



WESTERN UNIVERSITY

Campus Master Plan 2015

Western
UNIVERSITY • CANADA

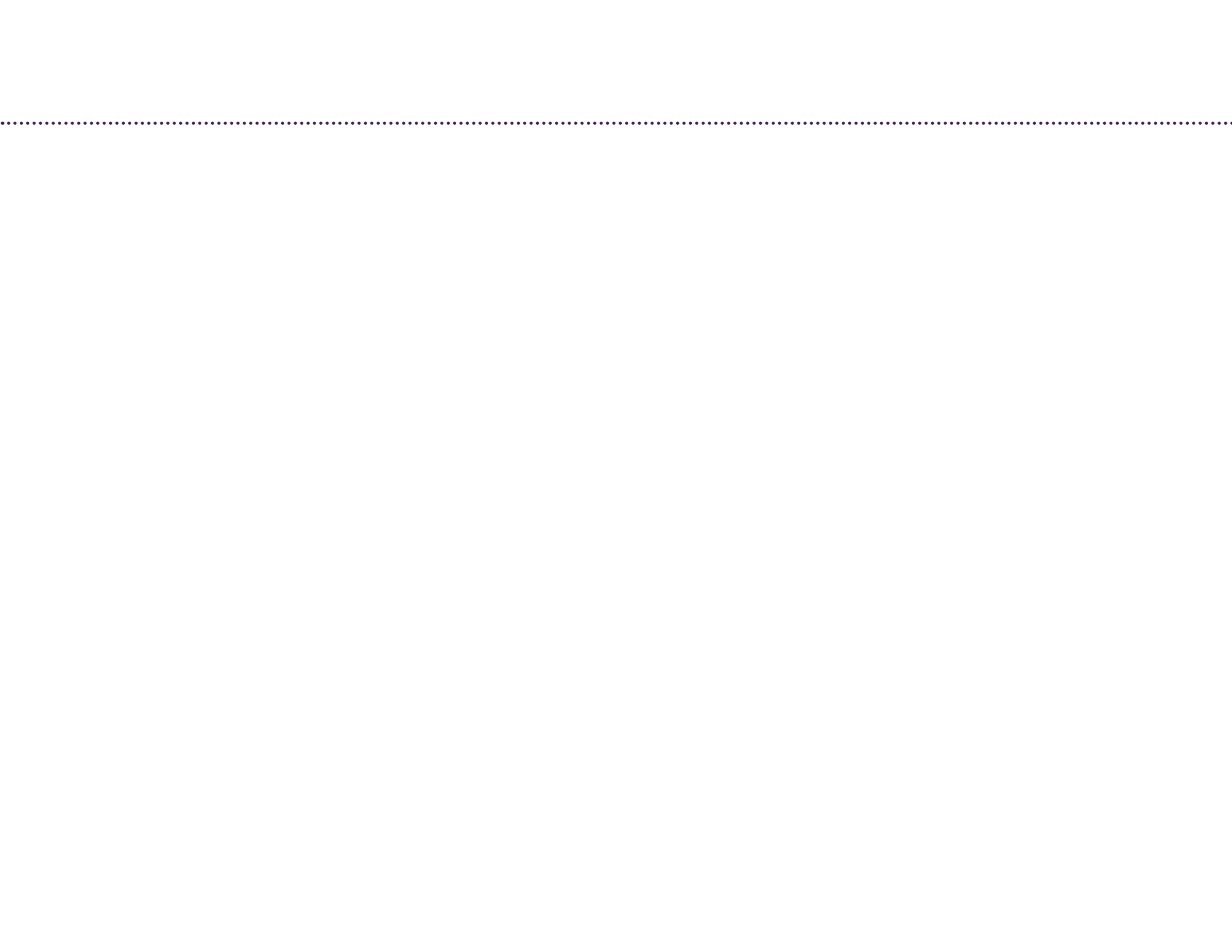
June 2015

Approved by Senate: May 2015
Approved by Board of Governors: June 2015



CONTENTS

	Introduction	01
1	The Evolution of Western University	07
	Campus History and Heritage	09
	Western University: Core Campus and Beyond	17
2	The Character of the Campus	23
	The Image of the Campus	25
	Sports, Recreation and Leisure	31
	Campus Culture	33
	Current Conditions	35
	Movement	36
	Parking	39
	Infrastructure	41
3	A Vision for the Future Campus	43
	Campus Planning Principles	45
4	Campus Development Areas	51
	Campus Development	53
	Primary Development Sites	55
	Secondary Development Areas	77
	Main Campus Development Potential	79
5	Open Space and Landscape Improvements	81
	Priority Areas for Improvement	83
6	Movement and Parking Strategies	113
	Future Transportation Strategies	115
7	Discovery Park & Advanced Manufacturing Park	119
	Discovery Park	121
	Advanced Manufacturing Park	123
8	Implementation and Management	125
	Implementation Strategies	127
	Appendix A	133
	Campus Master Plan Update Committee	135
	Appendix B	137
	Consultation	139



LIST OF FIGURES

Number	Title	Page	Number	Title	Page
Figure 1.1	Enrolments at Western – 1990 to 2014	14	Figure 26	Conceptual Massing: Westminster Site	67
Figure 1.2	Growth in Space at Western – 1990 to 2014	14	Figure 27	Conceptual Massing: Option 1 Alumni Hall / South Valley Site	69
Figure 2.1	Percentage Change in Enrolments and Space - 2014 over 1990	14	Figure 28	Conceptual Massing: Option 2 Alumni Hall / South Valley Site	70
Figure 2.2	Space over Student – 1990 to 2014	14	Figure 29	Conceptual Massing: Western Road Development Site 1	72
Figure 3	Western University Main Campus Zones	16	Figure 30	Conceptual Massing: Western Road Development Site 2	74
Figure 4	Western University within the City of London context	18	Figure 31	Primary and Secondary Development Sites	76
Figure 5	Western University Neighbouring Affiliated University Colleges	20	Figure 32	Main Campus Existing Development	78
Figure 6	Thames River Corridor and Floodplains	21	Figure 33	Main Campus Potential Development	78
Figure 7	Western University Main Campus Areas	24	Figure 34	Landscape and Open Space Improvement Areas	82
Figure 8	Signature Features and Prominent Views	26	Figure 35	Existing Conditions for Western Road	86
Figure 9	Main Campus Distinctive Architectural Character Areas	27	Figure 36	Future Changes for Western Road	86
Figure 10	Campus Character Landscape Areas	28	Figure 37	Illustrative Site Plan for Alumni Circle	92
Figure 11	Pedestrian Areas	29	Figure 38	Illustrative Site Plan for Oxford Drive	96
Figure 12	Sports, Recreation, and Leisure	30	Figure 39	Illustrative Site Plan for Social Sciences Plaza	100
Figure 13	Cultural Activities	32	Figure 40	Illustrative Site Plan for Kent Drive	104
Figure 14	Areas of Recently Completed and Current Development	35	Figure 41	Illustrative Site Plan for University Hill	108
Figure 15	Existing Gateways and Vehicular Circulation	36	Figure 42	Proposed Movement and Open Space Network	111
Figure 16	Existing Transit Network	37	Figure 43	Existing Surface Parking Lot Locations	114
Figure 17	Existing Cycling Network	38	Figure 44	Proposed Surface, Underground and Structured Parking Locations	116
Figure 18	Existing Parking Lot Utilization - March 2014	39			
Figure 19	Infrastructure Facilities	41			
Figure 20	Primary Development Sites	54			
Figure 21	Conceptual Massing: Springett/FRAM Site	57			
Figure 22	Conceptual Massing: Weldon Library Site	59			
Figure 23	Conceptual Massing: Elgin Entrance Site	61			
Figure 24	Conceptual Massing: Social Science Site	63			
Figure 25	Conceptual Massing: Perth Drive Sites	65			





INTRODUCTION

LAND AREA: 480 Hectares (Ha)

BUILDINGS: 91

2013-2014 FULL-TIME CONSTITUENT ENROLLMENT:

Undergraduate + Graduate = 23,383 + 5,003 = 28,386

FULL-TIME FACULTY: 1,410

FULL-TIME STAFF: 2,458

2013/14 Constituent University Data



Campus Master Plan (2007)

Introduction

This document constitutes a Campus Master Plan for Western University. An extensive process of analysis and consultation has been undertaken in refreshing the principles established in previous campus planning exercises, notably the one that was undertaken in 2007. Preparation of this document has taken approximately a year and a half, guided by the Campus Master Plan Committee. It is intended to guide and inform the ongoing growth and change of the complex, historic, beautiful and dynamic home of a great University.

A great deal of growth and change has occurred since 2007. In addition to substantial renovation of the Stevenson Hall and Lawson Hall buildings and the Physics and Astronomy Building, the campus has seen the addition of the Ivey Business School, the Western Student Services Building, the Support Services Building, the Western Student Recreation Centre, the Western Centre for Public Health and Family Medicine and the Ontario Hall Student Residence. Both the Discovery Park and the Advanced Manufacturing Park (which includes the iconic new WinDEEE facility, the Fraunhofer Project Centre, and The Collider), have also grown significantly over the past decade.

This Master Plan has also incorporated a number of area specific planning exercises that have been undertaken since the 2007 Campus Master Plan, specifically for Westminster site, South Valley site, the FRAM/ Springett lands, and for the Discovery Park and the Advanced Manufacturing Park.

Preparation of the campus plan has been guided by a key assumption – that the University will continue to grow and that additional floor space will be needed to accommodate that growth. To a significant extent that growth is now being fueled not only by demands related to enrollment growth, but by the increased space demands of research, scholarship and related activities as well.

What is less easy to predict is the rate of growth, which has been uneven over past decades. The principal intent of the plan has been therefore to indicate where new growth can be accommodated whenever it may occur. The distribution of that growth across the University's land holdings must also reflect the functional imperatives of the campus, with core sites being reserved for academic activities. This Campus Master Plan builds on previous planning principles and reaffirms the value Western places on the landscape, the architectural quality of its buildings, and the ways in which it seeks to ensure an environment that facilitates and enhances academic work. The Plan sets out how new growth can be best located and designed to celebrate these values.

This Master Plan focuses on the challenges facing the Western Campus for the coming decades, with appropriate re-visiting every 5 years. Principal among those challenges is the ability to accommodate continuing growth while respecting the essential qualities of the campus and ensuring efficient, modern space and safe access around the campus. The update proposes six key initiatives in response:

1. Intensification of the Core Campus

The heart of Western, along Oxford Drive, is the optimal location for student-centred activity and still has space for significant intensification with new and renovated facilities. A number of potential new building locations have been identified and design guidelines proposed.

2. Improvement to the Pedestrian Environment of Western Road

The University is clearly expanding across Western Road where many large future development sites are located. As Western Road changes from a boundary street to a road internal to the wider campus, the quality of its pedestrian environment must be improved.

3. Promote Parking Management Alternatives

Much of the intensification of the core campus, expansion across Western Road and open space

improvement will be undertaken on land now used for surface parking. Western has completed a comprehensive parking analysis, in parallel with the Campus Master Plan, to manage overall parking demand, increase utilization, prioritize parking spaces, and provide multi-level parking, along with appropriate pricing strategies. Key conclusions from this parking analysis has been included in this Campus Master Plan.

4. Improve Campus Connectivity

Greater emphasis will need to be placed on improving pedestrian and bicycle connectivity both within the campus and to the surrounding city, and on accommodating the potential of any new Rapid Transit (RT) routing proposed by the City. This will promote alternative transportation and effectively manage transportation demand.

5. Creation of High Quality Public Spaces

Western is a beautiful and well-situated campus. Many of its principal public spaces are however

in need of greater care and lack a clear design idea that could contribute to a sense of place consistent with its history and future.

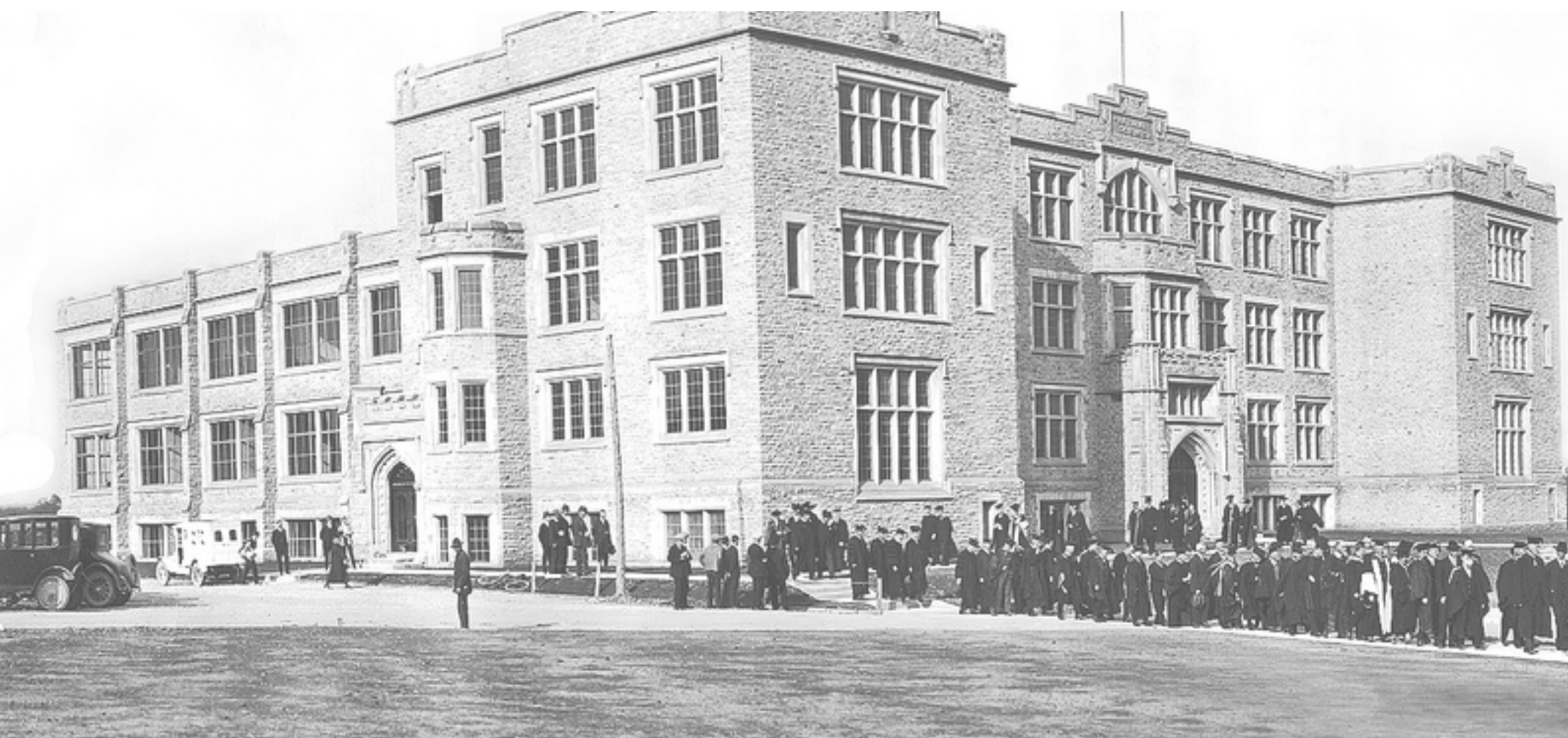
6. Identification of Campus Gateways

The sense of place and arrival at Western can be augmented by the use of new development sites, open space and pedestrian improvements to emphasize the principal gateways and entrances to the core campus and the expanding campus to the west of Western Road.

Leading this vision is Western's Strategic Plan, "*Achieving Excellence on the World Stage*". It acknowledges the enormous pride Western takes in its physical setting in London and the significant role it plays in recruiting and retaining students, faculty and staff from across Canada and abroad. It is also recognized that we welcome many alumni and visitors to campus everyday.

The Strategic Plan notes, "Western now welcomes approximately 5,000 first-year undergraduate students each year to our extraordinarily beautiful residential campus. As social demand for access to University education has grown, Western's enrolment has expanded to meet the need for global-ready citizens educated to compete in today's knowledge-based economy". Western will need to continue to develop its unique physical infrastructure to attract the brightest students from across Canada and around the world.

A number of these developments will require collaboration with the City of London, London Transit Commission, and other key stakeholders.





THE EVOLUTION OF WESTERN UNIVERSITY



Aerial View - 1927



University College - 1930s



Rendering of the Campus in 50 years - 1930s



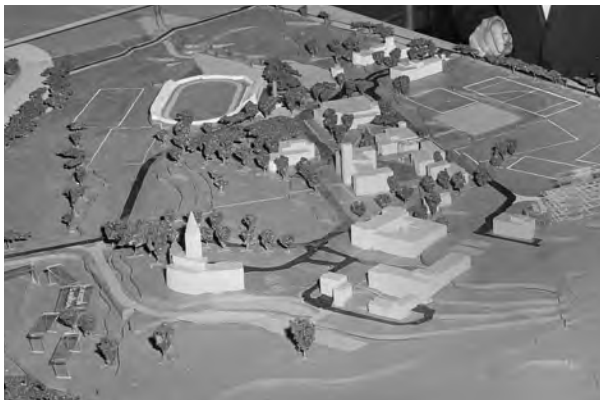
Campus View - 1947



Future site of Richard Ivey School of Business - 1950s



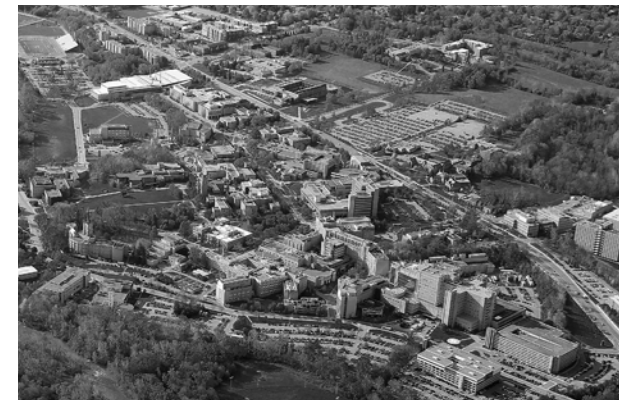
Aerial View - 1960s



Ten year expansion plan - 1960s



Aerial View - 2002



Aerial View - 2013

1.1 Campus History and Heritage

The first buildings on the Western campus appeared in the 1920s and since the end of World War II, the University has experienced about a thirty-fold increase in student enrollment and campus space. The accompanying campus plans and aerial photographs provide an overview of the pattern of that growth, starting on University Hill, organizing around Oxford Drive and most recently expanding across Western Road. In the modern era, the campus has consistently added an average of 130,000 square meters per decade.



University College Hill - 1950s



1920S



1930S



1940S

Development in the 1920s

14,000 m² NEW
14,000 m² TOTAL

Development in the 1930s

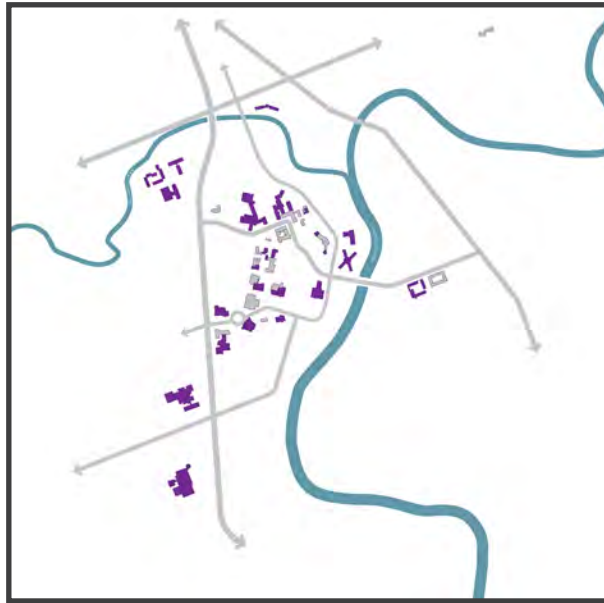
5,600 m² NEW
19,600 m² TOTAL

Development in the 1940s

7,500 m² NEW
27,100 m² TOTAL



1950S



1960S



1970S

Development in the 1950s

45,500 m² NEW
72,600 m² TOTAL

Development in the 1960s

250,000 m² NEW
322,600 m² TOTAL

Development in the 1970s

126,000 m² NEW
448,600 m² TOTAL



1980S



1990S



2000S

Development in the 1980s

40,000 m² NEW
488,600 m² TOTAL

Development in the 1990s

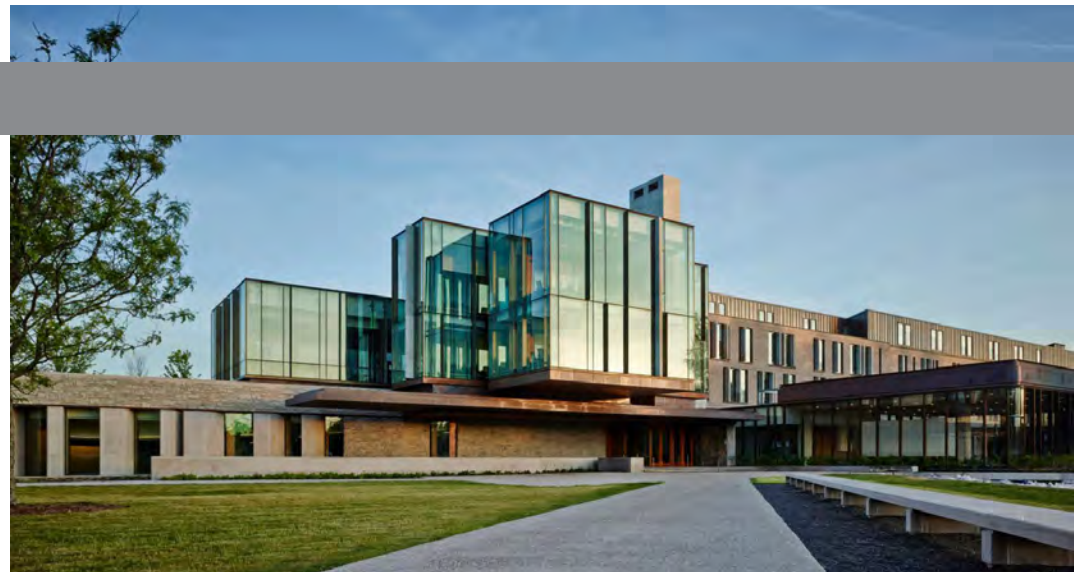
96,000 m² NEW
584,600 m² TOTAL

Development in the 2000s

144,000 m² NEW
728,600 m² TOTAL



Ontario Hall Student Residence - 2013



Ivey Business School - 2013

2010 to 2014

Development from 2010 to 2014

82,200 m² NEW
~810,800 m² TOTAL

Figure 1.1: Enrolments at Western - 1990 to 2014

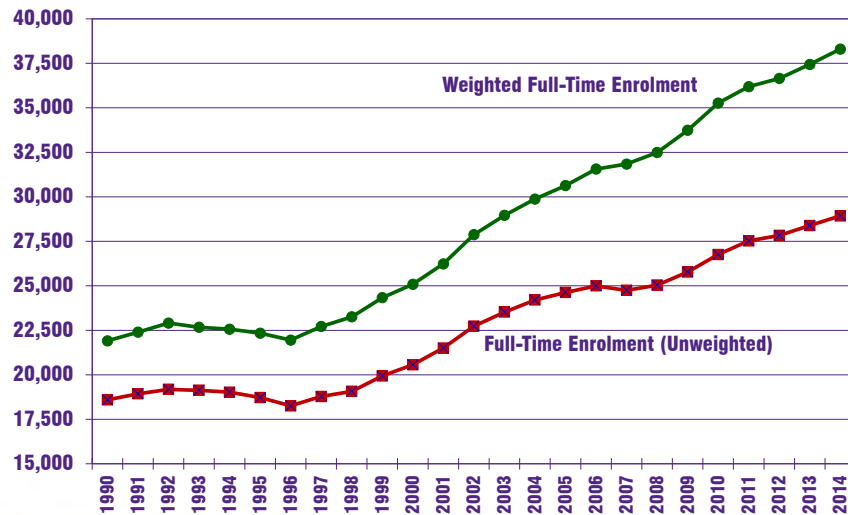


Figure 1.2: Growth in Space at Western - 1990 to 2014

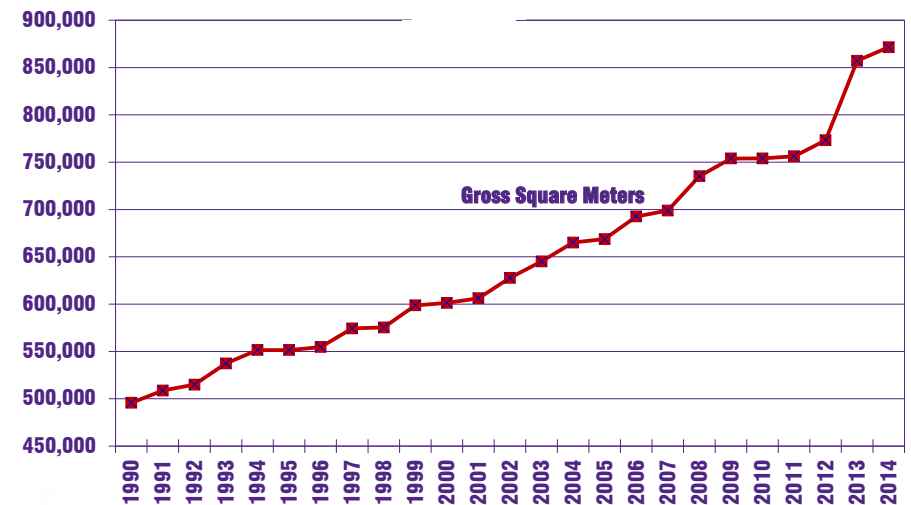


Figure 2.1: Percentage Change in Enrolments and Space 2014 over 1990

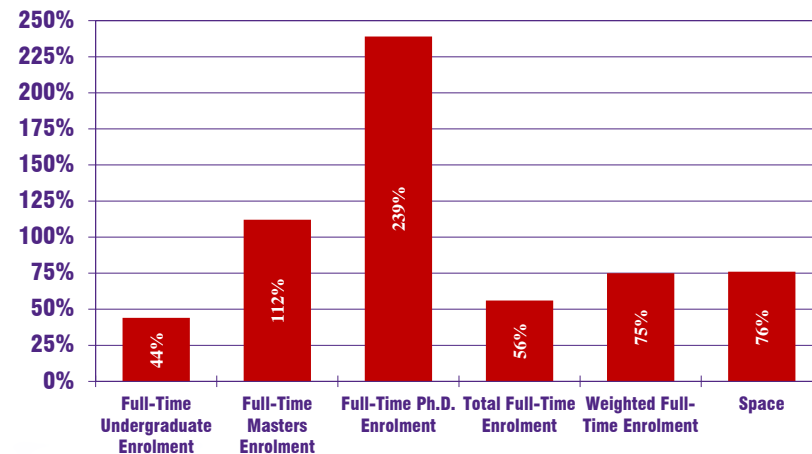
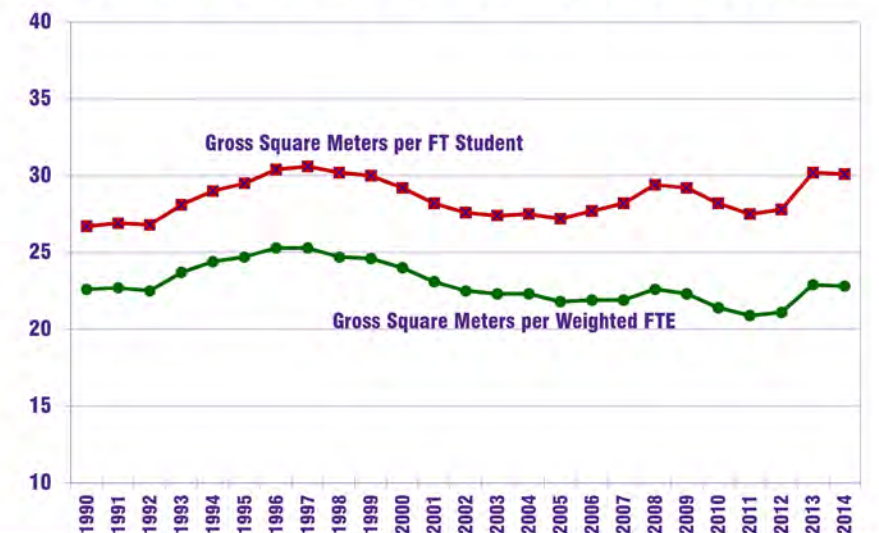


Figure 2.2: Space over Student - 1990 to 2014






Planning for the Future

Enrolments and physical space at Western have grown substantially since 1990. Figure 1.1 shows the growth in enrolments – both unweighted and weighted in that time period. Figure 1.2 shows the growth in space in the same time period. Weighted enrolments are calculated using weights of 1 for undergraduate, 2 for masters, and 4 for doctoral students – and (as noted in the 2007 Campus Master Plan) are much better indicators of required space than simple enrolments.

Figure 2.1 shows the percentage change in enrolments and space between 1990 and 2014 – and indicates that the growth in space is in alignment with the growth in weighted enrolment. The changes in space and enrolments are summarized in Figure 2.2 by showing space per student (simple and weighted) over that last 15 years – and the ratios have remained constant in this time period.

Looking forward, Western's space needs in the coming decades will be dictated not only by enrolment growth, but also by the University's priority of enhancing its research profile. Western's strategic plan – Achieving Excellence on the World Stage – clearly articulates the University's aspirations in the areas of research, internationalization, and graduate education. The Strategic Plan does not however, commit to specific enrolment levels. Therefore, in terms of future space needs assessment – from a Campus Master Planning perspective – it is reasonable to assume the general trends of the recent past (i.e. growth in the range of 100,000 to 120,000 square meters per decade).

With the above background, this Campus Master Plan does not set any specific targets/projections in terms of enrolments or space – but it identifies where the physical space growth can take place, the capacity of the identified development areas, and the design principles that should guide future building.

-  Core Instructional
-  Outer Core University Areas
-  Residence
-  Athletics
-  Undeveloped University Property
-  University Flood Plain Area / Undevelopable
-  Discovery Park
-  Affiliated University
-  Hospital
-  Private Non-University

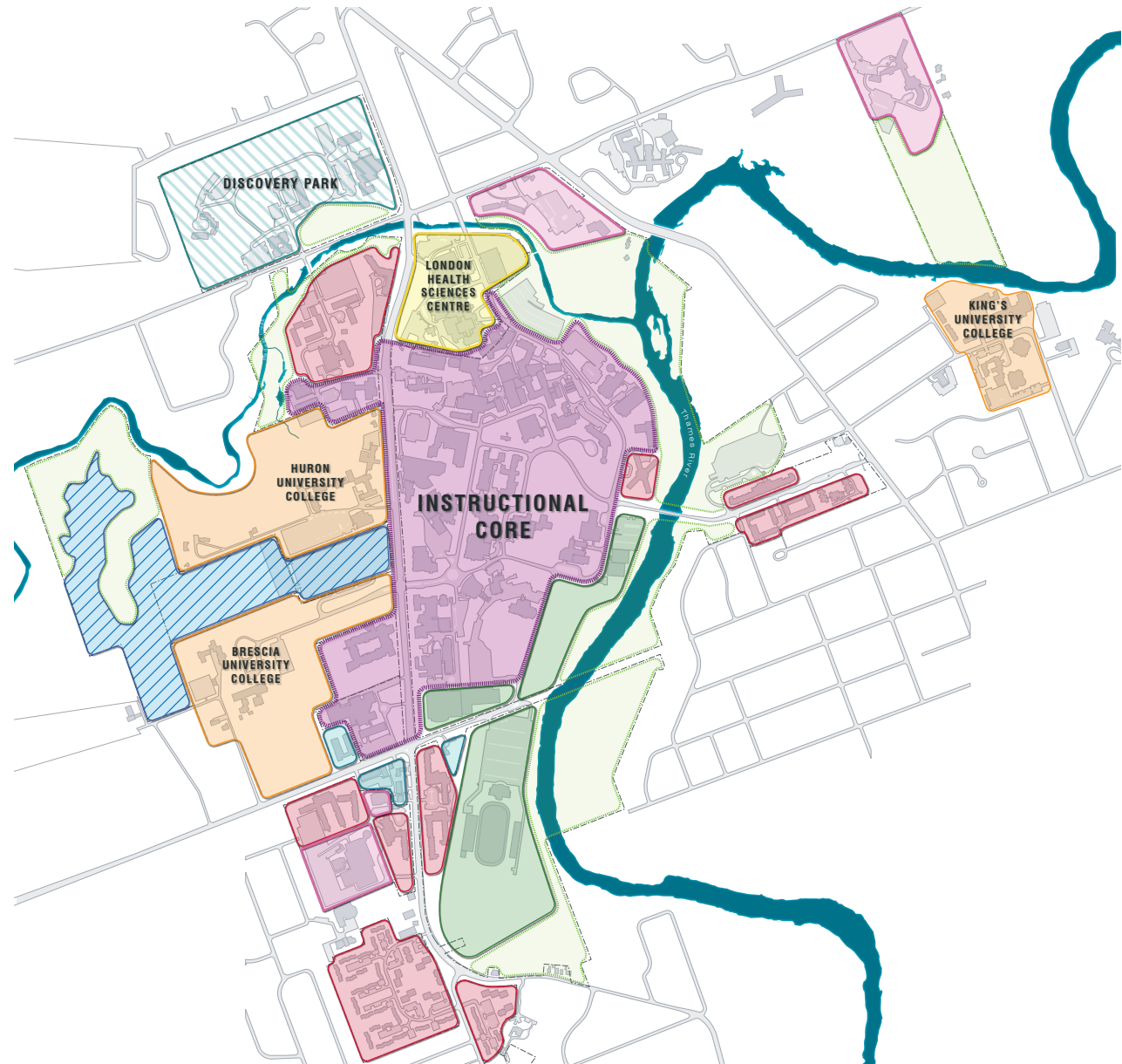


Figure 3: Western University Main Campus Zones

1.2 Western University: Core Campus and Beyond

The main campus of Western University is located approximately 4.3 kilometers north of the downtown of the City of London, and consists of a total of some 169 hectares. Western also holds a number of properties at some distance from the campus, such as the Advanced Manufacturing Park, whose role in overall campus master planning has been taken into account. Western has three Affiliated University Colleges located close to the main campus. Their plans will be relevant to the core campus master planning exercise.

Main Campus

The main campus of the University, excluding the remote sites, consists of a number of 'zones' that define the important use areas for particular University functions. At the centre is the 'instructional core', the location for teaching, education and student-centred activities (see Figure 3). This is an area of high pedestrian intensity, tied together by the 'ten minute' rule of being able to move from one class to another within that time period (Figure 11).

The instructional core is surrounded by student residence areas, the Affiliated University Colleges, Discovery Park, London Health Sciences Centre, and by the very significant flood plain areas, much of which is put to athletic use.

For the life of the University, the core campus has been defined by University Hill and Oxford Drive and the buildings arrayed around them. The core has now grown to include the buildings and future development sites on the immediate west side of Western Road. The Campus Master Plan has focused on lands within or immediately adjacent to this core campus, since it is these areas that are required to accommodate most of the projected growth. Future development in these areas will require collaboration with key stakeholders.

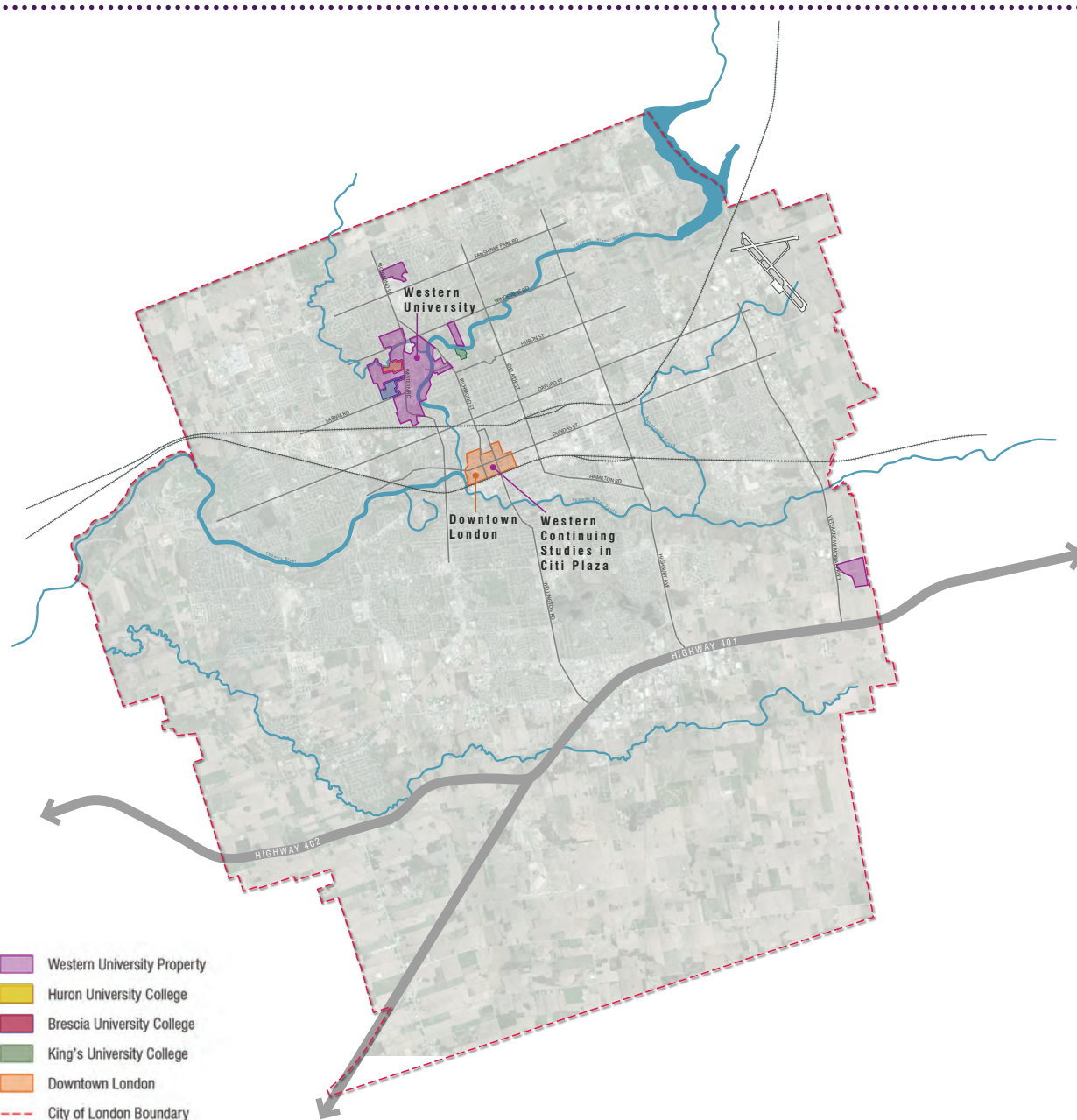


Figure 4: Western University within the City of London context

- Discovery Park - 20 Ha
- Ivey Spencer Leadership Centre Site - 13 Ha
- Elginfield Land - 120 Ha
- Delaware Radio Observatory - 51 Ha
- Environmental Science Western Field Station - 33 Ha
- Advanced Manufacturing Park - 15 Ha
- Gibbons Lodge - 18 Ha
- Middlesex Land - 21 Ha



Western Discovery Park



Ivey Spencer Leadership Centre



WinEERE



ICFAR at Environment Science Western Field Station
(Institute for Chemical Fuels from Alternative Resources)

Areas Beyond Main Campus

Two of the more remote properties do have relevance in terms of main campus planning: Discovery Park, immediately north of the core campus, should be considered in terms of its ability to accommodate appropriate elements of academic and research growth; the Advanced Manufacturing Park similarly has the ability to receive major research related facilities including those that might be relocated out of the core campus. Refer to Section 7 for more information.

Western Continuing Studies is located in Citi Plaza which is in the heart of downtown London. It is a mixed use complex that offers a unique collection of services including London Public Library and other educational institutions. It is accessible by vehicle, London Transit, and is situated walking distance from the VIA Train station.

Relationships with Neighbouring Affiliated University Colleges

Relationships with Affiliated University Colleges is important in achieving a comprehensive campus master plan. As an example, a shared entrance for Huron University College and the University's lands on the west side of Western Road was completed in the Fall of 2014.

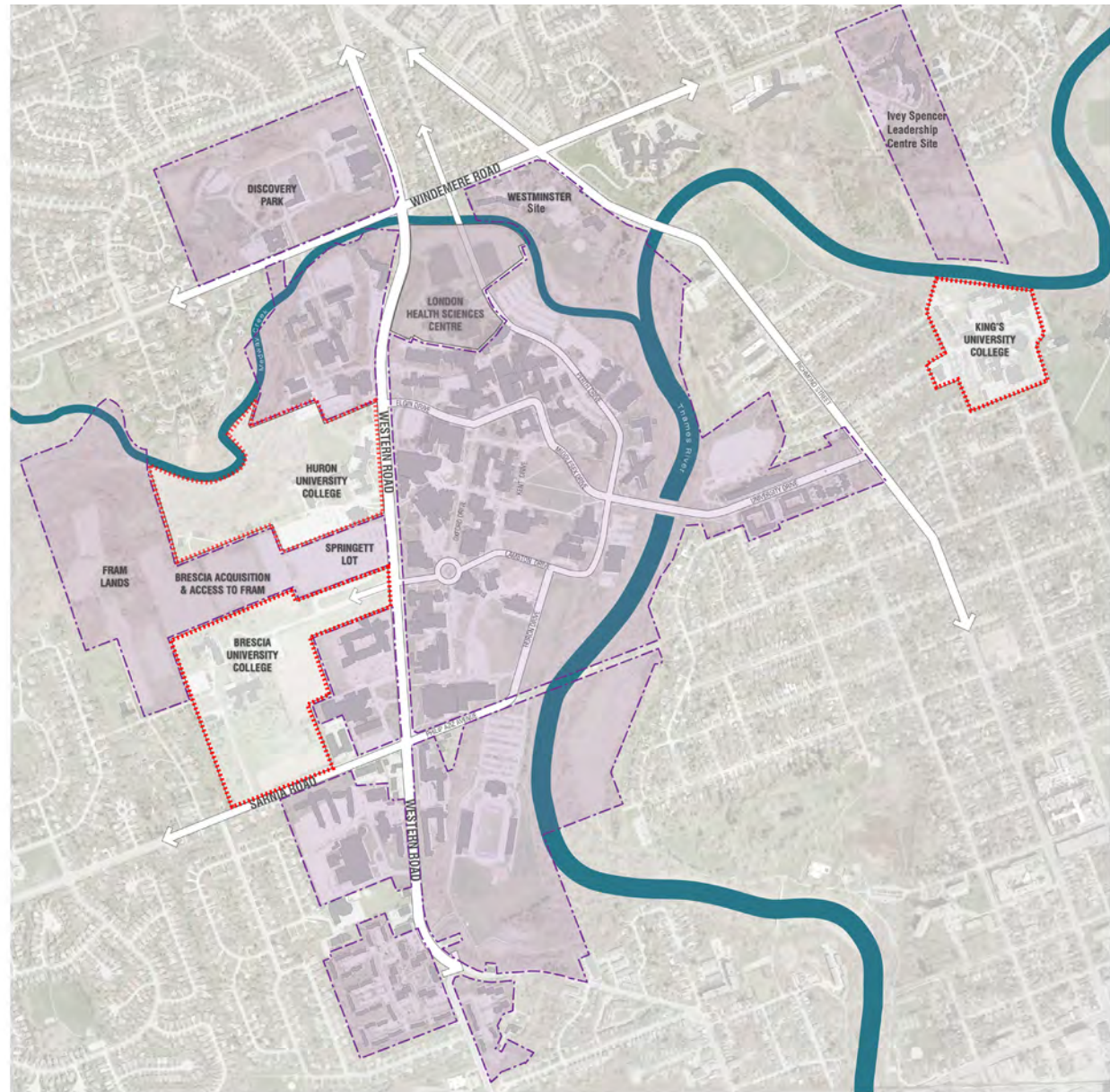


Figure 5: Western University Affiliated University Colleges

Thames River Corridor and Floodplain Control

Much of the campus is subject to the floodplain regulations of the Upper Thames River Conservation Authority (UTRCA), as illustrated in Figure 6, which indicates the 100 year and 250 year floodlines. These floodlines place considerable constraints on development within or adjacent to them and have been taken into account in the updated planning. Therefore it will be imperative that developable land on the main campus be protected for future academic purposes.

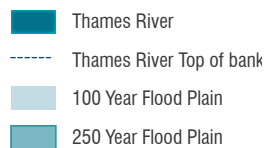


Figure 6: Thames River Corridor and Floodplains





THE CHARACTER OF THE CAMPUS

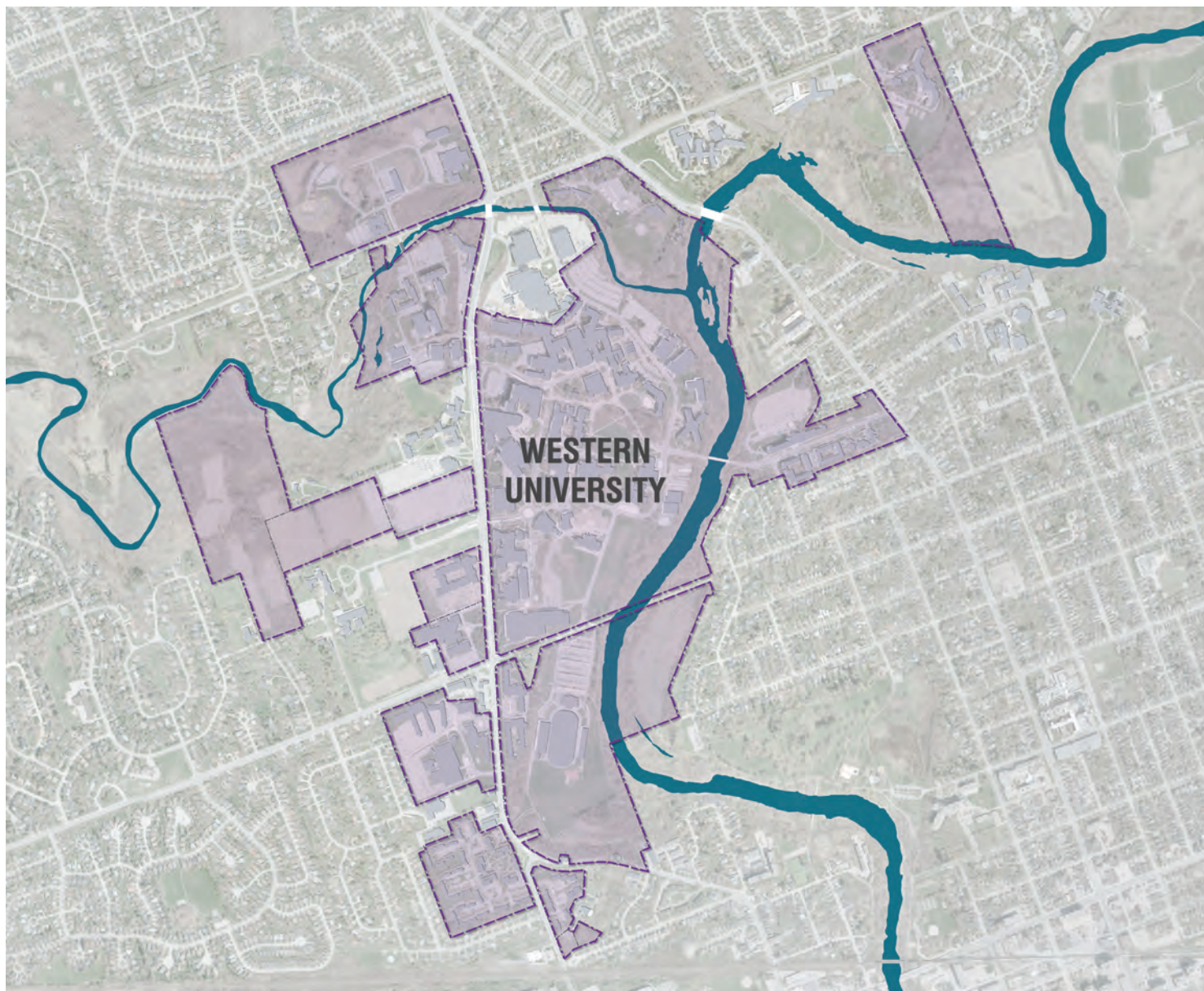


Figure 7: Western University Main Campus Areas







2.1 The Image of the Campus

The Western University campus has a distinctive scale and design quality that infill and expansion should respect. The height and mass of existing buildings generally increase from lower-scaled structures along Oxford Drive and at the top of University Hill, to mid-rise buildings on Western Road. The characteristic colour and texture of the stone facades of primary buildings can be carried into the future with a number of appropriate materials. Within these overall themes, a number of sub-districts have been identified in Figure 9, to provide guidance about the character of future development context.



Western Core Campus

There are several signature features and prominent views on the campus, which provide the visual image of the Western University campus: the view up University Hill to the tower; the way the hill is edged by several iconic buildings. As the campus develops, thought must be given to establishing additional areas of visual quality: along Western Road; at the main entrances to the campus such as Elgin Drive and Lambton Drive; and around Alumni Circle.

-  Significant Feature
-  Gateway
-  Prominent Building Edge
-  Prominent View Area
-  Significant Corridor View
-  Building of Historical Significance

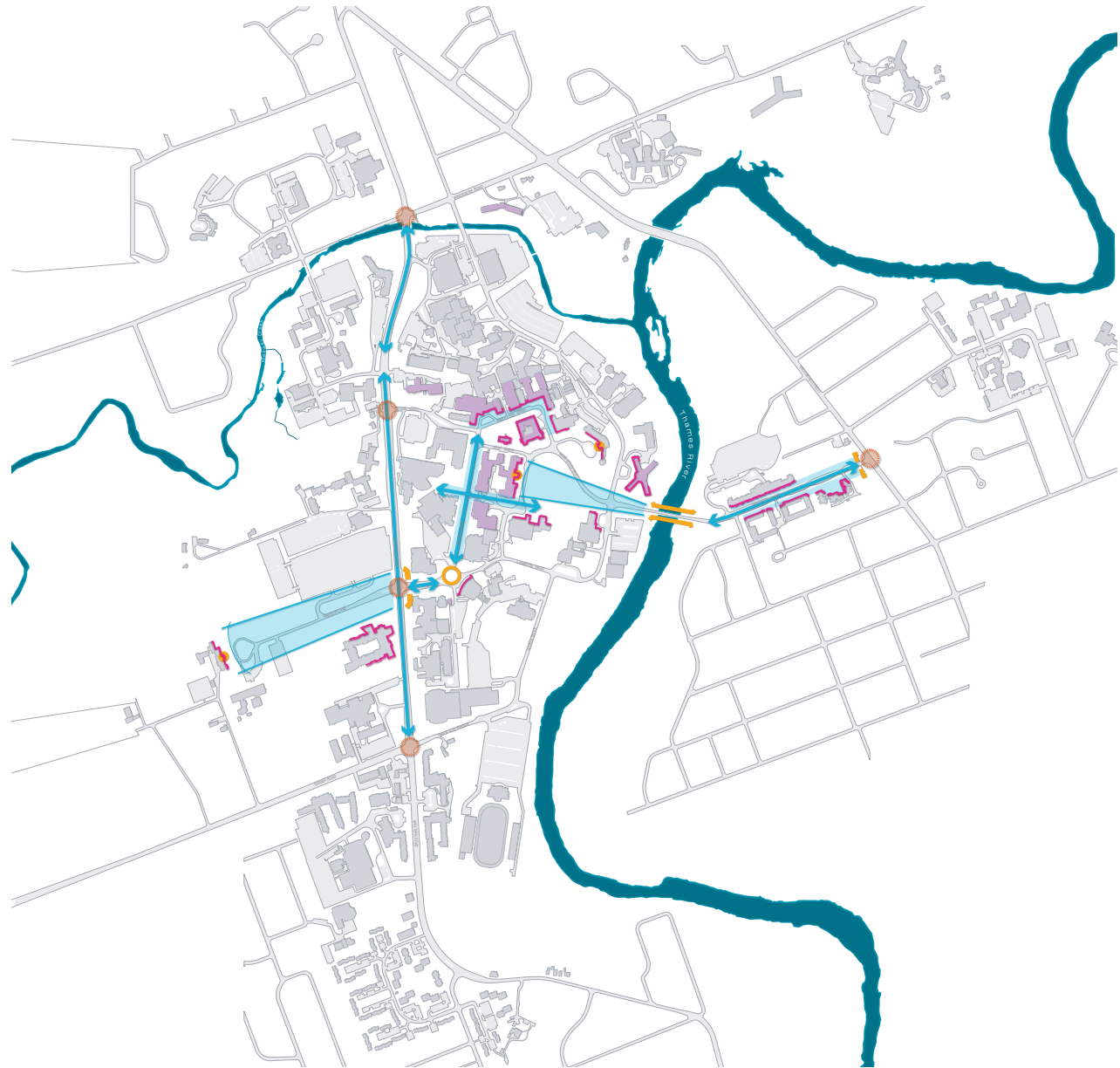


Figure 8: Signature Features and Prominent Views

1. High-rise apartment residences
2. The Concrete beach
3. High-density science cluster
4. Perth Drive
5. University Drive residences
6. Signature core campus buildings
7. South valley
8. Alumni circle
9. Engineering cluster
10. Athletics
11. South campus residences
12. John G. Althouse Faculty of Education Building
13. Ontario Hall Student Residence
14. Elborn College Building
15. Ivey Business School
16. Westminster



Figure 9: Main Campus Distinctive Architectural Character Areas

The landscape of the campus is itself significant, with slopes down to the river, the broad playing fields and its courtyards and focal points providing a frame that can be highlighted in future site landscaping.

As indicated on Figure 11, the centre of the campus is approximately a five minute walk from perimeter buildings. The outer core buildings are approximately ten minutes from the centre of campus.






-  Campus Lawns
-  Campus Plaza
-  Thames River Area
-  Bluffs
-  Open Fields



Figure 10: Campus Character Landscape Areas

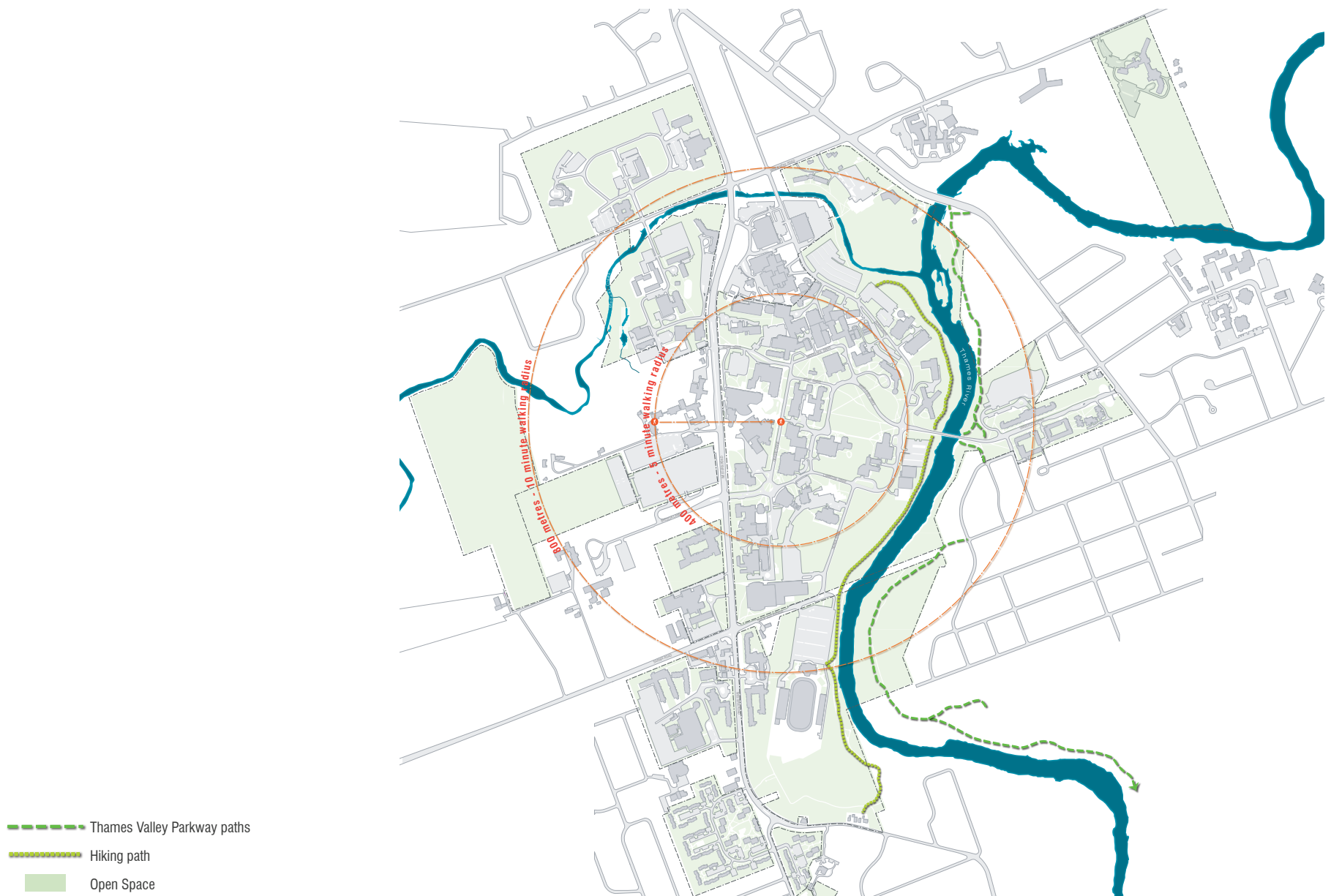


Figure 11: Pedestrian Areas



Figure 12: Sports, Recreation, and Leisure

2.2 Sports, Recreation, and Leisure

The updated Vision in the 2014 Strategic Plan, *Achieving Excellence on the World Stage*, invites all members of our academic community, not just students alone, to be part of the Western “experience.” This updated Vision qualifies the “experience” as learning in the broadest sense of the term: including co-curricular and extra-curricular activities, varsity athletics and recreational sport. The Strategic Plan also identifies the need to educate and support development of the whole person including recreational programming, informal socializing and collaboration and varsity athletics.

The 2007 Campus Master Plan acknowledged the importance of personal health and safety on campus in its Master Planning Principles. It recognized the need for the promotion of an environment where students, faculty, staff, alumni and visitors will be protected and their experience at Western will be enhanced. It indicated that this will be achieved through a spectrum of actions from protecting social spaces to facilitating recreation activities.

Most significantly, the Western Student Recreation Centre was realized in 2008. Located at the southern end of the South Valley, adjoining the Thompson Recreation and Athletic Centre, this facility relocated

campus recreation activities from the UCC. In turn, the UCC has been re-purposed for academic activities in the former pool area and for leisure activities in what is now known as the Mustang Lounge.

The completion of the Student Recreation Centre attached to the Thompson Recreation and Athletic Centre and the addition of the playing fields to the south of TD Stadium have further defined the recreation precinct at the south end of the main campus. This setting is adjacent to Thames River which forms a natural north-south spine where informal recreational and leisure pursuits can take place.

Sports, recreation, and leisure take place in a variety of locations on the campus, and opportunities should be incorporated in future campus development. It supports the academic mission of the University, contributes to student life and gives back to our alumni and the community.



Figure 13: Cultural Activities

2.3 Campus Culture

Another key aspect of the Western “experience” is the sense of culture that permeates life on campus. This Campus Master Plan takes a broad view of Western’s culture, including its architectural heritage; its landscape amenities and landmarks; traditions, including Indigenous connections to land and cultures; social life; the creative arts, leisure, sport, recreation and entertainment. All of this affects how Western’s students, faculty, staff, alumni and visitors experience the campus and each other.

Western offers a rich array of arts and cultural activity that enhances campus life and supports the development of the whole person as stated in the Strategic Plan. The academic departments, galleries, performance groups and venues, and student organizations across campus promote and raise the profile of the University’s culture scene. Partnerships with other arts initiatives and organizations contribute to and enhance the creative and cultural vibrancy of the campus and the city.

The campus community, alumni, visitors and the greater community all benefit from a number of venues that provide a rich, cultural experience year round.

Currently there are art galleries, performing arts and movie theatres, and various auditoriums that can accommodate a full complement of cultural activities.

In addition, outdoor venues for cultural activities include University Hill, the Concrete Beach, the area around the McIntosh Gallery and TD Stadium.

Cultural activities take place in a variety of indoor and outdoor spaces on campus, and opportunities to enhance Western’s unique culture should be incorporated in future campus development.



McIntosh Gallery



Davenport Theatre



2.4 Current Conditions

Areas of change include sites recently completed, planned for redevelopment in the near-term, or with conditions that may warrant redevelopment in the future. The University recognizes the merit of the older buildings on campus and will continue to invest in upgrading them over time.

1. Western Centre for Public Health&Family Medicine
2. Phase 1 Interdisciplinary Research Building (IRB)
3. Music Building Renovation & Addition
4. Academic Building for FIMS and Nursing
5. Ivey Business School
6. Ontario Hall Student Residence
7. The Collider
8. University College

- Recently Completed
- Current / Planned Development

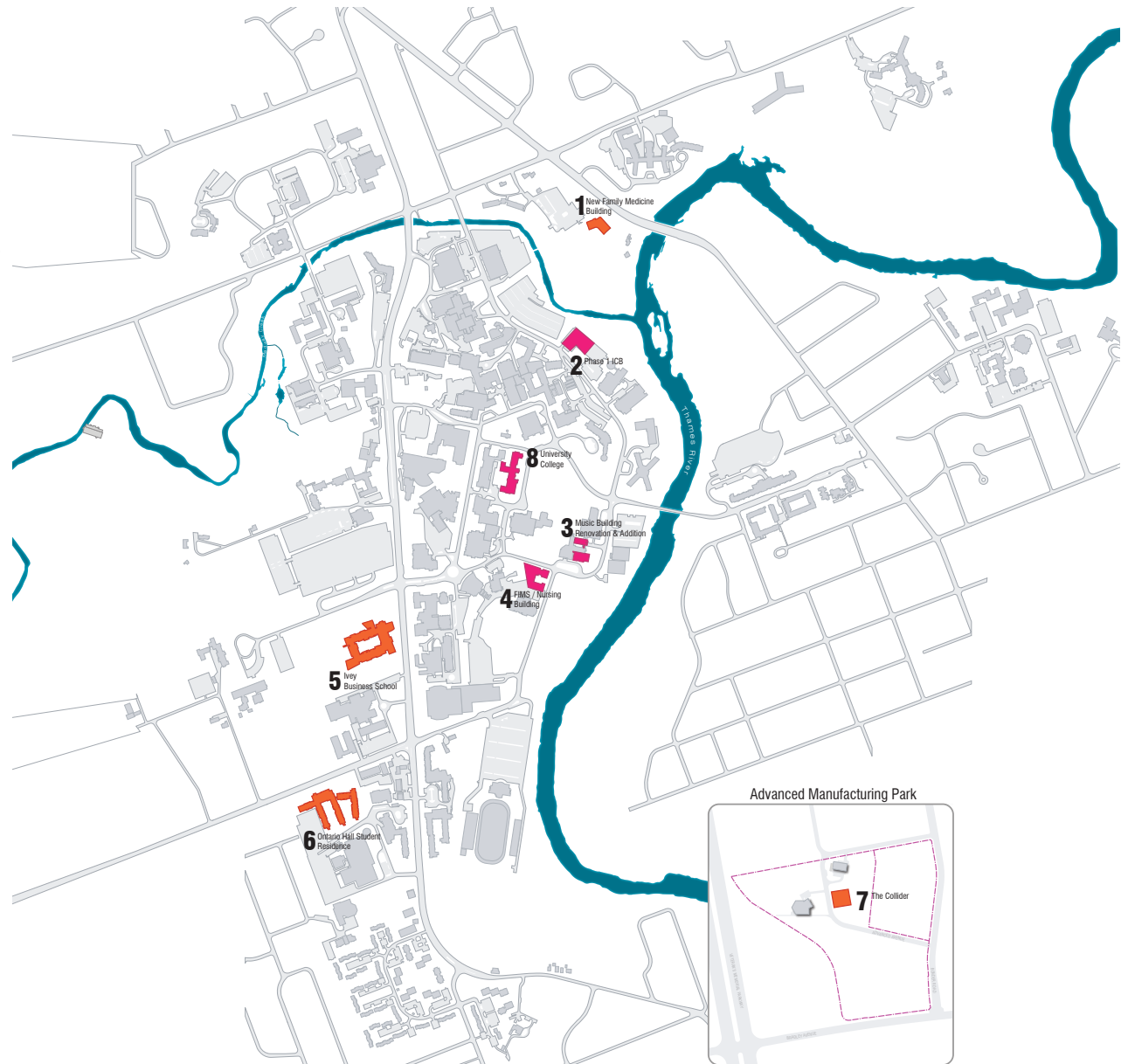


Figure 14: Areas of Recently Completed and Current Development

2.5 Movement

The core of the campus is used primarily by pedestrians, in a large part because the limited parking in this area has reduced vehicular traffic. While parking needs to be considered in future landscape planning and design, the priority should increasingly be on ensuring the campus community can safely and easily move around the core by walking and cycling.







-  Western Road Corridor
-  Boundary Street
-  University Gateway
-  Arrival Drives
-  Arrival Commons
-  Internal Vehicular Links



Figure 15: Existing Gateways and Vehicular Circulation

London transit bus service is provided through the campus along the major streets. How this might change if a RT route were to be provided to link to downtown London is not yet clear, as no detailed planning for the system has been undertaken. The new route would, however, have major impact on the current pattern of bus service and close contact should be maintained with the City and London Transit to ensure optimization of its implementation.

The introduction of a step-change in transit service should also be used to promote an equivalent change in the travel behaviour of all campus users. Parking demand should be reduced through effective management measures and promotion of car pooling, transit use, and possibly internal campus shuttles. The RT system, in particular, will be a pivot point for the delta in parking demand.



Figure 16: Existing Transit Network

Within the campus, traffic speeds and pedestrian activity make it generally a safe place for biking.

The cycling network throughout the campus and linking to the surrounding city is, however, incomplete. Western Road, a major connector to the rest of the city, only has bike lanes on portions of the road. With development of the South Valley site, it would also be beneficial to explore cycling connections along Huron Drive to link to the path south of Philip Aziz Avenue.

-  Signed Bike Road Route
-  Bike Lane
-  Bike Path
-  Multi-use Pathway



Figure 17: Existing Cycling Network

2.6 Parking

	Parking Lot	% Occupied*
a	Westminster Perimeter	80%
b	Chemistry Perimeter	94%
c	Visual Arts Perimeter	89%
d	Middlesex Core	76%
e	Medway Student	73%
f	Talbot Core	46%**
g	Kent Drive Visitor	75%
h	Medical Science Visitor	69%
i	Siebens Core	75%
j	Lambton Hall Core	81%
k	Support Services Core	96%
l	Social Science Core	91%
m	Weldon Core	95%
n	Upper Heating Core	72%
o	Springett Perimeter	79%
p	Alumni/Thompson Visitor	84%
q	South Valley Perimeter	99%***
r	Huron Flats	75%
s	Elborn	97%
t	Althouse	73%

* Average am/pm utilization from data collected during the week of March 24, 2014

** Former Ivey Building vacant at the time

*** Prior to expansion

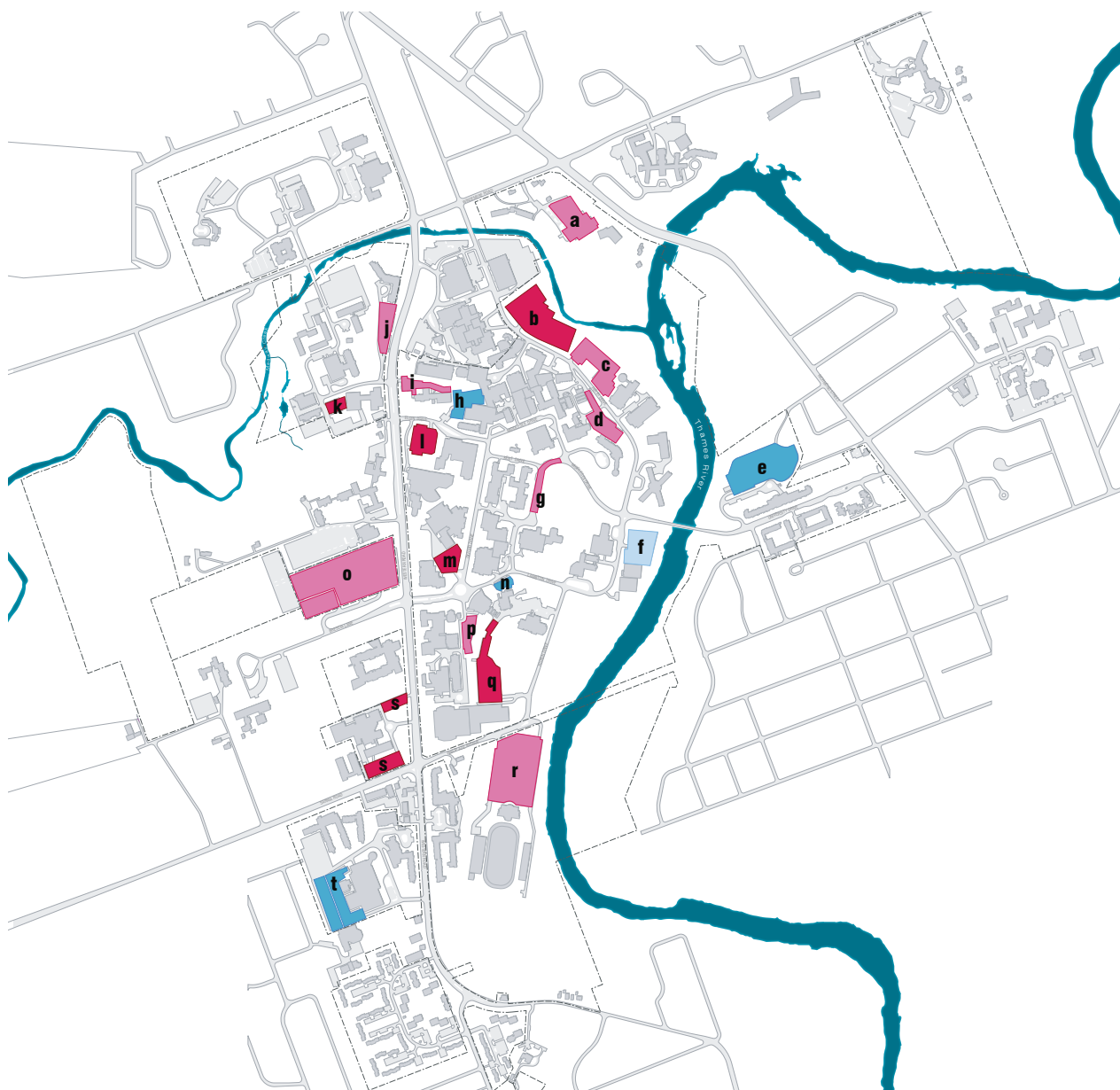
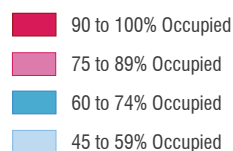


Figure 18: Existing Parking Lot Utilization - March 2014

This Master Plan undertook a careful look at parking supply and utilization, in association with an independent parking analysis being conducted at the same time.

There are currently 5,810 parking spots serving the main campus. While utilization across the campus varies, generally it is high, with highest utilization in the central campus core. Since this Master Plan is recommending that several of the central lots – notably Social Sciences, Weldon, Alumni and South Valley – be considered as future development sites, an overall parking transportation demand management strategy is essential to address student, faculty, staff, and visitors parking. Chapter Six of this Master Plan expands upon future transportation and parking strategies, informed by the findings of the parking analysis.



Social Science Core Lot



Expanded South Valley Lot



Springett Perimeter Lot



Chemistry Perimeter Lot



Middlesex Core Lot



Talbot Core Lot

2.7 Infrastructure

The Master Plan must also accommodate several infrastructure facilities that currently exist or will be required in future. These include the following:

1. East Sub-Station
2. West Sub-Station
3. Future Expansion of Power Plant
4. Power Plant
5. South Sub-Station
6. North Chiller Plant
7. North Sub-Station

- 1 East Sub-Station
- 2 West Sub-Station
- 3 Future Expansion
- 4 Power Plant
- 5 South Sub-Station
- 6 North Chiller Plant
- 7 North Sub-Station

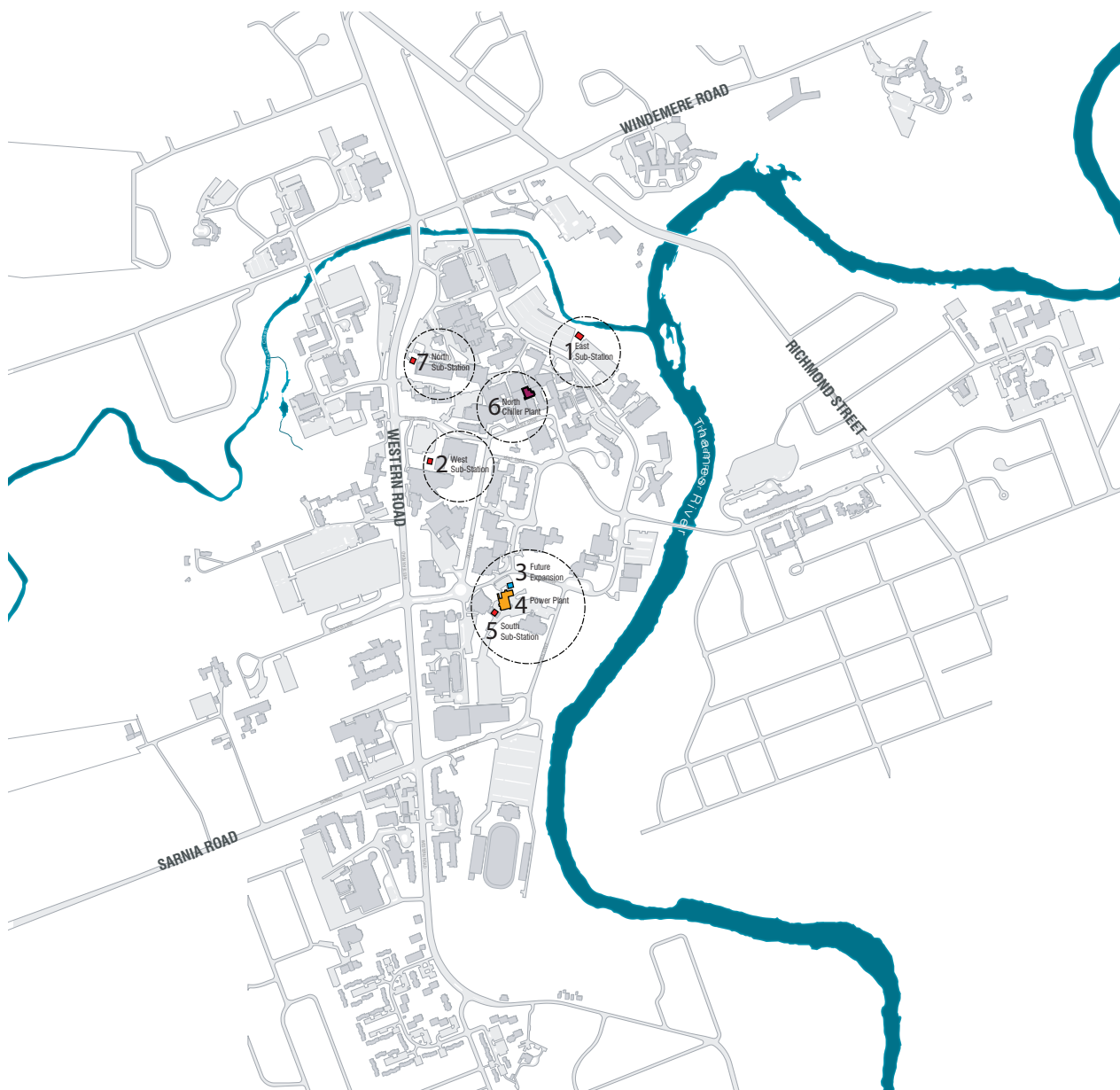


Figure 19: Infrastructure Facilities





A VISION FOR THE FUTURE CAMPUS



Campus Planning Principles

This current master planning study has built upon the exercise undertaken in 2007. The principles listed in that plan for campus and space planning have been reviewed in terms of current demands on, and opportunities for the campus. The original principles are reaffirmed and have been repeated below.

Master Planning Principles (2007)

1. Respond to Changes in Academic Mission and Technological Innovations:

Plans must be flexible enough to accommodate evolving innovations in research, teaching, and instructional technology, and to respond to the trend to life-long learning and the demands that mature, busy and sophisticated students will place on the campus.

2. Preserve Existing Natural Features and Maintain and Enhance Landscaped Open Spaces:

Achieving this principle will involve preserving the tremendous wealth of “natural capital” on campus provided by its natural resources and landscape, including enhancing the visibility and defining character of the Thames River.

3. Provide Direction for University Growth and Change:

Future plans should accommodate long-term University growth on a consolidated campus. Planning should therefore concentrate on essential academic and student-related activities within the campus core.

4. Invest in the Quality of the Campus:

Renewal of the elements which comprise the public spaces on campus is fundamental to the University’s future. Targeted are areas of campus activity and a section of Western Road, the latter scheduled to become a major landscaped boulevard within the future campus by late 2007.

5. Preserve and Enhance Architectural Integrity:

There is a strong and appealing architectural style on campus, the integrity of which should be maintained and enhanced through future development. Design Guidelines that characterize the scale, form, common elements (such as materials) and relationships among campus buildings (e.g., a normal maximum height of five storeys in the campus core, including mechanical space) should be used to establish guidance for new building and renovation projects. As proposed in the Strategic Plan, Engaging the Future, a signature building on the South Valley site could be constructed reflecting this principle.

6. Preserving Academic Interaction and “Decompressing” the Campus:

From the 1930s strategic plans have addressed the creation of academic clusters, where Faculties and services related to similar programs could co-exist in precincts. The rapid growth of the University in the 1960s and 1970s shifted the campus centre and made these precincts less rigid. We should seek to balance these two competing principles. We will keep the integrity of academic precincts where close proximity is necessary and conducive to the successful execution of our teaching and research mission. We will also seek to decompress our central university space in order to provide a better social and working environment.

7. Interdisciplinary Studies and

Research: Interdisciplinary scholarship will be a growing priority in the next decade. Such ventures may require space to facilitate creative interactions among the faculty and students involved in these initiatives. This space should create linkages between academic precincts. materials.

8. The Residential University and Canada's Best Student Experience:

Preserving Western University as a residential campus with core academic programs located in close proximity to each other is key to ensuring that Western continues to provide Canada's best student experience. A cohesive campus environment that allows for faculty and student interaction and fosters interdisciplinarity is fundamental to our future development.

9. Enhance University/City Relationships:

The University has important relationships with the neighbourhoods that surround it, with the City, and with the Region. University development should seek to sustain these relationships by providing for improved physical and functional connections, and by recognizing the impacts that planning decisions made by the University and the City of London have on one another.

10. Achieve Barrier-Free Accessibility:

Increasing numbers of persons of diverse culture, range of ability, and across the lifespan are studying, visiting, and working at the University. Designs for new buildings, modernization of older buildings, landscape initiatives, new streets and paths, and spaces within the University campus must ensure usability by the broadest possible range of persons. Space planning thus should incorporate the principles of universal design to ensure equitable, safe, and comfortable access.

11. Ensure Safety, Security, and a Healthy Workplace:

Personal health and safety is an important concern on campus, reflecting broader societal concerns. Designs for specific buildings and their environments and landscape and streetscape plans will need to address personal health and safety issues addressing such aspects as air quality. We will promote an environment where students, faculty, staff and alumni will be protected and their experience at Western will be enhanced. This will be achieved through a spectrum of actions from protecting social spaces to facilitating recreation activities.

12. Transportation: In considering transportation near the centre of the campus, the dominant factors relate to safe and efficient networks to support pedestrian, bicycle and bus traffic and to provide for visitor parking, in so far as possible. Vehicle traffic and University parking will be focused at the perimeter of campus.

13. Sustainability in Design of Facilities:

In planning the campus of the future the University will incorporate sustainability of the environment in the planning and design process. This includes promoting energy conservation in the operation of facilities, provision of facilities to support alternate transportation arrangements, and the protection of natural and wetland areas throughout the campus. Building designs should recognize the use of buildings as learning tools as well as learning environments and should provide examples of sustainable designs for our students.

14. Relocation within Existing

Buildings: During expansion and major renovation of physical space on campus, opportunities to realign the University's activities will arise. When presented with such opportunities, the following principles should serve as guides:

- Relocation of academic units/groups should be based on proximity to similar units/groups and should promote interdisciplinarity and collaboration
- Relocation of non-academic units should facilitate greater collaboration, effectiveness, and efficiency

Space Planning Principles (2007)

1. University Strategic Plan: Space planning at Western should directly support the priorities outlined in the University's Strategic Plan and should also be aligned with Faculty Academic Plans and Support Unit Operational Plans.

2. Space in the Centre of Campus: Space associated with activities that directly support and enhance the student experience should be given the highest priority in the centre of campus. Such activities include instructional facilities, faculty offices, library and student computing facilities, student services, and other academic support areas such as academic counselling.

3. Assessing Space Needs: New/incremental space should be targeted towards programs/areas with the greatest needs. The need for additional space should be directly linked to Faculty Academic and Support Unit Operational

Plans. The assessment of space needs should be guided by an analysis of actual space compared to required space according to standards for space allocation applied across the Ontario university system.

4. Interaction and Collaboration among Students, Faculty, and Alumni: Planning and design of new space should support and enhance interaction among the members of the University community – our students, faculty, staff and alumni. New space should promote a sense of community and should also facilitate success in interdisciplinary and pan-University initiatives.

5. Design of Space: As we create new space – either through new construction or through renovations to existing space – it is important that space is designed in a manner that is flexible and easily adaptable to the constantly-changing University environment. In addition, it is important that the design of space include the appropriate provisions for common or gathering space that would allow for informal

interaction/collaboration among students, faculty, postdoctoral fellows and staff.

6. Management of Space: All property at Western is under the authority of the Board of Governors. The President has assigned management of academic and general-use space to the Provost & Vice-President (Academic) and management of all other space to the Vice-President (Resources and Operations). The need to respond to a constantly changing environment requires us to ensure that space is readily reassigned.

7. Provision and Approval of Amenities: The provision of services to the University community including food and other types of amenities should reflect the strategic priorities of the University. Current services will continue and new ones be introduced only if they are financially viable and sustainable. The space in which they are housed should be designed to be flexible and welcoming to the University community. Approvals for food service or other commercial amenities will come through the Vice-President (Resources and Operations).

Sustainability Principles

A sustainable campus is one that promotes the smallest possible ecological footprint through a healthy ecosystem and supporting the values of conservation. Western subscribes to the following principles of sustainability as identified in the University's MAPP Policy 1.48; Environment & Sustainability:

1. Engagement: Environment and sustainability is the responsibility of everyone at Western. Success requires the collective action of the University community through long-term planning, shared learning, grassroots activities, and institutional leadership.

2. Institutional Ecology: The University commits to developing institutional practices that promote sustainability while reducing the use of resources and the production of waste and hazardous materials.

3. Efficacy: The University will continue to provide quality education and services while progressively reducing negative environmental, health and economic impacts.

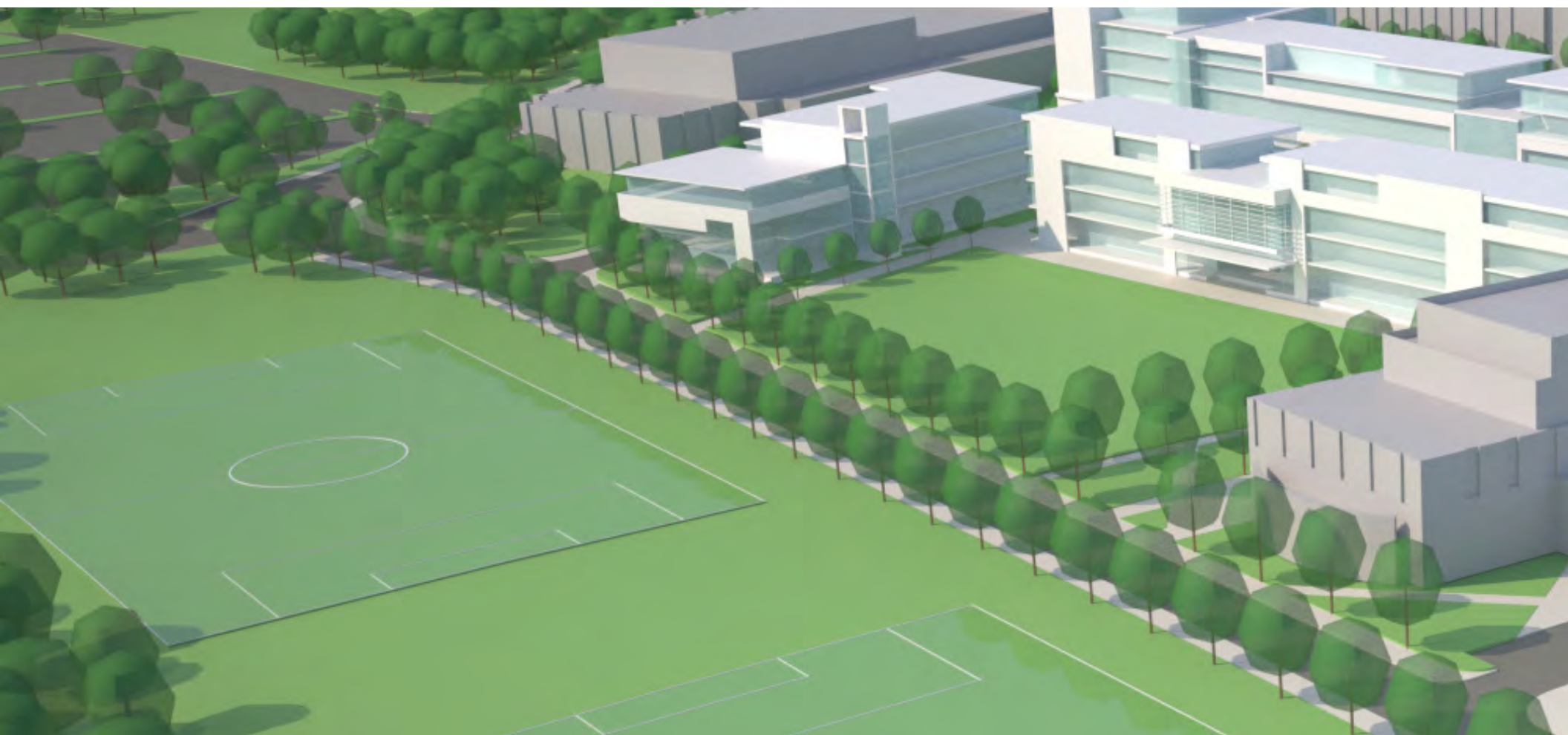
4. Accountability: The University will establish measurable sustainability goals and monitor, evaluate and report on performance.

5. Innovation: The University will encourage a climate of creativity, inquiry, research and collaboration that fosters new ideas and approaches to sustainability questions and challenges.

6. Community: The University recognizes that it is part of a larger community and will engage with that community to promote sustainable practices and to identify and address opportunities and challenges that may have impact beyond our campus boundaries.

The principles will encourage the following:

- Incorporating sustainability into our academic programming, to contribute to an educated citizenry and develop future leaders
- Engaging in research across the disciplines into issues of environmental sustainability
- Reducing our use of inputs
- Reducing outputs through recycling and reuse
- Focusing on life cycle management of resources and waste products
- Utilizing ecological landscaping methods and preserving green space
- Building and renovating facilities in accordance with energy efficiency and sustainability principles





CAMPUS DEVELOPMENT AREAS



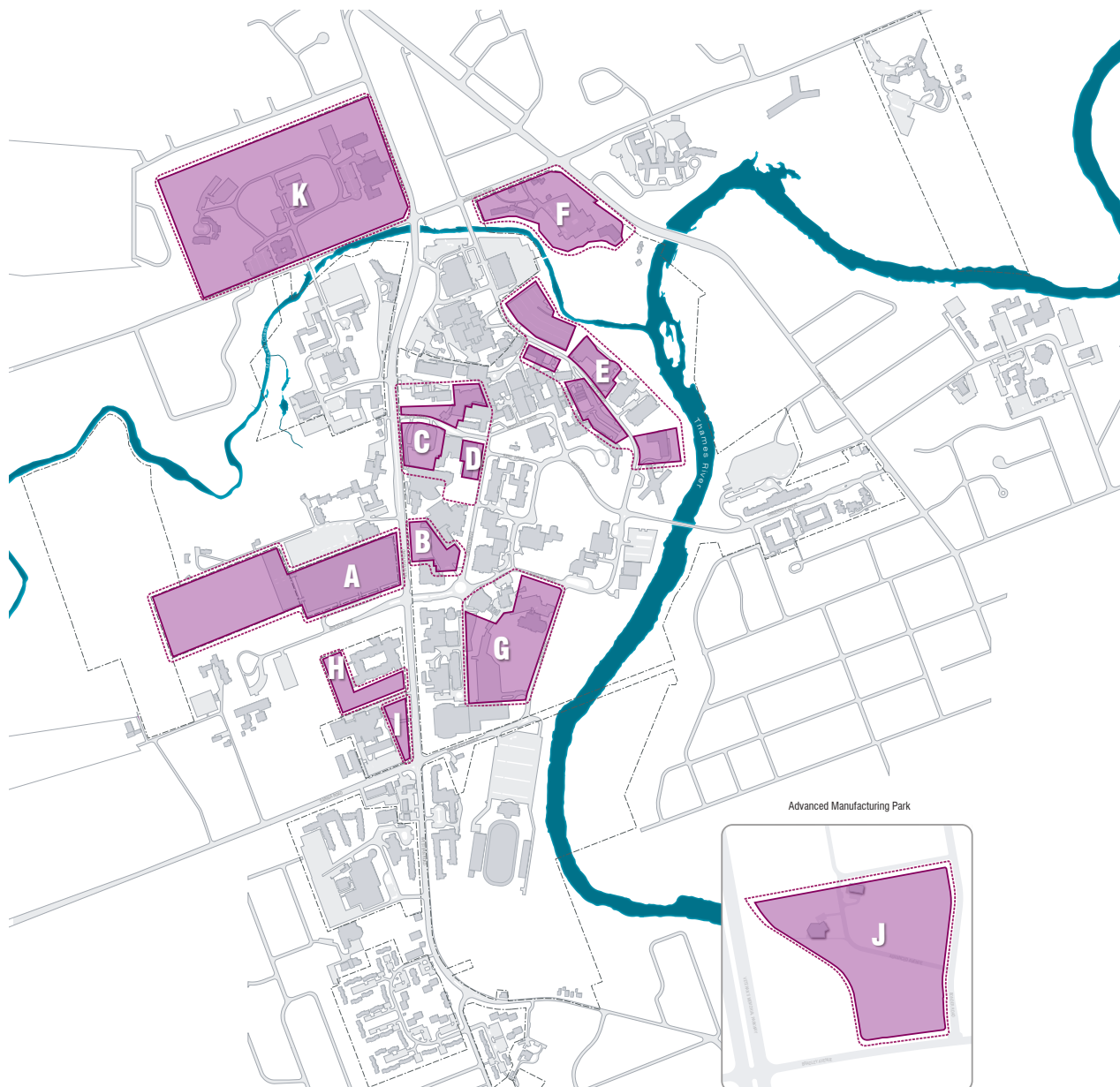
4.1 Campus Development

The previous sections have identified the current issues that need to be addressed on campus and confirmed the overall principles that should guide that process. Most significantly, the campus must adapt to accommodate the growth pressures that can be anticipated over the next decades in a way that enhances the quality of the campus environment and Western's functioning as a first rank University.

As identified by Master Planning Principle #5, all future development should maintain and enhance the existing historic architectural character of the campus. Clear design guidelines that specify the character of common elements and materials should be used in order to ensure that new buildings or building renovations respect the signature traditional building style of the campus through a contemporary interpretation of Collegiate Gothic architecture. In addition, as outlined in detail in the

November 2007 report *Recommendations for the Provision of Common Space* by The Provost's Ad Hoc Committee on Classroom and Common Space, all new buildings or major building renovations should incorporate 10% net assignable space as common space to serve the entire University community. This aesthetically attractive space should be moderately trafficked, informal, centrally located and provide appropriate amenities.

Increase in student numbers and changes in the University Community Centre (UCC) have resulted in a sense of overcrowding in the principal common spaces of the campus. This requirement for additional common space is intended to relieve this pressure and to disperse it to other major common areas.



- A** - Springett / FRAM Site
- B** - Weldon Library Site
- C** - Elgin Entrance
- D** - Social Science Site
- E** - Perth Drive Sites
- F** - Westminster Hall Site
- G** - South Valley Site
- H** - Western Road Development Site 1
- I** - Western Road Development Site 2
- J** - Advanced Manufacturing Park
- K** - Discovery Park

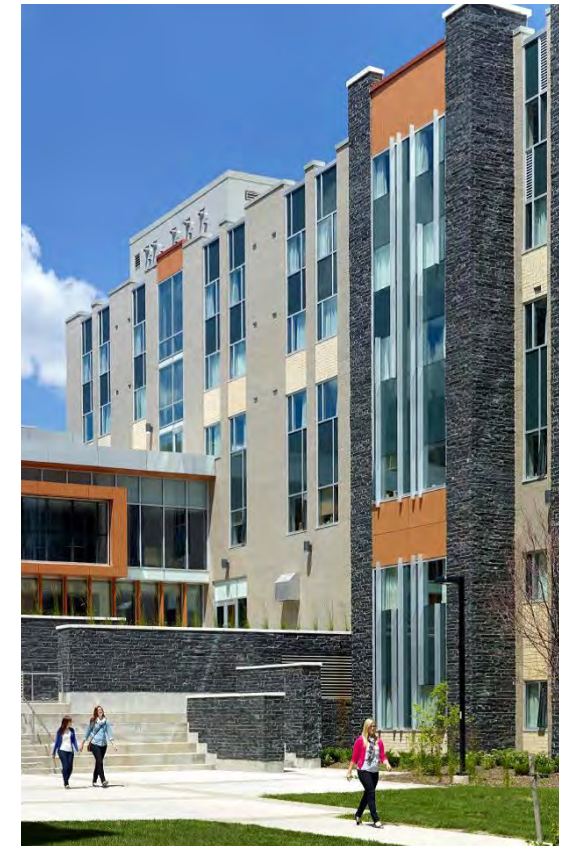
Figure 20: Primary Development Sites

4.2 Primary Development Sites

Figure 20 indicates the locations of the primary development opportunities in the main campus. Each of those is discussed in detail in this section, and various options for the height and massing of future development are explored. The development program for each parcel is guided by the general principle of height distribution noted in the Master Planning Principles, with taller buildings located along Western Road and buildings in the centre of campus respecting the height and massing of contextual buildings.

Similarly, the anticipated purpose of these development opportunities would reflect the previous thinking about campus zones, concentrating academic buildings in the heart of the campus, residences more to the periphery and research buildings in the outer ring. Our residences are required to be fully self-funding and are developed based on student needs. Discovery Park has considerable land available for future academic use.

The Advanced Manufacturing Park is located to the east of Veterans Memorial Parkway, approximately 30 minutes from the campus by car. It has the land for large and unique buildings that cannot locate, or could be relocated from, the core campus.



Ontario Hall Student Residence

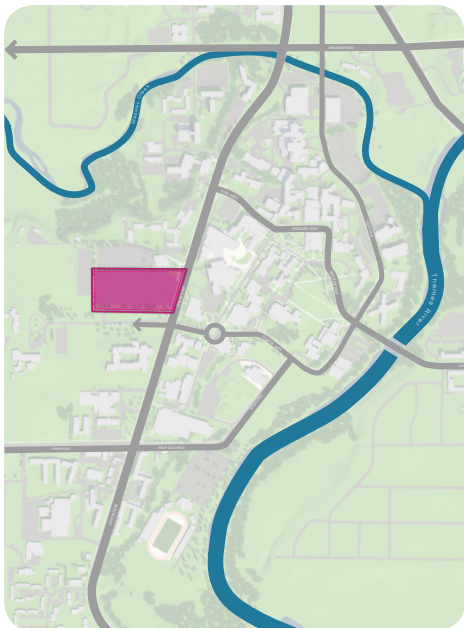
A Springett / FRAM Site



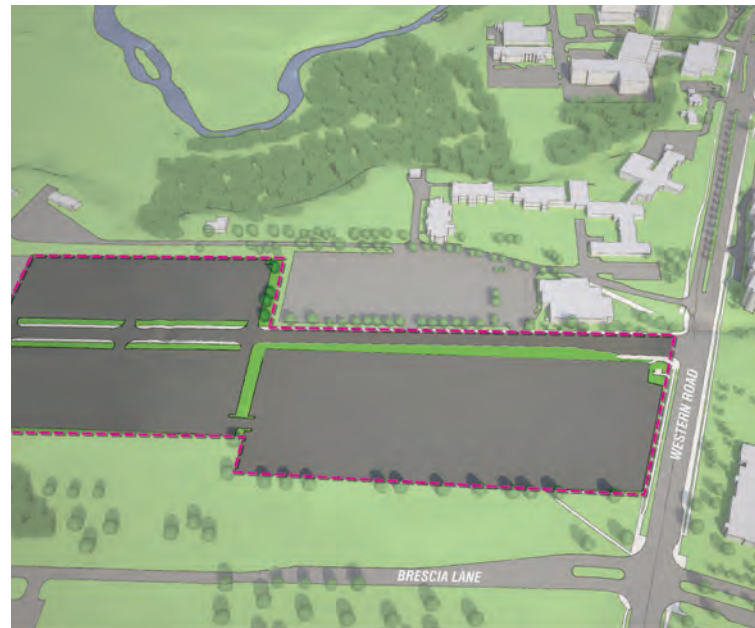
Existing Springett / FRAM Site

Current Site Considerations:

- Springett Lot is now accessed on the north side with a new road shared with Huron University College
- To better engage Western Road, the eastern section of Springett Lot is a prime location for new academic buildings



Development Site Context



Development Site Boundaries

Springett / FRAM Site



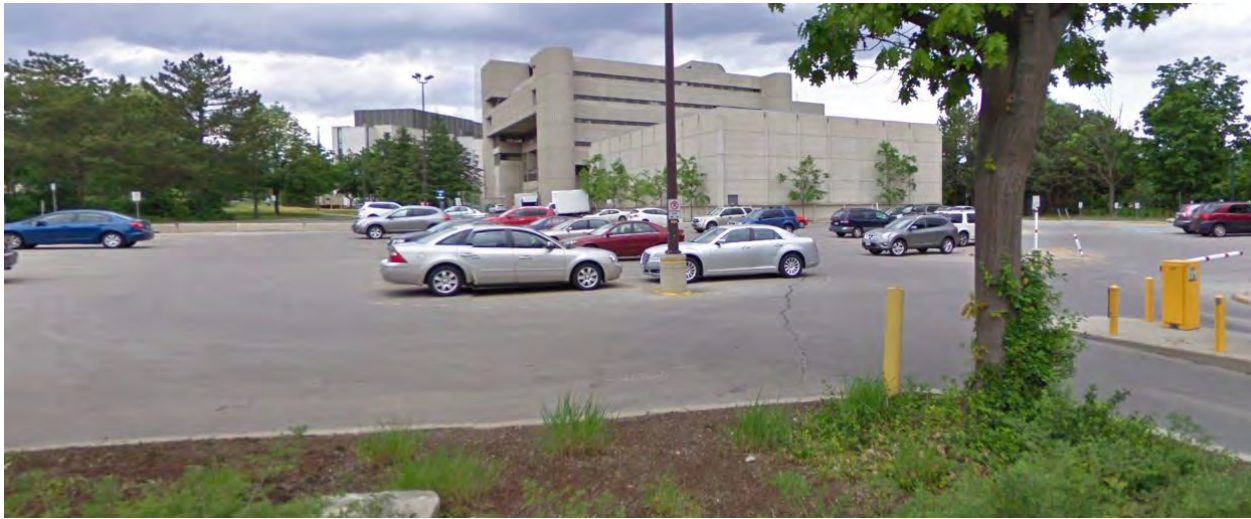
Figure 21: Conceptual Massing: Springett / FRAM Site

Design Opportunities:

- A** Re-purpose the eastern section of Springett Lot for one academic building fronting Western Road and additional academic buildings and provide active street frontage along Western Road
- B** A shared road has been created to service Huron University College, the FRAM lands, and Springett Lot. See pages 80-85 of this document for further information
- C** Consider using undeveloped lands west of new Springett Lot for future academic uses
- D** Provide parking to the rear of new academic buildings, respecting existing agreements

Yield Calculations: 60,000 - 80,000 m²

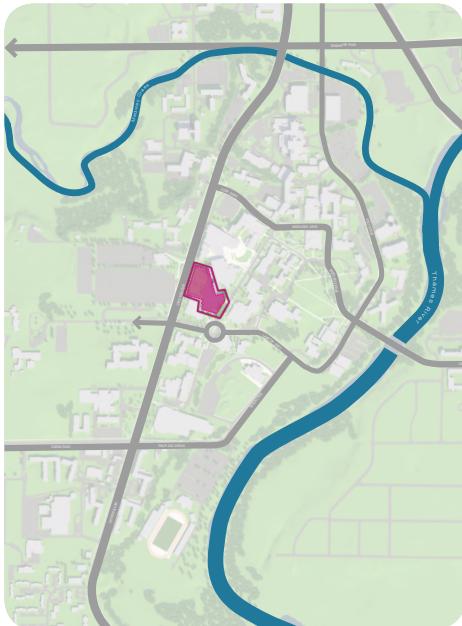
B Weldon Library Site



Existing Weldon Library Site

Current Site Considerations:

- A prominent campus location available for development
- The service access for Weldon Library and Law Building will need to be maintained



Development Site Context



Development Site Boundaries

Weldon Library Site

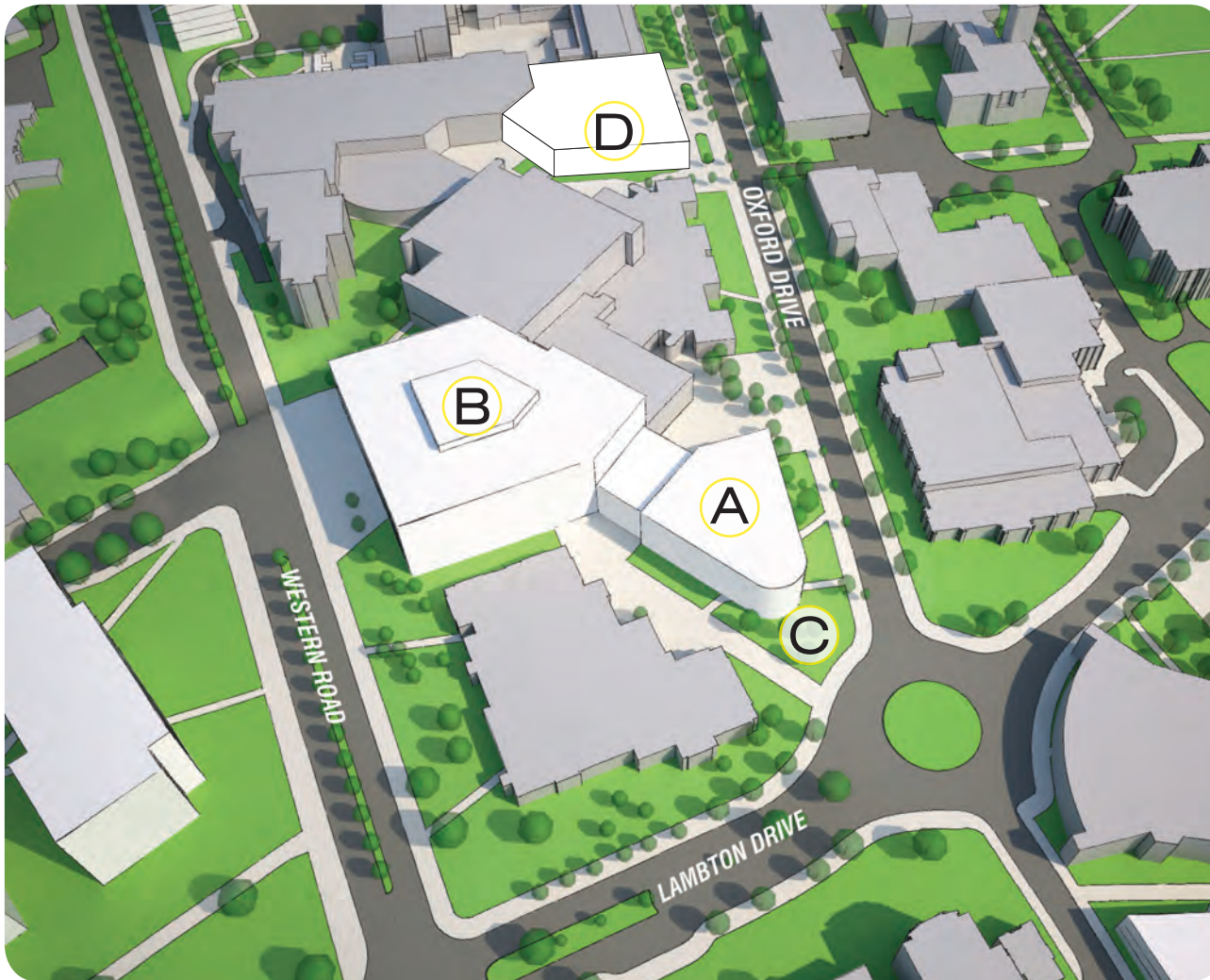


Figure 22: Conceptual Massing: Weldon Library Site

Design Opportunities:

- A** Develop a signature building at this prime Campus location
- B** Create a building that is connected to Weldon Library, maximizes height along Western Road and infills the internal courtyard to increase potential development yield (maintain service access to Weldon Library)
- C** Parking spaces will be lost to development
- D** Create a building that supports student activities on the Concrete Beach.

Yield Calculations: 20,000 - 24,000 m²

(yield does not include Building "D")

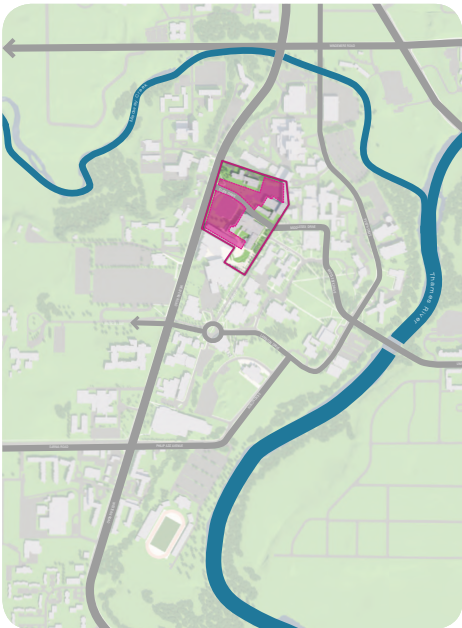
Elgin Entrance Site



Existing Elgin Entrance Site

Current Site Considerations:

- A major entrance to the centre of campus that is currently underdeveloped



Development Site Context



Development Site Boundaries

Elgin Entrance Site



Figure 23: Conceptual Massing: Elgin Entrance Site

Yield Calculations: 36,000 - 58,000 m²

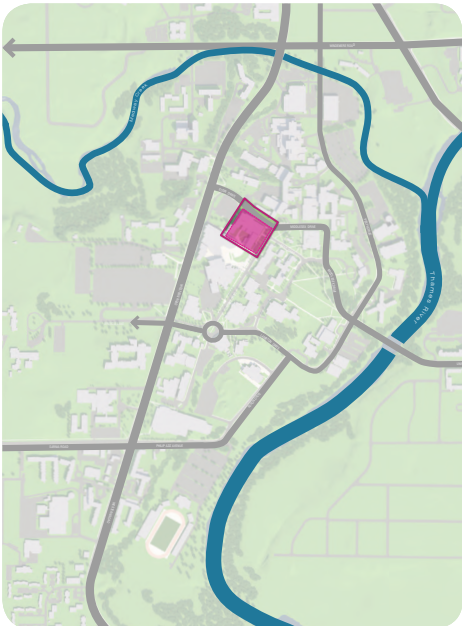
Design Opportunities:

- A** & **B** Use development to frame and formalize this central Campus entrance and maximize the height of academic buildings fronting Western Road
- A** Develop a building connected to Siebens Drake Research Institute
- B** Develop a building that maximizes height along Western Road and retains a service road
- C** Parking spaces in the social sciences lot will be lost. Underground parking could be considered but further study would be required prior to development.
- D** Develop a building connected to Dental Science building, Medical Science building and Siebens Drake Research Institute
- E** Potential to reconfigure existing UCC loading dock for future expansion and landscape improvements (maintain service access to UCC)

D Social Science Site



Existing Social Science Site



Development Site Context



Development Site Boundaries

Current Site Considerations:

- Current plaza design does not provide pedestrian amenities or programming
- The east and north sections of the Social Science building do not maximize the potential for academic space
- Building design does not contribute to the quality architecture of the campus

Social Science Site

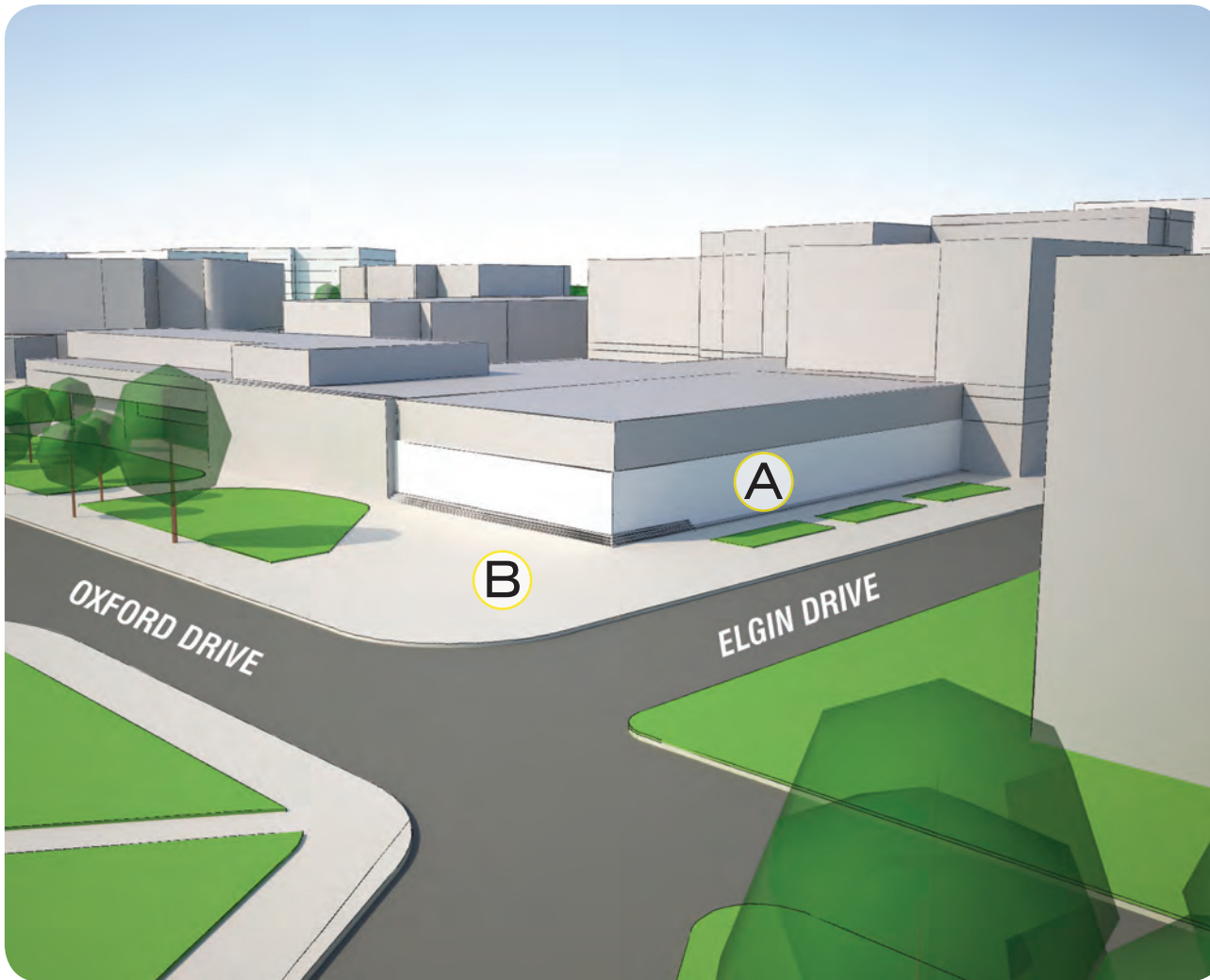


Figure 24: Conceptual Massing: Social Science Site

Design Opportunities:

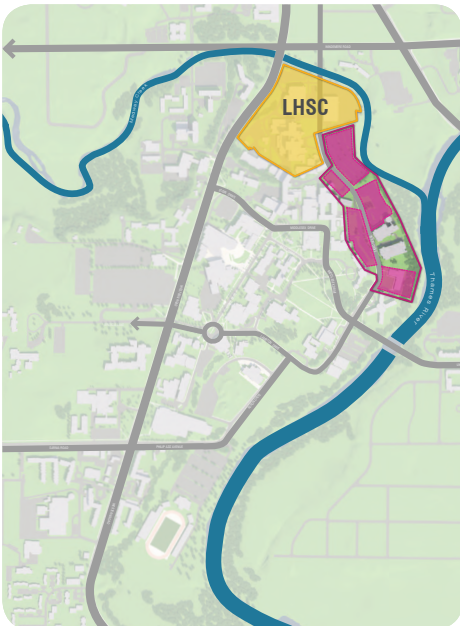
- A** Create a new lobby and instructional/company spaces by infilling the front and rear plazas
- B** Design a new addition to take advantage of this prominent location on Campus and its surrounding context as well as to make the building more inviting

Yield Calculations: 1000 m² (addition)

Perth Drive Sites



Existing Perth Drive Site



Development Site Context



Development Site Boundaries

Current Site Considerations:

- Floodplain control limits development potential around the Thames River
- The Staging building is an opportunity for redevelopment
- The Science cluster and Middlesex Lot back onto Perth Drive, diminishing connectivity with the buildings east of Perth Drive
- Western is committed to work with our partner institution, London Health Science Centre (LHSC), in its future plans to expand University Hospital

Perth Drive Sites

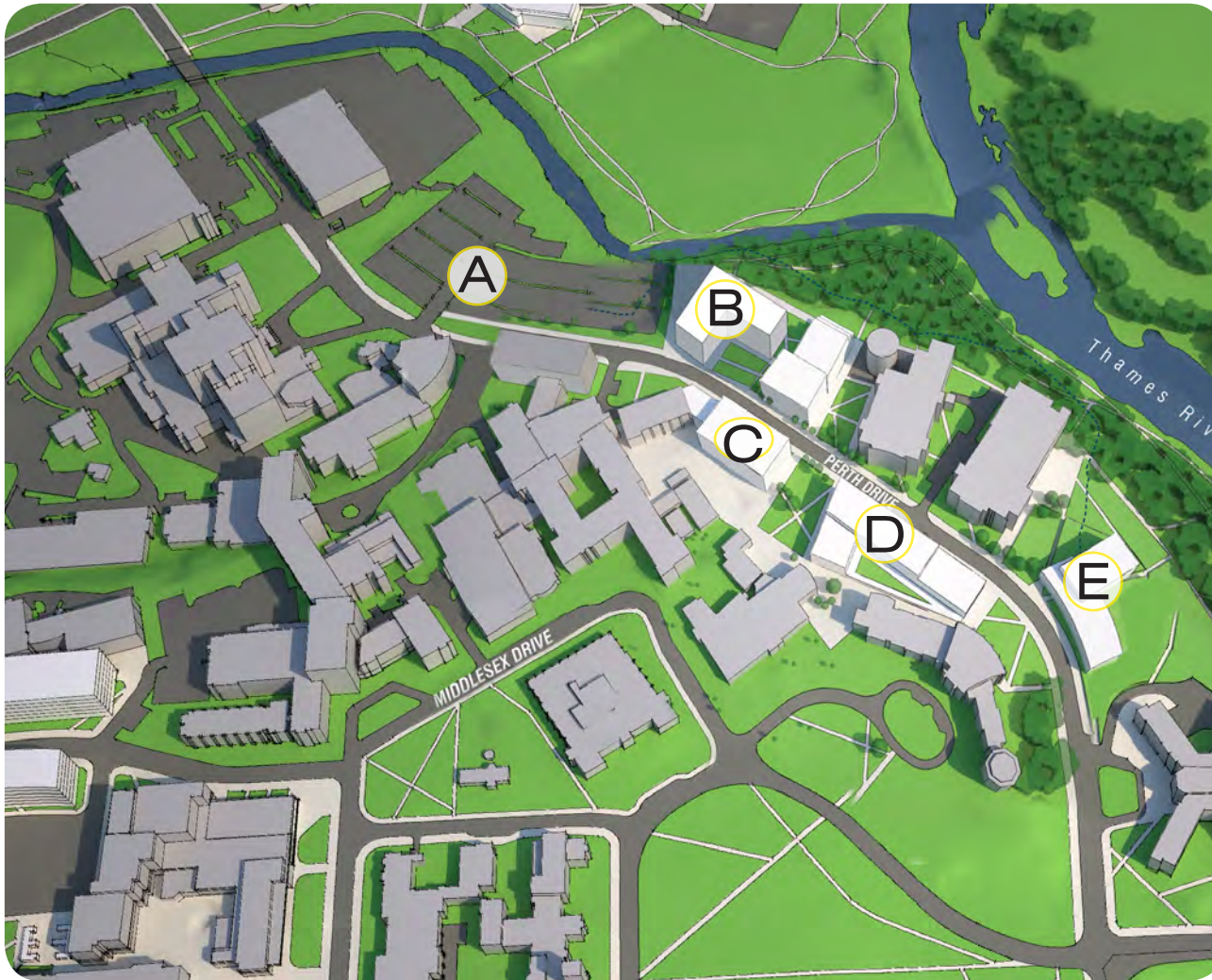


Figure 25: Conceptual Massing: Perth Drive Site

Design Opportunities:

- A** Future opportunity for multi-level parking structure
- B** Construct two academic buildings that maximize opportunities to open onto the Thames River
- C** Relocate the Greenhouses to an appropriate location respecting academic need and construct an academic building
- D** Create a new building with a plaza and parking on the existing Middlesex Lot without obstructing views to the iconic Middlesex College clock tower
- E** Redevelop the existing Staging building site

Yield Calculations: 56,000 m²

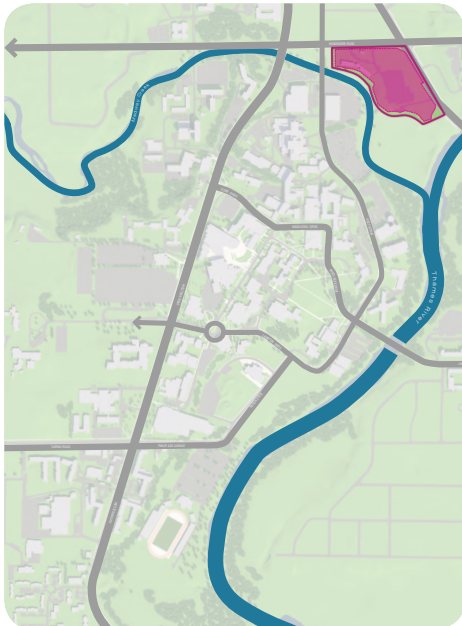
F Westminster Site



Existing Westminster Site

Current Site Considerations:

- The existing buildings are spread far apart and the site is underutilized
- Much of the Westminster site is floodplain and is restricted to recreational use



Development Site Context



Development Site Boundaries

Westminster Site



Figure 26: Conceptual Massing: Westminster Site

Design Opportunities:

- A** Construct new buildings to infill site
- B** Create new quads and a commons framed by new buildings
- C** Design a new promenade parallel to the Thames River
- D** Provide new surface parking lot

Yield Calculations: 33,000 - 37,000 m²

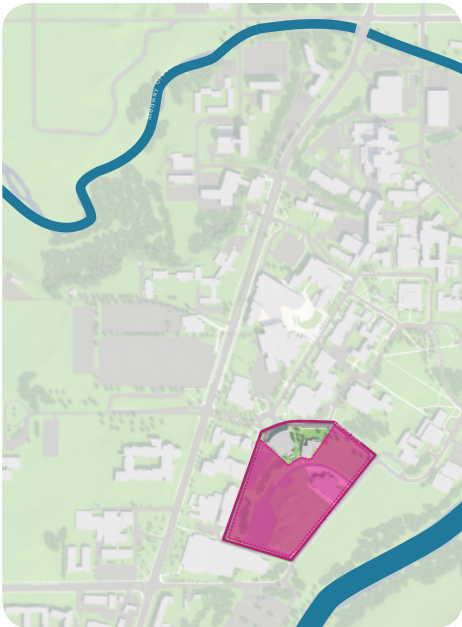
South Valley Site



Existing Alumni Hall / South Valley Site

Current Site Considerations:

- The site is disconnected from the core campus due to grade changes
- Floodplain control east of Huron Drive limits development opportunities on the existing sports fields
- The majority of adjacent buildings don't address the development site



Development Site Context



Development Site Boundaries

OPTION 1: South Valley Site



Figure 27: Conceptual Massing: Option 1 Alumni Hall / South Valley Site

Design Opportunities:

- A** Provide new academic buildings
- B** New building for Faculty of Information and Media Studies (FIMS) and the School of Nursing
- C** Develop new academic buildings
- D** Provide a flexible use open space that fronts onto a new internal road
- E** Utilize the existing slope to integrate structured parking to replace the South Valley Lot and provide additional parking for core campus

Yield Calculations: 41,000 - 50,000 m²

OPTION 2: South Valley Site



Figure 28: Conceptual Massing: Option 2 Alumni Hall / South Valley Site

Design Opportunities:

- A** Provide new academic buildings
- B** New building for Faculty of Information and Media Studies (FIMS) and the School of Nursing
- C** Develop new academic buildings
- D** Provide a flexible use open space that fronts onto a new internal road
- E** Develop a new parking structure to replace the South Valley Lot and provide additional parking for core campus

Yield Calculations: 41,000 - 50,000 m²

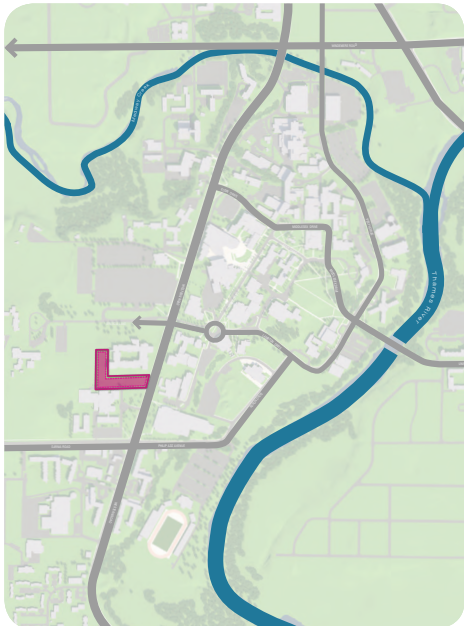
H Western Road Development Site 1



Western Road Development Site 1

Current Site Considerations:

- Development sites are available to the west and south of Ivey Business School
- Access is primarily from the south



Development Site Context



Development Site Boundaries

Western Road Development Site 1



Figure 29: Conceptual Massing: Western Road Development Site 1

Design Opportunities:

- A** Construct new buildings west and south of Ivey Business School
- B** Retain surface parking
- C** Design should consider future development on current Elborn site

Yield Calculations: 11,000 - 13,000 m²

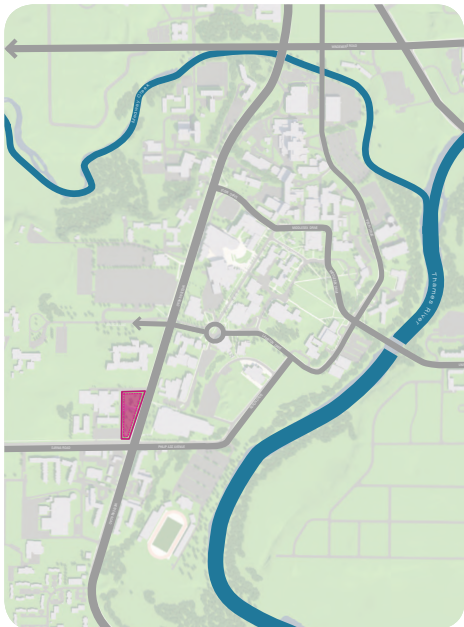
I Western Road Development Site 2



Western Road Development Site 2

Current Site Considerations:

- A** Triangular site to the East of Elborn College Building
- B** Good Western Road frontage and accessibility
- C** Important relationships to the current Ivey Building and future Elborn College Building



Development Site Context



Development Site Boundaries

Western Road Development Site 2

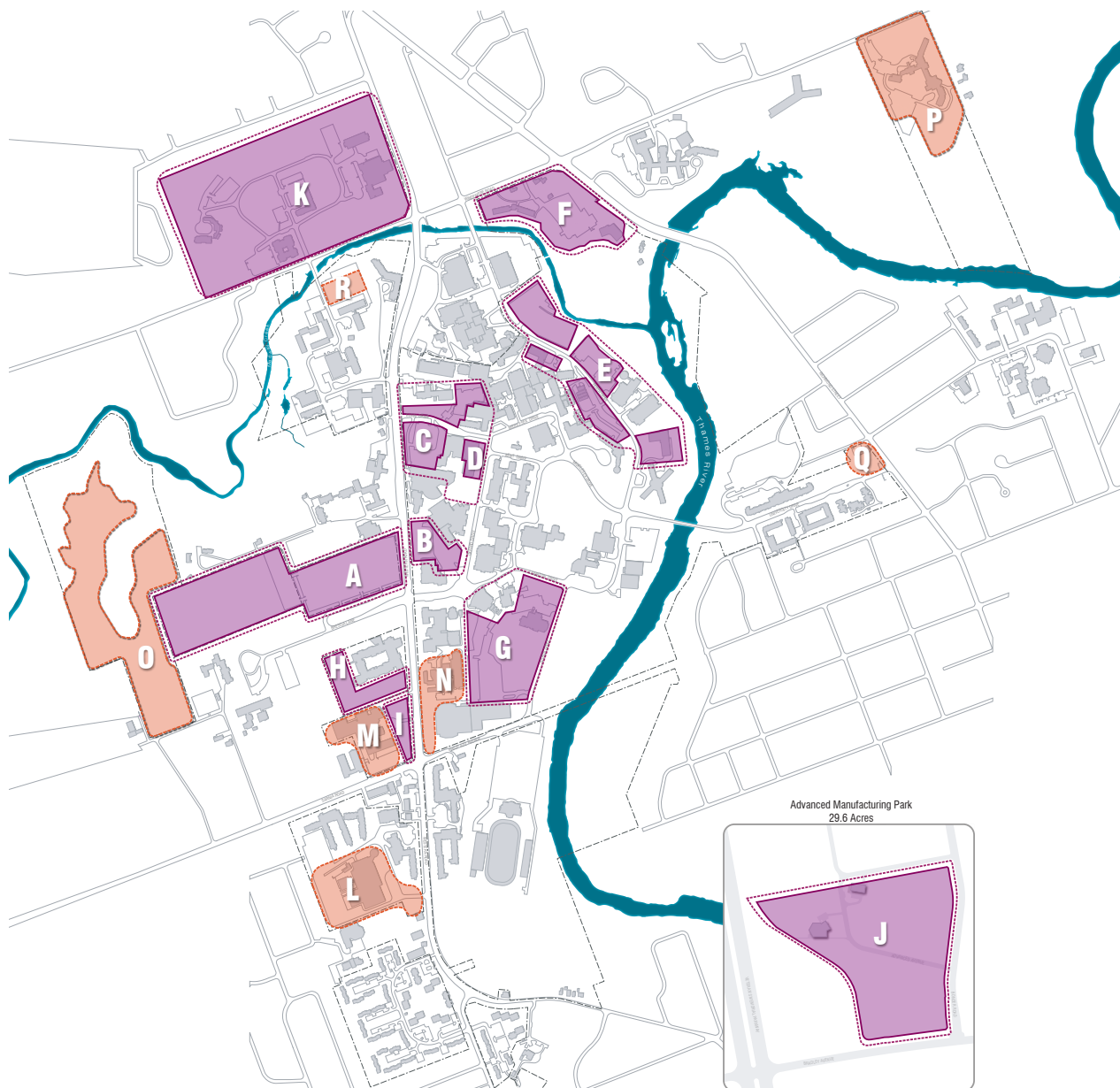


Figure 30: Conceptual Massing: Western Road Development Site 2

Design Opportunities:

- A** Provide clear and consistent Western Road frontage
- B** Building design should take advantage of height and scale opportunities
- C** Sarnia Road corner provides signature opportunities
- D** Manage design relationship to current and possible future neighboring buildings

Yield Calculations: 30,000 - 40,000 m²



Primary Development Sites

- A** - Springett / FRAM Site
- B** - Weldon Library Site
- C** - Elgin Entrance / Social Science Site
- D** - Social Science Building
- E** - Perth Drive Sites
- F** - Westminster Hall Site
- G** - South Valley Site
- H** - Western Road Development Site
- I** - Western Road Development Site 2
- J** - Advanced Manufacturing Park
- K** - Discovery Park

Secondary Development Sites

- L** - Althouse
- M** - Elborn
- N** - TRAC/Engineering Site
- O** - FRAM lands Site
- P** - Ivey Spencer Leadership Centre Site
- Q** - Bank of Montreal (BMO) Site
- R** - Bayfield Hall Site

Figure 31: Primary and Secondary Development Sites

4.3 Secondary Development Sites

Several large areas of University owned land and buildings are located on the periphery of the core campus. While these are not anticipated for growth in the immediate future, a long-term view of campus capacity should include their potential development.

The John G. Althouse Faculty of Education Building, Elborn College Building and the Wind Tunnel represent low-rise buildings on large sites. Their more intensive redevelopment would provide significant capacity along Western Road in relatively close proximity to the core campus.



the John G. Althouse Faculty of Education Building - 1.5 Hectares



Elborn College Building - 1.2 Hectares

The FRAM lands constitute a large potential resource, although it must be noted that much of the lands are constrained by environmental considerations, being part of the top of the bank of Medway Creek. These lands are mostly beyond reasonable pedestrian distance for core educational/instructional use, but do have potential for other academic and support buildings.



FRAM lands - 13.4 Hectares

There is potential to create a stronger athletic precinct around the Thompson Recreation & Athletic Centre and the Western Student Recreation Centre.

A secondary development site, the Bayfield Hall site, also extends to the South of Windermere Road.



TRAC Site - 0.5 Hectares



Figure 32: Main Campus Existing Development

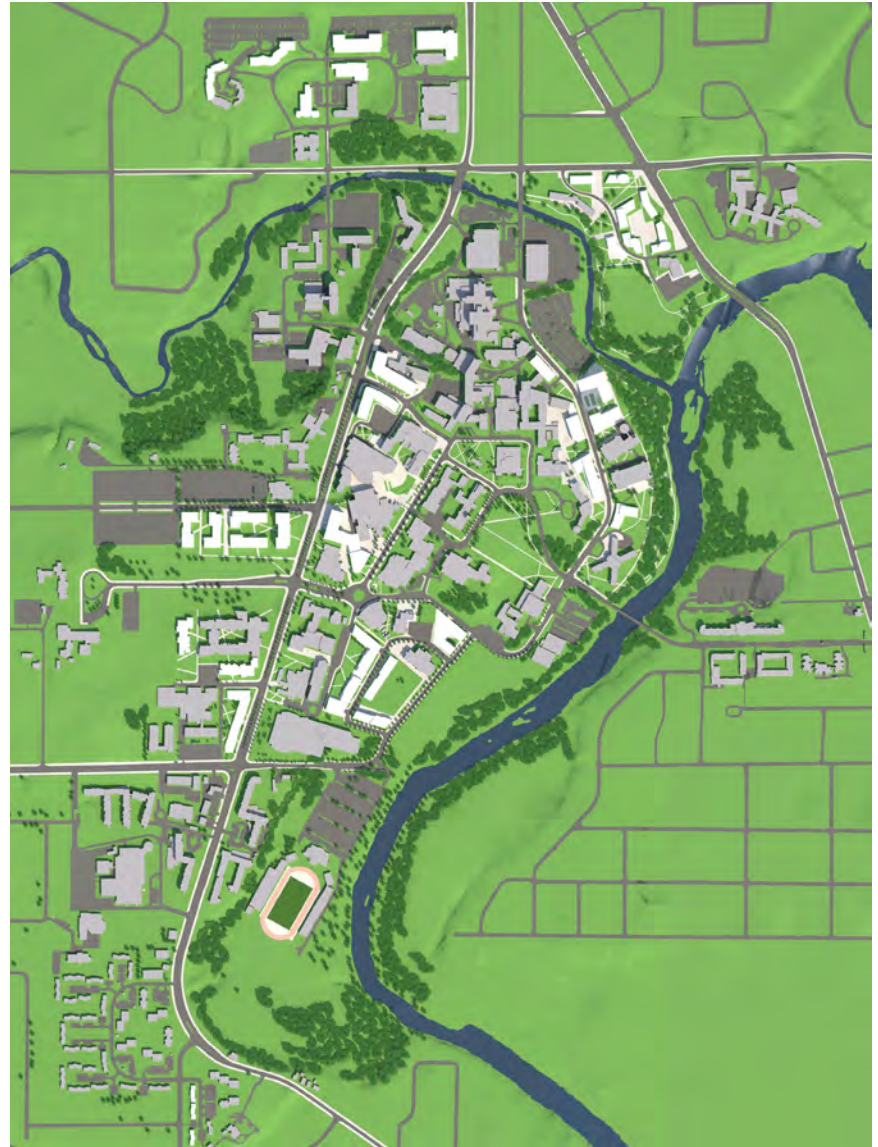


Figure 33: Main Campus Potential Development

Main Campus Development Potential

The following table summarizes the current and potential development capacity of the of the primary development sites (identified as sites A – I) on the main campus:

Current Academic Space on Main Campus:

740,000 m²

Potential New Academic Space on Main Campus:

288,000 - 359,000 m²*

* Does not include potential development sites at Discovery Park.

The total amount of space required by the University as indicated on Figure 1 is driven by enrolment as well as research and other related academic activities. Since the pressures on the University, both internal and external, for these kinds of activities are likely to increase, the trend line indicated in Figure 1, suggesting an addition of between 100,000 and 120,000 sq. m. per decade, is considered the best planning indicator of future growth.





OPEN SPACE & LANDSCAPE IMPROVEMENTS



1. Western Road
2. Alumni Circle
3. Oxford Drive
4. Social Science Plaza
5. Kent Drive
6. University Hill
7. Engineering / South Valley
8. Perth Drive

Figure 34: Open Space and Landscape Improvement Areas

Priority Areas for Improvement

The quality of the campus depends as much upon its landscape and open space character as on its buildings. Consideration should be given to these areas with respect to their design. Too many of them have a look that is inconsistent with the powerful presence of Western as an academic institution. Many major Ontario University campuses have undertaken major renewals of their open space character, their motivation generally being a combination of good husbandry, aesthetic, health & safety, and environmental concerns and the desire to project a confident, attractive image to potential students, faculty and donors.

The grounds, including pathways, courtyards, the Sherwood Fox Arboretum, natural areas, and wetlands all play an important role in creating a sense of place at the University. Future planning should include preservation of the grounds and development of an Open Space Master Plan, including the allocation of lands for the Arboretum, and enhancement of courtyards and other spaces. The retention of these spaces is essential for members of the community to enjoy and interact within the pleasant outdoor surroundings. In the development of plans for new facilities, the preservation of trees needs to be a critical part of the planning.

The Master Plan identifies six priority areas where such improvements should be made. These areas include:

- Western Road
- Alumni Circle
- Oxford Drive
- Social Science Plaza
- Kent Drive
- University Hill

These improvement areas are explored in further detail in this chapter. With future campus development, two additional areas for landscape and open space improvements have been highlighted - an extension of Oxford Drive south to the Engineering / South Valley areas and enhancement to the landscape along Perth Drive.

A Western Road



Existing conditions : Western Road at Springett Parking Lot

Current Site Considerations:

- The lack of centre median offers no respite for pedestrians crossing the wide road
- Multiple driveways disrupt the flow of traffic
- The large number of students crossing at Sarnia Road need a more pedestrian friendly intersection
- Inconsistent planting along the road does not create a welcoming or aesthetically pleasing streetscape
- There is an opportunity to continue Western signage along Western Road to create a stronger University identity
- As of this writing, the City of London has commenced an Environmental Assessment for Western Road, Sarnia Road and Philip Aziz Avenue
- It should be noted that Philip Aziz Avenue is City property and does not belong to Western



Existing conditions: Western Road at Huron University College

Western Road: Design Precedents and Opportunities



Figure 35: Existing conditions for Western Road

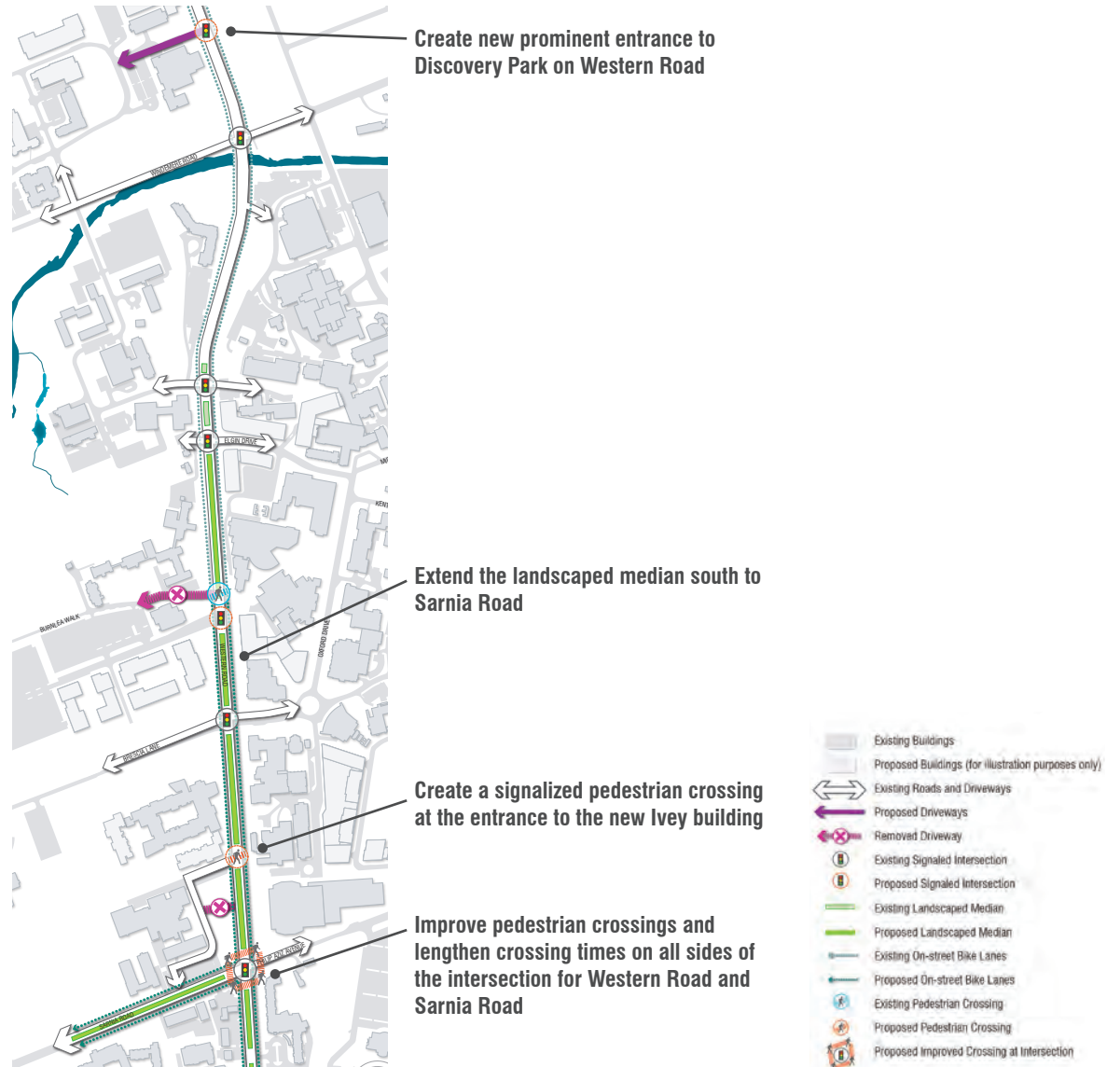


Figure 36: Future changes for Western Road



Western Road north of Huron University College



Cornell University



Cornell University

Western Road: Design Opportunities



Conceptual rendering of design opportunities: Western Road at Springett Parking Lot

Extend landscape improvements, signage and wayfinding, and traffic calming measures along the length of Western Road to create a true campus main street.



Conceptual rendering of design opportunities: Western Road at Huron University College

A new high-quality shared entrance for Huron University College and Western University has been constructed and future upgrades will improve the character and pedestrian safety of Western Road.

B Alumni Circle



Existing conditions: Alumni Circle

Current Site Considerations:

- Alumni Circle should provide a strong sense of formal arrival to the Campus
- Asphalt areas can be reduced and pedestrian comfort prioritized over car traffic
- Circle offers potential for new landscaping treatments and gathering areas that would encourage public use
- Existing road striping could be improved through paving treatment rather than traditional painting
- Existing asphalt and curbs are in need of replacement with higher quality materials
- New flagpoles could give Alumni Circle a fine formal sense of place
- New signage and signature design elements provide the opportunity to celebrate and promote Western University and enhance wayfinding on campus

Alumni Circle: Design Precedents



University of Richmond



Queen's University



University of California Berkeley



Princeton University



Figure 37: Illustrative Site Plan for Alumni Circle

Alumni Circle: Design Opportunities



Conceptual rendering of design opportunities: Alumni Circle

Create a pedestrian oriented arrival commons that extends the unique design of Oxford Drive and defines Alumni Circle as a key entranceway to the heart of Campus.

Oxford Drive



Existing conditions: Oxford Drive

Current Site Considerations:

- Oxford Drive should contain distinctive design elements such as paving or signage to define it as the main promenade of the campus
- The Drive should provide more seating or informal gathering areas that would encourage use other than passage
- Existing asphalt and curbs can be replaced with higher quality materials and street furniture
- Well integrated connections can be provided to adjacent public spaces, such as The Concrete Beach and Kent Drive

Oxford Drive: Design Precedents



Cornell University



Emory University



Penn State University



University of Toronto

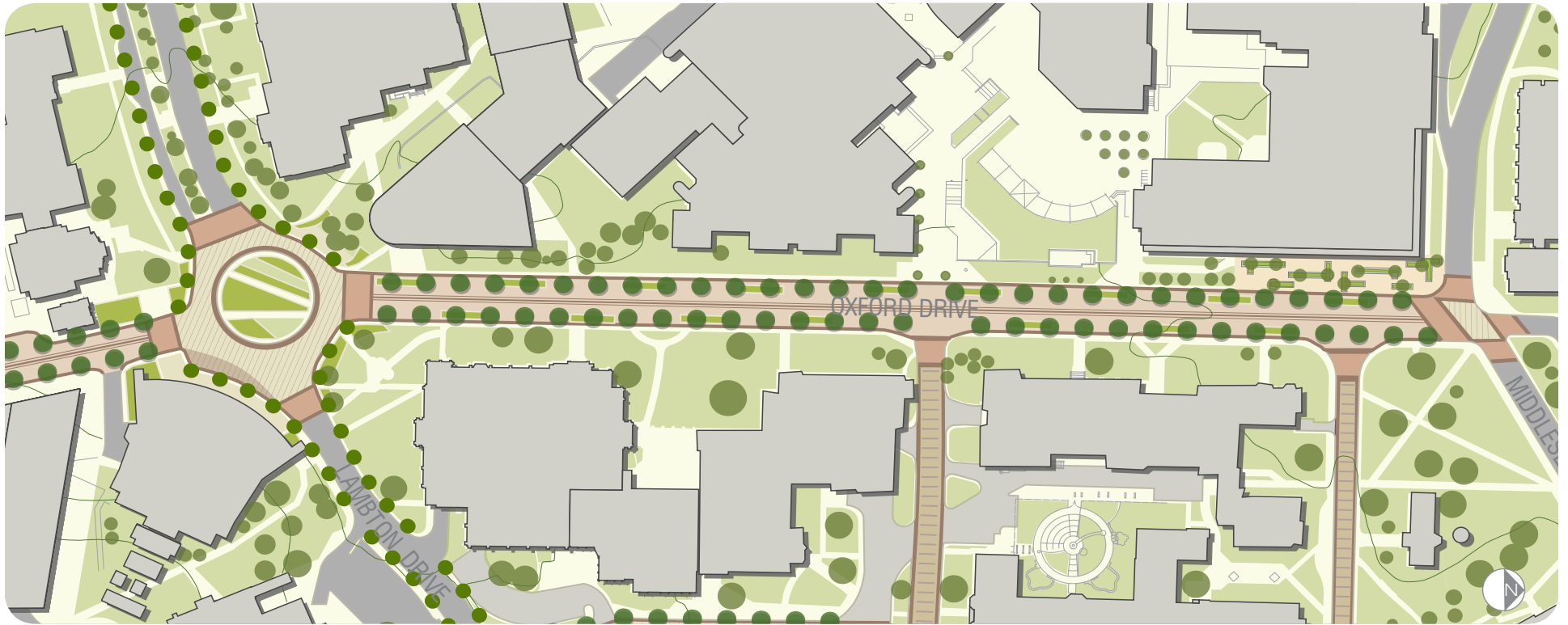


Figure 38: Illustrative Site Plan for Oxford Drive

Oxford Drive: Design Opportunities



Conceptual rendering of design opportunities: Oxford Drive

Provide distinctive landscaping, wayfinding and paving features to formalize Oxford Drive as a signature shared-use street that is oriented towards pedestrians but accessible to cyclists, the evening bus route and emergency services.

Social Science Plaza



Existing conditions: Social Science Plaza

Current Site Considerations:

- The plaza is outdated and in need of improvements to become a significant public space on campus
- The existing outdoor step area could be enclosed to create potential classroom uses or a lobby with informal gathering / lecture spaces
- Existing asphalt and curbs can be replaced with higher quality materials and integrated with the design of Oxford Drive
- The steps and stairs can be replaced to reduce hazard and maintenance issues

Social Science Plaza: Design Precedents



University College Cork



Victorian College of the Arts



Courtyard with seating



The Village of Yorkville Park, Toronto

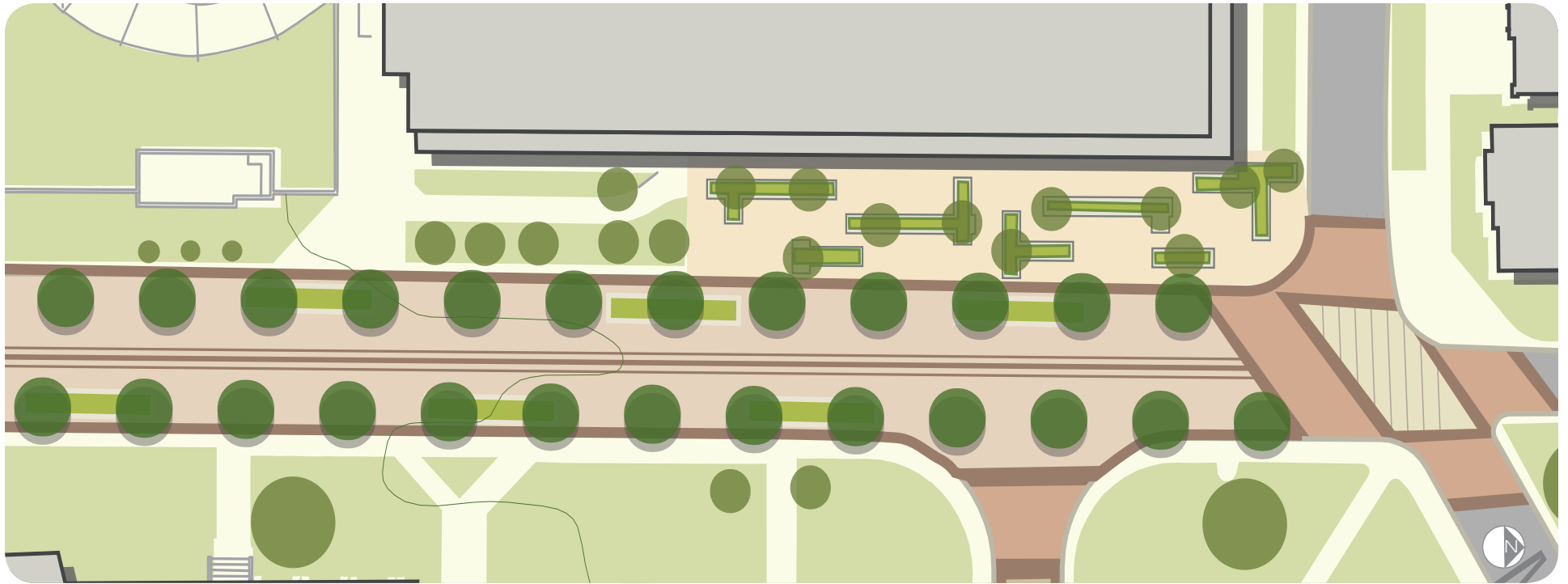


Figure 39: Illustrative Site Plan for Social Science Plaza

Social Science Plaza: Design Opportunities



Conceptual rendering of design opportunities: Social Science Plaza

Create a distinctive arrival plaza and building addition that compliments the design for Oxford Drive and provides a variety of interior and exterior spaces for studying, socializing, and informal lectures.

Kent Drive



Existing conditions: Kent Drive

Current Site Considerations:

- The extensive use of asphalt and prevalence of broken curbs distracts from the appeal of this classic part of campus
- Re-design can maintain access and parking while celebrating the area's distinctive campus character of buildings and landscape

Kent Drive: Design Precedents



Queen`s University



Duke University



College of New Jersey



Princeton University



Figure 40: Illustrative Site Plan for Kent Drive

Kent Drive: Design Opportunities



Conceptual rendering of design opportunities: Kent Drive

Design a pedestrian oriented walk around the original centre of Campus, utilizing tree planting program, wayfinding elements, a variety of seating amenities, and classic landscaping elements.

F University Hill



Existing conditions: University Hill

Current Site Considerations:

- University Hill can be well framed through landscaping and design features
- Improved paving on the signature path and appropriate landscaping and maintenance can enhance the classic view and sense of arrival on campus
- Existing light standards could be replaced with higher quality fixtures and integrated signage and wayfinding

University Hill: Design Precedents



Amherst College



The University of California, Berkeley



Furman University



Washington University



Figure 41: Illustrative Site Plan for University Hill

University Hill: Design Opportunities



Conceptual rendering of design opportunities: University Hill

Create a new plaza at the base of University Hill and improve the existing walkway and landscape to formalize this classic pedestrian entrance to Campus, while maintaining its unique, stark quality. A new informal amphitheatre can be created by using the natural slope behind the Music Building and Talbot College.



Proposed Movement and Open Space

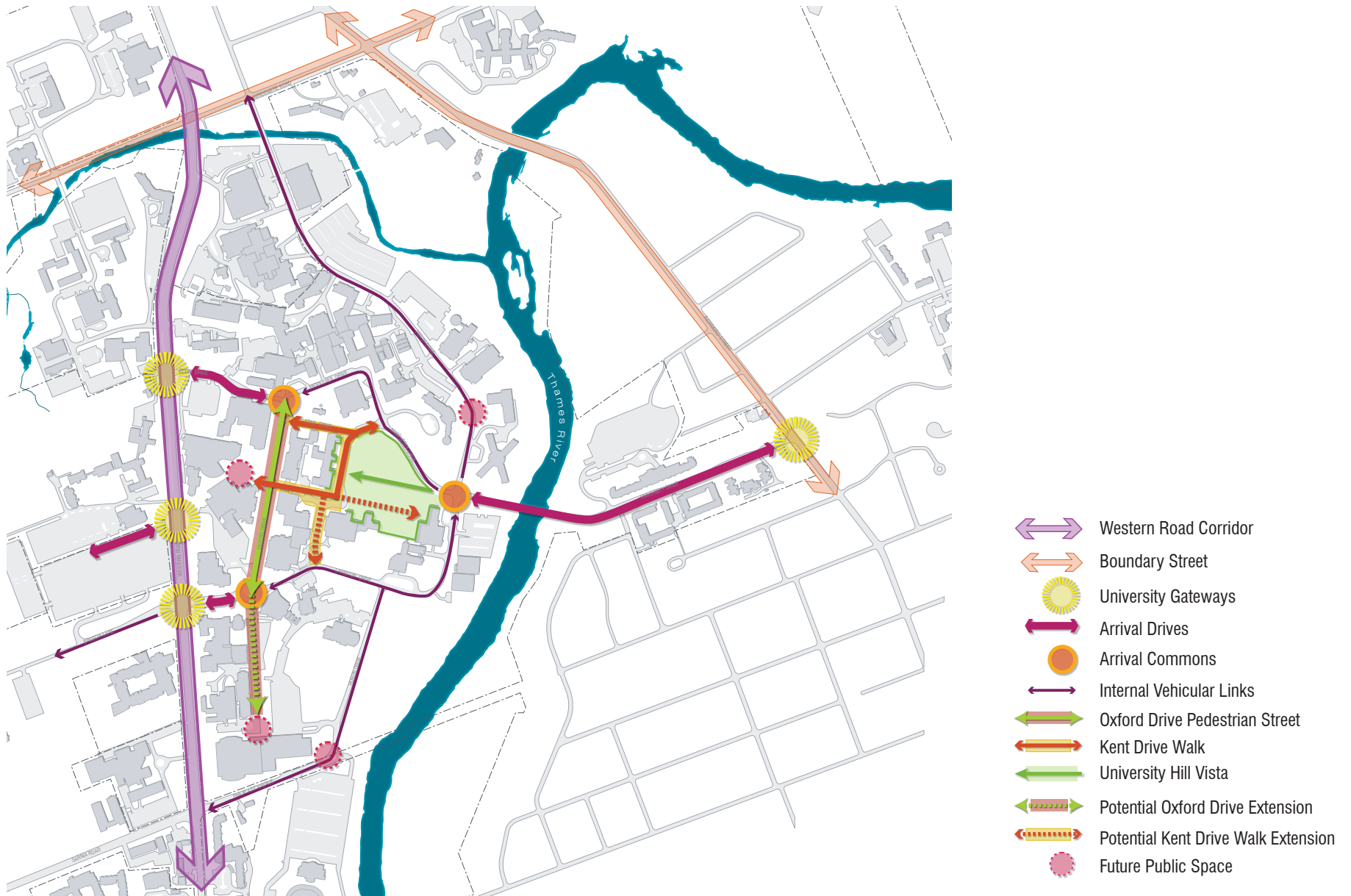


Figure 42: Proposed Movement and Open Space Network





MOVEMENT AND PARKING STRATEGIES



Existing Parking Spaces on Main Campus:

Existing Surface Lots - **5,810** spaces

Figure 43: Existing Surface Parking Locations

6.1 Future Transportation Strategies

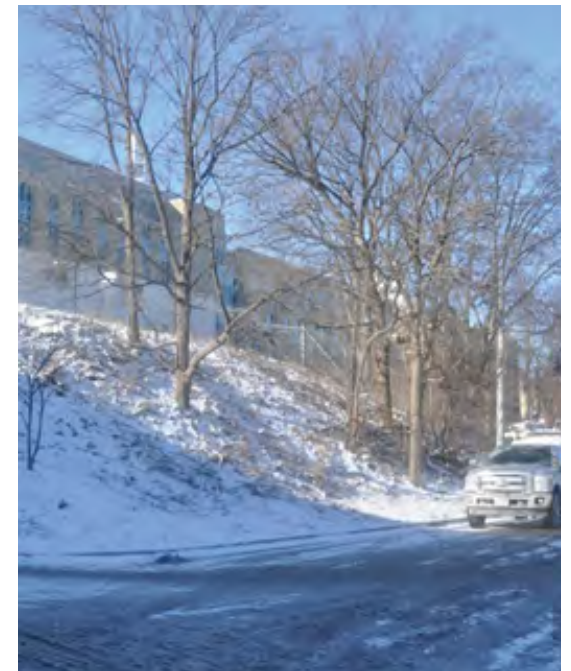
As the University continues to expand within the core, a shift in attitude regarding parking and transportation will need to be adopted. However, recognizing the needs of visitors to campus, alumni, those requiring accessible parking, and others, there will be a continued need to provide reasonable parking within the main campus. This Master Plan has identified some potential areas for new structured or surface parking, as illustrated in Figure 44.

In conjunction with this Master Plan, a parking analysis has been completed considering the existing parking supply and the impacts of development on parking and suggested direction and implementation for future

There are opportunities to take advantage of existing Perth Drive and South Valley grade changes to provide parking structures that would minimize the need for existing surface lots in the core campus.

As the Springett lot is developed, there is an opportunity to create new parking on the property further west, subject to the limits contained in property agreements.

There is also potential to collaborate with London Health Sciences Centre with respect to a shared parking structure on the existing Chemistry lot.



South Valley existing grade change



Figure 44 : Potential Surface, Underground and Structured Parking Locations

There are currently **5,810** parking spaces on existing Main Campus surface lots.

Potential Parking Spaces on Main Campus:

Remaining Surface Lots* - **2,720** spaces

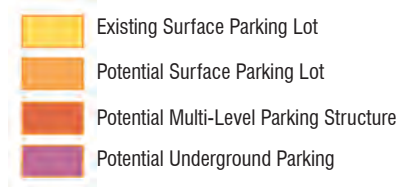
Possible Future Surface Lots - **1,430** spaces

Possible Future Structured - **1,800** spaces

Possible Potential Underground - **650** spaces

**FUTURE MAXIMUM CAPACITY:
6,600 spaces**

*based on all primary sites being developed



Parking at Western is an ancillary operation and, as such, is required to be fully self-funding. Recommended strategies from the parking analysis include:

Accommodating Parking

In the short-term:

- Seek to amend the parking requirements contained in the Zoning By-law to allow flexibility to reduce parking provision

In the long-term time:

- Plan for future parking structure to accommodate increases in building program beyond 2016/17

Transportation Demand Management (TDM Strategies)

Integrate TDM into Western's organizational structure to provide a coordinated approach and legitimacy to initiatives aimed at reducing travel demand.

Marketing and Outreach

A strong brand for TDM program will help with increasing awareness of TDM initiatives.

Active Transportation

Walking and cycling infrastructure and promotion can play a major role in providing travel choices for people.

Western should work with the City of London and other stakeholders to create a quality network of continuous and interconnected active transportation corridors (as envisaged in the City of London Smart Moves Transportation Master Plan). The use of transit is a key component of any successful University based TDM program and is of critical importance to Western.

The City of London's proposed Rapid Transit (RT) improvements bring the potential for higher frequency, more reliable, robust transit service to Western University. Along with restructured routes to feed the RT system, it is expected that the travel time to and from campus would decrease and make travel by transit more desirable.

A route along Richmond Street as part of the City's planned rapid transit network would provide benefits to transit accessibility for Western, but the largest benefits would be gained from having

Western directly on the rapid transit route and acting as a transportation hub. Discussions on potential RT routes through campus will be required between Western, the City of London and the LTC.

Rideshare/Carpool

Strategies to support ridematching and carpooling can substantially reduce the number of single-occupant vehicles entering the campus.

Build TDM Partnerships

Building partnerships with the City and adjacent employers will allow for coordination and sharing of resources and ideas on TDM initiatives.

Application of these strategies would decrease the need for parking spaces, decrease traffic congestion, increase transit options and improve the overall environment of the campus.





DISCOVERY PARK & ADVANCED MANUFACTURING PARK



7.1 Discovery Park

The Discovery Park at Western is looking towards expansion, with significant research, development and commercialization investments taking place in the biotech, agriculture, energy, chemical and industrial processing sectors. The vision is to become a destination for technology and talent and a beacon for the region's knowledge economy.

It occupies a large well-treed site with interesting topography and includes Windermere Manor hotel and conference centre. Several large, well-accessed sites are available for new development as well as infill and addition opportunities.

Future development of Discovery Park will be guided by the following directions:

- Creation of a new, more visible entrance to the Park from Western Road, with adjacent building design, street lighting and streetscaping reflecting this new sense of arrival in the Park and the strengthened presence of Discovery Park in the campus and hospital district
- Discovery Park, immediately north of the core campus, should be considered in terms of its ability to accommodate appropriate elements of academic and research growth



Discovery Park Western Perspective Rendering
Architects Tillmann Ruth Robinson



Discovery Park Western Road Elevation Rendering
Architects Tillmann Ruth Robinson



WINDEEE Building



The Collider



Fraunhofer Project Centre

7.2 Advanced Manufacturing Park

The Advanced Manufacturing Park (AMP) is within phase IV of the City of London Innovation Park. Currently, the area consists of 52 hectares of serviced industrial land of which 15 hectares has been donated by the City for AMP. Eleven hectares is operated by Western, four hectares is operated by Fanshawe College for research and incubation of advanced manufacturing.

The site is already home to several major facilities, including the WindEEE Dome, the world's first hexagonal wind testing building, the Fraunhofer Project Centre, a materials research, development and testing centre, and The Collider, a centre for research, testing and commercialization of advanced manufacturing technology. The Advanced Manufacturing Park has the ability to receive other major research related facilities including those that might be relocated out of the core campus.

Future development should be guided by the AMP Master Plan completed in 2011.



Advanced Manufacturing Park





IMPLEMENTATION AND MANAGEMENT



Implementation Strategies

The Campus Master Plan provides a framework for making ongoing development choices and decisions within the context of the long-term vision. This chapter identifies initiatives for short-term implementation and those in need of further development. It discusses potential phasing considerations for both development and landscape improvement initiatives.

This update recommends that a review and update to the Campus Master Plan be undertaken in 5 years (2020) to provide an assessment of growth trends, development activity, campus design and movement and parking systems.

This Master Plan has identified a series of large and high profile projects for the core campus. These projects are intended to elevate the image of the campus as well as support anticipated growth over the next decades. The development opportunities and landscape and open space improvement sites identified will take time and significant funding to realize. Due to their scale and complexity, these recommended projects will be the responsibility of current and future University administrations.

Since the majority of the projects are located within the core of the highly developed campus, proper phasing is required to ensure that change occurs in a controlled fashion. The considerations on the following pages should influence these decisions.

Campus Growth and Development

The highlighted primary development sites provide adequate capacity to support required development over the next 25-30 years and ensure the continued expansion of a compact campus in line with University development priorities. These sites are not fixed. As an example, our residences are required to be fully self-funding and are developed based on student needs. Should another residence be required in the future, the primary and secondary development sites identified in this plan would be further studied to determine the most appropriate location.

This plan was developed within the context of current floodplain regulations of the Upper Thames River Conservation Authority (UTRCA). As stated previously, these floodlines place considerable constraints on development within or adjacent to them and have been taken into account in the updated planning.

This plan is not intended to restrict choices, but to simply establish a realistic vision within a long-term plan.

Short Term Development

South Valley

- The South Valley development site is not impeded by existing use and should be considered as a shorter term goal for campus development. Work is already underway for a new academic building to the north of the Labatt Health Sciences building and should be coordinated with a larger development strategy for the site
- This South Valley site has been suggested as a prime location for parking facilities which should be explored prior to development

Perth Drive

- The Visual Arts parking lot has been identified as the site for a new Interdisciplinary Research Building and further planning is currently underway

Westminster

- The Westminster site is the most removed from the core campus and is least impacted by ongoing campus decision making. Work has recently been completed for the new Public Health & Family Medicine building and the remainder of the site is well suited for short term development

Springett Lot

- Due to its large and prominent location, development of the Springett Lot is a short term priority for the University

Longer Term Development

Social Science

- Building additions or renovations to the Social Science building should be explored further

Weldon Library

- Development for the Weldon Library site should consider how to maintain existing service access and incorporate a wider campus parking strategy

Elgin Entrance

- Development of the Elgin Drive entrance site should coordinate with the existing Siebens Drake Research Institute and incorporate a wider campus parking strategy

Perth Drive

- Development of the Perth Drive sites requires further exploration and decisions related to the Staging building

Secondary Development Sites

- Further explorations for development of Althouse, Elborn, the FRAM lands, and the Discovery Park should be undertaken by the University in the future

Open Space and Landscape Improvements

Several of the identified opportunities are landscape initiatives that require significant investment. They also represent improvements to the movement network, including pedestrian and vehicular circulation, and parking structure investments.

These landscape improvements should be implemented over time as opportunities and funding 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.

A comprehensive Open Space Master Plan should be developed to guide future decision-making and create an overall vision for campus-wide improvements. This plan should outline strategies for implementing and funding improvement initiatives that celebrate the historic landscape of the campus and improve the public realm. Its use is important as an academic resource, while promoting the use, pride, and ownership of open space for the University and community. Further, the creation of an overall vision for campus-wide improvements should recognize the need for gathering places for students, faculty/staff, and visitors throughout campus, the importance of the interface between buildings and adjacent landscape, accessibility, safe and efficient movement, signage, wayfinding, lighting and the four season usage of the campus.

Priority Improvement Areas

Western Road

- Streetscape improvements including the extension of the planted median and the removal or addition of driveways should be undertaken in conjunction with the shared driveway arrangements between Huron and Western
- Improvements to the pedestrian crossing at Sarnia Road should be implemented as soon as possible due to an influx of students with the opening of the new residence

Oxford Drive

- This is a key piece of the campus and should be considered as a priority improvement area, both due to its central location and the fact that most development around it has been completed
- Opportunities to fundraise this signature campus street should be explored

Alumni Circle

- This main arrival commons for the University is another priority area for improvement, however, the design of this area should consider any development that may be occur on the Weldon Library site

Secondary Improvement Areas

Social Science Plaza

- The redevelopment of this plaza should be undertaken in conjunction with any additions or renovations to the Social Science building in order to integrate with the building's interior
- The plaza should be considered as a component of a larger design strategy for Oxford Drive, Kent Drive, and The Concrete Beach

University Hill and Kent Drive

- While these improvement areas are important due to their prominent central campus location, they are considered secondary to those identified previously. There may, however, be potential to fundraise for these sites.
- Removal of the existing parking spaces on Kent Drive should be coordinated with a wider campus parking strategy

APPENDIX A

Campus Master Plan Update Committee

2014 Campus Master Plan Update Committee

John Capone, Vice-President (Research)

Neil Carruthers, Chief Administrative Officer (Huron University College)

Ruban Chelladurai, Associate Vice-President (Planning, Budgeting, and Information Technology)

Helen Connell, Associate Vice-President (Communications & Public Affairs)

Saher Fazilat, Executive Director (Facilities Development & Engineering)

Susan Grindrod, Associate Vice-President (Housing & Ancillary Services)

John Hatch, Associate Dean (Faculty of Arts), Past Chair (Senate Committee on University Planning)

Gitta Kulczycki, Vice-President (Resources and Operations)

Lynn Logan, Associate Vice-President (Finance & Facilities)

Michael McLean, Manager, Planning & Design (Facilities Development & Engineering) (Chair)

Kevin Wamsley, Associate Dean (Faculty of Health Sciences)

Alan Weedon, Vice-Provost (Academic Planning, Policy and Faculty)

Betty Anne Younker, Dean (Don Wright Faculty of Music), Chair (Senate Committee on University Planning)

APPENDIX B

Consultation

In the preparation of the “Consultation Draft”, which was posted to the Western web site on February 5, 2015, the Committee met seven times from November 2012. Both before and after posting of the Consultation Draft, consultations were pursued through several venues within the University community and with the broader community. These included meetings with specific stakeholders (listed below), a town hall meeting for the Western community and the external community and a link to the “Consultation Draft” on the Western website with a dedicated email box for responses that received seventy-seven postings.

Presentations to specific stakeholders:

2014

- Plan presented to Campus Council
- Plan presented to Deans Council
- Plan presented to President/ Vice-Presidents/Associate Vice-Provosts/Associate Vice-Presidents (PVP)

2015

- Plan presented to PVP with update
- Plan presented to University Students' Council (USC)
- Plan presented by Peter White to Councillor Phil Squire
- Plan presented to neighbourhood association representatives
- Plan presented to Society of Graduate Students (SOGS)
- London Community Consultation Meeting
- Campus Community Consultation Meeting
- Plan presented to Alumni Board

The Committee is very appreciative of the thoughtful and constructive responses received in the dedicated email box from individuals responding as individuals or as representatives of organizations.

Internal Stakeholder Consultations

PVP, Campus Council, Deans Council, SCUP, Senate, SOGS, USC

External Stakeholder Consultations

City of London, Neighbourhood Associations, Alumni Board, LHSC, LTC, Affiliated University Colleges

Campus Community

Mass Emails to students, faculty & staff, Western News article, Campus Community Meeting, Online Feedback

London Community

LFP Advertisement, Briefed LFP Editorial Board, London Community Meeting, Online Feedback