Mount Royal College Lincoln Park Campus Plan Update

bmi pace

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PREFACE

The Mount Royal College Lincoln Park Campus Master Plan was guided by a Steering Committee comprised of:

Richard Roberts (Chair) – Vice-President, Administrative Services Steve Foster (Project Coordinator) – Director, Physical Resources Dr. Robin Fisher – Vice-President, Academic Affairs Hunter Wight – Vice-President, External Relations Brian Fleming – Executive Director, Student Affairs and Campus Life Mike Reed – Director, Business & Retail Services Bryan Lane (Dean's Council Representative) – Dean, Faculty of Science and Technology Maureen Bedard (Support Staff Representative) – President, MRSSA Reid Spencer (Faculty Representative) – Faculty, Theatre, Speech and Music Performance Matt Koczkur (Student Representative) – Vice-President, External, SAMRC Rissa Myers (Project Assistant) – Physical Resources

Brook McIlroy Planning and Urban Design / Pace Architects (BMI/Pace) were retained by Mount Royal College in early 2008. The firm of Poulos and Chung assisted BMI/Pace by reviewing the existing transportation opportunities and constraints, and by developing strategies for managing future transportation demands.

The development of the Master Plan followed a three-phase process that involved background review and stakeholder interviews, development of a vision for the Campus, and the preparation of the Master Plan recommendations. A public-consultation event was held in each of the three phases to garner feedback and develop ideas. Public-consultation events were attended by students, staff, faculty and external stakeholders.

As the Mount Royal College Campus evolves, the Master Plan will provide a framework for growth to direct the expansion of the Campus. The Plan should be used to guide the placement and phasing of new buildings, the design and integration of open spaces, built form, the supply of necessary support infrastructure such as parking and pedestrian pathways, and the overall creation of a single unified urban Campus that reflects the College's goals as a community-oriented education institution.



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Existing Campus Plan with approved 2009 projects.

Mount Royal College

Mount Royal College 🗕 Lincoln Park Campus Master Plan

1. EXECUTIVE SUMMARY

1.1 OVERVIEW OF THE EXISTING CAMPUS

Mount Royal College's Lincoln Park Campus is a compact and well-defined 51.55 hectare property located in the southwest district of Calgary, Alberta. The Campus serves a wide range of part-time, full-time and continuingeducation students. The diverse student population adds to the dynamic nature of the College and helps inform the recommendations in this Plan.

Today, the neighbourhoods surrounding the Campus are in transition. An extensive office development is under construction to the south and a new mixed-use residential neighbourhood is planned to the north. With this new growth, the College is ideally positioned to become the central focus of an emerging, vibrant urban district.

1.2 CAMPUS GROWTH

In the 2008-2009 academic year, the total student population enrolled at Mount Royal College was approximately 7,696 Full-time Learning Equivalent (FLE). Over the next six years, the full-time student population will significantly increase. Nearly 9,400 FLE students will be enrolled at Mount Royal College by the year 2015. In the 2008-2009 academic year, there were 2,260 members of faculty and staff. The faculty population growth is expected to match the student growth. Just under 300 faculty staff are expected to join Mount Royal College over the next six years.

The total Campus population, including students, faculty, staff and management will increase 12% by 2015. This Campus Master Plan provides a structure by which the Campus can accommodate these increases. Phase 1 of the Master Plan provides a framework for new facilities, and qualitative improvements to the Campus based on growth projections summarized in Table 1: 2008-2015 Campus Population Projections.

Table 1: 2008-2015 Campus Population Projections

INDICATORS	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014 -15
Student Population (Credit only)*	7,696 FLE	8,042 FLE	8,845 FLE	9,310 FLE	9,387 FLE	9,389 FLE	9,389 FLE
Faculty Population	1,479	1,572	1,665	1,665	1,665	1,746	1,746
Staff and Management Population	781	806	839	839	839	880	880
Total Campus Population (FLE Student population included)	9,956	10,420	11,349	11,814	11,891	12,015	12,015

*Seven-year campus projection student population does not include part-time students taking continuing education, conservatory or language institute and international courses.



1.3 NEW FACILITIES TO ACCOMMODATE GROWTH

Today's Campus buildings provide 106,320 m² of space to support the core functions of the College. The ratio of building area per FLE student is 13.8 m² per person. Residence buildings providing 1,020 beds are in addition to this number.

The Master Plan is organized into two phases. Phase 1 accommodates the anticipated growth resulting from the addition of degree-granting programs to the College's offerings, as well as the development of core facilities necessary to the continuing success of the College. Phase 1 will accommodate the academic Campusgrowth projections reflected in Table 1 to the year 2014-2015 providing an additional 61,016 m² to bring the total building area to 167,336 m² by the end of Phase 1 summarized in Table 2: Building Area Takeoff Phase 1 & 2. This building area will serve a total FLE Campus population of 9,389, resulting in a ratio of 17.8 m² per person.

The Phase 1 Master Plan anticipates the completion of the following construction projects:

- Centre for Continuous Learning Expansion (6,121 m²)
- Science and Technology Expansion Phase 1 (4,700 m²)
- Proposed New Library (15,960 m²)
- Proposed Conservatory and Concert Hall (8,775 m²)
- Proposed Health and Sciences Building (25,460 m²)
- Parking Structure (± 1,200 parking spaces)

Table 2: Building Area Takeoff Phase 1 & 2

	DESIGN PLAN				
BUILDING	Building Footprint (m ²)	Storeys	Total Built Floor Area (m ²)		
Phase 1					
Science and Technology Expansion Phas	e 1 1,567	3	4,700		
Proposed Health and Sciences Building	6,365	4	25,460*		
Proposed Concert Hall	2,900	1	2,900		
Proposed Conservatory	2,938	2	5,875		
Centre for Continuous Learning Expansion	n 2,040	3	6,121		
Proposed New Library	3,990	4	15,960		
Total Phase 1 Campus Building Area			61,016		
Total Existing Building Area (2008-2009)		106,320		
Total Building Area (End of Phase 1)			167,336		
Phase 2					
Future Academic 1	3,917	4	15,668		
Future Academic 2	2,890	4	11,560		
Future Academic 3	1,235	4	4,940		
Future Academic 4	1,985	4	7,940		
Future Academic 5	2,441	4	9,764		
Future Academic 6	2,516	4	10,064		
Future Academic 7	2,516	4	10,064		
Future Mixed Use 1	2,185	4	8,740		
Future Mixed Use 2	1,988	4	7,952		
Future Mixed Use 3	1,625	4	6,500		
Future Residence Complex	4,770	4	19,080		
Future Residence	2,045	4	8,180		
Study Cottage/Alumni Building	625	2	1,250		
Total Phase 2 Campus Building Area			121,602		
Total Building Area (End of Phase 1)	167,336				
Total Building Area (End of Phase 2)			288 938		

* Reflects maximum build-out potential. Actual size may be less.



Campus Plan Phase 2. The Phase 2 Plan demonstrates Mount Royal College's capacity to accommodate long-term growth, potentially supporting a FLE student population of 17,400 students.

1.4 MASTER PLAN OVERVIEW

The Master Plan for Mount Royal College's Lincoln Park Campus has been created to guide the location and design of future buildings and open spaces, and to create an inspiring and supportive environment for teaching and learning. The Plan also establishes a strong relationship with the neighbourhood, building upon the centuries-long tradition of intertwining educational institutions with their surrounding communities to establish symbiotic 'place-making' relationships.

By offering degree programs in Fall 2008 the College is heading in a new direction. The Campus Plan is structured to respond to both the immediate and long-term growth needs that will result from this transition. The Plan also builds on the College's reputation as an institution that provides an intimate learning environment for full- and part-time students and faculty. The recommendations in this document focus on the structuring elements of the Campus, including buildings, open spaces, roads, parking lots, sports facilities, and circulation. The Plan identifies core directions for future development consultation with Campus faculty, staff and students. These directions include goals for sustainability, facility organization, building design, accessibility, transit and transportation.



Below is a summary of the structuring elements of the Plan.

Pedestrian and Cyclist Circulation

 An interconnected system of trails and paths from the edges of the Campus to the core building is recommended, especially through existing parking lots.

Entrances and Access

- The Main Gate at Mount Royal Gate Southwest is retained as the primary Campus vehicular entrance, reinforced by the new Conservatory/Concert Hall and a Parking Structure. All entrances focus on the accommodation of pedestrians and cyclists, creating a more urban gateway condition.
- In Phase 2, the vehicular entrance at the West Gate is moved further north to align with the municipal road across the street. A new minor entrance is added off of Richardson Way Southwest, approaching the intersection with Richard Road Southwest.

Streetscapes

 In Phase 2, a portion of Mount Royal Circle is proposed to be transformed into a pedestrian promenade reflecting a greater reliance on the surrounding cityroad system, as well as a new focus on creating a beautiful, green Campus setting. Two primary streetscape conditions are recommended. Mount Royal Circle by the West Court Residences is retained as a conventional roadway with a more urban condition. Mount Royal Circle by the East Gate Entrance and the E4 parking lot is envisioned to become a pedestrian-oriented streetscape with vehicular travel limited to service and emergency vehicle use. In Phase 2, two new bus terminals are recommended at the perimeter of the Campus (adjacent to new buildings including the Library) that will accommodate interior waiting areas, providing informal study space and cafés.

Building Placement

- New buildings are designed and located with a focus on safe, pedestrian-friendly settings.
- Sixteen potential new building sites are identified. Six building sites could move forward with little to no change to the existing circulation patterns and buildings.
- In Phase 1, a Parking Structure is recommended to be developed in combination with the new Conservatory/ Concert Hall at the Main Gate. An alternate suggestion is a stand-alone parking garage in this location with the Conservatory/ Concert Hall located on Lot S1 (See Appendix D).

Open Space Organization

- There are seven new, formal open spaces proposed within the Master Plan. Each acts as an organizing landscape for new buildings and is framed on a minimum of three edges with new or existing built form.
- A new study pavilion and Alumni Building are located adjacent to the Convocation Green to promote enhanced activity and use in this area.

Utilities and Infrastructure

The design of the Conservatory/Concert Hall and Parking Structure at the Main Gate will have to consider the infrastructure easement through this area.

Proposed West Campus area.

1.5 SUSTAINABLE TRANSPORTATION STRATEGY

Today the College provides 4,273 parking spaces, serving a Campus population of 9,956. This results in a parking-supply ratio of 2.3 persons per stall.

Travel to the Campus is supported by Calgary Transit bus routes. Students who live on Campus also assist in reducing the need to drive to Campus.

Table 3: Campus Parking Comparison compares Mount Royal College's parking-supply ratio to other post-secondary institutions and demonstrates the relatively high supply presently provided by the College. This pattern of high dependence on automobile use as a means of transportation to the Campus reflects the historic context of the College's suburban location. However, despite this comparatively high rate of parking supply, there is a perception that a shortfall currently exists; a situation which may intensify as the College population expands in the coming years.

The College has adopted a clear mandate of sustainability to guide Campus development and operations. A core principle of the Campus Master Plan is to move the College away from having to continuously build more parking in line with current parking-supply ratios. Because of the rapid urbanization of the College area and the introduction of the Calgary Transit Light Rail Transit (LRT) Line to Westbrook Station in 2012, the use of Transportation Demand Management strategies and progressive parking fees will gradually shift transportation to the College towards other non-automobile modes. This will result in reduced parking ratios. In the short term, the College intends to address the anticipated shortfall in parking caused by the displacement of surface parking as new facilities are built by building a Parking Structure providing up to 1,200 stalls. Commencing construction in 2009, the Parking Structure will alleviate any shortfalls that exist in the College's current parking supply and approximately maintain the present parkingsupply ratio of 2.3 persons per stall even as the Campus population increases over the next six years to 12,015 persons.

The Phase 1 parking plan results in a parkingsupply of 5,070 spaces, providing a parking ratio of 2.36 persons per stall. The Phase 1 Plan will serve as the basis for discussion between the College and the City of Calgary related to any necessary development approvals and/or amendments to existing planning and zoning regulations.

During Phase 2, which is expected to incrementally evolve after 2015, the amount of parking per person will gradually reduce reflecting improved transit service to the College, as well as other less parkingdependent modes of transportation. With more housing anticipated to be built close to the College, staff, faculty and students will have more opportunity to walk and cycle to Campus.

The long-range vision for the Campus does not foresee the construction of more than one Parking Structure for the College, although new building projects are recommended to include one level of below-grade parking where feasible.

Table 3: Campus Parking Comparison

INSTITUTION	STALLS	POPULATION	POPULATION / STALLS
Mount Royal College	4,273	9,956	2.30
University of Calgary	8,432	23,909	2.84
University of Alberta	8,124	40,055	4.93
University of Western Ontario	7,500	29,000	3.87
Kwantlen Polytechnic University	900	4,034	4.48
BC Institute of Technology	3,800	15,945	4.20
University of British Columbia	10,650	31,035	2.91
Simon Fraser University	5,400	15,600	2.89
University of Saskatchewan	6,310	25,670	4.07



The original Mount Royal Campus on 7th Avenue and 11th Street Southwest, Calgary.



Conservatory students in front of the original Mount Royal Campus in downtown Calgary.



A 1947 boxing match at Mount Royal College.

Note: photos courtesy of Mount Royal College Web site, 2008.

2 BACKGROUND

2.1 HISTORY OF THE CAMPUS

2.1.1 The Campus and its Evolution

Mount Royal College was granted a charter in 1910 and was named after a nearby prestigious housing development. For the first 32 years, the College was under the direction of George William Kerby and offered primary and secondary schooling in a variety of fields of study. During this first phase, the school was a secondary school of the United Church of Canada, only changing its affiliation in 1931 when it became the University of Alberta's Junior College. During the second phase, under the direction of Reverend Dr. John Garden, the College saw an increase in veteran enrollment after the Second World War. The Business Administration Department, which went on to become the highly respected Bissett School of Business and the Reflector, the independent newspaper of Mount Royal's student body, were also established during this era. With a steady increase in enrollment rates, the College began actively seeking a new location for its main Campus. The campaign for a new Campus began in earnest in 1964 when

enrolment had reached capacity. The Lincoln Park Campus was the site of an abandoned Second World War airbase and was of interest to the Calgary Exhibition, the Stampede and the expanding College. In 1972, the main Campus was relocated to the present-day location at Lincoln Park, in the southwest outskirts of the City of Calgary. Satellite campuses were introduced in 1981. Twenty-nine years after becoming a public institution of the Province of Alberta, Mount Royal College began offering Canada's first two applied baccalaureate degree programs in 1995. Since the move to Lincoln Park, two major expansion projects were completed in the 1980s and the campus facility increased by thirty percent. In early 2000, two new academic buildings were constructed, the gymnasium complex was tripled, construction on the Centre for Continuous Learning began and 594 beds were created in a residential complex. (Source: Mount Royal College History Web site, 2008.)

2.1.2 Transition to a Degree-Granting Institution

Mount Royal has come a long way since its humble beginnings on 7th Avenue and 11th Street Southwest in Calgary. Today the College has transitioned into a baccalaureate degree-granting institute. In 1999, the College commissioned a long-term campusdevelopment strategy plan to help lead the Campus into the next 25 years as it becomes a full-credential undergraduate College. The completion of the Learning Centre represents the end of Phase 2 of the six-phase Master Plan. At this ten-year mark the College is ready to review and update the 1999 Campus Development Plan (CDP). A Campus Transportation Strategy was prepared for Mount Royal College in 2006, updating the transportation portion of the 1999 CDP. The next step in the process is the preparation of this comprehensive Campus Master Plan.



2.2 EXISTING CAMPUS STRUCTURE

To better understand the Campus and the constraints associated with its development, a series of studies were developed to analyze the Campus' structuring elements and constraints. These elements include buildings, parking, roads, pathways, open spaces and infrastructure.

Prior to the most recent building projects, the College evolved as a mega-structure: a large centralized space, created through a succession of contiguous building additions and surrounded by surface parking lots. In many ways the pattern of the Campus was similar to a large shopping mall, providing a climate-controlled indoor environment with little connection to the surrounding city or landscape.



Existing building footprints.

Built Form

The Campus is comprised of four main buildings that house classrooms, laboratories, faculty and staff offices, study lounges, food-services areas, recreational and athletic facilities, and circulation space. The total building area is 106,320 m² of covered space and occupies 16% of the total Campus area. Three of the four main buildings are located in the centre of the Campus ring roads. Student residences and the Centre for Continuous Learning (CCL) are located on the periphery of the Campus, adjacent to the external municipal road network.



Existing parking lots.

Surface Parking

The total land used for surface parking is significant; and it is almost 8% more than the total building space (24% for surface parking compared to 16% for built form.) The majority of the parking spots are allocated to students with the remaining assigned to staff and visitors. A key goal of this Master Plan is to manage existing parking requirements by recommending alternate modes of transportation to and from the Campus.



Existing road network.

Road Network

The existing road network is made up of the private Campus ring road (Mount Royal Circle) and the public municipal roads (Richardson Way Southwest and Richard Road Southwest). These two road systems form a parallel ringroad structure. The ring road is connected to the municipal road system through a series of streets, which establish the vehicular entrances to the Campus. The Campus has five entry points. Mount Royal Gate is considered the primary entrance way, with four other Campus entrances closely aligned to connect the Campus with the existing surrounding neighbourhoods. The road networks make up 8% of the existing Campus. The total area dedicated to the road network is significant, given the duplication between the public and private street networks.



Existing pedestrian pathways.

Pedestrian Paths

The pedestrian-path network is extensive, yet it only makes up approximately 2% of the total land area of the Campus. Within Mount Royal Circle and surrounding the main Campus building, there is a well-established network of pedestrian pathways. Outside of Mount Royal Circle, pedestrian pathways are sporadic, nonexistent, or end abruptly at parking lots.



Existing open & green spaces.

Open Spaces & Athletics

The combined land areas of open space (42%) and athletics (8%) represent half of the total land uses on the Campus. Open spaces are evenly distributed within the site boundary, but the athletics areas are concentrated in the southwest corner of the site. The athletic space includes a track-and-field space, four soccer fields, six tennis courts and two beachvolleyball courts.

Throughout the public-consultation process, the existing open spaces were often highlighted as one of the single most important Campus amenities to be retained. The potential to reduce the number of sports fields from four to three was accepted if significant improvements were made to the remaining sport fields though the Campus Plan does not require this reduction.



Infrastructure and servicing.

Infrastructure and Servicing

Within the Campus, there are significant constraints relative to existing infrastructure easements. There are service easements, for sanitary and water services, that bisect the Campus and may prohibit significant construction. These should be avoided where possible. The recommendation to locate the Conservatory/Concert Hall and Parking Structure at the Main Gate may require the relocation of the water easement.



2.3 CITY POLICY FRAMEWORK

An understanding of the City's planning and policy framework was crucial to identify the appropriate steps to ensure the successful implementation of the recommendations within this Master Plan. The following is a summary of the existing zoning bylaws.

The current land-use designation for the Campus lands fall under a Special Purpose District (S) designation. This designation includes land uses such as parks, places of worships, educational and recreational facilities, and government offices. There are nine divisions within the "S" land-use designation and the Lincoln Park Campus falls within the Community Institution (S-CI) District, which is intended to provide direction for large educational facilities.

The College is currently surrounded by Multi-Residential (M) land use on the south and west sides, which permits developments of 14.0 metres to 16.0 metres in height. On the north and east sides of the Campus, the lands are designated as Direct Control (DC) sites. Though DC is a "custom made" designation designed for one specific area or project only, it is still subject to the full public-hearing redesignation process. The Campus also shares a parcel with a Special Purpose District – School, Park and Community Reserve District (S-SPR) and a Community Service District (S-CS) on the east side.

The existing Special Purpose District CI designation controls building height, front, rear and side setbacks, landscaping and parking stalls. The allowable development on any parcel with a S-CI District designation is also constrained by adjacent land uses. Building heights for any development on the Mount Royal College Lincoln Park Campus can range from 6.0 metres to a maximum of 16.0 metres. It should be noted that existing height regulations will need to be adjusted if the College is to achieve taller, more compact building footprints. The regulation specify front setbacks of a minimum of 6.0 metres, rear setbacks of a minimum of 1.2 metres, and side setbacks of a minimum of 3.0 metres. Areas not being used for vehicle access or sidewalks must be soft-surfaced landscapes. The landuse designation places specific regulations for tree-to-shrub ratios for landscaped areas. For further detail on the land-use designations and allowable development, please see Appendix C.

2.4 CONSULTATION SUMMARY

The Master Plan Process

The preparation of the Campus Master Plan followed an interactive three-step publicconsultation process. The three consultations stages included:

- 1. Background research/opportunities and constraints analysis.
- 2. Campus visioning/key directions development.
- 3. Preparation of recommendations and a Campus Master Plan document.

The following is a summary of the consultation process undertaken as a part of this Master Plan.

Phase 1 - Background Research

The consulting team first met with Campus staff, faculty and students in one-on-one interviews to discuss the key directions of the plan. These initial discussions were followed by meetings with City staff, Calgary Transit, key adjacent landowners and Campus architects to gather feedback on the initial Master Plan directions. These meetings were all structured as stakeholder interviews and were undertaken over several months at the beginning of the Master Plan process.

During this first phase, a total of 26 individual stakeholder interviews were completed. The interviews allowed the consultant team to better understand the needs and opportunities within the Campus. An information Web site and kick-off open house meeting were also hosted during the first phase. At the public meeting and through the online questionnaire, students, faculty and staff were asked to respond to initial directions for the Campus Master Plan and identify development opportunities for the Campus in general. The public consultation material is included in Appendix B.

Phase 2 - Campus Visioning and Key Directions

During the second phase, a student, staff and faculty workshop was undertaken to review preliminary concepts prepared by the consulting team. At this workshop attendees developed several important recommendations that would be carried forward within the Master Plan concept. These recommendations included:

- Mount Royal College should set the benchmark that other campuses and communities can strive for.
- Environmental sustainability should be incorporated into campus design.
- The Campus should build taller buildings with smaller footprints.
- The Campus should not duplicate the City's road network.
- All spaces and buildings on the Campus should be fully accessible.
- Getting to and from the Campus by transit should be easier and more efficient.

Phase 3 - Consolidated Campus Master Plan

- Parking Structures should be addressed as new buildings are built. The Campus cannot accommodate all cars.
- The Campus should be designed for all seasons, with adequate protection from the elements, especially during the winter.

The final open house was held on September 11, 2008. At this meeting, the consultant team presented the Campus Master Plan to the attendees. A question-and-answer session followed the presentation, where participants were given an opportunity to highlight any concerns they had with the direction of the Campus Plan.

2.5 GUIDING PRINCIPLES

Guiding principles were developed to guide decision-making in the development of the Campus for the short and long term. The following principles represent a Campus Vision that developed through ongoing discussions with the Campus community and the Steering Committee.



The Plan should provide flexibility to implement the College's Strategic Priorities over the long term.

Universities operate in a fast-changing world. Demographics and the state of the economy dictate undergraduate enrolment, while government and industry support determines the viability of research programs. Care should be exercised not to respond only to immediate needs, but rather to identify a variety of development opportunities that can respond to changing needs over time.



The Plan should assist the College in placing continued emphasis on excellence in teaching and research.

The College's main mission should continue to be teaching and research. All recommendations should prioritize the long-term viability of these two activities, while accommodating other uses whenever possible, including athletics, cultural activities and residence life.



The Plan should help strengthen physical and virtual linkages with the world at large.

Opportunities to bring the world to the Campus through art, exhibits, exchanges and facilities that support diverse needs should be emphasized.



The Campus should be accessible to all.

Mount Royal College should continue its commitment to improving accessibility for both the visually and physically disabled. All development and redevelopment on Campus should seek to improve accessibility for students, staff, faculty and visitors with a broad range of disabilities.



Campus growth should be mindful of its neighbours and minimize adverse outward expansion.

The development of Mount Royal College should continue to be mindful of its residential neighbours by involving the College's representatives and community stakeholders in planning for growth.



Campus growth should be based on the principles of sustainable development and demonstrate proactive and responsible stewardship of Campus green spaces.

Future Campus growth should incorporate principles and practices of sustainability. This is understood as financial sustainability (building for the long term, considering the life-cycle cost of Campus elements), social sustainability (creating a diverse, welcoming and accessible Campus, knitting strong ties to the community in which it operates), and environmental sustainability (using resources responsibly, striving to minimize impact on the local and global environments).



The Campus should become a vibrant place throughout the day, in all seasons, and offer an unparalleled quality of life.

Through the addition of compelling cultural, study and communal spaces, and the improvement of outdoor spaces, the College can create a more vibrant environment throughout the day and the year.



The Campus should encourage interdisciplinary collaboration and informal interaction.

As the Campus develops and redevelops, new communal spaces should be added to existing and new buildings in easily accessible and clearly visible locations to encourage informal interaction among all members of the Campus community.



New buildings should complement existing facilities and buildings.

New buildings should be respectful of existing Campus buildings. They should integrate within the Campus fabric seamlessly, while seizing opportunities to create new landmarks and improve the Campus's edges to portray a dynamic and prestigious image of Mount Royal College to the outside world.

3 THE CAMPUS PLAN CONCEPT

3.1 INTRODUCTION

The Campus Master Plan focuses on the long-term, sustainable growth of the Lincoln Park Campus. The purpose of the Campus Plan Concept is to demonstrate how new development can and should occur in the future, as well as how the necessary infrastructure (transit, roads, parking, etc.) should be positioned to support this growth.

A central focus of the Campus Master Plan is to create a series of new, easily identifiable areas within the overall Campus structure. Each area should have a primary use and designation that when built out, provides the Campus with all of its growth needs. The Campus areas are described in detail in Section 3.3.

Design and planning considerations that are central to the Master Plan are summarized in the following sections. These were developed through the stakeholder interviews, discussions with the Steering Committee, workshop directions, and a review of current trends and best practices.
In the future, Mount Royal College students will spend more time on Campus.



1. Transformation to a University level Campus.

In the fall of 2008, the College completed the transition of several of its diploma/advancedstanding courses into four-year university degrees. These new programs will result in a significant growth in full-time students on Campus. To facilitate this transition to a degreegranting institution the Campus will need to evolve by providing more flexible study areas for students, new research and teaching spaces, and a more formal structure of interior and exterior spaces that is conducive to a university environment.

The primary shift will be evident in how students will use the Campus. It is likely that students will spend more time studying and living on Campus, which will lead to a more established academic community. The Campus Master Plan ensures that this transition is a priority and focuses on the creation of spaces for students and faculty to enhance the quality of life on the Mount Royal College Lincoln Park Campus. Aerial of Mount Royal College and surrounding neighbourhoods.



2. Connecting with the surrounding community.

To truly establish a relationship with the surrounding communities, it is essential that Mount Royal College physically, socially and operationally connects with its context. This can be achieved through several changes to the existing Campus configuration including extending the existing built form to the Campus edges, introducing amenities within the Campus that are inviting to the community, and creating buildings that make the Campus a central focus within the larger community.

With future development and intensification of the surrounding lands, there is an opportunity to maximize the College's central geographic position, creating a learning institution that is fully integrated within the community. To achieve this, the Campus's programming, open spaces and built form should have strong physical, and functional connections to the community.



Interior Renovation Plans completed in 2006 by Educational Consulting Services Corp. and HFKS Architects Inc.

3. Enhancing the existing facilities.

The Master Plan process determines how new buildings are incorporated into the overall Campus. There are two distinct phases that need to be addressed. The first phase is the short term, which addresses the immediate needs of the Campus to accommodate the student, staff and faculty growth resulting from the transition into a degree-granting institution. This phase builds on the work completed in the Interior Renovations Master Plan (completed in 2006) and includes new buildings that are currently in the planning stages. It also addresses the forthcoming parking supply-anddemand imbalance that will result from the immediately scheduled construction projects. Phase 2 addresses the long-term growth of the Campus and identifies priority areas for redevelopment and future development sites.

Naturalized landscape should be incorporated within the Campus wherever possible.



4. Introducing sustainable Campusplanning measures.

Mount Royal College has already begun to take significant steps towards implementing sustainable building practices, evident in the recently built Roderick Mah Center for Continuous Learning, which was designated Leadership in Energy and Environmental Design (LEED) Gold. Other sustainable social and physical measures are recommended in the Master Plan and are outlined in more detail in Chapter 4.0.



Indoor waiting areas are planned for two bus terminals on Campus.

5. Creating transportation terminals on Campus.

Currently, the Campus is serviced by Calgary Transit through a series of bus routes. The buses circulate on Campus via Mount Royal Circle. The Campus Master Plan proposes to provide two dedicated locations for transit service; one at the entrance off of Richard Road Southwest and the other at the West Gate. The terminals are located to eliminate bus traffic within the Campus. Each terminal should provide an indoor waiting area, a food-services kiosk and wireless internet access for students. The terminals are also intended to be used by the surrounding community.

The Campus should be designed around pedestrians.



6. Creating a pedestrian-friendly Campus.

The Campus Plan directs cars to parking lots and away from central Campus areas. With vehicular traffic, at the periphery Mount Royal Circle can be transformed into a pedestrian oriented promenade.

The existing street should be divided into two distinct portions. The eastern portion will be developed as a pedestrian- and cyclist-priority street. The western portion will remain as a conventional street. Formal pedestrian routes are also recommended outside of Mount Royal Circle, with a special focus on creating pedestrian connections within parking lots and to and from new buildings. Enhanced transit service will reduce automobile use as a primary mode of travel.



7. Making other modes of transportation more feasible.

The larger transportation system around Mount Royal College should accommodate alternatives to the car as modes of transportation for travel to and from Campus. This should include strengthening the existing cycling networks and, wherever possible, increasing the friendliness of pedestrian routes through safety and urbandesign measures.

Housing choices and amenities need to reflect the future vibrant and active 24-hour Campus community.



8. Providing a variety of housing choices on Campus.

It is anticipated that, with the new degreegranting programs, there will be an increased demand for student housing on Campus. This will transform the Campus's daily functions by creating a more vibrant and active 24hour community. To support this new student community, new residences are considered an important part of this plan. Other supportive services and amenities may be required, including food services, retail amenities, etc. These are also critical to the support of the continuous-education students, staff and faculty during evening hours. Open spaces should be an organizing feature of the Campus.



9. Focusing on the creation of new open spaces.

A series of new open spaces are proposed throughout the Campus. These shared spaces are central to the Campus Plan. Each shared space is oriented to provide outdoor amenities for future buildings. New open spaces provide the central organizing feature around which new buildings are situated. All new and existing open spaces are to be usable in all seasons and fully accessible, with covered walkways and cleared paths where required.

3.2 THE CAMPUS MASTER PLAN - PHASE 1



THE CAMPUS MASTER PLAN - PHASE 2





3.3 CAMPUS MASTER PLAN AREA DESCRIPTIONS

The Campus is subdivided into five distinct districts. Of the five districts, there are four new Campuses proposed. The four new Campus areas (north, east, south and west) are in addition to the existing Core Campus. The Core Campus includes the majority of existing Campus buildings. New Campus development and redevelopment is primarily planned for the East and North Campuses. Minor road alignments and limited development will be introduced in the South and West Campuses.



3.3.1 Core Campus

The Core Campus area includes the buildings located within Mount Royal Circle and contains the Campus' original buildings. Several buildings have recently been built, including the Bissett School of Business and the new Faculty of Arts Building.

Currently, Phase 1 of the Science and Technology Building expansion and the Health and Sciences Building are proposed for the northeastern area of the Core Campus. The Campus Plan proposes a configuration that is the first step in establishing a hierarchy of open spaces and street-related buildings. The Health and Sciences Building, for instance, creates a protected open space with the proposed Future Academic Building #2.

The existing open spaces within the Core Campus are greatly valued by the College and should be retained with better connections to the existing buildings. To facilitate enhanced year-round use of the open spaces, a Study Cottage is recommended, adjacent to the Convocation Green and the Bissett School of Business. The Study Cottage will house a café, fireplace and informal seating areas. Alumni Building will share the space with the planned Study Cottage. Alumni Building will house resources and services for alumni and, most importantly, provide space for alumni to connect with their alma mater socially and intellectually. The area between the Alumni Building and Convocation Green would be suited for a tree-planting program, initiated by Alumni Affairs.



In the Core Campus there is an opportunity to introduce a weather protected pathway between the Proposed Health and Science building and the Future Academic Building #2. It is anticipated that changes to the interior of the existing Main Campus building (based on the recommendations of the Interior Renovations Master Plan) will also include improvements and provisions for natural lighting and connectivity of the Core Campus area.



3.3.2 North Campus

The vision for the North Campus is a dynamic community-living centre, with a mix of new student residences, academic buildings and retail uses to support students living on Campus.

The area is currently a combination of student residences and surface parking lots. The 426 residential units built in 1989 for the Calgary Olympics are located around an internal road structure ending in a cul-de-sac. Aside from the 290 residential parking spaces assigned to the existing residences, there are 508 parking spaces located just south of the residence, in the S1 parking lot. (See Appendix A for existing and proposed parking spaces.)

The North Campus will continue to accommodate student residences through taller buildings with more compact footprints. Both academic and mixed-use buildings will be located in the North Campus. New buildings include four-to-six-storey academic buildings, a five-storey residential complex, and six-storey mixed-use buildings facing Richardson Way Southwest.

The six-storey buildings along Richardson Way Southwest will define the Campus edge and create a stronger presence for the College along its northeast boundary. These building could be developed as joint venture projects with the private sector.

The focus of the North Campus is an interior common open space, or quadrangle, and is fronted by retail, academic, and residential buildings.



North Campus site plan.

As the College grows, there will be increasing demand for additional day-care facilities on Campus. Consideration should be given to finding a new location for a consolidated daycare in an area that has less vehicular traffic and more access to dedicated green space. As more student residences are built in the North Campus area, a new day-care facility should be integrated into one of the buildings in this area. An alternative location to the North Campus would be in proximity to the existing residential cluster in the South Campus area. A free-standing building on the site of the existing tennis courts could be constructed in this area in the near term.

Proposed East Campus area.

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3.3.3 East Campus

The vision for the East Campus expands on the College's community-oriented programming. By grouping current and proposed facilities that house public programming, the East Campus becomes the public face of the Campus.

The East Campus is currently home to the newly built Centre for Continuous Learning, parking lots E1, V1, and S7, the Storage Building and the Site Office. With the introduction of five new buildings, the East Campus will experience the most dramatic change and will require significant reorganization of existing pedestrian and vehicular circulation.

The redesign of Mount Royal Circle will allow for a pedestrian promenade that will act as a Campus Main Street. It is recommended that all buildings along the promenade have direct pedestrian connections to the promenade and are street-oriented in design.

The Main Gateway at Mount Royal Gate Southwest entrance will potentially be the new home for the Conservatory/Concert Hall, providing a welcoming facade to the city, with one of the College's most highly used facilities. A Parking Structure will be attached to the Conservatory/Concert Hall and will be located to allow people entering the Campus to quickly park and walk to the heart of the Campus. The Library and new Academic Building located at the Richard Road Southwest Campus entrance should create a formal, highly visible Campus gateway, with a dedicated location that provides a Campus bus terminal and information for visitors and Campus users.



East Campus site plan.

In the East Campus there is an opportunity to introduce weather protected walkways between new and existing buildings, to allow students an alternative way to navigate through the Campus. These walkways are preferably located at grade level in glazed and enclosed arcade structures that can be opened in the summer months. Some gaps in these walkways will be required to allow for vehicle access. Alternatively below-grade or bridge structures could be considered where at-grade structures cannot be provided.

Proposed buildings for the East Campus include the new Library, Conservatory Building with Concert Hall, Parking Structure, a Visitor's Centre/Transit Terminal, an extension to the Centre for Continuous Learning and new Academic Buildings.



3.3.4 South Campus

The South Campus is currently a student recreation and residential area to which few changes are proposed. The existing road alignment will be changed to create a continuous connection from Mount Royal Gate Southwest into the Campus.

The new Student Residences in the South Campus were completed in 2003 and accommodate housing for 634 students. The residences are adjacent to the athletic (sports) fields, with tennis and beach-volleyball courts, and soccer fields. The two parking lots provide a total of 730 parking spots. (See Appendix A for a summary of existing and proposed parking counts by area.)





3.3.5 West Campus

The vision for the West Campus creates a new Quad fronting onto Richardson Way Southwest. To achieve this, vehicular access will have to be relocated north of its current location, to align with the existing road on the opposite side of Richardson Way Southwest. This relocation creates the needed space for a grand pedestrian entrance, as well as two future academic buildings.

The West Quad will be lined with two academic buildings which front the space. A new bus terminal is located adjacent to the southern building. An indoor waiting area with cafe kiosk should be provided on the ground floor of this building.



West Campus site plan.

Phase Summary





3.4 PHASING

The timing of implementation and construction for new buildings, open spaces, way-finding and circulation is critical to maintaining ongoing activity on Campus. Significant restructuring work should occur during the summer months to avoid disruption to the Campus community; However, non-disruptive building construction could continue throughout the year. Key recommendations have been divided into immediate, and long-term phasing.

3.4.1 Phase 1

Buildings

In the near term, the College is preparing to accommodate the growth of the student, faculty and staff population. New buildings and interior-renovation projects recommended for the short term have already been identified by the College. This includes the Science and Technology Expansion Phase 1, the Health and Sciences Building, the CCL Expansion, the Conservatory/Concert Hall, the Library, and the construction of a new Parking Structure. Since many of the buildings proposed in the short term are located on existing surface parking lots, a new Parking Structure will be required immediately to meet the Campus's parking requirements.

Circulation

No major changes to the existing Campus circulation are recommended in the near term. Opportunities to create formal pedestrian paths through parking lots should be examined and established wherever possible.

Way-Finding

A way-finding strategy should be undertaken for all interior and exterior spaces on Campus and implemented in the immediate term. The way-finding strategy should address building signage, directional signage, mapping and visitor information. Phase Summary





3.4.2 Phase 2

Buildings

In the long term, a number of potential building sites have been identified. In the West Gate area two new academic buildings and a new open space are proposed. These buildings will frame a new West Quad and will connect the Campus to the city at its northernmost boundary.

In the area adjacent to the Health and Sciences Building another academic building is proposed. This building will create a strong street edge along the promenade and complete a courtyard space.

The North Campus building sites are on lands that will be vacated once the existing lowdensity residence buildings are removed. It is recommended that this area be redeveloped in the future for a student village that will include student residences, academic uses, a mix of commercial uses along Richardson Way Southwest, and a new landmark building at the corner of Richardson Way Southwest and Richard Road Southwest. Adjacent to Convocation Green a prominent site is reserved for the Study Cottage/Alumni Building, which will be a landmark building that improves the level of use of this area of the Campus.

Circulation

The majority of recommended circulation changes should be implemented in Phase 2. The primary change is the transition of the east segment of Mount Royal Circle into a pedestrian promenade. To accommodate the new buildings on the west edge of the Campus, the West Gate entrance will have to be relocated to the north along Richardson Way Southwest aligning with the road on the other side. The two transit terminals will require modifications of parking areas and road access points in Phase 2.

4 SUSTAINABILITY

4.1 DEFINITION

In 1987, the World Conference on Environment and Development defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). Since then, sustainability has been understood as the need for all development to take place in an environmentally, socially and economically responsible fashion, over the long term.

4.2 PURPOSE

In every community, in which they are located, academic institutions are seen as catalysts for change, acting as a source and champion of innovation in the development and application of knowledge, technology and ethics. As a prominent community leader, employer and educator in the City of Calgary, Mount Royal College's influence ranges from the community to the national scale. In light of this impact, it is clear that the transformation of the Campus into a catalyst for environmental sustainability should be an integral part of Mount Royal College's mission.

Increasingly, students, faculty and staff have strong views about the health of the environment. Institutions are increasingly realizing that environmental initiatives not only result in a healthier environment in the long term, but can have an effect on the "bottom line" within a relatively short amount of time. For instance, energy savings as a result of the replacement of light bulbs with powersaving models, or window replacements yield recognizable savings in operating costs. In addition, a sustainable campus can:

- Enhance the reputation of the institution and serve as a recruiting tool for faculty, staff and students.
- Provide opportunities for research and information sharing.
- Help fulfill Canada's international emissions-reduction commitments.
- Contribute to a healthier campus and local environment.

Because sustainability impacts virtually every aspect of campus growth and operations, sustainability principles permeate the Master Plan as a whole. This chapter captures and summarizes key initiatives that should be pursued to make Mount Royal College a leader in sustainability.

4.3 STATUS & BENCHMARKS

A strategic plan for sustainability will be required to inform the Campus Plan. It is anticipated that a Campus Sustainability Audit may be an important source of information. The audit will determine the current levels of sustainable practice on Campus and will provide a status quo upon which future benchmarks can be set.

4.4 A COMPREHENSIVE APPROACH

For the implementation of sustainable guidelines to be effective, a comprehensive, systematic and strategic approach must be pursued. This means that every process and activity on Campus is reviewed for its environmental impact, taking into account social and economic implications. Mount Royal College has the benefit of an established Sustainability Committee to help implement and identify sustainable opportunities on Campus. This group has established general principles and recommendations to be supported in this Master Plan. The following components are suggested as part of this approach:

- The principles of energy efficiency and sustainability should be maximized in the planning, financing, design, construction, renewal, maintenance and operation of all Campus facilities. Space management, facility utilization, and the decommissioning of facilities and infrastructures should take these principles into account as well.
- The use of sustainable materials and design principles that preserve natural resources

and minimize negative impacts to the environment are vital.

- Research, analysis and experience gained over time are critical components in developing specific targets, priorities and timetables for achieving sustainability objectives.
- A commitment to measure and monitor progress in achieving sustainability principles, goals and objectives is necessary.
- The concepts of sustainable design and use of "green" building materials apply at all stages of the design process (program plans, architect selection, design, construction and close out).
- Environmental stewardship and other sustainable practices are an individual and collective responsibility shared by all community members.



Rooftop gardens could be incorporated into appropriate new developments to reduce the amount of runoff from buildings.

4.4.1 A Bottom-Up Approach

Realizing the vision of a more sustainable Campus is everyone's job. While champions are needed at the senior level of Mount Royal College's administration, everyone on Campus should be involved in carrying out this vision. A number of methodologies have been developed to assist organizations in this regard. One is The Natural Step, an approach originally developed in Sweden for municipal governments. In The Natural Step, a bottom-up approach is pursued; instead of change being imposed from the top, sustainability becomes everyone's responsibility. Workshops should be conducted in every department to ensure that all faculty and staff are made aware of the importance of sustainability; and empowered to contribute solutions and implement sustainable practices on the job. Targets and responsibilities are established at the department level.

The bottom-up approach must be complemented with a top-down approach, whereby senior management provides the leadership and initiative to empower the organization to change.

4.4.2 Life-cycle Costing

An important step in the implementation of sustainability is the consideration of life-cycle costs. These are the added cost of acquisition, maintenance, replacement and operation over the lifetime of an object. The relevance of life-cycle costing to sustainability stems from the role of energy in the operation of buildings, machinery and vehicles. Since a premium is often attached to energy efficiency, it is important to consider life-cycle costs and coordinate capital and operational budgets. Additionally, discussions can be held with funding organizations and governments to explain the benefit of life-cycle costing, especially as part of fundraising efforts for new buildings.

In addition to life-cycle costing, external costs and benefits must be recognized as much as possible. This means that costs and benefits not normally accounted for, either environmental or financial, are taken into account in decisionmaking.

4.4.3 Sustainability in the Curriculum

By weaving sustainability into its curriculum, Mount Royal College can establish itself as a leader in environmental education and research, in addition to sparking new ideas on how to constantly improve its own practices. Because sustainability has social, environmental and economic dimensions, every discipline has opportunities to include sustainability in its curriculum. Students can be provided with opportunities to work on long-term study projects that involve sustainability. Research programs can be established to further advance the state of knowledge in environmental science and education, with opportunities for partnerships with internal and external entities involved in the day-to-day implementation of sustainability. The sustainability program can also constitute a source of on-Campus employment for students in, for example, the areas of recycling, composting, manual grounds maintenance, and the training of others in sustainability practices. Finally, a sustainable Campus provides opportunities for outreach programs such as summer camps.



Sustainability should be incorporated into the curriculum.

4.4.4 A Proactive Approach

Mount Royal College should actively pursue relationships and service agreements with companies and institutions that maintain a high standard of sustainability. By proactively supporting best practices in sustainability, the Campus will have a far-reaching effect with its own sustainability policies.

4.4.5 Monitoring Systems

Once the Sustainability Audit is complete, monitoring systems will be needed to track progress against pre-established targets and to identify areas in which further progress is needed. Over time, partnerships can be established with compatible institutions to agree on a common measuring system to allow benchmarking. Each year, a report should be produced to publicize Mount Royal College's progress, inspiring other organizations and encouraging further efforts.

4.5 CAMPUS SUSTAINABILITY INITIATIVES

4.5.1 Buildings

Through their construction, maintenance and operation, buildings have a significant impact on the environment. The LEED model is the most popular emerging standard for the design and construction of buildings, and was used in the construction of the recently completed Roderick Mah Centre for Continuous Learning. LEED can help minimize the building's impact on the site and reduce energy and water consumption during construction and throughout the building's life. LEED also emphasizes human health through a healthy indoor environment. See Section 5.2.3.9 for additional details.

4.5.2 Open Space

There is significant scope to improve the environmental quality of Mount Royal College's open spaces, particularly through the selection of plant species that require less maintenance, and by integrating species and planting patterns typical to Alberta's native forests, where appropriate. Additional details on the design of open spaces can be found in section 5.2.3.3.

4.5.3 Procurement

Procurement covers the sourcing of all products and services on Campus. By actively managing its procurement policies, Mount Royal College can obtain products and services that can result in a cleaner environment at Mount Royal College as well as where they are produced. The following principles can, at times, appear to contradict one another. Therefore, the net benefit must be determined. However, these principles should be followed in the selection of products and services:

- Repair and reuse before purchasing.
- Select products and services that are produced locally, employ local people and help perpetuate local culture and practices. This type of selection process should be an important practice in the sourcing of food for the Campus. Institutions across North America have struck agreements with local farmers to ensure that a stable supply of healthy and locally produced food is provided to their Campuses.

Mount Royal College <mark></mark> Lincoln Park Campus Master Plan

- When products from developing countries must be purchased, choose products that have been produced with improved social practices (e.g. fairtrade coffee).
- Determine the life-cycle costs of options and opt for durable goods.
- Where possible select renewable materials instead of man-made alternatives.

4.5.4 Processes

Switching to more innocuous materials and tools will not in itself ensure sustainability. New processes developed specifically to achieve sustainability must be adopted as well. Examples include:

- Lower thermostats in the winter and educate users on the reason for doing so. Temperatures can be as low as 19
 °C. In the summer, thermostats can be raised as high as 26 °C.
- Minimize the use of chemicals that have impacts on the local environment and human health, for example, volatile organic compounds.
- Explore economizing processes, such as duplexers in printers that allow double-sided printing, or the use of a printer tray that contains scrap paper.
- Select plants that require less watering, fertilizing and pest control. Review mowing schedules and times.
- Discourage idling on Campus.
- Encourage barter and garage sales in residences to minimize disposal.

4.5.5 Water Efficiency

Clean water requires energy to produce and transport, while waste water must be treated at great expense. Hot water requires energy to produce. Some opportunities for better efficiency include:

- Low-flow faucets and shower heads in existing and new buildings.
- Low-flow toilets in existing and new buildings.
- An effective process to report and repair leaks as they occur.
- Selection of plants that require less watering.
- Water-saving watering practices.
- Rainwater collection.
- Runoff reduction through permeable surfaces, green roofs and filtration swales or ponds.



Native plant species should be used whenever possible.
4.5.6 Parking and **Transportation**

Mount Royal College should ensure that institutionally owned vehicles are energy efficient models, used conservatively, and fine-tuned for optimal operation. However, a significant amount of energy is consumed by Campus users commuting to and from the Campus. Mount Royal College should acknowledge its responsibility in transportation-related energy use, and adopt a program to encourage alternative modes of travel and establish reduction targets.

Managing access to the Campus is strongly related to the supply of parking. In the future it is anticipated that the price of owning and driving a car to Campus will be cost prohibitive relative to taking transit. This increase in cost, with some encouragement toward other modes of transportation, can eliminate the need for new parking lots, thus resulting in the following benefits:

Reduced heat-island effect in the summer, defined as a localized increase in temperature due to absorption of solar energy by flat, paved surfaces.

- Increased opportunity to plant trees that capture carbon dioxide and enhance the appearance of the Campus.
- Reduced use of asphalt. •
- Reduced power use for lighting.
- Reduced use of salt and melters.
- Reduced plowing. ٠

Additionally, the College can encourage alternative modes of transportation by restricting parking supply.

Additional information on transportation alternatives can be found in Chapter 7.0.

4.5.7 Waste Reduction and Management

Mount Royal College can make progress in the following waste-reduction and management areas:

- Through the procurement process, favour goods with minimal packaging.
- Work with local suppliers to reduce the ٠ amount of packaging used.
- Reduce the packaging used for food ٠ services on Campus.
- Strengthen education efforts for off Campus students, to increase compliance.
- Explore opportunities for on-Campus composting and use (e.g. in grounds maintenance). It is possible to start small, for example, with coffee grounds.
- Collaborate with the City of Calgary ٠ to address recycling and disposal of computer and electronic equipment.
- Provide a centralized recycling and waste-management facility. This should be included in a location that is central to Campus, with easy pick-up and dropoff capabilities.



Precedent image showing courtyard buildings with transition in height.

5 BUILT-FORM AND ARCHITECTURAL CHARACTER

5.1 INTRODUCTION

The design, location and orientation of new buildings will greatly influence the character, and identity of the Campus. This chapter focuses on the elements of buildings that will allow them to positively influence the current Campus character while reflecting the uniqueness of Mount Royal College. These guidelines should be used as a starting point for new development, and direct building design and construction as the Campus grows. The guidelines are not intended to curb architectural creativity, but should be understood as an articulation of the Campus's long-term goals for growth.

5.2 GUIDELINES

5.2.1 Introduction

Mount Royal College's existing buildings reflect the spirit of the era when the Lincoln Park Campus was first developed, primarily the 1970s. Generally, newer buildings have been designed quite differently to that original style. Newer buildings also reflect a more modern aesthetic that is complementary to a Campus environment. This should be seen as a positive advance and should be continued in future building projects.

While the original Core Campus building responds to the functional needs of the College, it lacks the welcoming character that is generally associated with more classic College and University Campuses. Mount Royal College should strive to develop buildings that offer a rich community ambiance and 'sense of place,' which students seek in selecting their place of higher education. To address this issue, the Campus Plan proposes an architectural language that remains consistent with the College's more recent building style of lowmaintenance yet striking, while providing those aspects of design that are richer, more humane and more supportive of a dynamic Campus life. Mount Royal College should avoid replicating traditional Campus-style buildings, and should instead develop buildings that are reflective of its contemporary approach and institutional age. This will help create a consistent Campus character.

The quality of the Campus cannot be enhanced through a program of new buildings alone. Substantial effort should be made to renovate the existing Campus buildings, which define the Core Campus area. This includes enhancements to the exterior of existing buildings, such as introducing new windows and light wells to bring in natural light and provide views of the Campus's open and green public spaces. Subtle interventions that respect the spirit of the building era can radically improve the building while creating a more open, accessible and inviting character.

5.2.2 Key Considerations

Several key considerations should be addressed early in the schematic design and throughout the entire development process. These considerations are addressed in the following paragraphs:

Human Scale

Buildings should be designed to respond to the natural contours and features of the Campus and to the building's own programmatic divisions. Large and tall buildings should be highly articulated and designed to reduce their perceived mass, imparting a human scale to the Campus. All buildings should have an articulated base, to address the street and create a pedestrian scale at ground level.

Defined Architecture

The Campus will include an ensemble of buildings of different scale and form, in response to different programmatic needs. While these buildings can be diverse in style, they should be united by their palette of materials and elements, and by their common approach to the site. This should not preclude innovations in design or materials, but be balanced with a strong contextual understanding of any new buildings and of their surroundings.

Coherent Design

Each new building should be a coherent architectural composition and should employ a unifying vocabulary of forms, elements, details and materials on all building facades. A coherent vision for the building program can be represented within the visual design of the building.

Architectural Elements

Architectural elements are components of a structure that add to or change its main volume, such as windows, doors, columns and colonnades. These elements reinforce the building's architectural style, but also enhance the quality of life for the building's occupants. Architectural elements should always provide a formal building function and should never be simply applied facade treatments.

Materials

Building materials should be selected to convey an image of quality, durability and permanence. Suitable primary materials include brick, stone and concrete. Visual interest should be created by the articulation of planes and volumes, not by arbitrary changes in materials.

Building Details

Building details are the crafted pieces that compose the larger elements. The quality of these details, and how they fit together, contribute to the building's visual interest and its ability to convey a human scale. Building details should be well resolved and should reflect the greater building vision.

5.2.3 Core Guidelines

5.2.3.1 Built Form and Architectural Character

The built-form and architectural integrity of a Campus can greatly enhance the identity of an institution, attract faculty and students, and provide an environment conducive to academic advancement and lifelong learning. Urban design and architecture can compel and inspire, particularly in a place of higher learning. It is a logical objective that excellence in quality and design of buildings and open spaces should reflect the excellence in quality of learning that is fundamental to institutional objectives. These qualities are recognized as defining characteristics, which give academic institutions their stature within society.

The following principles apply to built form and architectural character:

 Buildings should be designed for permanence. The use of high-quality materials and construction, appropriate for this topographic and climatic region, should be used.

- The architecture of Campus buildings should fit with the future urbanized vision for the Campus and integrate street-oriented building design that frames open spaces.
- Building design should aspire to beauty. A place of higher learning that represents excellence and warrants compelling and inspiring architecture.
- The selection of building materials, construction methods and interior partitioning should support the objectives of longevity, adaptability and human health.
- New buildings should reinforce and enhance the architectural integrity of the Campus, without resorting to historic replication. Instead, they should establish a new, modern architectural context and aspire to design excellence and innovation. The objective should be to achieve a level

of Campus continuity, through the consistent use of building elements and materials within a common palette. All new buildings should adhere to central Campus Plan concepts, such as the strong interface between buildings and outdoor spaces, with views, pedestrian shelter, transparency, active uses on the ground floor, etc.

- Buildings should be designed to be fully accessible to all people, with ramps, tactile materials and automatic doors.
- Buildings should adhere to principles of sustainability in their location, construction and day-to-day operations.

5.2.3.2 Building Scale and Massing

The scale and massing of buildings impacts one's sense of place within the Campus. To date, much of the built-form pattern on the Campus has been achieved through a consistent, low-rise building scale and proportion. The original building forms and proportions were applicable to the creation of a compact Campus. In the future, new buildings should be taller, and have smaller building footprints and maximize future open spaces. Although existing buildings are two to three storeys in height, new buildings should range from three to four storeys. Taller buildings should be located at key focus areas to establish Campus landmarks. A key design strategy for the creation and enhancement of a pedestrianoriented Campus is for new buildings to establish a strong, linear and interconnected system of exterior spaces that will define travel patterns within the Campus.

Both the footprint and the massing of a building should reflect the role it will play in the larger composition of buildings on Campus; for example, framing an open space or quad. Principles for building massing include:

- Building depths should be narrow to ensure access to natural light, particularly for residential uses.
- Where possible, buildings with longer floor plates should be arranged around courtyards to provide shelter from wind and create intimate spaces.
- Atriums should be introduced in buildings with larger floor plates for the provision of natural light, visual orientation and seasonal relief.
- Taller buildings should be located in such a way as to minimize shadows on public open spaces. Maximum building height should be seven storeys.
- Taller, landmark building elements, extending above the roof line, should be used to terminate view corridors and mark key building entrances, gateways or significant public spaces.

- Where possible, building massing should articulate transitions from a pedestrian scale and give expression to the building at higher floors, through the use of building envelope variation or rhythm.
- Larger or excessively long buildings should introduce articulations in massing to provide variation that is scaled to the surrounding buildings.

5.2.3.3 Interface With Paths and Open Spaces

Presently, buildings on Campus are designed in a manner that defines a formal path, street or open space, such as the main guad. In some instances, particularly at the periphery of the Campus, buildings appear to be sited less formally to take advantage of the views in to wooded areas, or simply placed to take advantage of parking. The design of proposed buildings, or renovations and additions to existing buildings, should reinforce a pattern of path-oriented and open-space-oriented buildings. In many cases, a building or building site may relate to both a street and an open space. Build-to lines are identified for new building or expansion sites to ensure that key spaces and streets are consistently framed and treated as principal facades.

Buildings should be designed to encourage active ground-floor and small-scale uses to support pedestrian vibrancy. Buildings need to be permeable with multiple public entrances, to appear open and welcoming to visitors and dayto-day users. In particular, some buildings may require facades that are animated or articulated on all sides. Front doors and entrances should be designed to respond to the open-space and pedestrian system. Other principles include:

- Pedestrian pathways and active building uses, such as offices, lounges, food areas and interior circulation routes, should be placed to visually or physically connect with streets and open spaces, and to provide increased animation, surveillance and safety.
- Informal areas for socializing or studying should be easily accessible from main circulation corridors and provide views of the outdoors to encourage informal interaction and engagement.
- Principal pedestrian entrances should be located on paths, streets and open spaces.
- Blank building walls (without windows) should be avoided to the greatest extent possible, particularly

at the ground-floor level. Where necessary, they should be located to minimize exposure to public areas of the Campus, particularly paths, streets and open spaces. Landscape screening should be used to mitigate the appearance of blank walls. Where blank walls currently exist, steps should be taken to introduce new glazing and entrances, especially adjacent to public open spaces such as the Convocation Green and Stage.

- Pedestrian and bicycle traffic should be given priority and generous space consideration at main building entrances.
- Exterior-grade and interior-floor levels should be aligned at pedestrian entrances to ensure full accessibility and to establish a physical and visual connection between the exteriors and interiors of buildings.
- Service areas and service access should be discreetly located, separate from



Indoor pathways should be connected to open spaces.

main public areas, and incorporate visual screening.

- Security should be promoted through self-surveillance, as opposed to the use of video surveillance, and facilitated through attention to:
 - Ensuring that buildings or groupings of buildings do not create dead-end exterior spaces.
 - Strategic lighting. 0
 - Visual transparency between 0 interior and exterior at grade.

5.2.3.4 Facades

The building facade is key to creating a Campus that is both compelling and conveys a strong sense of identity, permanence and community. Campus buildings represent the image of the Campus. Other guidelines for building facades include:

- Buildings at ground level should be highly engaging, transparent and incorporate pedestrian-sheltering elements, such as canopies, breezeways and colonnades.
- The use of colour and high-quality • materials in the composition of facades should generally convey a sense of permanence and dignity, and be timeless in their appeal. This includes the use of stone, brick and high-quality precast concrete, wood, man-made stone and metal products. The use of colour should generally reflect materials in their natural state. While bright and vibrant colours should be encouraged as accents in the composition of facades, this

effect should be achieved by applying colour to key interior spaces (entrance vestibules, lobbies, lounges, stairways, etc.) that are visible from the outdoors through large windows.

- Building facades should provide a minimum of forty percent windowto-wall ratio with a higher ratio at the ground floor.
- Selected building materials should convey a sense of prestige and permanence and capital budgets must provide adequate resources to ensure that high-quality, durable materials and building components are used. Priority should be given to the use of local materials from Alberta. Vinyl and aluminium siding, corrugated and sheet metal panels and concrete block should be avoided.
- Buildings facades should incorporate, where appropriate, projections that assist in the articulation of the facade and provide relief to long, flat surfaces.

These projections or bays should coincide with public areas of buildings (lounges, key meeting rooms, cafés and food areas, stair and elevator towers, the ends of corridors) and integrate high levels of glazing to facilitate twoway views. These interior areas should be painted utilizing vibrant colours to enhance their visibility from the outdoors.

- Window glazing should facilitate two-way visual connections between indoor and outdoor areas. Window and doorway compositions that incorporate a combination of clear and frosted glazing should be encouraged. The use of dark tinting, smoked and mirrored glass should be avoided, as it limits visibility from the outdoors.
- New additions and renovations should incorporate a material palette and composition in keeping with, or complementary to, the existing structure.

- Mechanical penthouses and service areas should be screened utilizing attractive materials that complement the overall building design.
- Where possible, exterior materials should continue into entrance lobbies to aid in pedestrian orientation and navigation.
- Architectural detailing should be used to highlight window and door frames, cornices and corners.
- Blank walls should incorporate detailing, such as material variety, projecting brick patterns and other techniques for articulation.
- Dated cornerstones, dedications, building names and other inscriptions add to the visual appeal and provide the Campus with historical meaning.

5.2.3.5 Roof Forms and Materials

- The colour of roofing materials should reflect a natural palette. Metal roofing should avoid the use of greens, reds, or blues, and instead emphasize colours which reflect the material's natural state. For instance:
 - Copper copper colour eventually transforming in to a patina.
 - ^o Aluminium silver or light grey.
 - Galvanized metal silver or light grey.
 - Zinc or Coated Copper silver or light grey.
- Roof membranes should be light coloured to reduce heat absorption and the 'heat island' effect.
- Roof gardens should be encouraged as they minimize heat absorption, reduce the 'heat island' effect on site, and reduce-storm sewer loads by collecting, filtering and storing rainwater for onsite use.

Mount Royal College 😽 Lincoln Park Campus Master Plan

- High-quality roofing materials should only be used for sloped roofs. These include standing-seam metal roofing (in natural colours of light grey, dark grey, or silver only), copper, lead-coated copper, zinc, slate or cedar shakes.
- Roof lines should be designed to emphasize key features, such as main entrances or a visual terminus.
- Mechanical penthouses and service areas should be incorporated as part of the building massing, and utilize the same high-quality roofing and cladding materials used on the main body of the building.

5.2.3.6 Landmark Elements

Taller landmark and tower elements are encouraged to extend above the height of buildings, thereby articulating highly visible strategic sites, entrances or key public areas of the building. The location of these higher elements can correspond to axial views, primary frontages, main entrances or a combination of these. This pattern of landmark elements will enhance the sense of place, orientation and connectivity of the Campus.

5.2.3.7 Building Entrances

Entrances are distinguishing elements in a building's elevation. They indicate principal building facades and orient movement to and through the building.

- Entrances should have a clear and prominent architectural expression to aid both orientation and Campus identity.
- Entrances should be located and designed to reinforce a visual terminus, key open space or gateway.
- Entrances should project from, or be recessed from, the main building wall to further articulate the facade and create shadow lines.
- Entrances should generally be highly transparent either through glazed doorways or solid doorways with a glazed surround.
- Architectural elements, such as special light fixtures, porches, canopies and colonnades that reinforce the identity of entrances, should be utilized.



Precedent image of a sheltered walkway.

5.2.3.8 Sheltered Pedestrian Walkways

A continuous system of sheltered pedestrian walkways should be integral to all new buildings and should be added to existing buildings undergoing renovation. This sheltered pedestrian-circulation system will facilitate inter-building links while keeping the pedestrian engaged with the public life of the Campus. The system should ideally be located at grade and between the indoor and outdoor areas of the Campus. The system can, at times, take the form of glazed corridors located at the groundfloor exterior edge of buildings, or can run between buildings through breezeways, which are single or double-storied colonnades. Both elements feature a high level of glazing, with the ability to open up to the outdoors in the warmer months through a series of operable windows, sliding wall panels and doors. These at-grade systems should be used wherever possible. Pedestrian tunnels or overhead bridges should generally be avoided, except where it is necessary to traverse roadways and assist with accessibility.

- Sheltered pedestrian walkways should be located adjacent to public spaces quad, paths, streets and other major pedestrian-traffic corridors, to ensure year round Campus accessibility.
- These walkways should link key Campus-wide destinations and functions.
- As primary-circulation corridors, their design should be considerate to all users and incorporate ramping at key points of entry and egress.
- Where added to existing buildings, the architectural language and materials should compliment and enhance the existing structure.
- Where possible, sheltered walkways should link buildings of close proximity, either as a continuous enclosed corridor or as a covered connection.
- To reinforce visual and physical connection with exterior spaces, as well as allow light penetration, breezeways should incorporate a sixty to seventy percent glazing-to-wall ratio.

- As much as possible, the glazing elements should be designed as operable doorways, to allow for opening in the warmer months.
- Adjacent to open spaces and important intersections, elements such as several continuous steps, or other protrusions, should be incorporated at the base of the breezeway to encourage sitting and interaction.



Precedent image of a sustainable building system.

5.2.3.9 Sustainable Building Systems

- New buildings on Campus should be designed to meet, and preferably exceed the LEED gold standard or equivalent.
- Operational energy consumption is a building's most significant source of negative impact on the ecosphere. The budgeting process for new projects should recognize life-cycle costs of building structures and factor reduced future operating costs into the review of initial capital costs.
- Natural ventilation and under floor distribution systems should be encouraged to promote passive convection cooling and ventilation. Passive systems can minimize or eliminate mechanical systems for heating, cooling and ventilating buildings.
- Innovative waste-water treatment, water reduction and sustainable irrigation strategies, including the use of waterefficient plumbing fixtures, should be encouraged.

- Protocols should be implemented to measure and verify the operation of building systems over their life cycles, to provide both optimal performance as well as quantitative results.
- Building systems should be designed to be adaptable to future change in use or possible change in program. Designing for flexibility prolongs the possible life of buildings, which in turn reduces waste, conserves resources and reduces the environmental impacts of manufacturing and transport.
- Preference should be given to low-impact energy sources. (i.e., geothermal heating, solar power, passive heat gain, wind power, etc.) The selection of low-impact energy sources is fundamental to reducing negative impacts from a building's energy consumption.

- Efficient lighting equipment should be used and unnecessary lighting of occupied space should be eliminated, by using room and task light switches, occupancy sensors, and photocells as energy-efficient occupant controls.
- The highest possible indoor air quality should be provided by minimizing the contamination of indoor air and the penetration of pollutants present in outdoor air.



Open-space themes or concepts should be tied to the Campus culture.

6 LANDSCAPE AND OPEN SPACE

6.1 INTRODUCTION

Mount Royal College's Lincoln Park Campus already has a multitude of well-landscaped, high-quality open spaces that are enjoyed by the Campus population. The following chapter describes the existing conditions and status of open spaces on Campus, and provides recommendations for existing and future landscaping. Also highlighted is the correlation between the built-form recommendations and the design of future open spaces.

Below is a summary of the key Master Plan recommendations and existing opportunities that should be considered when planning for new development and designing new open spaces;

- Open space on the Campus is already an asset, playing a big role in defining the character and identity of the Campus. Generally, outdoor spaces on the Campus are well tended and maintained.
- Active building bases (ground floors) and good indoor-outdoor relationships should be an objective of new development. Buildings should frame

open spaces and relate physically and visually to the outdoor environment.

- Landscapes and open spaces should promote use during all seasons of the years, particularly in the winter months. Protection from wind and precipitation will be key factors in ameliorating the outdoor environment in the winter.
- Accessibility should rank high among Campus-development objectives.
- Open spaces should be useful and meaningful, relating to a theme or concept that ties into the Campus culture. Spaces should generally be perceived as public and not private, being open and easily accessed both physically and visually.
- New Campus development will promote a reduction in vehicle infiltration onto the Core Campus.
 Parking areas will be arranged along the edges of the Core Campus. This area should still be considered a significant open space and should receive a high level of treatment, providing for pedestrian comfort.

- More residential buildings are proposed as part of the new development on Campus. New and existing open spaces should respond to the potential increase in usage by provisioning for different kinds of program elements, which could provide places to go and things to do in the evenings and on weekends.
- Infrastructure and amenities for cycling should be integrated into all new and existing Campus open spaces.
- Generally, way-finding and building identification is problematic and should be improved.

6.2 OPEN-SPACE TYPOLOGIES

Six types of open space have been identified on Campus, including the existing conditions. The evaluation of new types of open spaces within these categories will assist with maximizing the open-space opportunities presented by new development.



Secondary entrances should be unique and pedestrian oriented.



6.2.1 Entrance / Gateway Spaces

Primary - Mount Royal Gate Southwest and Richard Road Southwest

- Because this intersection is primarily a visual space, it should have a high quality of landscape treatment that reinforces the character and identity of the Campus.
- The intersection should be memorable so that it is recognized as the main entrance to the Campus.
- There are opportunities to enhance the look of the storm pond by incorporating landscaping and naturalized areas.
- Explore opportunities for public art or feature elements that will support the trademark or branding of the College.

Secondary - Mount Royal Circle at Richardson Way Southwest and Richard Road Southwest

- Design treatments should support the design hierarchy established by improvements to the primary entrance. They should be seen as secondary entrances.
- Each entrance's design should be varied so that they can be recognizable, contributing to the general improvements needed for way-finding on the Campus.
- Secondary entrances will require a more pedestrian-friendly entrance condition, with sidewalks on both sides and a direct route toward building entrances and bike parking.



Covered walkways between buildings should be provided to protect pedestrians from wind and precipitation.



6.2.2 Through Spaces

Urban / High Volume

More urban, high volume through spaces should provide the following features:

- A level of design and materials appropriate for a high volume of use.
- Way-finding features.
- Lighting.
- Seating and gathering area opportunities
- Cycling access and amenities.
- Shade trees, landscaping and protection from wind and precipitation.
- Access to reserved accessible parking.
- Universal accessibility.

Passive / Low Volume

Passive through spaces are defined as areas that see a lower volume of use and are generally located along the desire-lines between buildings and parking areas. Passive through spaces should provide the following features:

- Way-finding features.
- Lighting and security beacons.
- Pavement design to accommodate snow-removal equipment.



Precedent image of a destination space.



Destination spaces are locations where people will gather and remain for longer periods of time. The Alumni Building and Study Cottage, East Campus and the proposed Courtyards are classified as some of the new destination spaces. These kinds of spaces may include:

- Design themes and concepts relative to adjacent buildings or the College in general. Space should have an identified role and provide features to support the intended use(s).
- High-quality landscaping and design features, such as tree and shrub planting, public art, water features, site furnishings, etc..

- Patios and seating areas.
- Open air shelters or other outdoor structures.
- Hierarchy of spaces, for example, small intimate gathering spaces versus larger open spaces for large groups.
- Way-finding and interpretive features.



Planting along street edges should be consistent throughout the Campus grounds.



6.2.4 Streetscapes and Edges

Streetscapes and Campus edges should receive a consistent treatment that will identify the boundaries of the Campus. Streetscapes and edges should include the following:

- Consistent treatment of boulevards, including setbacks, sidewalks, curbs, tree and shrub planting location (species could vary), lighting, signage, bike lanes/trails, transit stops and parallel parking spots.
- Pedestrian crosswalks.
- Legible and logical way-finding features.



Landscaping is an important design element for Campus parking lots.



6.2.5 Visible Parking Areas

New Campus development will promote a reduction of vehicle infiltration into the Core Campus. Instead parking areas will be arranged along the edges of the Core Campus. However, a parking area is still a significant open space and should receive a high level of design that provides for pedestrian comfort.

Parking areas should be designed to include the following features:

- ° Lighting;
- ^o Directional signage;
- Pedestrian networks that can also be identified in the winter months;

- Landscaping shade trees, island planting, storm-water management;
- ^o Emergency beacons;
- Snow-storage and melt-filtration areas;
- ^o Storm water management;
- Drop-off loops for areas with high volume drop-off and pick-up requirements, such as the Day Care or the Conservatory; and,
- Dedicated parking for alternativeenergy and auto-share vehicles, motorcycles, mopeds and bicycles.





6.2.6 Existing Spaces

Existing destination and through spaces should be maintained with improvements as required to integrate with new spaces and Campus circulation.

- Development of a site-furnishing replacement plan that harmonizes site furnishings on Campus.
- Conversion of large expanses of surplus lawn area into naturalization areas to improve infiltration of run-off, and reduce general maintenance and the maintenance of sloped areas.
- Reinforce the character of existing landscaping.

- Promote the use of coniferous plantings in all new landscaping.
- Preserve existing healthy and mature trees and landscaping.



6.3 OPEN-SPACE SUMMARY AND AREA-SPECIFIC RECOMMENDATIONS

The following is a summary of the key existing and proposed open spaces for the Master Plan. Each space will perform either a passive or active function. Open spaces are all intended to become the primary organizing features for the Campus. All of the recommendations outlined in Section 6.2 of this chapter should be considered for all the areas summarized below.



6.3.1 Existing Open Spaces

1. The Convocation Green

The Convocation Green is an expansive, existing open space that is framed by the original Core Campus. The Green is the place where people arrive on Campus. Currently, the Convocation Green contains a pond, a tower, an amphitheatre, a lawn area and a series of well-connected pedestrian pathways. Although the area is well-loved by the Campus community, it is at times under used. The Master Plan proposes several changes to the existing buildings, the open-space boundaries and the programming within the space. Key recommendations for the Convocation Green include:

- Introduction of windows wherever possible looking onto the Convocation Green from the existing Core Campus building.
- Reconfiguration of the adjacent street to better address the open spaces and create a pedestrian-friendly street.

- An expansion to the Convocation Green to the south is recommended. This expansion will frame Mount Royal Circle with a linear green space. Within this new space, an interior study pavilion is recommended to encourage students to work and meet within the Green itself, through this provision of a public working and studying area.
- All publicly accessible doorways off of the Green should be unlocked and available for entry. Where doors cannot be accessible, paths should be clearly marked. This is to encourage pedestrian traffic throughout the area.
- Where lawn areas are determined to be surplus, naturalized planting areas are recommended to minimize maintenance and to increase the number of native species on Campus. All plants should be marked and labeled for education and information purposes.



2. The Interior Courtyards

The interior courtyards surrounding the Core building are well-landscaped and maintained, and are appreciated for their individual characters. Some are more active, for hanging out and meeting with friends. Others are quieter, for reading a book or studying. There are no recommendations to change the character of these areas, but all publicly accessible doorways off of the courtyards should be unlocked and available for entry. This is to encourage pedestrian traffic throughout the area. Doorways should also be glass so that someone exiting has a full view of the courtyard.



3. The Grand Plaza (East Gate)

The Grand Plaza is the formal entrance to the Core Campus building. It is well-serviced, with pedestrian walkways and a protected walkway adjacent to the new Faculty of Arts buildings. This colonnade condition is recommended adjacent to all new open spaces, to ensure year-round accessibility and use. Additional cyclist parking should be added to encourage ridership and provide a visible and central location to store bicycles.

Existing pedestrian paths leading to interior courtyards.





Precedent image of naturalized planting areas.

4. The Arts Courtyard

The existing Arts Courtyard is located between the new Faculty of Arts building and the existing Core Campus buildings. Currently, the courtyard has rock-formation displays and information, and a meandering pathway that connects to the East Gate entrance. Key recommendations for the courtyard include:

- The entrance to this open space from Mount Royal Circle is somewhat unresolved, with pedestrians crossing parking lots to enter into the space. A new green-space entrance is proposed.
- The area needs additional way-finding so that people are aware that this is a viable circulation route.
- Where lawn areas are determined to be surplus, naturalized planting areas are recommended to minimize maintenance and to increase the number of native species on Campus.
 All plants should be marked and labeled for education and information purposes.

6.3.2 Proposed Open Spaces

The following is a summary of the key proposed open spaces for the Master Plan within each Quad.

5. Science and Technology Courtyard

A new hardscaped courtyard is proposed in the centre of the Health and Science building and a future academic building. The courtyard is intended to be passive in nature, with hard and soft landscaping. There should be ample benches, evergreen trees, naturalized planting and signage. The courtyard should be fully accessible from the surrounding buildings, with a minimum of one public entrance on each side.

7. North Quad

The North Quad is proposed to be framed by academic, mixed-use retail and residence buildings. The Quad is located at the core of the North Campus and organizes future buildings. The Quad is a place for passive and active recreation, providing students with an allseason, outdoor amenity space. It is envisioned as a landscaped courtyard with open lawn, trees, benches and pathways. All pathways should terminate at public entrances into the buildings or passageways to the rest of Campus.



6. South Campus Pedestrian Plaza

The South Campus Pedestrian Plaza is framed by two new academic buildings adjacent to the Convocation Green. The space is envisioned as a pedestrian and cyclist area, connecting to the Promenade to the east. The plaza area is a transition space that brings pedestrians from Mount Royal Circle into the Core Campus area. It is envisioned as a predominately hardscaped area, with planters and tree pits to delineate the length of the plaza.



Campus courtyard space.
8. West Quad

The West Quad is the new pedestrian Campus entrance that connects the main street to Richardson Way Southwest. The pedestrianand cyclist-only plaza provides a much needed open-space feature on the west side of the Core Campus. The Quad is framed with two new academic buildings and connects to a future bus-terminal facility located on Mount Royal Circle. The West Quad is envisioned as a hardscaped area, with a central double row of trees. Planters, benches, and glazed windows in the ground floor of surrounding buildings will give the space a transparent and inviting feel, drawing people into the Campus.

9. Residence Courtyard

The Residence Courtyard is internal to the Residential Complex. The area is intended for use by students living on Campus and is to be a passive recreational space. The courtyard allows natural light into the centre of the building, and is a study/retreat area for residents. The courtyard is envisioned as a naturalized-landscape area, with no active lawns, containing benches and tables for studying and hanging out.

10. The Promenade

A new road configuration and streetscape design is proposed for Mount Royal Circle. The length of the street is recommended to extend from the Proposed CCL addition to the North Gate off of Richardson Way Southwest. Mount Royal Circle is to have a special paving treatment and flexible streetscape design that blends the divisions between pedestrian and vehicular areas. This street design is called a *woonerf* (meaning "streets for living") and is typically used to slow traffic in pedestrianoriented areas. The design of this street should reinforce the high-quality pedestrian environment that is recommended for Mount Royal College's Campus Master Plan.

Proposed Open Space/ **Expanded Open Space** Precedent image of a wide pedestrian

promenade.



Two new transit terminals are proposed for the Campus.

7 TRANSPORTATION

7.1 INTRODUCTION

This transportation, traffic and transit overview has been prepared based upon:

- Review of the Mount Royal College Campus Transportation Strategy (March 31, 2006) prepared by D. A. Watt Consulting, in conjunction with Swanson Transportation Consultants, Brown & Associates Planning Group and Research Works Inc.;
- A site visit and discussions with senior officials;
- Review and input of the Campus Master Plan prepared by Brook McIlroy Planning + Urban Design/Pace Architects; and,
- Extensive experience in all disciplines of transportation, including providing guidance and assistance in the preparation of development plans, site-vehicle circulation plans, parking strategies and related travel-demand measures for numerous institutional uses.

The following sections describe our interpretation of available information. This information was also used to extrapolate future operational considerations, to assist in achieving not only the goals of the Master Plan but directing efforts towards sustainable transportation.

7.2 TRANSPORTATION SUSTAINABILITY

The Campus Transportation Strategy (2006) clearly indicates that Mount Royal College enjoys a high degree of accessibility from all areas of the City of Calgary. The accessibility is primarily provided by a hierarchy of municipal roads which provide direct connections to the Campus.

Calgary Transit provides a regular scheduled service through eight bus routes. Most of these routes are considered to be part of the normal route structure of the municipality and not strictly designed to meet the travel desires and patterns of students and faculty/staff. The current transit service to Mount Royal needs improvement, in terms of routes, capacity and frequency. Calgary Transit have committed to an enhanced new service model (with dedicated BRT service and increased frequency) in conjunction with the opening of the West LRT line. However, Mount Royal's challenge will be to work with Calgary Transit to realise those enhanced service levels much sooner than 2013.

Walking and bicycling are other modes of transportation that are used by students, faculty and staff.

Analysis of boundary road and site intersections indicates that virtually all locations achieve very good levels of service with minimal delays to vehicle operations. Certain improvements are required to the internal road system to facilitate transit and possibly vehicle movements at sharp curve locations.

The modal choice characteristics that have evolved can be summarized as follows (students, faculty and staff):

- The automobile accounts for approximately 66% of all travel;
- Transit accounts for approximately 27% of all travel; and,
- Walking, bicycling and car pooling accounts for approximately 7% of all travel.

The above resultant modal choice or transportation sustainability characteristics are strongly influenced by:

- Student on-site monthly parking charges in the order of \$25.00;
- Faculty/staff on-site parking charges which vary;
- A site parking provision model based upon maintenance costs, operations costs and monetary reserve allocations; and,
- A mandatory student yearly charge of \$95.00 for a Calgary Transit pass.

The Campus Transportation Strategy (2006) indicates that the opportunity to continue the above transportation sustainability approach is feasible from an off-site perspective but in our opinion not feasible from an internal site perspective.

Population and employment is growing in the City of Calgary. Also it is expected that the student population could be in excess of 9,389 by 2015 / 2016. The Campus Transportation Strategy (2006) took into account all of this growth potential and concluded that area roadway network including key boundary road intersections and Campus entrance locations would still be able to achieve very good levels of service with minimal delays to vehicles.

It is concluded from an off-site perspective that the area roadway network is fully capable of accommodating the total vehicle demands (of maintaining current transportation sustainability characteristics).

However, the Campus will not be spared the impact of the increased vehicular activity associated with the growth in students, faculty and staff.

The price that will be paid to maintain this level of transportation sustainability is:

- Increased vehicle flows within the Campus requiring adjustments and modifications to the ring road;
- Increased vehicle / pedestrian / bicycle conflicts within the Campus;

- Introduction of vehicle calming measures to control vehicle movements and speeds;
- A site parking provision model designed to continue the provision of a supply to meet the increasing demand; and,
- Reduced flexibility in the location and design of Campus buildings and Master Plan elements.

The continued dependency upon the automobile as the primary means of Campus access has direct implications on the parkingsupply provision which in turn directly affects building configurations and locations. This also impacts the ability to create a proper pedestrian environment within the Campus.

The costs associated with such an approach can be quite high. It is evidenced at many institutions across Canada that the most effective means of accommodating site travel demands is increasingly in favor of transit. Such an approach inherently permits more flexible building configurations and locations and strongly encourages greater pedestrian movement within the institutions. The ability to achieve planned building infrastructure with significantly reduced parking provides immediate and long term financial benefits. Additional benefits accrue to the environment with reduced automobile travel.

Increased walking and bicycling provides significant health benefits to participating persons.



Parking behind the Roderick Mah Centre for Continuous Learning.

7.3 FACTORS WHICH INFLUENCE TRANSPORTATION SUSTAINABILITY

In the context of the City of Calgary and the Mount Royal College Campus the following considerations are brought forth with respect to transportation sustainability.

There is no doubt that the cost of owning and operating a vehicle will continue to increase. As these costs continue to climb, one segment of the population that will immediately seek alternative modes of transportation will be students.

- Since students have now made a modal choice their next selection will be an evaluation of not only the availability of alternative modes (primarily transit) but an evaluation of the Campus itself. In other words how well is the Campus organized and configured to accommodate transit, pedestrian and bicycle movements.
- When the Campus population reaches 14,000 persons Mount Royal College will be in the top 5 of the "50 Largest Employers List" in the Province of Alberta.

- If the student transit pass is maintained at \$95.00 then Calgary Transit will receive each year approximately \$1.3 Million. How will that money be spent to assist the travel demands of Mount Royal College? How will Mount Royal College receive Calgary Transit within the Campus and how comfortable will it be to get on and off the bus?
- Of equal importance is how the automobile is treated on the Campus. Does it pay its own way or is it subsidized?
- The monthly Calgary Transit pass for an adult is \$95.00. This represents the least motorized cost in the City of Calgary not withstanding car pooling or car sharing opportunities.
- This motorized cost should be considered as the bench mark for establishing monthly parking charges at Mount Royal College. The lowest on-site monthly parking pass should always be greater (at least \$5.00 more) than the Calgary Transit monthly adult

pass. As Calgary Transit increases the pass cost so should the Campus parking pass.

- This can be considered to be a localized approach to transportation sustainability. It is understood that other modes of transportation have a role to play (walking and bicycling) and should be accommodated. However, in respect to fall and winter months, transit becomes the pre-dominant consideration towards sustainability.
- Also, there is no doubt that the College and Calgary Transit must work together to initiate new services and facilities. The College must ensure that transit vehicles can circulate quickly and efficiently while on-site. One or more transit terminal facilities need to be strategically placed within the Campus. These facilities must be climate controlled, offer food services and be within steps of the bus bays.





7.4 THE MASTER PLAN AND TRANSPORTATION **SUSTAINABILITY**

The Mount Royal College – Lincoln Park Campus Master Plan directly focuses on creating an environment which places the pedestrian first.

All primary modes of transportation; automobile, transit, bicycling and walking are accommodated but once the site is entered it is understood that pedestrians and bicyclists have priority.

The internal circulation system and building patterns permit the ability to achieve the necessary transportation sustainability levels. The remaining efforts can now be directed towards managing the provision of an appropriate parking-supply based on placing transit first.

7.5 THE MASTER PLAN **PARKING-SUPPLY**

The Master Plan proposes the introduction of a parking structure in a strategic manner designed to achieve the necessary transportation sustainability level.

The strategy in parallel with increased transit services and other supportive on-site parking measures increases the supply in strategic locations both on-street and off-street.

The parking structure located at the main gate area will meet the parking demands of the college - accounting for the displacement of some surface parking as new buildings are developed.

7.6 TRANSPORTATION DEMAND MANAGEMENT **STRATEGIES**

The primary travel demand strategy as discussed in the above sections for Mount Royal College should be the strong support of transit combined with appropriate on-site parking charges and minimal provision of an increased on-site parking-supply.

There are other remaining relevant travel demand measures for implementation by Mount Royal College. These include:

- Supporting increased walking and bicycling to and from the Campus;
- Car-pooling; ٠
- . Telecommuting.

While transit supportive measures can shift significant portions of the total travel demand the remaining measures are likely only to shift a very small percentage of the demand. Even if the shift is in the order of 1 to 2 percent it is appropriate to encourage and support these remaining measures.

APPENDIX A

Campus Building Area Take-off and Parking Inventory

Building		Design Plan		
	Building Footprint (sm)	# of Storeys	Total Built Floor Area (sm)	
Science & Tech Expansion Phase 1	1,567	3	4,700	
Proposed Health Sciences Building	6,365	4	25,460	
Proposed Future Concert Hall	2,900	1	2,900	
Proposed Conservatory	2,938	2	5,875	
CCL Expansion	2,040	3	6,121	
Proposed New Library	3,990	4	15,960	
TOTAL CAMPUS BUILDING AREA PHASE 1	18,233	_	61,016	

Mount Royal College Campus Building Area Take-off Phase 2					
Building		Design Plan			
	Building Footprint (sm)	# of Storeys	Total Built Floor Area (sm)		
Future Academic 1	3,917	4	15,668		
Future Academic 2	2,890	4	11,560		
Future Academic 3	1,235	4	4,940		
Future Academic 4	1,985	4	7,940		
Future Academic 5	2,441	4	9,764		
Future Academic 6	2,516	4	10,064		
Future Academic 7	2,516	4	10,064		
Future Mixed Use 1	2,185	4	8,740		
Future Mixed Use 2	1,988	4	7,952		
Future Mixed Use 3	1,625	4	6,500		
Future Residence Complex	4,770	4	19,080		
Future Residence	2,045	4	8,180		
Study Cottage/Alumni Hall	625	2	1,250		
TOTAL CAMPUS BUILDING AREA PHASE 2	30,738	-	121,702		

Mount Roval College Campus Building Area Take-off Phase 1

Parking Lot	Existing	Phase 1	Phase 2	Additional Parking
	(stalls)	(stalls)	(stalls)	(stalls)
S5	277	277	277	0
S4	247	247	280	33
V2	118	118	0	-118
E2	298	298	310	12
S3	434	434	315	-119
S10	300			-300
E4	231	250	0	-231
E - Overflow (East Res)	34	34	0	-34
East Res	258	258	0	-258
S1	508	508	420	-88
E1	307	105	104	-203
CCL	73	73	73	0
V1	204	0	0	-204
S7	211	105	66	-145
S8	366	366	366	0
S9	372	372	372	0
West Res	35	35	35	0
Below Grade Parking		390	1,248	1,248
Parking Garage		1,200	1,200	1,200
TOTAL	4.273	5.070	5.066	793

APPENDIX B

Open House Material and Stakeholder Background Information

APRIL 1, 2008 OPEN HOUSE PRESENTATION BOARDS

INTRODUCTION

Why a campus plan?

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What is the process?





OPEN HOUSE MOUNT ROYAL COLLEGE, LINCOLN PARK INF (2400

DRAFT CAMPUS PLAN DIRECTION

The Campus In Context

Preliminary Guiding Principles





SUMMARY OF 1998 CAMPUS DEVELOPMENT PLAN **Key Recommendations**



STAKEHOLDER BACKGROUND INFORMATION AND OPEN HOUSE MATERIAL

INTRODUCTION

Why a Campus Plan?

The current Campus Development Plan is now eight years old and in order to remain current and address the Collegis to Hanging metals regular updates to that ghan are required. This process will update the existing Campus. Development Plan and focus on the changing goals of the campus. A special focus will be placed on strategic: invivinmental sustainability and public campus spaces.

The Consultant Team

To prepare the Campus Master Plan, the College has commissioned a multi-disciplinary team led by Brook. McTroy Planning + Urban Design and Pace Architects laws brookinc/troy.com] in association with Poulos and Chung Engineers.

Towards a Campus Plan

The Lincoln Park Campus of Mount Royal College is embarking on a new strategic Campus Mastel Plan that will address multi-year budgeting, sustainable growth, long term development strategies and academic planning and investment in facilities for minewal and growth.

At Mount Royal Collegit's Lincolo Park Campus them and four main buildings in which classrooms, laboratories, faculty and staff offices, study luurges, food services areas, increational and athletic facilities and circulation space are housed. Approximately 1.6 million square feet wit covered space is used for these purposes.

Mount Royal College has undertaken two major expansion projects since it moved to its current location in Lincoln Park. The first expansion, in the mid 1980's, increased the size of the original 1972 facility by 30%. The expansion of the sairly 2000's included construction of two new academic buildings, a triple germasium complex, a Centre for Continuous Learning and a 594 tied student residence complex. With continued and rapid environment grants, mere program development and with the mount approval to offer university degree programs, facilities have once again reached their capacity, and it is now necessary to onvinis the 1999 Campus Development Plan in order to plan for the future.

March 2008

LINCOLN PARK

CAMPUS MASTER PLAN

To address the need for a new long term development plan, Mount Royal College is undertaking the preparation of a tomprehensive Compus Master Flan. The plan will focus on establishing a high quality and implementable campus vision that is developed through an inclusive consultation process.

The Plan's Objectives

The Campus Plan has four main objectives.

- Provide a feasible and flexible physical framework to accommodate granth over the next ten to fifty years through recommendations for the placement of new buildings and facilities, and their relationship to campus open spaces.
- Identify spontunities for high-quality open spaces and a sale, functional and attractive pedestrian network.
- Analyze space utilization and recommend strategies to use space more efficiently in the short term in switching buildings, as well as in new buildings.
- Guide the design of new buildings and significant additions to ensure that they contribute to a high quality Campus setting and provide animated people hieridly setting and provide animated

Campus Community Consultation

The input of students, faculty and staff, an well as input from the community around the campus is central to the development of a competensive Campus. Flan, Throughout the process, there will be opportunities to review work to date and provide feedback, either by attending a workshop, an open those or by providing direct feedback via s-mail. The input offered by MIIC's Lincoin Campus stakeholders will help shape the future of the campus.

A Campus Plan writisite will be launched, on which key information about the project will be made available, lockuling important dates, a feetback form and an interactive discussion forum.

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MOUNT ROYAL COLLEGE Campus Manner Plan

CONSULTATION QUESTIONNAIRE #1

This Questionnaire can be filed out digitally at www.brookmcilroy.com/interactive/MRC_Forum

1.0 EMERGING GUIDING PRINCIPLES

The following are emerging Guiding Principles for the Lincoln Park Campus Plan. What changes would you make? Is anything important missing?

- 1. The Plan should provide enough flexibility to implement the College's strategic priorities over the long term,
- 2. The Plan should assist the College in a continued emphasis on establishing in tracking and research;
- 3. The Plan should help strengthen linkages with the world at large-
- 4. The Campus should be accessible to all;
- 5. Campos growth should be miniful of its neighbours and minimize adverse outward expansion;
- Campus growth should be based on the principles of sustainable development and demonstrate proactive and responsible stewardship for Campus green spaces;
- The Campus should be a vitrant place throughout the day and in all seasons, and other an unparallelist quality of life;
- R. The Campus should privide a redwork of high quality open spaces and a podednae priority environment;
- 9. The Campus should encourage interdisciplinary collaboration and informal interaction, and,
- 10. New buildings should complement and be well integrated with existing facilities and building.



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MOUNT ROYAL COLLEGE

Campus Master Plan

WHY A CAMPUS PLAN?

The current Campus Development Plan is now eight years old and in order to remain current and address the College's changing needs, regular updates to the Campus Plan are required. This process will update the existing Campus Development Plan and focus on the College's changing goals. A special focus will be placed on strategic environmental sustainability and public campus spaces.

THE PLAN'S OBJECTIVES

The Campus Plan has four main objectives:

- · Provide a feasible and flexible physical framework to accommodate growth over the next ten to fifty years through recommendations for the placement of new buildings and facilities, and their relationship to campus open spaces.
- · Identify opportunities for high-quality open spaces and a safe, functional and attractive pedestrian network.
- · Analyze space utilization and recommend strategies to use space more efficiently in the short term in existing buildings, as well as in new buildings.
- ·Guide the design of new buildings and significant additions to ensure that they contribute to a high quality Campus setting and provide animated people-friendly spaces year-round.



IMPORTANT MEETINGS

YOUR THOUGHTS

The input of students, faculty, staff, and the surrounding campus community is central to the development of a comprehensive Campus Master Plan. Throughout the process, there will be opportunities to review work and provide feedback, either by attending a workshop, an open house or by providing direct feedback via e-mail and interactive web surveys. The input offered by Mount Royal College stakeholders will help have a major role in shaping the future campus.

An interactive discussion forum has been set-up to facilitate participation throughout the process and the summer months. New discussion topics, questionnaires and surveys will be posted regularly. Please visit the discussion forum at:

www.brookmcilroy.com/interactive/MRC_Forum

In addition to the consultation and public open house sessions we will provide direct contact with the study team through the Mount Royal College website. We encourage you to share any comments, concerns or thoughts you have regarding the Campus Master Plan.



APPENDIX C

Special Purpose District Land-use Designation

SPECIAL PURPOSE DISTRICT LAND-USE DESIGNATION

Building Height

On the south and east side where the Campus parcel shares property lines with Multi-Residential At Grading Housing District (M-G) and Grade Oriented District (M-CG) land-uses, new development heights are dependent on whether the adjacent buildings are greater than or less than 6.0 metres high. In the instance that the existing adjacent building heights are greater than 6.0 metres, new development is limited to 8.0 metres measured from grade at the shared property line increasing proportionately to a maximum of 12.0 metres measured from grade at a distance of 4.0 metres from the shared property line. If the adjacent building heights are less than 6.0 metres, new development is limited to 6.0 metres measured from grade at the shared property line and increasing proportionately to a maximum of 12.0 metres measured from grade at a distance of 6.0 metres from the shared property line. In the two instances where the Campus parcel shares property lines with Multi-Residential Contextual Low-Profile District (M-C1) the maximum development height is 14.0 metres. A Multi-Residential Medium-Profile District (M-C2) parcel located in the southeast corner establishes a maximum height of 16.0 metres for any adjacent new development. The remaining parcels, which are Direct Control (DC), districts do not stipulate limitations on the height of new developments on the Campus lands.

Setbacks

All Special Purpose Districts must have a minimum front setback of 6.0 metres. Rear and side setbacks for new developments that share a rear or side property line with another parcel must have a minimum depth of 1.2 metres. Along Richardson Way Southwest, Richardson Road Southwest or any other lane, street or Light Rail Transit (LRT) Corridor that the new development may share a parcel with, the set back in the rear and side shall be a minimum of 3.0 metres.

Landscaping

Areas not being used for vehicle access, sidewalks, or any other purpose allowed by the Development Authority, must be soft surfaced landscaped. Along all four sides of the Campus, not including the adjacent Special Purpose District parcels, the setback areas must provide 1.0 tree and 2.0 shrubs for every 30.0 square metres, or 1.0 tree and 2.0 shrubs for every 50 square metres, where irrigation is provided by a low water irrigation system. Where the Campus shares a parcel with other Special Purpose District parcels (along the east side of the Campus) the setback area must provide a minimum of 1.0 trees and 2.0 shrubs for every 45.0 square metres; or 1.0 trees and 2.0 shrubs for every 60.0 square metres, where irrigation is provided by a low water irrigation system. The landscape requirements for the Campus development adjacent to Multi-Residential properties must be 40.0 per cent of the area of the parcel. This can be a combination of hard and soft landscaped area. The hard landscaped area can not be more than 30.0 percent of the required landscaped area. Trees and shrubs must be planted in an overall minimum ratio of 1.0 tree and 2.0 shrubs per 45.0 square metres of required landscaped area.

Landscaping for Parked Areas

Landscaping is required in a parking area when the total surface area containing the required drive aisles, motor vehicle parking stalls and vehicular access for a development is equal to or greater than 5,000.0 square metres. The landscaped area must be a combination of hard and soft surface landscaped area in the form of islands and strips. There should be 0.15 square metres for landscaped area for every 1.0 square metres of the total surface area.

Islands need to be provided at the beginning and end of every row of motor vehicle parking stalls and for every 20 metre vehicle parking stalls in a row. Islands should be 12.0 square meters with at least one side of the island being a minimum length of 2.0 metres. There should be a minimum of 1.0 tree and 2.0 shrubs and be surrounded by a concrete curb.

Parking

Parking requirements for any new development located within 400.0 metres of an LRT platform can be reduced by 10.0 per cent.

Sidewalks

Buildings with one main or multiple entrance(s) should be connected to a public sidewalk or the nearest street. Parking lots should be connected to the public entrances of building with at least one sidewalk. Sidewalks need to be hard surfaced landscaped, with a minimum 2.0 metre width, different from the parking area on the parcel area and must be raised above the parking area.

APPENDIX D

Option 2: Master Concept Plan

OPTION 2: CAMPUS MASTER CONCEPT PLAN - PHASE 1



OPTION 2: CAMPUS MASTER CONCEPT PLAN - PHASE 2

