue into the future, with the university actively managing parking based on development need, parking demand and other factors.

Surface parking lots will generally be located at the periphery of campus to make way for higher order land uses in the core. Surface lots will see enhanced landscape treatment (e.g. landscaped pedestrian paths, increased tree cover, pedestrian-scale lighting, smaller parking modules) to better reflect the quality of campus and ensure a safe pedestrian experience. Visitor, short-term and accessible parking will be strategically provided throughout campus, including in the Campus Core, to ensure convenient access to campus, create a welcoming environment and support retail and other activities. Visitor parking should be highly visible and accessible, and may include on-street metered parking. Investments in enhanced parking management technology can make finding a parking space much more convenient and efficient.

In the long-term, open space and building investments will displace surface parking to the point where structured parking may be required. In managing the long-term supply of campus parking, the university should seek to balance cost, impacts to the campus environment and impacts to surrounding communities.

While service routes have been located to minimize conflicts with pedestrians, there are some locations on campus where sharing between pedestrians and service vehicles is inevitable, such as Trent Lane. Pedestrian activity will be prioritized in these locations.

University Project M7: Parking Structures

Several existing surface parking lots have been identified as potential sites for parking structures. The university should protect these sites from development until a long-term parking strategy has been fully implemented. Other means for accommodating displaced parking may be considered, including below-grade parking under new development sites that are accessible from a primary vehicular route.

Recommendations:

1. Hold the total number of parking spaces on campus constant and invest in an electronic parking management system to ensure convenience and efficiency in the use of university parking lots.
2. Develop a long-term parking management and funding strategy to ensure the university is prepared for a transition to structured parking.
3. Design building service areas to be oriented to service routes, screened from view and, where possible, integrated into buildings.
4. Consolidated service routes should be designed to ensure appropriate service and truck access to campus facilities.
5. Where service routes overlap the pedestrian network, they should be designed as high quality pedestrian spaces to discourage unsafe vehicular behaviour and reinforce the pedestrian nature of campus.
6. The university may explore opportunities for a central receiving facility at the periphery of campus.



1. Princeton University 2. York University 3. Rutgers University

4.5 Energy, Infrastructure and Utilities

The University is committed to fostering an institutional culture of sustainability and empowering individuals to put this commitment into practice. While the Campus Master Plan itself outlines an inherently sustainable framework for campus growth and evolution, sustainable systems and efficient operations will further contribute to campus sustainability.





The university's district energy network provides one of the most efficient and cost-effective means of heating and cooling campus buildings. This network and its central plant also provides a focused opportunity for improving efficiency and minimizing contributions to climate change. Utilities and infrastructure will continue to serve the campus efficiently and reliably without impacting the quality of campus. The university will expand and improve the district energy network and other utility systems to support new campus development and users. Continued attention to water conservation and waste management will reduce resource consumption, and increased on-site stormwater management will minimize downstream impacts.

The Central Utilities Plant will continue to be the primary home for utility and infrastructure systems. New development in surrounding areas should ensure compatibility with this use, including any consideration of emissions, noise and vibrations. Potential to expand this facility should be considered in order to accommodate long-term campus growth and support opportunities for increased district energy generation and distribution.

Infrastructure and utilities considerations and constraints related to the development and renewal opportunities are illustrated in Figure 7.

Virtually invisible to the campus community, an extensive below-grade network of utilities keeps the campus in operation year-round. Operated centrally from a cluster of buildings along Powerhouse Lane, campus utilities include a district energy system (steam and chilled water), water and wastewater systems, stormwater, electricity and telecommunications networks, and other minor utilities. Many of these systems are located below grade under walks and within a network of tunnels.

Legend

-  Infrastructure tunnel or major service duct to be protected with adjacent developments
-  Infrastructure tunnel or service duct to be accommodated or relocated in new development, subject to further investigation
-  Extension of water, sanitary and stormwater services required
-  Municipal connection: capacity for sanitary and stormwater discharge from nearby campus development to be confirmed

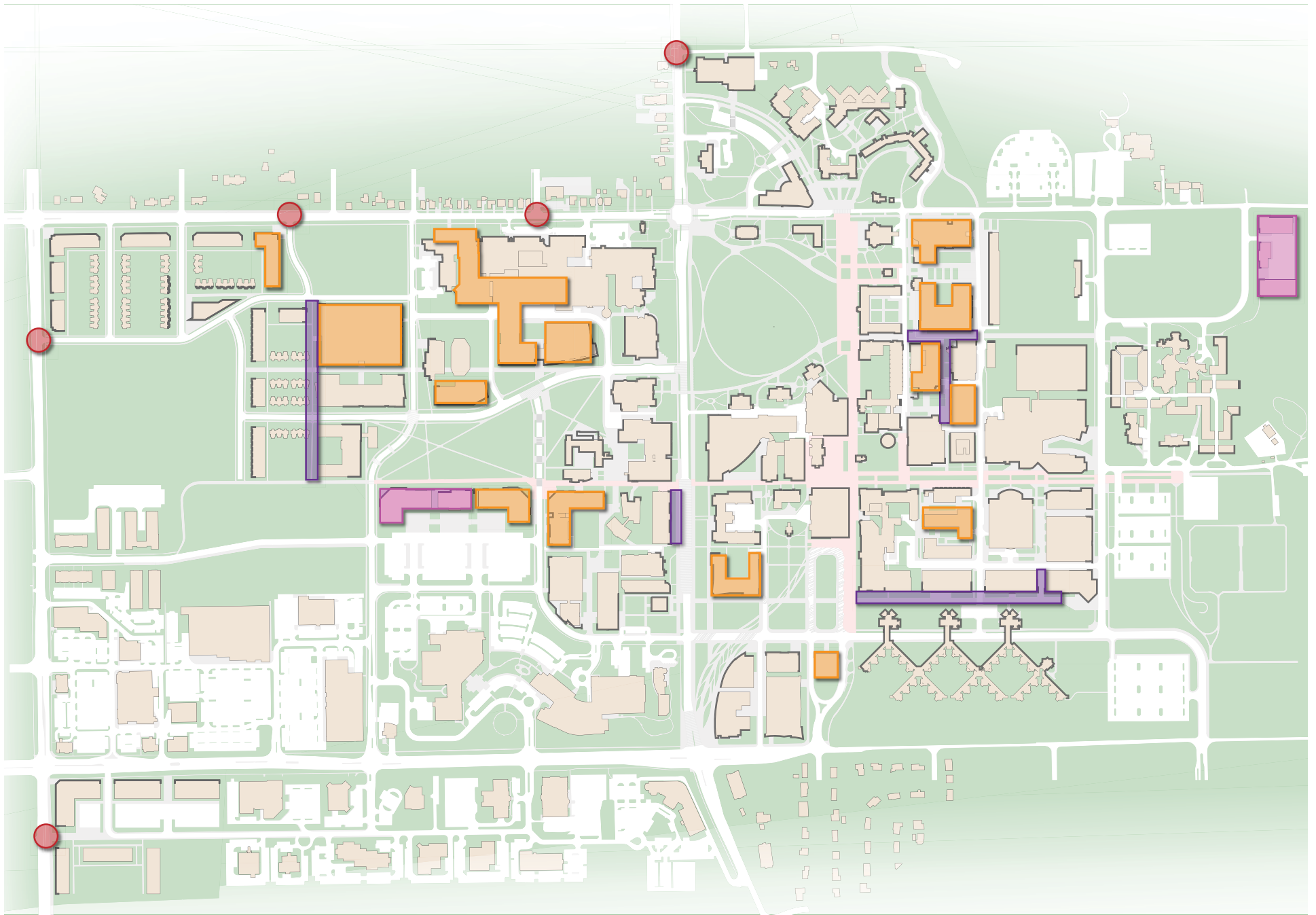


Figure 7: Infrastructure and utilities constraints



The university purchases domestic water from the City of Guelph, ensuring a consistent and reliable supply. Water pressure is boosted at the Central Utility Plant (CUP) on Powerhouse Lane and distributed throughout the campus. The University has an extensive water distribution system, and flow and pressure does not appear to be a constraint for further campus development.

The campus has an extensive sanitary sewer collection system that serves existing development. However, capacity in some areas is limited. The type of development proposed on any given site will dictate whether or not this is a significant constraint. Additional capacity in the system may also be realized through redevelopment and intensification. For example, an older building may have relatively high water consumption and resulting sewage discharge, but may be retrofitted with current code compliant fixtures or replaced with a low-use facility (e.g. a lab is replaced with a lecture hall).

Mostly developed at a time where stormwater management was not a high priority, the university's storm sewer system is below current standards and is typically capable of handling

a maximum 2-year design storm, rather than the recommended 5-year criteria. Not only does this pose a challenge to campus infrastructure and safety in major storm events, it can impact downstream infrastructure and waterbodies.

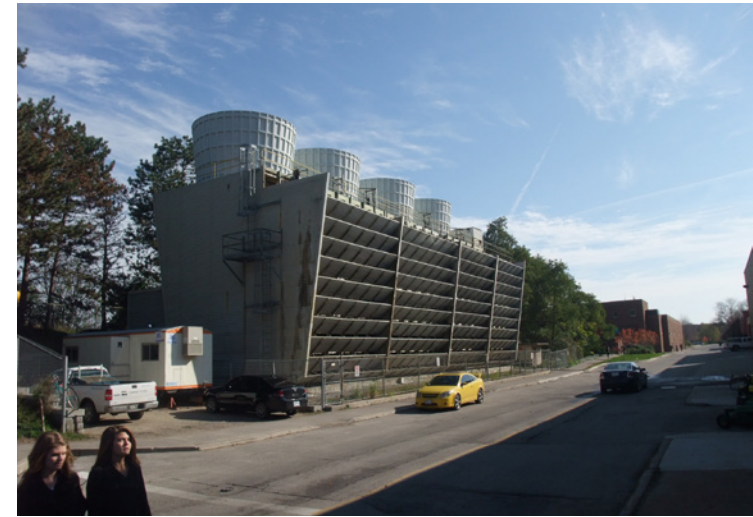
The electrical network has been designed and updated to meet the needs of the campus environment. It will continue to be managed and upgraded as needed. Detailed study should be undertaken to determine potential upgrades required to accommodate proposed renewal and redevelopment.

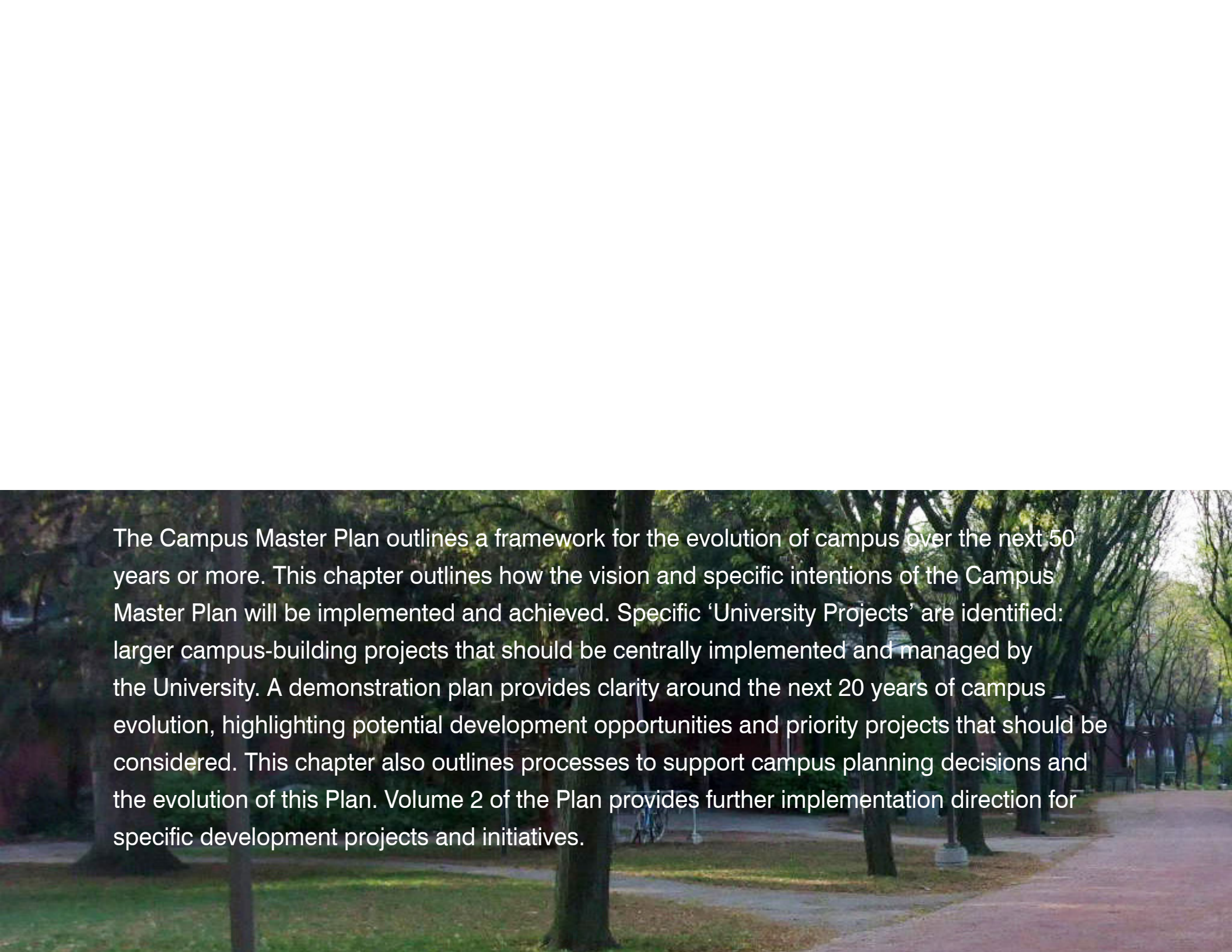
The steam and chilled water network, primarily found in the utility tunnels, is the primary means for heating and cooling campus buildings. District energy systems of this type are very efficient and should be used to support new development. Further study is required to determine network and system upgrades to support new development.



Recommendations:

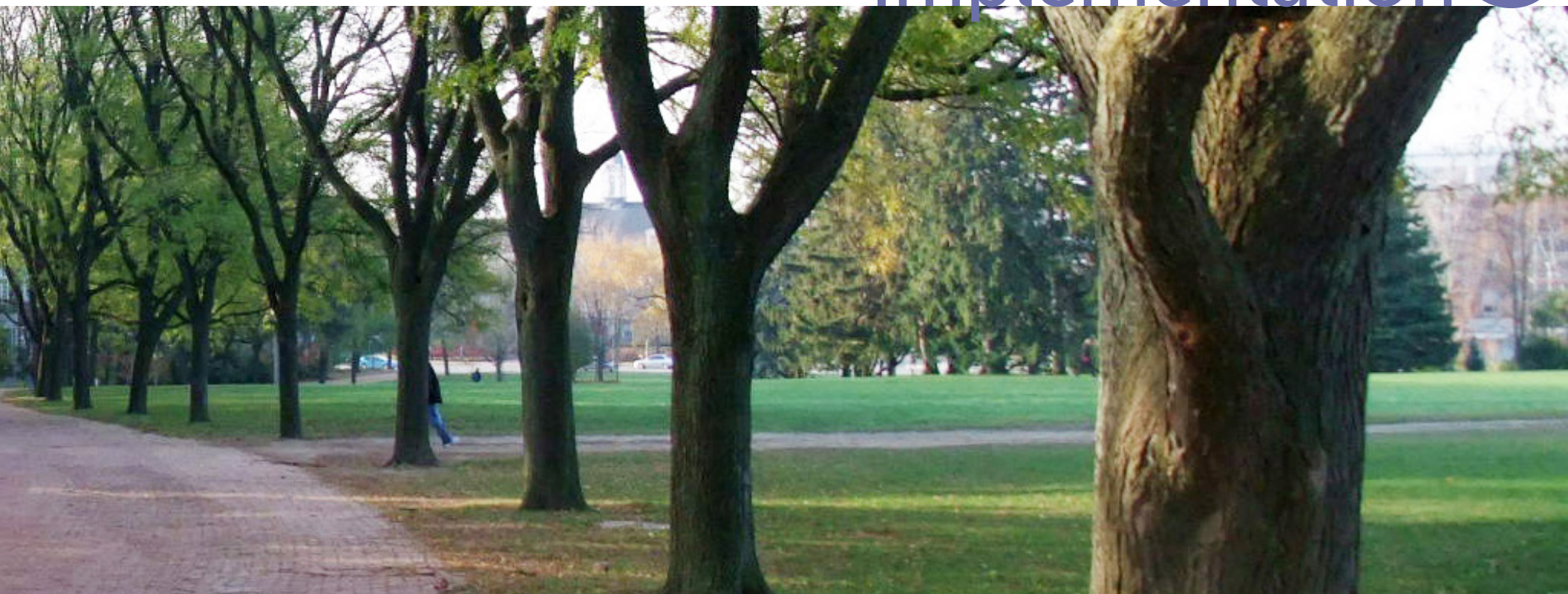
1. Renewal and development provide opportunities to increase water efficiency in buildings and reduce overall consumption.
2. Much of the university's water and sanitary systems are relatively old, and proactive management of the network is required to minimize disruptions from water main breaks and other factors.
3. Some of the identified development sites do not yet have access to a sanitary sewer. In most cases, the topography of the campus will allow extension of the gravity sewer system, but in extreme cases, a pumping station may be required.
4. New development and renewal projects, landscape initiatives and parking lot design will consider best practices in on-site storm water management techniques. Potential stormwater management measures for consideration include:
 - Surface or underground storage and detention to control release rates;
 - Roof top storage as a means of natural retention;
 - Re-use of stormwater for irrigation, toilet flushing or other greywater applications;
 - Quality control measures such as oil and grit removal;
 - Increased permeable paving and other design approaches or technologies to increase infiltration; and
 - Integration of stormwater management features into landscape and streetscape projects.
5. New development will be designed to minimize electrical consumption to meet stringent standards for energy consumption. The generator building in Trent Lane will be maintained on site, and future development in and around it should consider potential emissions and vibrations from the use. If required, the oil tanks that fuel the generator may be moved to another location.
6. The chilled water system should ensure capacity or potential to add capacity to support long-term campus renewal and development. Chiller expansion could occur in their current general location or integrated with new development in the area. The cooling towers require replacement in the near-term.



The background image is a photograph of a university campus. It shows a wide, reddish-brown brick path that curves from the bottom right towards the center. To the left of the path is a grassy area with several large, mature trees with green foliage. In the distance, a red brick building is partially visible through the trees. The overall scene is bright and sunny, suggesting a pleasant day on campus.

The Campus Master Plan outlines a framework for the evolution of campus over the next 50 years or more. This chapter outlines how the vision and specific intentions of the Campus Master Plan will be implemented and achieved. Specific ‘University Projects’ are identified: larger campus-building projects that should be centrally implemented and managed by the University. A demonstration plan provides clarity around the next 20 years of campus evolution, highlighting potential development opportunities and priority projects that should be considered. This chapter also outlines processes to support campus planning decisions and the evolution of this Plan. Volume 2 of the Plan provides further implementation direction for specific development projects and initiatives.

Implementation 5



5.1 University Projects

This Plan identifies a series of large-scale projects that play a direct role in improving the larger campus environment. Due to their scale and complexity, these recommended projects will be the responsibility of the university administration for implementation.

Many of the University Projects are landscape initiatives that require significant investment beyond the walls of new or existing buildings. They also represent improvements to the movement network, including pedestrian and vehicular circulation, transit and parking structure investments and improvements. Two significant investments in central university services and amenities are also identified.

University Projects are illustrated in Figure 8. Priority University Projects to be implemented within the 20-year planning horizon are identified in Section 5.2. The remaining recommended University Projects can be implemented over time as opportunities arise and in conjunction with adjacent development. Despite the larger university responsibility to implement these recommended projects, proponents of specific development and renewal projects will bear a responsibility to contribute common space and local landscape improvements in keeping with the Campus Master Plan framework.

Landscape:

- 1 Johnston Green Renewal
- 2 The Pastures
- 3 South Mall
- 4 Entry Plaza
- 5 Branion Plaza Renewal
- 6 Winegard Walk Extension and Renewal
- 7 Reynolds Walk Extension and Renewal
- 8 Alumni Walk Renewal
- 9 South Entry Walk
- 10 Gordon Street
- 11 College Avenue
- 12 Smith Lane
- 13 East Ring Road
- 14 Stadium Green








Movement:

- 1 Extension of Chancellors Way to McGilvray Street
- 2 Extension of South Ring Road north to McGilvray Street
- 3 Convert Macdonald Street to local access
- 4 Removal of through access on Reynolds Walk
- 5 Extension of Powerhouse Lane to South Ring Road
- 6 Bus loop and transit improvements
- 7 Parking structures
- 8 University Welcome Centre

University Services and Amenities

- 1 Dairy Barn Re-purposing
- 2 University Centre Re-purposing and Administration Re-location

Legend

-  Primary Pedestrian Connection
-  Pedestrian Mediation Area
-  Cycling Route
-  Gateway
-  Open Space Initiative
-  Local Courts and Greens
-  Streetscape Initiative

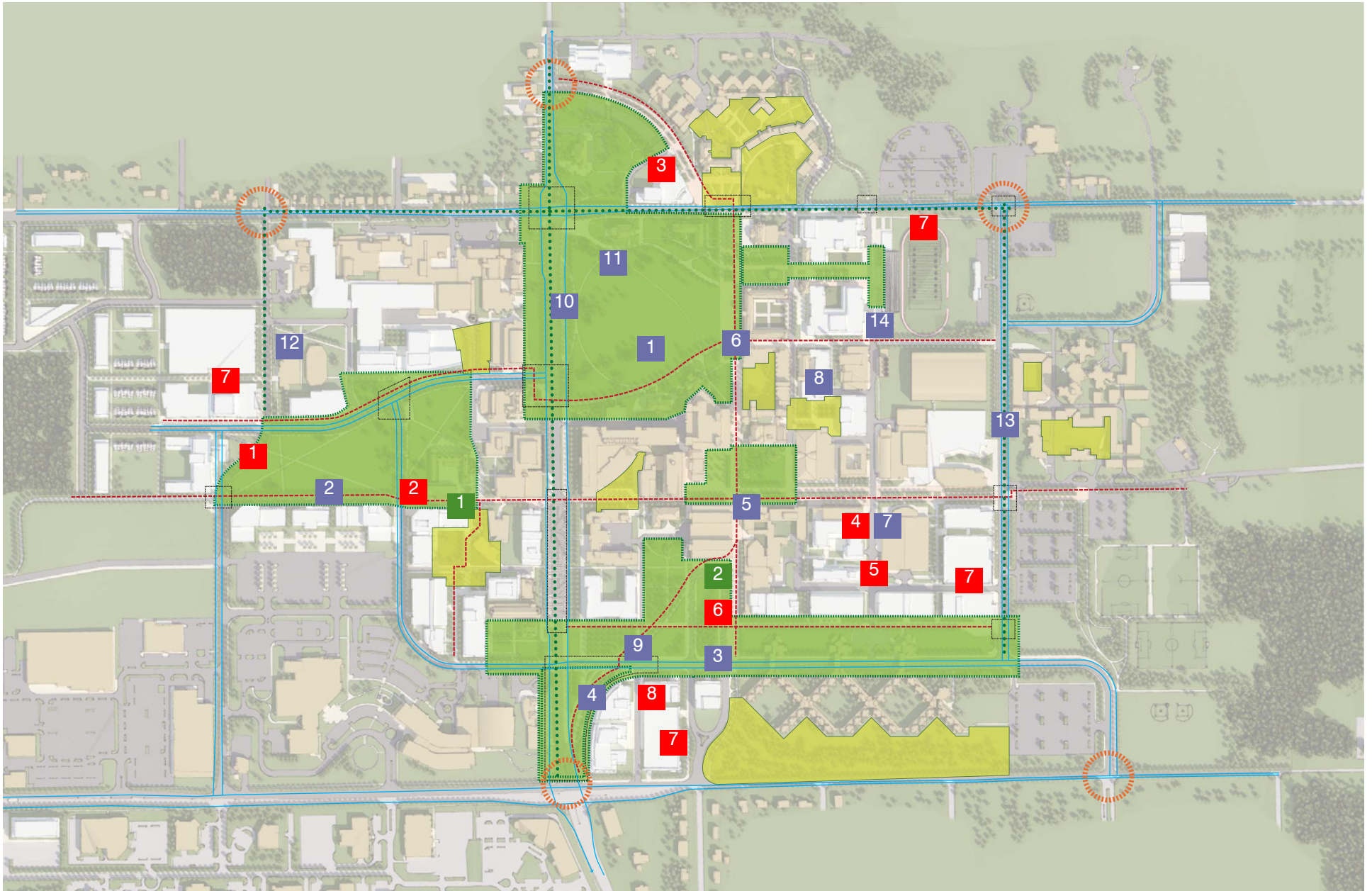


Figure 8: University Projects

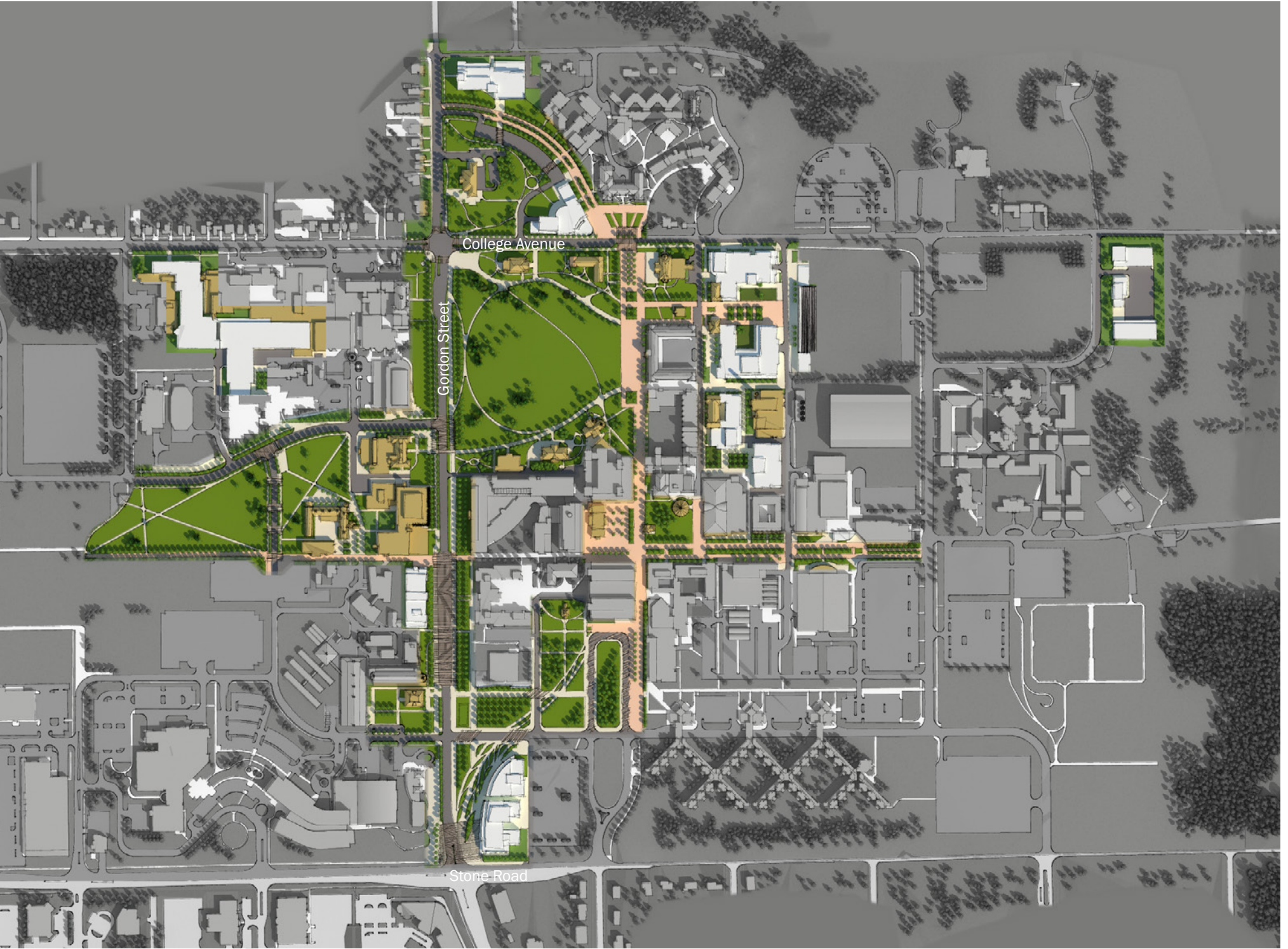
5.2 Twenty-Year Demonstration Plan

The Campus Master Plan identifies a long-term framework for growth that can slowly be achieved over many decades. This framework will be reinforced and achieved through countless decisions that impact campus-building, ranging small-scale planting improvements to site selection for large development projects. As the campus evolves and grows, elements of this Plan will slowly be implemented to meet the ongoing needs of the university.

The Campus Master Plan provides a framework for making ongoing development choices and decisions within the context of the long-term vision. The demonstration plan highlights a series of development opportunities that provide adequate capacity to support any required development over the next 20 years (Figure 9). Development sites shown in the 20-year demonstration plan have been selected to ensure the continued expansion of a compact campus, to implement university development priorities and to minimize impacts on surface parking lots. These sites are not fixed. Development opportunities may arise that are not illustrated in the demonstration plan but are consistent with the Campus Master Plan framework. The demonstration plan is not intended to restrict choices, but to simply establish a realistic 20-year vision within a long-term plan.



Figure 9: 20-Year demonstration plan



College Avenue

Gordon Street

Stone Road

The demonstration plan provides flexibility and choice for development decisions well into the future. Within this long-term framework, the following list of priority initiatives and University Projects have been called out for implementation within the next 20 years. Implementation of these priority initiatives and projects will ensure the evolving campus environment supports and protects for new development opportunities and reinforces the long-term vision for campus.

1 Campus Growth and Development

- Implement a coordinated program of facility renewal and space reassignment to maximize utilization and quality of existing facilities.
- Protect and fully build out development sites within the context of planned open space and movement networks.
- Ensure that private sector development on university lands is consistent with the campus vision and supports integration with the campus.

2 Open Spaces

- Enhance Johnston Green and extend its qualities across Gordon Street and College Avenue.
- Enhance Branion Plaza as a consolidated open space to support its intensive use at the heart of campus.
- Invest in the Entry Plaza and South Mall open spaces to create a welcoming front door to the campus.
- Protect the Pastures open space following the relocation of large animals off campus.
- Develop a comprehensive Campus Landscape Master Plan to guide future decision-making.
- Invest in the Stadium Green landscape with the redevelopment of the Trent Lane area.
- Enhance Gordon Street as a complete street and important open space, including implementing a new pedestrian crossing at Alumni Walk.
- Implement College Avenue Streetscape improvements.

3 Campus Community

- Reinforce Reynolds Walk as the campus ‘main street’ through the renovation and creation of student-oriented spaces.
- Reclaim the University Centre for student services and amenities, and reclaim and renew historic buildings for administrative uses.
- Protect the Dairy Barn for eventual conversion to the social and cultural hub west of Gordon Street.
- Continue to implement the Athletics Master Plan to ensure high quality fields and facilities for the university and surrounding community.

4 Connected Campus

- Extend and improve the primary pedestrian walks, including consistent hardscape treatment, plantings, street furniture and lighting. Specific initiatives include:
 - Reclaim Reynolds Walk east of Branion Plaza for pedestrian uses.
 - Extend Winegard Walk north across College Avenue while closing Macdonald Street.
 - Implement South Entry Walk from the corner of Gordon Street and Stone Road into the University Centre and Winegard Walk.
 - Enhance Alumni Walk, including a new signalized pedestrian crossing at Gordon Street.
- Invest in strategic improvements to the street network for enhanced connectivity, particularly west of Gordon Street.
- Accommodate growing transit needs, enhance transit facilities and ensure efficient and safe transit operations.

5.3 Design Guidelines and Precinct Plans

Volume 2, Design Guidelines and Precinct Plans, is an integral part of the Campus Master Plan that serves as an implementation manual for the Volume 1 plan. It provides design direction for new development and Campus Master Plan projects to ensure they are implemented within the larger campus planning framework. Volume 2 is intended to assist project managers, decision makers and other members of the university community to make decisions around development, project implementation and other initiatives.

The building design guidelines provide generalized built form direction to ensure all campus developments are built to an appropriate standard.

The precinct plans divide the campus into ten precincts in order to provide specific place-based development direction and establish specific development parameters for each development site. They consolidate the opportunities and requirements for campus evolution, providing a convenient and simplified framework in which to plan and evaluate campus projects within the comprehensive guidelines of the Master Plan.

The precinct development guidelines consist of two major components: a development framework map and a corresponding development matrix. The precinct plan framework map locates development and renewal parcels within the context of the Campus Master Plan. It identifies development sites, site planning considerations for each development site, major open space initiatives, and movement infrastructure and initiatives.

The development matrix complements the precinct plan framework drawing, providing a comprehensive table of development parameters and other considerations for each development and renewal site. Parameters include minimum and maximum lot coverages, building heights and gross floor areas. Permitted land uses are also indicated, with required land uses shown in bold. Enabling projects are those projects and initiatives that must be completed before development takes place, such as replacement or removal of current uses that occupy the site. Coordinated projects are larger projects and initiatives that should be considered and addressed in the design of the site. These may include landscape projects or

coordinated streetscape initiatives that should be reflected in the new development. Figure 10 and Table 1 illustrate the development framework map and a corresponding development matrix for Precinct 3.

The precinct plans should be referred and adhered to during all pre-construction phases of project planning, including site selection, programming, schematic and detailed design. Proposals that depart significantly from the precinct plans will be subject to a review process where they must demonstrate that they achieve the principles, objectives and general intent of the Campus Master Plan.

Where large parcels are to be developed in phases, a phasing and development plan should be created for the entire parcel in conjunction with detailed site planning for the proposed development. This will ensure coordination of pedestrian and vehicular circulation and address impacts to the larger open space and movement networks.

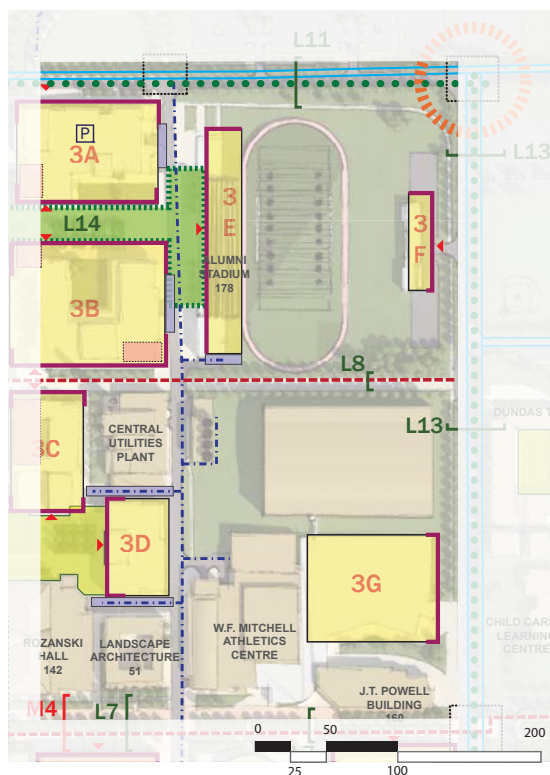


Figure 10: The Precinct 3 framework map illustrates the renewal and development sites within the context of University Projects and other Campus Master Plan considerations (from Volume 2)

Parcel	Project Type	Retained Building Capacity	Parcel Footprint (m²)	Min/Max Coverage		Min/Max Height (Floors)		Min/Max Gross Floor Area (m²)		Permitted Uses (required in bold)	Enabling Projects	Coordinated Projects
Precinct 3: Trent Lane												
3A	New Development/ Facility Renewal MAIDS HALL	1,298	5,696	70%	90%	3	6*	11,962	30,758	<ul style="list-style-type: none">academicadministrativeresidentialbelow-grade parking	<ul style="list-style-type: none">Demolish 1, 10 Trent Lane and potentially the Hersey Building, and relocate displaced usesProtect or integrate Maids Hall into new developmentAccommodate or relocate existing utilities	<ul style="list-style-type: none">Stadium Green landscape initiativeCollege Avenue streetscape initiative
3B	New Development/ Facility Renewal TRENT BUILDING	971	8,072	70%	90%	3	6*	16,951	43,589	<ul style="list-style-type: none">academicadministrativeresidentialbelow-grade parking	<ul style="list-style-type: none">Demolish Physical Resources Building, Paint Shop and potentially Hersey Building; relocate displaced usesRelocate oil tanks and accommodate generators in developmentProtect or incorporate Trent Building into new developmentProtect adjacent infrastructure tunnel/ service ductAccommodate or relocate existing utilities	<ul style="list-style-type: none">Stadium Green landscape initiativeAlumni Walk renewal
3C	New Development/ Facility Renewal BLACKWOOD HALL	4,220	3,998	75%	100%	3	6	8,996	23,988	<ul style="list-style-type: none">academicadministrativeresidential	<ul style="list-style-type: none">Demolish Fire Hall and south addition to Blackwood Hall; relocate displaced usesIntegrate Blackwood Hall into new developmentProtect adjacent infrastructure tunnel/ service ductAccommodate or relocate existing utilities	<ul style="list-style-type: none">Alumni Walk renewalLocal green/court initiative
3D	New Development		2,819	75%	100%	3	6	6,343	16,914	<ul style="list-style-type: none">academicadministrativeresidential	<ul style="list-style-type: none">Demolish Vehicle Services Building; relocate displaced usesProtect adjacent infrastructure tunnel/ service ductAccommodate or relocate existing utilities	<ul style="list-style-type: none">Local green/court initiative
3E	Planned Capital Project ALUMNI STADIUM		3,649							<ul style="list-style-type: none">stadium and related uses		<ul style="list-style-type: none">Stadium Green landscape initiative
3F	Planned Capital Project		1,068							<ul style="list-style-type: none">stadium and related uses	<ul style="list-style-type: none">Relocate/compensate for displaced parking	<ul style="list-style-type: none">East Ring Road streetscape initiative
3G	Planned Capital Project		6,454							<ul style="list-style-type: none">athletics/ recreation	<ul style="list-style-type: none">Relocate/compensate for displaced parking	<ul style="list-style-type: none">East Ring Road streetscape initiativeImplement coordinated pedestrian access and servicing strategy for Mitchell Centre, Powell Building and Field House
Total		6,489	31,756					44,251	115,249			

* indicates a maximum building height for academic uses, measured from Powerhouse Lane. Residential uses may exceed maximum building heights.

Table 1: The Precinct 3 development matrix illustrates the development parameters and projects to be considered in renewal or development projects (from Volume 2)

5.4 Campus Planning Processes, Monitoring and Updates

The Campus Master Plan plays an important role in defining the future of the institution. This role is shared by the Integrated Plan and the Capital Plan, which together provide a road map for all university decisions. The success of the Campus Master Plan will be determined by its ability to both shape and respond to evolving university priorities. Broadening the application of the Campus Master Plan and maintaining awareness of its role will ensure that the Plan remains an essential tool for shaping the future of the campus.

Planning Processes and Review

The Campus Master Plan will be firmly embedded in all planning and development processes. To ensure the Plan is referred to at the outset of projects and processes, a transparent and straightforward planning approval process will be established to communicate the expectations of a project and the applicability of the Plan. Projects will be expected to confirm alignment with the Campus Master Plan at various stages of project development, including program development, site selection, concept design, approval and design development. Opportunities to engage the university community through consultation will also be identified as part of this process. A scoped review process should be developed to ensure development on Heritage Trust Lands are consistent with the intentions of the Plan.

Projects will be reviewed by the university to determine appropriate fit with the Campus Master Plan framework. Projects will be reviewed against the various objectives and recommendations contained in the Volume 1 plan, but will be specifically reviewed according to the building design guidelines and the Precinct Plan guidelines and development parameters outlined in Volume 2.

Campus Master Plan Amendments and Updates

This Plan is the official policy of the university, but it is not intended to remain frozen in time. Amendments and updates to this Plan may be considered and explicitly made where such changes would be beneficial to the university and campus and are consistent with the established planning principles. Major amendments to this Plan require the approval of the Physical Resources and Properties Committee of the Board of Governors. Minor amendments should be approved by the Office of the Vice-president (Finance and Administration). Volume 2 is intended to be a living document that can be updated and revised as necessary within the framework established in Volume 1.

The university will monitor the success of the Plan to ensure its relevance and responsiveness to evolving university priorities. A review of campus development projects and other initiatives will be conducted and presented annually to the Physical Resources and Properties Committee. At this time, Volume 2 should be reviewed and updated, if necessary. The university will also continue its pattern of comprehensively reviewing and updating the Plan on a minimum 10-year schedule.

Municipal Integration

The University of Guelph is committed to being a good partner to the City of Guelph and a good neighbour to its surrounding communities. Strengthened relationships with the City will be achieved through improvements that successfully knit the campus into the surrounding urban fabric. These decisions will include such measures as integrated bicycle and path networks, improved streetscapes in streets that surround campus, enhanced transit connectivity, new development at the edges of campus and other means.

To ensure these improvements are aligned with the Campus Master Plan framework while supporting the City's objectives, the University is committed to continued dialogue with City staff and its neighbours. This may include regularly scheduled coordination meetings with City staff and/or targeted implementation studies as required. The university will also ensure appropriate communication with surrounding residence associations to promote awareness of, and receive input on, applicable campus developments.

The campus benefits from a diversity of historic buildings and places that reflect its long and storied past. The university will work with the City of Guelph to confirm important heritage resources, including both buildings and landscapes, that should be protected in the long-term. The university will ensure that the role of these places and resources can evolve over time to support the academic mission.

The Arboretum is one of Guelph's most valued natural heritage resources, enjoyed by members of the university and city community alike. The campus features many other natural heritage resources that, while not as large or accessible as the Arboretum, play an important role in the larger natural heritage network. The university should work with the City of Guelph to understand the value of specific resources and to develop appropriate management and development guidelines to ensure the long-term sustainability of these resources.

Downtown Guelph offers opportunities to support university activities within an urban setting. Specific opportunities have not been identified, and the university will continue to accommodate its core academic activities on campus. However, the university should continue to engage in dialogue with the City of Guelph to identify potential opportunities to strengthen the university's presence in Downtown Guelph.