







This document has been prepared by DIALOG, together with ECS and WSP, for Mohawk College as part of the Campus Master Planning Process.

APRIL 16, 2019







LAND ACKNOWLEDGEMENT

We acknowledge that Mohawk
College is situated on the traditional
territory of the Haudenosaunee and
Anishnaabeg nations, within the
lands protected by the Dish with
One Spoon wampum agreement and
the Between the Lakes Treaty and is
currently home to many Indigenous
peoples from across Turtle Island.





LETTER FROM THE PRESIDENT

Creating welcoming and vibrant places of learning has been a priority for Mohawk since the renewal of our campuses began more than a decade ago. Guided by a bold Plan and unwavering commitment to students, the transformation that has taken place has reinvigorated a sense of pride in the College and strengthened our sense of purpose in our vision and mission.

Inspired by these successes, this Campus Master Plan is the most ambitious yet. Rather than creating a roadmap for future generations, the Plan offers a set of guiding principles to inform decisions related to the evolution and expansion of our College in a strategic, sustainable and learner-centred way for the next 50 years. Current and future decision-makers will use this Plan to create inspirational environments that showcase student leadership, spark new ideas and encourage sustainable growth, while promoting adaptability and innovative thinking.

Developed through extensive in-person and online consultations with more than 1,500 stakeholders, the Campus Master Plan reflects a broad range of opinion from students, college employees, governors, Program Advisory Committee members, and industry and community partners. I want to thank everyone who took the time to be part of this process. Your input was critical to the Plan's development. I especially want to thank the Board of Governors for their strategic leadership and continued support.

The Campus Master Plan is an opportunity to inform and inspire future generations. Together, we are building a future-ready college that will remain a key destination in Hamilton and the surrounding region for decades to come.

Sincerely,

Ron J McKerlie

President, Mohawk College

ACKNOWLEDGEMENTS

This document was developed for Mohawk College in collaboration with the DIALOG, ECS and WSP consultant team, with input from a broad range of stakeholders from the College and wider community, partners and students and staff. The consultant team was greatly supported throughout the project process by the Campus Master Planning Working Group, the project Steering Committee and the Board of Governors.

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In addition, the team would like to acknowledge the involvement and contributions of the following groups, which comprised student, staff, faculty and administrative representatives, along with key community stakeholders and experts in various fields. These include

- Mohawk College students, faculty and staff, from all campuses and teaching sites
- The Mohawk Student Association (MSA)
- The Mohawk College Senior Leadership Team (SLT)
- The Mohawk Executive Group (MEG)
- Program Advisory Committee (PAC)
- Indigenous Education Student Services
- Marketing and Communications
- City of Hamilton
- McMaster University
- Hillfield Strathallan College
- St. Joseph's Healthcare Hamilton
- The community at large

Thank you to the entire College community for their input and collaboration throughout the engagement process and to neighbourhood residents for their involvement and attendance at open houses.

A special thank you to the College's Indigenous community for their participation and guidance in the pursuit of Indigenous placemaking on Mohawk's campuses.

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DOCUMENT OUTLINE

The Campus Master Plan Document is structured in three parts—Background, The Plan and Implementation—and appendices, described as follows:

PART A: Background

Outlines the project background, objectives and process and provides an overview of the evolution of the campus and an understanding of its most valued assets, as well as relative municipal and community policies and initiatives. Included is an analysis of its existing conditions and opportunities with respect to master planning, as well as an outline of early priorities and Design Direction that emerged as outcomes of the analysis and engagement process.

PART B: The Plan

Outlines the Vision and Guiding Principles for overall campus master planning, relevant to all campus locations. They provide the foundation for concept design and growth strategy. The chapter also contains Concept Plans for the three key study campuses—Fennell, Stoney Creek, IAHS/McMaster—and associated Plan Frameworks that provide recommendations specific to implementation of the Campus' built form, open spaces, movement and sustainability.

PART C: Implementation

APPENDICES: Master Plan Studies

The appendices include studies conducted as part of the Master Plan process, to inform the analysis of the site opportunities and in turn inform the development of the campus Concept Plans.

Studies included are

- **Engagement Events Summary**
- Fit-to-Function Assessments
- Sustainability Workshop Summary

EXECUTIVE SUMMARY

BACKGROUND AND INTRODUCTION

In early 2018, Mohawk College launched a Campus Master Plan process to develop a framework for the next 20–30 years of progression and growth in the physical resources of the College. The Campus Master Plan focused on the College's three main campuses: Fennell, Stoney Creek and the Institute for Applied Health Sciences (IAHS) at McMaster University.

The process began with the establishment of a clear set of goals and objectives for the Campus Master Plan which can be found in **Section 1.0**.

The College's Strategic Plan and Strategic Mandate Agreement act as the foundation of the Campus Master Plan as well as a number of related City of Hamilton policies, including the Official Plan Urban Structure Map, the BLAST Transportation Plan, the Complete-Livable-Better (CLB) Streets Policy and Framework, and the Cycling Master Plan.

The Campus Master Plan has been developed through four phases over 11 months. The process has been led by a Campus Master Plan Steering Committee, with daily oversight by a Campus Master Plan Working Group. DIALOG, an integrated design firm, with space programming support from Educational Consulting Services (ECS) and transportation planning from WSP, were the successful proponents to assist the College with the development of the plan.

BROAD ENGAGEMENT

The engagement process for the development of the Campus Master Plan was both broad and extensive. Utilizing a variety of formats, including surveys, campus pop-ups, public consultations and more, over 1,500 participants contributed to the Campus Master Plan development, including students, staff, faculty, the Board of Governors, partners and community members. Details of the engagement process are included in both **Section 2.0** and **Appendix A** of the report.

EXISTING CAMPUS REVIEW

Section 3.0 of the report describes the results of the site analysis for each Campus, conducted to determine the baseline condition of each and identify future opportunities from a number of perspectives, including

- Potential campus expansion locations;
- Potential buildings to be replaced;
- Gateways and entrances into the campus;
- Building structure and organization;
- Circulation and wayfinding;
- Relationship between indoor and outdoor spaces;
- Formal and informal open spaces; and
- Servicing facilities on the campus.

The Fennell Campus has a number of heritage aspects which are unique to this campus. As a result, an analysis was conducted from an historical and heritage assets perspective as well as from the context of the neighbourhood in which the Campus resides. Furthermore, there

is an opportunity for the College to acquire 21.5 acres directly north of the Fennell Campus, currently owned by the Province of Ontario which has been declared as surplus land. The potential North Lands have also been analyzed from Built Form, Open Space and Circulation perspectives.

DESIGN DIRECTION

Design direction for all campuses and campusspecific directions have been determined through the Campus Master Plan process. For example, the College will design environments which are welcoming to all, with animated frontages; campuses that connect with the larger community and are compact, walkable, easily navigable and safe. Mohawk College will create sustainable spaces, and incorporate net-zero energy and low-carbon policies for new buildings. The campus will be used as a teaching and learning tool both indoors and outdoors, and will incorporate increased recognition and awareness of the Indigenous community. New strategies relating to campus servicing (e.g.: shipping/ receiving, municipal servicing and access), parking and mobility will be developed. Any future development on our campuses will be of a high quality and iconic, to build campus identity and support the public realm. Additional student residence capacity will be explored on the Fennell and Stoney Creek campuses.

The design directions for the Fennell Campus

include: improving exterior campus frontages, open spaces and pedestrian connections; restructuring interior spaces to create better wayfinding and more cohesive academic and social spaces; phasing out low-functioning building wings and portables to create new

building and open space opportunities; adding new amenities for students, staff, and community, including additional space for industry partners and a substantial wellness centre; coordinating City of Hamilton initiatives to ensure the best connections for the College; and development of the North Lands with a focus on wellness and connection to the escarpment.

Design directions for Stoney Creek Campus

include: a consolidation of all traditional apprenticeship programs onto this campus, as well as the addition of a variety of environments to attract industry partners onto the campus; improving the visibility of the campus with more green and open space; additional student life and student services offerings on the campus to create a more complete campus environment; and increasing the overall building footprint by developing new buildings or vertically expanding existing buildings.

The IAHS/McMaster Campus design directions

include: alignment with the 2017 McMaster University Campus Master Plan through public realm enhancements; improving visibility of Mohawk's presence on the university's campus; enhancing the communal green space to the south of the IAHS to establish a social heart of the campus; further discussion with the university regarding access for Mohawk College students to student services and student life amenities on the university campus; and providing additional opportunities for industry partners in both indoor and outdoor spaces.

A detailed list of design directions can be found in **Section 3.3** of the report.

THE PLAN

CAMPUS MASTER PLAN VISION AND GUIDING PRINCIPLES

Section 4.0 of the Campus Master Plan report outlines the Vision and Guiding Principles for the Campus Master Plan. The Vision will help to inspire and guide decision-making and highlights the College's deepest values as a place of learning, dwelling and being. It sets the tone for the design process and becomes the measure against which implementation can be tested for alignment. The Mohawk College Campus Master Plan Vision is stated as follows:

Mohawk College Campuses will be...

Welcoming and vibrant places of education, where learning and pride permeate all aspects of the campus environment for students, alumni, faculty, staff and visitors. In all its physicality, Mohawk College will be a great living lab: an integrated, pedagogical, and inspirational environment that showcases student leadership, sustainability, adaptability and innovation, and sparks the development and sharing of new ideas. Mohawk College will be in all aspects, a learner-centred, industry-focused, transformative and future ready campus.

It will also be a place of wellness—a sanctuary supporting walkability, recreation, accessibility, diversity and healing. Mohawk College will continue to grow and develop as a key city destination and a hub for the community. A place for gathering and sharing knowledge, offering continuous new experiences and discoveries for all.

There are **nine Guiding Principles** for the Campus Master Plan, providing a foundation for design work, policies, and related recommendations in the Campus Master Plan that will guide the development of the Concept Plan and Plan Frameworks.

- An innovative and collaborative learning environment;
- A community-oriented campus and destination;
- An environment that supports diversity and inclusivity;
- New and enhanced Indigenous spaces on campus;
- A fully accessible environment;
- A quality and attractive environment;
- A place of wellness, healing and transformation for all;
- A sustainable, resilient and Future Ready Campus; and
- A campus that embraces the natural environment and context.

FENNELL CAMPUS MASTER PLAN

The Concept Plan for the Fennell Campus can be found in **Section 6.0**. It reflects a welcoming and transparent environment defined by unique and inviting open spaces and buildings, distinct iconic architecture and art, and an energy generated by pedestrian movement and activity. Fennell Campus is a place that inspires, and visibly showcases leadership in sustainability and technology, with growing gardens, forested canopies, and photovoltaics absorbing energy. The campus is a place with a multitude of pathways and connections that encourages a seamless flow of movement from the internal to external environment, from the edge of campus to the internal campus, weaving through and linking a diversity of social spaces and distinct campus neighbourhoods.

The Campus Master Plan builds on the existing campus structure, which celebrates existing assets, enhances sustainability, and creates distinct and inclusive places for teaching, learning, socialization, recreation, health and wellness, and community integration.

The Fennell Campus has been further organized into five overlapping "neighbourhoods." Each neighbourhood is defined by buildings and open spaces focused around a central gathering place or hub, both internal and external. This creates a selection of places to go to gather, socialize, integrate, and experience the unique aspect or draw of each place, creating "social magnets" at each corner of the campus.

STONEY CREEK CAMPUS MASTER **PLAN**

The Stoney Creek Campus Concept Plan can be found in **Section 7.0**. It creates a more complete campus environment featuring new buildings fronting the streets and framing a variety of new open spaces that offer places to linger, socialize, study, learn and recreate. A large flexible central plaza space defines the campus heart and functions as an outdoor classroom, as well as a college and community destination to host events and to showcase programming.

The Plan creates an environment that inspires students to stay beyond classroom hours, and for the community to enjoy as a destination year-round. The new buildings and enhanced landscapes support a welcoming front door to the campus, and greater exposure to the street. The streets are enhanced so they are more pedestrian oriented, improving the connectivity throughout the campus and to the neighbourhoods. The Concept Plan further supports and incorporates sustainable initiatives, creating an attractive and compact pedestrian-oriented environment with new amenities, academic program space, open spaces and improved multi-modal access.

IAHS/MCMASTER CAMPUS CONCEPT

The Concept Plan for the IAHS at McMaster University can be found in **Section 8.0**. It showcases a newly defined and enriched place for study and socializing—a place of true pride for the Mohawk student and staff, and a magnet for the surrounding community.

The Campus Master Plan Concept strengthens Mohawk College's identity in a multi-faceted way, with new signature architecture, diversified landscaping, and public art. Wayfinding is also enhanced through unique and visible signage at entrances and gateway moments. Streetscapes and pathways are enriched with tree planting and pockets of specialized gardens and seating spaces.

The Plan outlines a new building extension to the IAHS along the west side of the site—an iconic piece of architecture, transparent and permeable, as well as accessible from all sides. A beautiful courtyard complements the building at the heart of the campus, with quality landscaping, seating and lots of flexible space to invite the community to gather together, to celebrate or recreate, learn or innovate, or just enjoy a sunny lunchtime break.

The Concept Plan proposal also increases amenities and services including recreational facilities and food choices to create a more independent and sustainable Mohawk presence, as well as improved teaching spaces and social gathering space.

RECOMMENDATIONS

Each campus has a unique character defined by a set of buildings, spaces and attributes that manifest the outlined highlights above, and a set of unique recommendations towards their achievement, outlined in **Sections 6.0**, **7.0** and **8.0** of the report. There are a series of recommendations that apply to all campuses and are organized around a series of themes: built form, open space, movement, parking and servicing, sustainability, and universal accessibility. Built Form: The built form recommendations cover topics such as height and massing; mitigation of climatic conditions; building views, frontages and transparency; building entrances; architectural design and materials; and heritage conservation.

Open Space: Open space recommendations consider heritage landscapes; recreational spaces and trails; planting strategy; site furnishings; public art; and winter design and programming.

Movement: Recommendations regarding movement focus on the pedestrian network; cycling network; transit network; vehicular network; gateways and entrances; signage and wayfinding; and lighting, safety and security.

Parking and Servicing: Parking and servicing recommendations discuss surface parking lots; street parking and lay-by parking; and servicing and loading.

Sustainability: The sustainability recommendations cover construction and materials; energy conservation; transportation demand management (TDM); and stormwater management.

Accessibility: The universal accessibility section includes buildings (interior and exterior), entrances and connections, parking structures, streets, open spaces, pathways and trails.

IMPLEMENTATION

Section 9.0 of the report addresses the Implementation of the Campus Master Plan and reflects its most nimble aspect, with yearly reviews required of this section for validity and prioritization.

The Campus Master Plan report is intended to be a living document that should be applied to all physical resource decisions made moving forward. It will be reviewed annually to monitor alignment and delivery of initiatives, and to incorporate new opportunities and approaches to the Plan. A more fulsome review will occur every 5 years to ensure implementation of the Plan is on track, and that the Plan continues to align with the College's overall strategic goals.

The administration and monitoring of the plan (Section 9.2) will occur under the leadership of a new cross-functional Campus Master Plan Implementation Committee responsible for the overall implementation of the Plan. Any future development project at the College should be evaluated against the Vision, Principles and Frameworks of the Campus Master Plan. The Board will be provided with an update on the Campus Master Plan on an annual basis.

As the Plan evolves, it is critical that the College community and stakeholders continue to be involved in conversations about its implementation and updates. This continued engagement and collaboration between the College and internal and external stakeholders is an important aspect of the Plan's successful evolution over time (Section 9.3).

The development phasing of the Plan (Section 9.4) has been broken into Early Considerations, Short-Term Initiatives (one to five years), Mid-Term Initiatives (five to 10 years) and Long-Term Initiatives (10 to 20+ years), however this section must be the most flexible to adapt and change as needed based on strategic directions at the College, funding opportunities, etc.

Strategic Partnerships (Section 9.5) emphasizes the need for and benefits of Strategic Partnerships in the successful implementation of the Plan, including partnerships with private business to provide services to the College and potential partnerships to develop land and buildings.

The Campus Master Plan will provide Mohawk College with a Vision, Guiding Principles and Framework for development over the next 20 years, demonstrating the commitment of the College to best optimize its physical resources at its campuses.



PART A: BACKGROUND





1.0 INTRODUCTION

1.1 THE NEED FOR A CAMPUS MASTER PLAN

In January 2018, Mohawk College launched a Campus Master Planning process as part of its ongoing commitment to providing a place that inspires learning and success in the context of high-quality, attractive, sustainable and accessible campus environments. The moment was attractively aligned with the celebration of the College's 50 years of "phenomenal growth and transformational change." The College also acknowledged that, although domestic enrolment growth is slowing down, the campus facilities and services are near capacity and the College will need to plan for future growth in the near term, just as much as in the long term.

The planning and rationale for the first 40 years of growth and development at the College emphasized connectivity between wings on the campuses. The most recent Campus Master Plan was completed in 2006, in which the College prioritized content on programming and space planning at the Fennell and Stoney Creek campuses. This new Campus Master Plan sets the foundation for the next 20–30 years of progression and growth at Fennell, Stoney Creek and IAHS/McMaster, backed up with a structured and well-thought-out concept design and implementation recommendations. The new Plan outlines a framework and direction for development that is supported by a strong Vision and Principles and that is deeply rooted in a collaborative process with stakeholders and the public. The Plan responds to both short- and long-term growth projections, needs and aspirations and considers the combination and relationship of open space with buildings and the connective tissue that weaves a campus together both internally and outwardly with the community.

Furthermore, the Campus Master Plan acknowledges that the world around us is changing so rapidly, with technological advancements and environmental drivers in particular, that growth patterns and space needs may deviate at any moment. For this reason, it is imperative to be ready with a Plan that is flexible in its framework and that offers a resilient implementation strategy.

¹ Mohawk College's 50th Anniversary Coffee Table Book

1.2 MASTER PLAN GOALS AND OBJECTIVES

1.2.1 MASTER PLAN GOALS

Mohawk College outlined at the outset of the project four overarching goals that have set the tone for the development of the Campus Master Plan. The four Goals are as follows:



1.2.2 MASTER PLAN OBJECTIVES

The Concept Plans for each campus, alongside recommendations and policies for campus development, were driven by 6 overarching Objectives. They form the foundation against which all decisions have been measured.



CREATE A SINGLE UNIFIED VISION, WITH THREE DISTINCT CAMPUS PLANS

Each campus showcases differences in the programs that they deliver and the look of their physical campus environment as well as distinct context that contribute to their individual distinct characters. Together, however, they must aspire to tell one unified story that speaks to the College's overall identity, shared history, celebrated achievements and overarching goals.





ALIGN WITH COLLEGE POLICY PLANS

The College has several plans guiding its development, growth, programming, space usage and investment decisions, including:
Environmental Management Plan 2.0 (2014), Sustainable Landscape Plan (2016), Mohawk College Strategic Plan (2016–2021), Strategic Mandate Agreement (2017–2020) and Indigenous Education and Initiatives Plan (2018). It was imperative for the new Campus Master Plan to align itself with the initiatives and directives in these plans.



MASTER PLAN OBJECTIVES (CONT'D)



SUPPORT WELLBEING FOR THE WHOLE COMMUNITY

As the Public Health Agency of Canada has recognized, the link between how we plan and design communities and the wellbeing of people and the environment is of paramount importance. This means that at Mohawk College, a conversation is needed with the College, surrounding communities and all key stakeholders about their vision for how we can improve community wellbeing on each campus as it develops over time and embed these ideas into the Plan.



Community Wellbeing Framework: developed by the Conference Board of Canada and DIALOG.



ALIGN WITH THE COLLEGE'S VISION OF 'FUTURE-READY, LEARNING FOR LIFE'

The Plan must support the growth of the campus in a way that prepares for the future in all aspects—from new technologies and new architectural strategies to new trends in campus strategies; new trends in campus planning, programming and learning; new modes of transportation and sustainable energy models. The Plan must also foster an inspirational learning environment. Most importantly, it must be flexible and adaptable to stand the test of time.





GIVE CONSIDERATION TO A NET-ZERO ENERGY AND LOW CARBON CAMPUS

Strengthening our leadership in environmental sustainability and stewardship is a strategic priority for Mohawk College. As the College is committed to developing high-performance buildings, the new Campus Master Plan must embed this thinking throughout its process and policies, from its Vision and Principles, through to design development and implementation.





BE ROOTED IN EXTENSIVE COLLABORATION AND ENGAGEMENT

The new Master Plan process holds great value for the College and it is imperative that the Plan is guided by the input from the college community as well as the surrounding community. The input from the engagement events is invaluable and influences all components of the new Campus Master Plan.



1.3 ALIGNMENT WITH MOHAWK'S STRATEGIC PLAN

First and foremost, the Campus Master Plan must align itself with Mohawk College's institutional plans, both long-standing and new, to be recognized as valuable and to fulfil its potential, as well as to validate its implementation strategy. The institutional plans of greatest priority include

- The 2016–2021 Strategic Plan; and
- The 2017–2020 Strategic Mandate Agreement.

Other institutional plans and projects with important input for the Campus Master Plan development include, among others:

- Academic Plan 2012;
- Environmental Management Plan 2.0 2014;
- Sustainability Policies and Projects including the Sustainable Landscape Plan and Energy Conservation and Demand Management Plan 2014; and
- 2016-2018 Accessibility Plan.

The Campus Master Plan has been developed with all these key policies and plans in mind.

1.3.1 FIVE-YEAR STRATEGIC PLAN

Mohawk College's Strategic Plan¹ is a comprehensive framework created to assess and evaluate options for Mohawk's current and future needs. The key message is highlighted right at the outset in the Vision Statement "Future Ready. Learning for Life." The Strategic Plan focuses on establishing a foundation for all future development and College projects that is grounded in five key values that speak to being student-focused, committed to excellence and innovation in education, engaging of the community, inclusive and accountable. Within its Vision and Core Values, it sets the base goals and top priorities for the Campus Master Plan. The Campus Concept Plans must focus on

 Providing ample opportunities for innovative development and a student-centred learning environment.

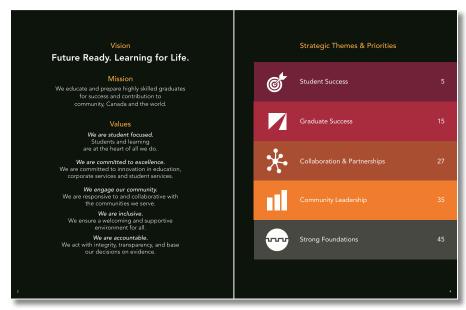
Policies must touch on the themes of

• Inclusiveness, accessibility and sustainability.

The Strategic Plan also sets the precedent and requirement for:

- A highly collaborative and extensive engagement process, inclusive of the community at large; and
- A flexible Plan that is implementable, to meet the vision of "Future Ready."

¹ Document link: http://strategicplan.mohawkcollege.ca/



1.3.2 STRATEGIC MANDATE AGREEMENT

The Strategic Mandate Agreement is a written commitment set forth by Mohawk College of Applied Arts and Technology to the Ministry of Training, Colleges and Universities. It outlines the role the College performs in Ontario's post-secondary education system, as well as how it will build on its current strengths and leadership to achieve its vision and help drive system-wide objectives and government priorities. More specifically, it establishes a new foundation for excellence in academic programming and sustainability in operations.

Shared objectives and priorities for College differentiation include

- Enhancing student experience
- Innovation in teaching and learning excellence
- Access and equity
- Applied research excellence and impact
- Innovation, economic development and community engagement
- Enrolment strategy, program direction, sustainability and partnerships
- Institutional collaborations and partnerships
- Ministry/government commitments

Mohawk College has launched or expanded and improved on a number of institutional initiatives to support these shared objectives and priorities. Initiatives include support programs such as "Mo-Money" that help students understand financial situations and manage their funds, or different student leadership groups (i.e.,: Leaders in work-integrated learning, Leaders in simulation-based learning) as well as specialized centres for topics of research (i.e.,: College student success research centre) and innovation (Centre for Teaching and Learning).

The Campus Master Plan must support these initiatives and provide opportunities for their growth and prominence as physical space and symbols of identity. Key directives and opportunities for the Campus Master Plan to align with the objectives and priorities of the Strategic Mandate include:

- Provide opportunities to support an enhanced student experience, in the design of the public realm and buildings—that they be inspiring and conducive to learning and that there be a diversity of space typologies for a breadth and richness in experiences.
- Showcase the College's leadership and talent in innovation and research throughout the campus, as part of its identity—through architectural expression, landmark buildings, in open space design and public art opportunities and more.
- Support a Master Plan that provides equitable access to all buildings and open spaces and across all connections throughout the campus and create a welcoming face to the community.
- Collaborate with, engage with and offer opportunities for existing and new partners to join Mohawk College's initiatives and to participate in the Master Plan process.
- Create an inviting and animated campus environment that attracts students, staff, partners and visitors, to support growth enrolment and partnership opportunities.

1.4 CITY POLICY CONTEXT

The City of Hamilton's planning policies and initiatives provide the College with guidance in planning for and developing the three campuses as growth needs arise, as well as insight into opportunities to integrate ideas for joint public realm improvements for the College community and the broader neighbourhood. These can include streetscape enhancements, an expanded and integrated path and trails network and improved connections to transit stops.

In general, the City of Hamilton's policies are flexible, supporting opportunities for diversifying uses and for additional height on each campus and they further support intensification and public realm enhancements to create a strong "activity node" for the community. They also promote sustainable initiatives and forward-thinking quality design.

The City of Hamilton is very supportive of open communication and working together with Mohawk College to improve transit and other alternative transportation mode options for commuting. The following section highlights key policies and initiatives that have informed opportunities for each campus's Concept Plan and frameworks.

1.4.1 OFFICIAL PLAN URBAN STRUCTURE MAP

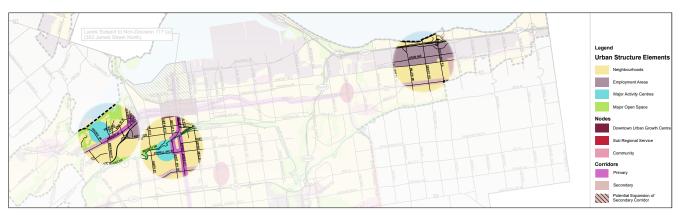
The Hamilton Official Plan is an overarching policy framework that guides development throughout the City of Hamilton towards the implementation of its goals and visions for the future. The Plan is built upon a key set of principles including, among others

- Building compact and healthy urban communities;
- Protecting environmental systems;
- Balancing transportation networks to offer choice; and
- Supporting a growing, strong, prosperous and diverse economy.

Of particular relevance to Mohawk College is Schedule E in the Official Plan: The Urban Structures Map. It identifies the IAHS/McMaster Campus and the Fennell Campus within a Major Activity Centre and the Stoney Creek Campus within an Employment Zone.

Opportunities:

- The Campus Master Plan has the opportunity to contribute to the achievement of the City of Hamilton's overarching principles outlined in the Official Plan.
- Campus Master Plan Concepts should support the Urban Structure Plan designations for each campus.



A zoom-in of the Schedule E Urban Structure Map, Hamilton Official Plan, highlighting IAHS/McMaster and Fennell campuses as Major Activity Centres (blue colour on the map) and Stoney Creek Campus within an Employment Zone (purple colour on the map).

1.4.2 BLAST TRANSPORTATION PLAN

BLAST is the acronym used for Hamilton's Long Term Rapid Transit System. It was originally developed in 2007 as part of the City of Hamilton's Transportation Master Plan and later incorporated by Metrolinx as part of the 2017 Regional Transportation Plan, which proposes a regional transportation network for service by 2041. The Plan aims for Bus Rapid Transit (BRT) service on all five lines of the network. Lines A and B are further prioritized to receive the BRT service by 2024, with a longer-term goal of Light Rail Transit (LRT) service by 2041.

The future plans, once implemented, will benefit Mohawk College with new rapid transit routes planned in proximity to each campus, with better overall connections throughout the City of Hamilton. Mohawk College must work with the City of Hamilton to ensure that transit stops best serve the College campuses.



The BLAST Map, with Mohawk campuses highlighted in yellow.

1.4.3 CLB STREETS POLICY AND FRAMEWORK

The Complete-Livable-Better (CLB) Streets Policy and Framework¹ is a policy and guidelines document and toolkit for a typology of complete street designs for the City of Hamilton. Complete Streets is an approach to right-of-way design that aims to balance the needs of all users irrespective of ability or mode. Hamilton's approach of a CLB street builds on the idea of Complete Streets and recognizes further that "no one-size-fits-all solution is appropriate for right-of-way (inclusive of streets) design as different streets can have different priorities." As such, the Policy and Framework for CLB Streets provides a range of solutions depending on the different elements and future role of each street type.

The Policy is applicable to each of the Mohawk College campuses and should be considered in the design of the public realm. More specifically, the streets that should consider the design guidelines outlined in the document, are as follows:

- Fennell Avenue West at the Fennell Campus relates to an *Urban Avenue* typology;
- West 5th Street at the Fennell Campus relates to an *Urban Avenue* typology;
- Barton Street at the Stoney Creek Campus relates to a *Transitioning Avenue* typology;

The descriptions of the streetscape typologies that relate to the Mohawk campuses are transcribed here directly from Section 4.0 of the *CLB Streets Policy and Framework* document for reference and further details are found in Section 5.0.

Urban Avenue Elements

(pg. 27, CLB Streets Policy and Framework)

- Wide sidewalks and high-quality pedestrian amenities;
- Pedestrian crossings at signalized intersections or unsignalized intersections in accordance with Ontario Traffic Manual Book 15;
- Transit amenities with transit in mixed traffic, dedicated transit lanes or transit priority lanes;
- Dedicated cycling facilities and amenities (e.g., bicycle lanes or cycle tracks, bicycle parking);
- Dedicated on-street parking;
- May accommodate goods movement but may be limited to certain times of day or locations;
- Landscaping includes street trees, shrubs/ perennial beds and decorative planters;
- Sensitivity to goods movement; and
- Place-making and active, healthy public realm.

Transitioning Avenues Elements

(pg. 27, CLB Streets Policy and Framework)

- Wide sidewalks and high-quality pedestrian amenities;
- Pedestrian crossings at signalized intersections or unsignalized intersections in accordance with Ontario Traffic Manual Book 15;
- Transit amenities with transit in mixed traffic, dedicated transit lanes or transit priority lanes;
- Dedicated cycling facilities and amenities (e.g., bicycle lanes, cycle tracks or multi-use paths and bicycle parking);
- Permit off-peak parking;
- Goods movement supportive;
- Landscaping includes street trees, shrub/ perennial beds, raised planters, buffer planting and could include a landscaped median;
- Sensitivity to goods movement; and
- Place-making and active, healthy public realm.

 $^{1\} Document\ link:\ https://d3fpllf1m7bbt3.cloudfront.net/sites/default/files/media/browser/2018-06-06/draft-tmp-backgroundreport-liveablestreets-3.pdf$

1.4.4 CYCLING MASTER PLAN

Hamilton's Cycling Master Plan¹ was created in 2009 and a Review and Update was issued in 2018. The original Master Plan identifies a cycling network of approximately 1,000 centreline kilometres of routes of varying types, alongside a timeline for implementation based on a priority ranking of projects. It is supported with principles, details and reference maps. The Review and Update document builds on the original Master Plan, adding further cycling route kilometres that specifically create stronger linkages towards a connected overall network and it provides an update to the list of ranked projects in order of priority. The document also highlights some of the relevant details from the CLB Streets Policy and Framework as they pertain to cycling route typologies relative to street typologies.

The Mohawk College Campus Master Plan, in reviewing where relevant planned routes are identified in the Cycling Master Plan, should consider the incorporation of cycling amenities that support the planned routes, as well as create appropriate new cycling route linkages through the campus environments that will support a wider connected city network. Appendix A, Maps 1 and 2 in the 2018 Review and Update document showcase a map of the Planned Cycling Network, with a number identification of projects highlighted. Planned routes relevant to each Mohawk College campus are as follows:

- Fennell Avenue West: project number 130identified as a "Planned Multi-Use Trail"
- West 5th Street: project number 13-identified as a "Planned Multi-Use Trail"
- Cootes Drive: project number 17-identified as a "Existing Multi-Use Trail Paved"
- College Court: project number n/a-identified as an "Existing MultI-Use Trail Unpaved"
- Barton Street East: project number 11identified as a "Planned Bike Lane"

The relevant cycling linear facility types outlined for Mohawk College's core campuses are defined in the Cycling Master Plan Review and Update as follows:

Multi-Use Trail: "A multi-use trail is a paved or packed loosE-material trail that is physically separated from vehicular traffic by an open space or barrier. Multi-use trails are typically shared by pedestrians and other nonmotorized uses. An asphalt surface is desirable for cyclists."

Bike Lane: "Reserved bicycle lanes designate a portion of the roadway for the exclusive use of cyclists through signing and pavement markings. OTM Book 18 (2013) and TAC's Bikeway Traffic Control Guidelines for Canada (2012) are primary design resources. Enhanced forms of bicycle lanes exist including buffered bicycle lanes (paint and sometimes visual barriers), cycle tracks (various types of barriers) and protected bicycle lanes (physical barriers). Installation of enhanced forms will be accompanied by a staff report. The images below are examples of enhanced bicycle lanes. The City of Hamilton aims to avoid the application of a two-way cycle track along one side of a two-way street for motor traffic. Such a design increases potential conflict points at intersections as well as creates concerns if there are frequent driveways."

Other cycling linear facility types that may be relevant to internal campus streets and should be considered in the design of each campus include: Bike Paths and Bicycle Boulevards/ Neighbourhood Greenways. Their descriptions and supporting imagery can be found on page 12 of the Cycling Master Plan Review and Update document.

¹ Document link: https://www.hamilton.ca/city-planning/ master-plans-class-eas/city-wide-transportation-master-plan

1.5 HISTORY OF THE COLLEGE

1.5.1 INDIGENOUS ROOTS

"Mohawk College sits on the legendary Niagara Escarpment. Once a great path, it connected the Indigenous peoples of this region with related and distant communities creating a trading and diplomatic network. Many campfires were kindled nearby as the Neutral, Wyndot, Haudenosaunee and Anishinaabec travellers moved through this region over the centuries.

Now, Mohawk College serves the Indigenous communities of the Six Nations of the Grand River, Mississaugas of the Credit River, as well as Indigenous families in the greater Hamilton region.

One tradition says that Mohawk College was named in recognition of the Mohawk Nation that played an essential role in local history because of their treaty alliance with the Crown that dates back to 1667. Joseph Brant, a Mohawk leader, was one of the most influential figures in colonial history who led his people to the Grand River in 1784 and took up residence on Burlington Bay. The use of Mohawk in the college's name was meant to honour the Indigenous presence in this location."1



1.5.2 DEVELOPMENT HISTORY

The following section is to be referenced with the timeline below, which highlights key development dates in the history of Mohawk College.

1946–1956: PROVINCIAL INSTITUTE OF TEXTILES

Mohawk College began as the Hamilton-based Provincial Institute of Textiles (PIT), one of the Government of Ontario's establishments of industry-specific institutes across Ontario in 1946. It opened its doors in September 1947 to 14 students and four faculty members, equipped with spinning equipment, knitting machines, weaving looms, a dye house and testing labs. However, with the decline in the textile industry, the decision was eventually made to transform the PIT into the Hamilton Institute of Technology.

1947
Provincial Institute
of Technology (PIT)
opens

1965

68 acres at Fennell Ave. and West 5th St. is chosen as a new post-secondary institution site -Fennell Campus-home to what would become Mohawk College 1969

Mohawk College establishes Braneida Campus in Brantford 1990

Saltfleet Campus renamed Stoney Creek Campus



1967 Mohawk has first Ontario College's graduating class

Saltfleet Campus (future Stoney Creek Campus) opens 2000
Institute for Applied Health
Sciences at McMaster opens
as a partnership project

as a partnership project between McMaster University and Mohawk College

¹ Rick Hill, Tuscarora Clan of the Six Nations of the Grand River, Distinguished Fellow – Adjunct Professor, Mohawk College



1957-1966: HAMILTON INSTITUTE OF **TECHNOLOGY**

After being re-established as the Hamilton Institute of Technology (HIT), the school expanded its programs to include textiles, electrical, electronics and mechanical technology. In its first year of operations (1958), HIT had a freshman class of 104 students and nine full-time faculty members, with the purpose of acting as a feeder school to then Ryerson Institute of Technology (RIT). However, none of the students from HIT's freshman class were able to get into RIT in their second year and HIT was faced with the decision of either growing its competitiveness or closing down. As a result, HIT began accepting levels of direct industry support, which led to increased enrolment and greater academic and cultural recognition. HIT began experiencing significant growth into the '60s.

1966-PRESENT:

In 1965, then Minister of Education William G. Davis introduced Bill 153 as an attempt to provide new alternatives to university in Ontario. Thus resulted the colleges of applied arts and technology. Based on this new opportunity, HIT began its journey of becoming a college. Sixty six acres of land at what is known as Fennell Campus today was selected as the site of a future college in Hamilton and in 1966, HIT was again reestablished, into what we know as Mohawk College of Applied Arts and Technology.

The College would steadily grow into the '70s and '80s, with increased enrolment and rapid expansion that led to the opening of the Saltfleet Campus in Stoney Creek (1970) and new buildings throughout Fennell Campus. By the 1990s, new partnerships and associations within the College were established and with its excellence in health and nursing, the Government of Ontario-funded Mohawk College and McMaster University training centre: the Institute for Applied Health Sciences at McMaster. The Institute opened its doors in 2000.

In 2009, the College began a substantial series of upgrades and new construction projects at its Fennell Campus to accommodate its fast-growing student population and ultimately transfer all programs from the Brantford Campus.

Stoney Creek Campus becomes the STARRT Institute (Skilled Trades and Apprenticeship Research, Resource and Training) and adds two new wings to the existing building

Repatriation of Brantford Campus to Fennell Campus

2015

Mohawk College opens City School at the Eva Rothwell Centre

2018

Joyce Centre for Partnership and Innovation opens at Fennell Campus

Fennell Campus begins \$84 million planned upgrade

Mohawk Students' Association Fitness Centre opens

Mohawk College celebrates 50 Year and embarks on Campus Master Plan Development

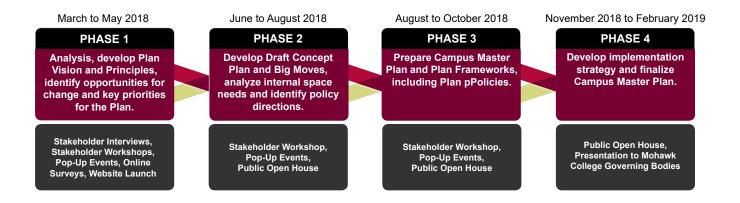


2.0 ENGAGEMENT **PROCESS**

2.1 PROCESS OVERVIEW

The engagement strategy started early on in the Campus Master Planning process with the introduction of the project to the public and stakeholders and all the way through to the presentation of a draft Campus Master Plan. It was imperative to engage as fully and as broadly as possible and to provide multiple moments to provide feedback. The process saw the engagement of the general public in local communities around each campus, as well as a diverse collection of internal and external stakeholders including: Mohawk students, College staff and employees, McMaster University, the City of Hamilton, Hillfield Strathallan College and St. Joseph's Hospital. Input ranged from affirming ideas synthesized from previous events, and providing new ideas and proposals to inform each next stage of work.

The project process had engagement moments organized around each milestone in the development of the Campus Master Plan. Events took on various formats such as informal interviews, online surveys, interactive workshops, pop-ups and open houses. A website accompanied by a branding platform were also created to share information about the project as it unfolded and care was taken to make all content AODA compliant. Above formal engagement events and the digital platform, a series of meetings were held throughout the project process with various internal committees to provide updates and receive input, including: the Campus Master Plan Steering Committee, the Mohawk Executive Group and the Board of Governors. The diagram below outlines the four phases of the project process that unfolded across a 12-month time frame.



2.2 ENGAGEMENT EVENTS SUMMARY



Student Pop-ups during Phase 1 (April 11, 2018)



Phase 2 Public Open House at Fennell Campus (July 17, 2018)

PHASE 1 ENGAGEMENT

The first phase of the project kick-started the engagement process with a light series of events that catered to a broad and diverse audience. The main goal was to share with the Mohawk community and the public the project goals and objectives and the upcoming process and engagement events, as well as to gather a first set of opportunities and constraints and big ideas for the campuses. We heard from hundreds of voices and the input gathered was invaluable.

Outcomes from Phase 1 included

- Development of an overall Vision and Guiding Principles for the Campus Master Plan; and
- A series of Design Directions for both individual campuses, as well overall for all campuses of Mohawk College. These can be found in Section 3.2 of this Report.

PHASE 2 ENGAGEMENT

Phase 2 of the project process began with a review of the Design Directions put forth in Phase 1, to inform the development of Concept Plans for each campus. Draft Concept Plans were then taken out to the public and stakeholders for a critical review and workshop discussions. There was also another opportunity to review the Vision and Principles in more detail, against the Draft Plans.

Outcomes from Phase 2 included

- A refined Vision Statement and set of Guiding Principles;
- Commentary on the Draft Concept Plans for each campus and their associated design frameworks, to inform refinement in the next phase of work; and
- Insight into new opportunities and considerations, relative to the College's concurrent and new projects and initiatives being revealed at this time.



Phase 3 BOG workshop (October 10, 2018)

PHASE 3 ENGAGEMENT

Phase 3 events focused on refining the draft Concept Plans for each campus environment based on input from the previous phase. A conversation on space planning and phasing was also initiated, to inform more realistic opportunities and time frames for better future planning and towards the development of an implementation strategy.

Outcomes from Phase 3 included

- Final Concept Plans for each campus;
- Refined Design Frameworks; and
- A draft phasing and implementation strategy.

PHASE 4 ENGAGEMENT

Phase 4 work focused on completing the draft Campus Master Plan report, circulating it for review and approval, and creating strategies for the socialization and implementation of the Plan. Engagement events included presentations of the final Campus Master Plan to the Board of Governors, Mohawk employees during the Annual Town Hall events, and our strategic partners.

For further details on all event series, their timeline and description, reference Appendix A.



3.0 ANALYSIS

3.1 CAMPUS STUDY SITES

Mohawk College is a leading-edge institution for post-secondary education located in Hamilton, Ontario. It is rich in its history-its stories and heritage landscapes and buildings—as well as education, achievements and research development. It has evolved and grown substantially over the years and today, the College stands proud with three campuses and many teaching site locations across the City of Hamilton and beyond, including

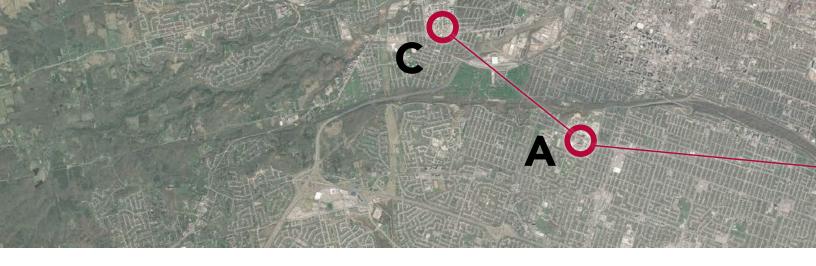
- Fennell Campus
- Stoney Creek Campus
- IAHS/McMaster Campus
- John C. Munro Hamilton International Airport
- Mohawk Employment Services
- City School (Mobile Unit)
- Eva Rothwell Resource Centre
- Caroline Street Substation

- Mission Services of Hamilton
- Six Nations Polytechnic
- Ohsweken Training Centre
- Wentworth Heights
- St. Elizabeth Village
- St. Joseph's Healthcare
- Hamilton Health Sciences Hospitals
- Hamilton Public Library, Central Branch

The Future Ready Campus Master Plan concentrates on three key campuses throughout its analysis and design process: Fennell, Stoney Creek and the Institute of Applied Health Sciences at McMaster University.



The following section outlines opportunities and constraints analyses conducted for each study campus site from the perspective of the physical built and natural environment and connections between them. The site analyses provide insight into each site's context and build the foundational elements that help inform each campus' master plan concept.



3.2 EXISTING CONDITIONS AND OPPORTUNITIES

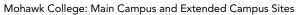
To support the development of a new Campus Master Plan that was truly comprehensive and implementable, responding to growth with an outlook into the future, it was important to begin with a review and assessment of existing conditions and an analysis of opportunities and constraints. Assessments were conducted relative to the physical structure and form of each study campus-Fennell, Stoney Creek and IAHS/McMaster-looking at the condition and organization of buildings, open spaces and the connectivity between them, as well as overall space programming. Opportunities identified were also aligned with the College's sustainability goals, as well as current community and City of Hamilton initiatives relative to streetscape improvement plans, cycling and walking trails and urban structure.

It is important to note that although three select campuses are the focus of this Campus Master Plan, this does not preclude all other teaching sites from the analysis conversation. Opportunities for consolidation, or conversely the opening of a new teaching site for example in a downtown location have been incorporated in multiple conversations among stakeholders and the campus community and continue to be so. No particular decisions for change have been solidified at this time, but the possibilities have been identified as opportunities and the Plan considers a flexible framework in response.











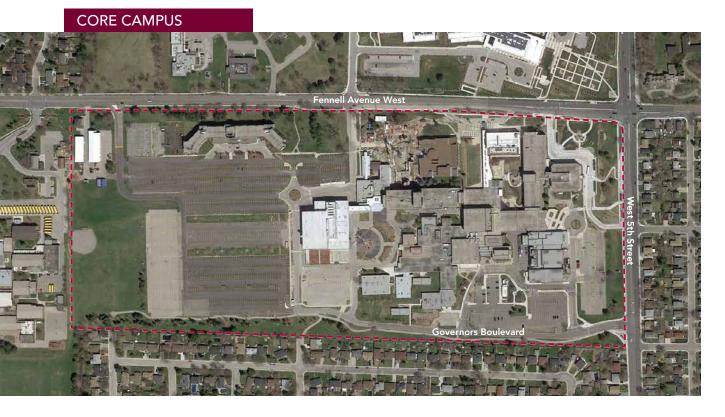
3.2.1 FENNELL CAMPUS

Fennell Campus fronts two key arterial roads in the City of Hamilton, namely Fennell Avenue West on the north and West 5th Street on the west, providing good accessibility options and opportunities to establish a visible presence in the community. With the potential acquisition of the North Lands, the campus benefits from having a direct link to the Niagara Escarpment and its recreational trails and can enhance these assets as campus and community amenities. The campus holds other key heritage assets that should be enhanced or celebrated, such as heritage buildings (the Cellar, Century Manor), unique landscapes such as the orchards that represent the campus' past heritage landscape and its connection to its Indigenous heritage roots.

Currently, only about half of the campus lands are developed with buildings and open spaces, with the other half being occupied predominantly by surface parking. In applying an alternative parking strategy and promoting alternative commuting options, there is extensive opportunity to grow and expand the campus in the future.

The built form structure of the campus is based on a mall structure of development, with a series of interconnected building wings. As a result, the campus is primarily internally focused, having very little relationship to its external environment. This makes internal and external wayfinding a challenge and minimizes the opportunity to experience the outdoors. The access and egress points and pathway connections relate primarily to parking lots, catering more to vehicular circulation versus pedestrian circulation and connectivity.

Existing open spaces are often formed from residual spaces between buildings and periphery landscapes are underutilized. There are opportunities to introduce a pattern of building development that establishes a balance between the built form and open space; that considers both internal and external relationships, programming, circulation and connectivity; and that defines beautiful purpose-built, useful and functioning open spaces.





The historic Hamilton Psychiatric Hospital (McMaster University website)

HISTORY AND HERITAGE ASSETS

Fennell Campus and its potential addition of the North Lands carry notable heritage value. The North Lands in particular are sited on lands holding heritage designation under Part IV and V of the *Ontario Heritage Act*, identified as St. Joseph's Healthcare Mountain Campus, at 100 West 5th Avenue. The property comprises a cultural landscape of value and the Century Manor building, which is listed on the Municipal Heritage Register. The Cellar building located south of Fennell Avenue West is also a heritage-listed building and although listed separately, it was a part of the original Mountain Campus lands.

Key heritage assets at Fennell Campus were considered during the development of the Concept Plan as elements to preserve, enhance where relevant and possible and celebrate as an important part of Mohawk's history and identity.

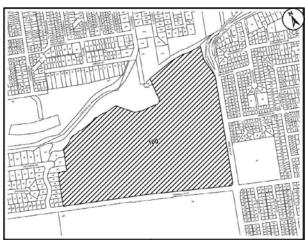
The Story of Mental Health and Wellbeing

The Fennell Campus lands were once upon a time the site of the important Hamilton Psychiatric Hospital—originally the Hamilton Asylum for the Insane—and its associated facilities and grounds, also known as the West 5th Campus, or the Mountain Campus. The Hospital attracted patients from faraway countries and by 1890 (14 years after establishment) it housed 915 patients.

The establishment was impressively self-sustaining. The 529-acre grounds (which extended well beyond the limits of the Fennell boundary today) included farmland for animals and crops and orchards; a root cellar for storage of vegetables, a greenhouse and a milk-processing house; and a butcher's shop, bakery, tailor's shop, sewing room and up'holstery shop. It even had its own fire hall, chapel and power house and offered recreational opportunities for staff and patients such as skating and curling rinks, a



Historic farmlands and orchards of the Hamilton Asylum



Location map for heritage designated property 100 West 5th Street



Century Manor as it exists today



The Barton Workshop building today

bowling green, tennis courts and more. A series of tunnels were strategically built underground for the transportation of goods between farms and storage areas, some of which still exist today. The site was originally chosen for the asylum because it was found to carry restorative and therapeutic qualities with a connection to nature and the panoramic views from the mountain edge.

Opportunity:

The legacy of the institution and the entire campus tell an important story about the City of Hamilton's care for mental health, wellbeing and sustainability. This story must be preserved and shared, whether through public art, special garden spaces, reference to food production, connections to nature, or other means. The entire landscape holds a sense of restoration and should be considered in the design of the Concept Plan.

Century Manor and Other Historic Buildings

A series of buildings remain of the Fennell Campus specifically on Mohawk's potential North Lands property, currently owned by Infrastructure Ontario, that must not be overlooked. They include: Century Manor, the Barton Workshop, Beckfield Building, Trades Building, the Power House, Inverness Place and the Bunker. Some of the buildings are currently in use and being maintained to a certain level, while others have been vacant for over 20 years.

Century Manor is of particular value on site and holds designation as a listed heritage building. This was the second original building of the Hamilton Asylum when it was first opened in 1884. It holds many stories from the past and has significant architectural character both on the exterior and interior of high Victorian style.

Consideration:

All remaining buildings on site should be assessed for heritage value and significance prior to decisions being made on their preservation or demolition as they all form part of a larger story of historic value for the City of Hamilton. Century Manor above this must be considered relative to the *Heritage Act*.

Opportunity:

Opportunities for Century Manor are multifold. Certainly the building as a signature piece of Victorian architecture and the story of its historic use as an asylum must be preserved. There is opportunity for the re-use of the building to focus on health and wellbeing and to create an associated landscape around it to extend that purpose beyond the interiors.



The Cellar



The Orchards

The Cellar

The original Hospital Mountain Campus extended across all of the southern lands that constitute Mohawk College today and beyond. The Cellar building, which functions today as the College's student pub located near the College's central vehicular entry along Fennell Avenue West, has a rich historic and architectural character in particular on the interior. The building is a low stone, one level construction, with the interior featuring grand archways and open alcoves along a long central corridor, all made of red brick. During the time when the psychiatric hospital was in full function and its patients worked the land for their own food, this building functioned as a storage cellar for all root vegetables and was connected via the underground tunnel system. The Cellar was designated as a heritage building under the Ontario Heritage Act in 1891 (no. 135 Fennell Avenue West).

Opportunity:

The Cellar is a unique piece of identity for the College. There is an opportunity to create a plaza and seating area outside of the Cellar building to give it greater presence on campus and an associated outdoor space, extending its footprint and experience beyond its four walls.

The Orchards

The farmlands that were once so prominent on the Fennell lands have all been removed. What does remain, however, is the memory of the use of the land. The College has taken care to commemorate the history of the cultural landscape by way of planting orchards on campus. There are 23 apple trees located south of Governors Boulevard, near the entrance to the community pathway. The College community has also been very active in establishing and maintaining a community garden on campus and in promoting local produce sold on campus during the growing season.

Opportunity:

There is opportunity to expand the orchards in other areas of campus, as well as to promote the idea of increased food production and edible gardens throughout, to commemorate the history of the site as fruitful farmland and contributing to a sustainable future.

THE CONTEXT

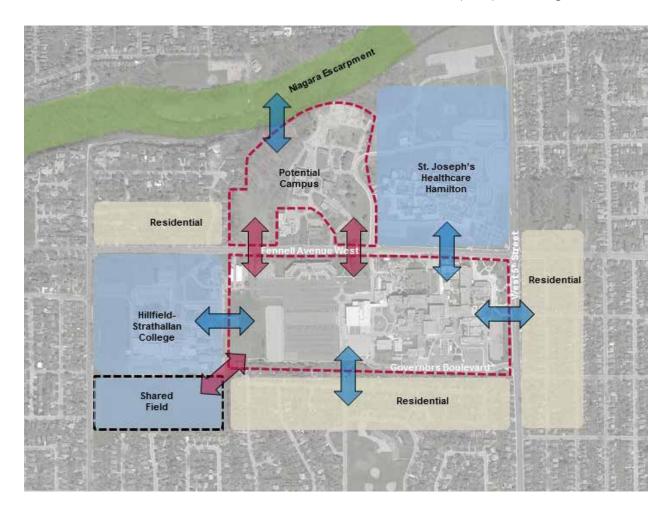
The Fennell Campus setting is on a hillside near the brow of the Niagara Escarpment. It is set in a quieter residential neighbourhood, but the site itself is flanked by a private institution—Hillfield Strathallan College—for students up to grade 12—and the St. Joseph's Hospital building alongside a series of smaller health buildings. There is also a piece of land south-west of the campus that hosts a playing field shared between Mohawk College and Hillfield Strathallan College.

Community and City Initiatives

Important to the context are two proposed initiatives for trail systems in and around Fennell Campus. The City of Hamilton is proposing to expand its Mountain Brow Trail crossing the Niagara Escarpment, which would see a new

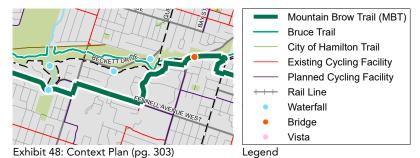
multi-use path section along Fennell Avenue West and northwards along West 5th Avenue. Hillfield Strathallan College has also proposed an ecological naturalized interpretation trail and park system within the shared field site, which would connect into the Mohawk Trail system from the west. (Both trail initiatives can be referenced in the maps on the facing page.)

Opportunities: The site's location on a hillside benefits from connections to the escarpment trails and great views over the City of Hamilton. There are also partnership opportunities with the hospital and private school, to share open spaces and facilities and to encourage opportunities for a connected trail system with ecological enhancements to open spaces and green corridors.





Map references from Project Sheets for Project Groups E and F (pgs. 106 and 111)



Exerts from the City of Hamilton Mountain Brow Multi-use Pathway Feasibility Study 2018

(https://www.hamilton.ca/parksrecreation/creating-new-parks/ mountain-brow-multi-use-pathwayfeasibility-study)

CHARACTER

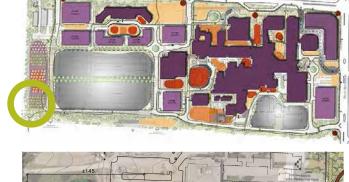
The Mohawk & Hillfield Recreation Area is an extension of the Mohawk Trail System that incorporates the shared Mohawk-Hillfield lands on the west side of campus, bordered by Garth Street, the Buchanan Neighbourhood and the Hillfield Campus. This co-development focuses on naturalization and fitness areas that include different types of natural vegetation and workout pods placed along the trail system. The southwest portion of these lands provides opportunity for the future development of track and field or field house facilities.

ACTIVITIES

- · Healthy, active living
- · Teaching and learning
- · Community connectivity

PRIORITY ACTIONS

• Complete development concepts in partnership with Hillfield





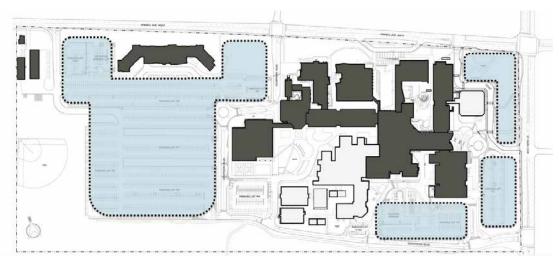
Exert from Mohawk College's Sustainability Landscape Plan 2016 (pg.78) outlining Hillfield Strathallan's proposal for an interpretive trail on the two Colleges' shared lands

(https://www.mohawkcollege.ca/about-mohawk/sustainability/buildings-and-grounds)

SITE ANALYSIS



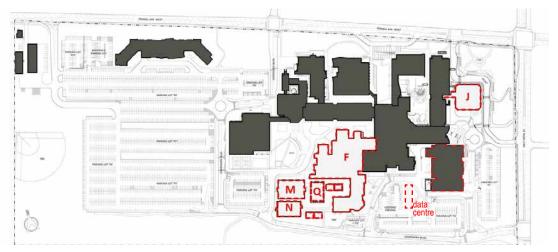
View of Fennell Campus looking north-west



Campus Expansion: Beyond the opportunity to expand or re-organize space within the soft site locations, there are other areas on campus where expansion is an opportunity and they are primarily where the existing surface parking lots are located. These areas hold high land value for the College and they should be assessed for best use relative to that value. Other locations available for campus expansion are at key gateway moments and along street edges where currently, periphery landscape is present. Vertical expansion to existing buildings

could also be considered, but must be assessed for structural possibility.

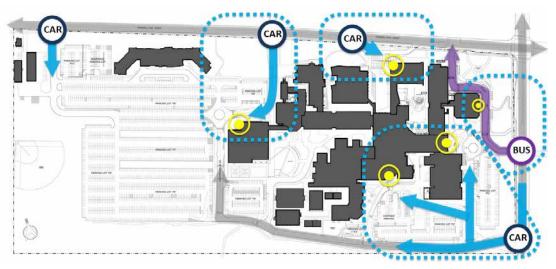
Opportunities: The greatest opportunity with respect to campus expansion is to utilize new architecture and landscape to highlight gateway moments and to strengthen the presence and identity of Mohawk along West 5th Street and Fennell Avenue West. Further opportunities are to expand built form in the parking lot areas to frame existing and new open spaces.



Building Soft Sites: The campus buildings are almost all interconnected in one large mall-like structure. The existing portables are intended for temporary use and not part of the long-term plan. Buildings J and F have been identified as worthy of future demolition based on a combination of building condition and space inefficiencies as identified in background studies. Other buildings may benefit from renovation or re-purposing such

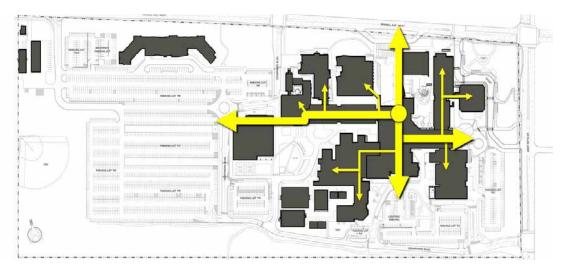
as A, B, C and E wings. The server out-building is also intended to be re-located to the internal facility in the future.

Opportunities: There is opportunity to reconsider and improve the interconnected building structure, and to provide a better wayfinding strategy through a better building placement and connection to the outdoors. There is also opportunity to improve open spaces and visual connections.



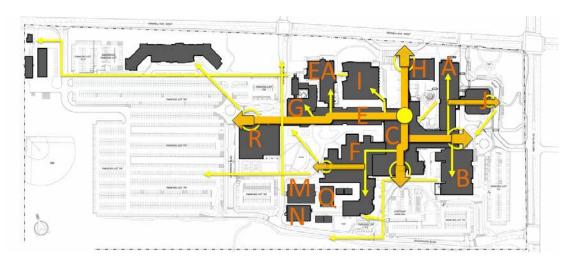
Gateways and Entrances: As the campus grew over time and new buildings were constructed, new entrances to the campus were also created. The south entrance from Governors Boulevard was originally created as the main front door to the campus, but today is considered one of five different front doors. Each of these is associated with an entrance drive, drop-off, or pathway, accessed by different travel modes. Relative to campus entries, four gateways are identified as per the existing campus layout, along Fennell Avenue West and West 5th Street.

Opportunities: Although multiple prominent entrances to a campus may be beneficial in the context of a larger campus environment, establishing a hierarchy for them would be an opportunity towards improved wayfinding. Entrances and access points and the adjacent public realm spaces, can be redesigned to improve visual connectivity and quality of space and to speak to identity. They should also be made more pedestrian focused versus vehicle focused.



Building Structure: The current building structure is organized as a series of wings branching out from one another, in four different directions from a centre point. The wings are connected alongside each other, but not *inter*connected to reflect desired pathways associated with student and faculty passageways.

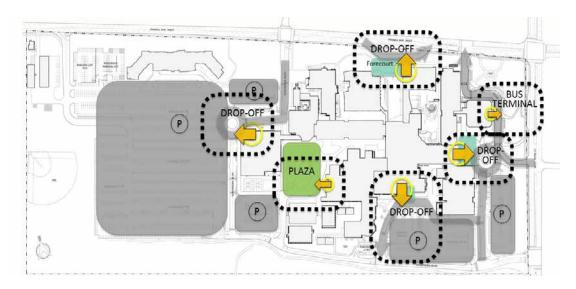
Opportunities: A new pattern of development can be introduced to provide an improved balance and relationship between the buildings and open spaces. The opportunity is to introduce new internal and external connections between individual wings that are not necessarily located directly next to each other and in turn improve wayfinding and circulation across the campus. There is also opportunity to capitalize on the central crossroad of all pathways and create a "heart."



Circulation and Wayfinding: Wayfinding signage at the campus is predominantly focused on the interiors. Signage is organized along the main circulation corridors within the interconnected wings and has a cohesive colour palette but its location and size can be improved upon. The naming of wings is organized in the order of building construction and not necessarily in a logical manner. Wayfinding is also challenged by the multiple changes in levels as they relate to a connected "ground" floor. Furthermore,

outdoor circulation is lacking in connectivity and is challenged relative to safety and accessibility.

Opportunities: The signage and naming of existing buildings should be improved to support wayfinding and to build campus identity. Signage should also be improved in its location and legibility. Improved connectivity between buildings in the exterior environment would also assist in improving wayfinding, as well as safety and comfort for the pedestrian, in support of a more walkable campus.



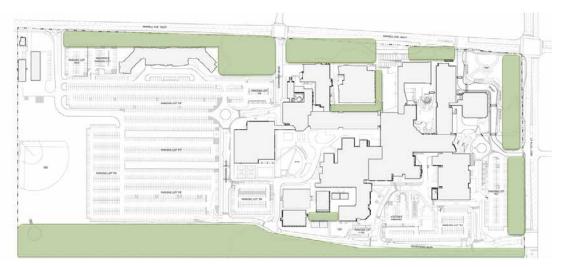
Indoor/Outdoor Spaces: The relationship of the interior spaces to the external campus environment, in particular at campus entrance locations, is dominated by a vehicle-focused public realm. The campus user is faced with a dominant view of parking lots and drop-offs in most cases, rather than pedestrian-focused and inviting public spaces.

Opportunities: The relationship between buildings and open spaces especially at key entrances can be improved so that the entry experience to the campus is more welcoming, attractive, inviting and clear. The location and design of parking lots can also be improved to mitigate the views, or an alternative parking strategy considered.



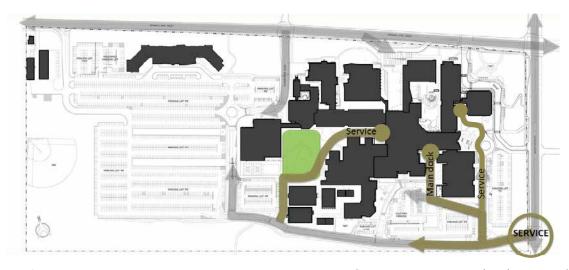
Formal Open Spaces: There are a number of diverse open spaces dotted across the campus outdoor environment, including recreational space, small and large gathering spaces, community gardens, an Indigenous courtyard and a number of forecourts.

Opportunities: Although diversity is offered in open space types, the visual and physical relationship and connectivity to them can be improved with increased access and building transparency. The function and programming of the open spaces can also be enhanced to increase day-to-day use. Some of the spaces also have the opportunity to mitigate climatic challenges relative to winter winds and summer heat from the sun, by incorporating tree planting and structural features in strategic locations.



Informal Open Spaces: A majority of periphery open spaces alongside Fennell Avenue West and West 5th Street are landscaped for visual pleasure. They are not conducive to programming or use as a gathering place. Conversely, the informal open space on the south end is utilized as a forested green corridor for walking and cycling and hosts a multi-use path, connecting into the residential community on the south side.

Opportunities: The majority of informal open spaces which define the edge of the campus can be improved as significant and contributing landscapes. There is also opportunity for new buildings or building additions to protrude into these edge landscapes, to create frontages to the main streets and help define a stronger presence and identity.



Servicing: There are two main service routes into the campus, both accessible off the southernmost entrance from West 5th Street. Access points towards and into the buildings are in conflict with pedestrian paths and the campus main central open space (the MSA Plaza), impacting pedestrian safety and everyday activity.

Opportunities: New development should include opportunities to internalize or screen service corridors and bays and be altogether re-routed to reduce pedestrian and vehicular conflict.

NORTH LANDS

The North Lands are a 21.5-acre site located north of Fennell Avenue West, just west of St. Joseph's Hospital, owned by Infrastructure Ontario. The potential for their acquisition by the College arose during the process of the Campus Master Plan development. Although the lands would open a door towards extensive new development, at this time the focus is on preservation and re-use of existing buildings and forest lands, to support the character of health and wellness that has defined the site for many decades. A portion of the lands is also governed by the Niagara Escarpment Commission and must be preserved accordingly (reference map of the lands on the following page).



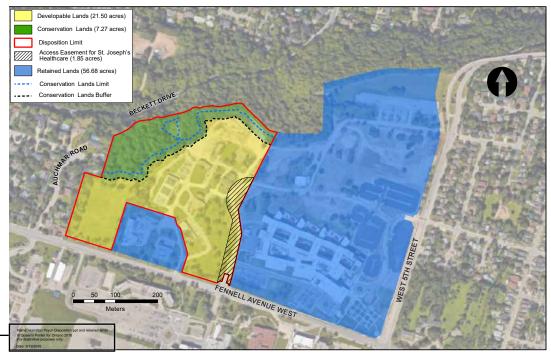
The Escarpment Landscape

The Niagara Escarpment is a rich biosphere of unique fauna and flora upon a long stretch of steep rock-face measuring 725km in length in Ontario alone. The Escarpment marks part of the shore of an ancient sea, moulded over time through water erosion and glaciation. The Bruce Trail traverses its length and connects with many other trail systems and offers multiple recreation options and panoramic views.

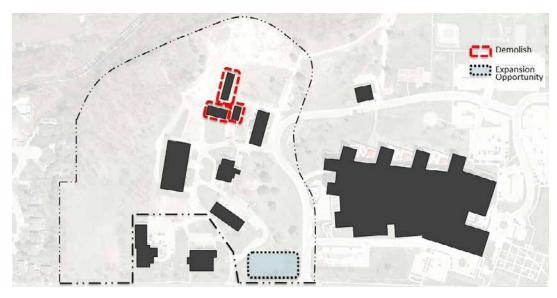
Most development within the conservation lands is prohibited and must be reviewed and approved by the Niagara Escarpment Commission. The Escarpment should be protected from all development and enhanced with trails and other opportunities to enjoy its rich environment as a recreational and therapeutic amenity.

Opportunities:

- The proximity of the escarpment and its extensive trail system is an opportunity for the College to create clear trail and visual connections towards the forest landscape, connecting in with the Bruce Trail.
- The escarpment as a recreational amenity, a commuting option, as well as a gem within the City of Hamilton can be promoted with wayfinding and signage.
- The edge of the landscape can be enhanced and complemented with additional gardens and extended forest canopy.



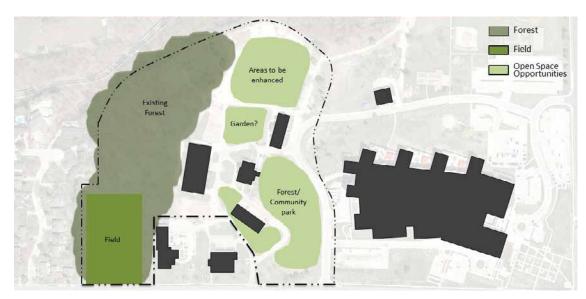
"Hamilton Psych Disposition ppt and retained lands © Queen's Printer for Ontario 2016. For illustrative purposes only (Date: 9/19/2016)."



Built Form: The North Lands feature a collection of historic buildings that were once components of Hamilton's Asylum. Some are in poor condition and of lesser historic value, making them available as soft sites for redevelopment. Others should be assessed for heritage value prior to any decision-making relative to takedown or redevelopment. Century Manor, on the other hand, is an architectural and historic asset, listed under the *Heritage Act* and must adhere to preservation criteria. The undeveloped portion of

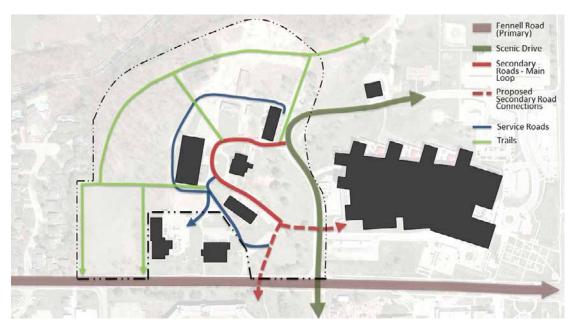
the lands is deemed as valuable green space and is largely forested, restricted from development.

Opportunities: The opportunity to create a gateway presence and identity at the main entrance into the North Lands, alongside Juravinski Drive, should be considered. On the interior of the site, buildings identified worthy of preservation should be maintained and repurposed, while others should be removed to make way for new opportunities in a cohesive design.



Open Space: The North Lands are dominated by green space. They include a large area of forested landscape on the west side, within conservation lands, with a flexible recreational green on Fennell Avenue West. There is also a series of more open landscapes dotted with trees along the east side of the site and in between buildings.

Opportunities: The North Lands provide many opportunities to diversify the open space typologies and to create a distinct communityoriented health and wellness precinct. There is also opportunity to celebrate Century Manor with a complementary open space, be it informal gardens, a therapeutic landscape or other use.



Circulation: The circulation network on the North Lands consists of a main entry route-Juravinski Drive-and circuitous vehicular route to the west. Service roads are concentrated along a longer circuitous road behind the buildings. There are numerous trails connecting into the Niagara Escarpment trail system as well as to the roads. Sidewalks are present alongside the main drive, but not included along other streets.

Opportunities: A clear street hierarchy should be developed for the North Lands, identifying main entrances and circulation routes services routes and pedestrian and trail connections. Service routes have the opportunity to be less prominent and lengthy. New sidewalks should also be established as part of a comprehensive new network, as well as new connections to trails.

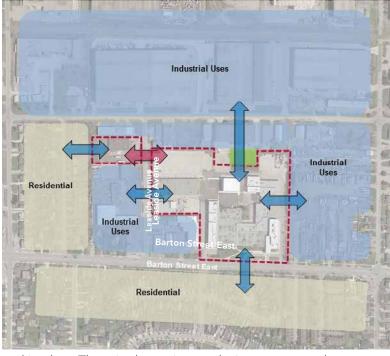
3.2.2 STONEY CREEK CAMPUS

The Stoney Creek Campus for Skilled Trades is located about 20km east of Fennell Campus and a five-minute drive from Lake Ontario. Existing commuting options favour the automobile, with limited transit and cycling connections. Opportunities to connect to the GO Train and bus service would be beneficial given the high number of students and staff arriving from outside of the City of Hamilton. The campus is set in a predominantly industrial area, which presents opportunities for partnerships and learning.

Creating a campus "heart" is integral to placemaking on campus and to developing Stoney Creek as a more vibrant, complete campus environment, fostering campus and community socialization and integration. Transforming the centre of the campus from its existing condition

as surface parking and servicing, into a communal flexible open space, can provide a vibrant central gathering place for events, display and learning opportunities, to be shared with the whole community.

With a new parking strategy that considers a shift towards reducing parking demand to supply by offering new multi-modal options, the campus could offer room for new development opportunities. Alternatively, the opportunity also exists for vertical building expansion on site, provided that structurally, the buildings could support it.



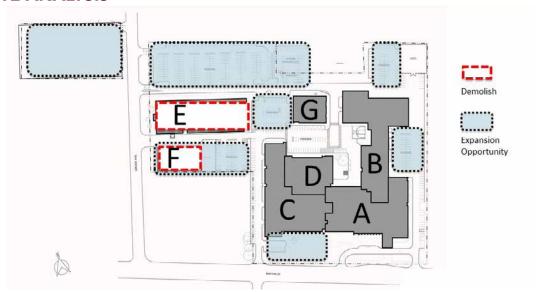
THE CONTEXT

The Stoney Creek Campus location within the City of Hamilton is challenged by its seclusion away from activity nodes, but its integration within an industrial area is considered beneficial and well matched with the character and nature of the programs being offered here. A bigger challenge to the campus site is the limited space for expansion as well as limitation to connecting to and having a presence on a main road, as the campus is wedged between a number of other properties within a bigger block. Only about 20% of the campus periphery faces a public street, while the rest faces industrial uses and

parking lots. There is also an innate desire to connect the two campus property parcels that straddle Leaside Avenue, although that connection point is a narrow one and crosses a street.

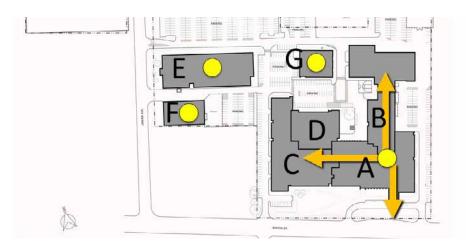
Opportunities: The biggest opportunity for Stoney Creek is to consider either vertical expansion if deemed structurally and programmatically feasible, or land acquisition opportunities and partnerships for shared use of lands and facilities. This would in turn increase the opportunity for presence and identity building facing Barton Street East and Leaside Avenue. The Concept Plan should also look into alternative brand and identity opportunities, as well as streetscape improvements for better connectivity.

SITE ANALYSIS



Campus Expansion: Less than half of the campus is currently built out with the majority of buildings being 1 to 2 storeys high and in good condition—only building wings E and F could be considered for redevelopment. The rest of the campus is dominated by surface parking lots and a limited proportion dedicated to shared open spaces and gardens.

Opportunities: There is opportunity to rethink the parking model existing today, towards providing a multi-modal strategy that would see surface parking lots open up as opportunities for future building and open space development. Expanding vertically should also be considered and appropriate structural and space utilization analyses conducted towards this option. Looking at land acquisition options is a third opportunity for campus expansion.

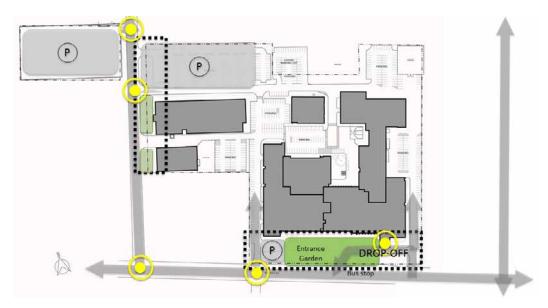


Building Structure and Wayfinding:

The building structure of the campus is a hybrid model with four interconnected wings as part of one building and another three wings located separately (yellow dots on the map), starting to frame spaces on the interior of the campus. The challenge, however, is that those spaces are currently utilized for parking, making passage

across them unsafe and the spaces themselves unusable and unfriendly. Wayfinding opportunities are limited to the internal pathway system.

Opportunities: Entrances and access points and the adjacent public realm spaces can be redesigned to improve wayfinding and be more pedestrian oriented.

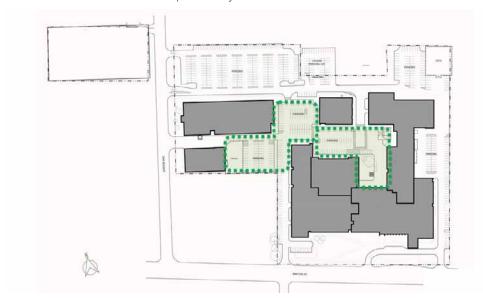


Community Interface and Gateways:

Currently, the College's face to the community is restricted to a section of Barton Street East as the primary face and another section alongside Leaside Avenue as a secondary face. The primary face is defined as a great green garden and dropoff area and the front foyer building structure stands tall as a signature piece of architecture. There is a Mohawk sign on Barton Street East, meant to define the key gateway to the campus, but it is hidden from view for passersby almost

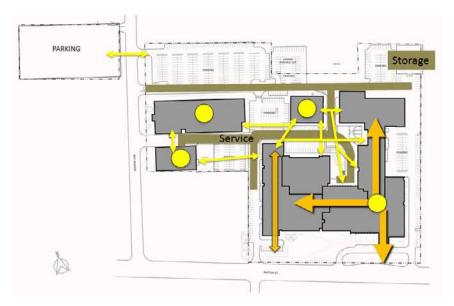
until you are directly in front of the campus. The Leaside face is lacking in definition with insignificant architecture and green space and limited signage.

Opportunities: Campus wayfinding can be enhanced with improved and new gateway treatment in the form of buildings, signage, landscaping and art. Signage can be made more visible and streetscape enhancements would also help contribute to an enhanced community face.



Creating a Heart: The configuration of the campus as it exists today informally frames a large central outdoor area. The area consists of a series of parking lots and a couple of usable small open spaces and is almost void of pedestrian paths and connections between buildings.

Opportunities: There is a real opportunity to transform that central area into a campus "heart," which can function as the prime gathering space for the college community and a destination for the surrounding community, as well as a safer connective tissue for the surrounding buildings.

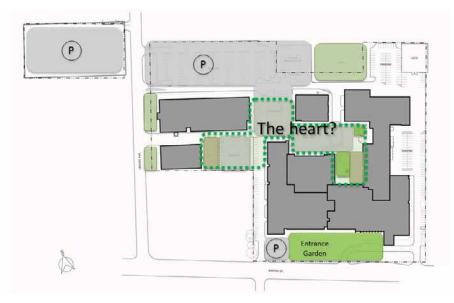


On-site Circulation and Servicing:

Inside the campus property, the circulation network suffers from conflicts between pedestrian paths and vehicular and service routes, which all cross over without formal organization and warning for safety.

Opportunities: Priority opportunities would include the exploration of moving servicing out of

the centre (heart) of the campus and providing more defined and enhanced pedestrian paths between buildings. The vehicular circulation, on the other hand, would require shifting surface parking away from the central area of the campus to provide room for a useable and safe open space, conducive to pedestrian movement across desire lines. Lastly, a better connection to the westernmost parcel across Leaside Avenue should be a consideration.



Open Spaces: Given the tight property area of the campus and current high parking demand, the outdoor spaces are dominated by surface parking lots. The open spaces that are useable for the college community as areas for reflection, socialization or recreation are the gardens and open greens at the entrance of the College along Barton Street East, basketball courts in the interior, as well as a small open green with picnic tables. A

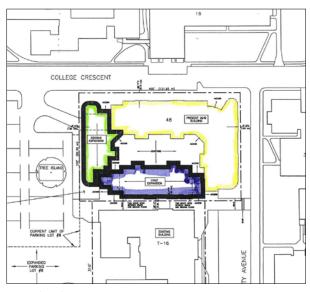
sassafras forest, although outside of the property line, contributes to the benefits of green spaces in and around the campus.

Opportunities: In addition to the aforementioned opportunity to create a great central gathering space in the heart of the campus, there are also opportunities to provide a variety of flexible spaces, to increase diversity and encourage use of the public realm.

3.2.3 IAHS/McMASTER CAMPUS

The Institute for Applied Health Sciences (IAHS) is located at the southwest area of the McMaster University Campus. It constitutes one individual building, currently shared with McMaster University. Ownership between the two institutions is split at 50/50, but Mohawk College currently occupies 70% of the building. The details of the shared use as well as a plan option for two possible expansions on site are outlined in a formal agreement document and First Amendment (see plan below). There are also opportunities for shared use of McMaster-owned buildings, as per the 2017 McMaster University Campus Master Plan Update (also shown below).

Plans for growth at this campus are in part dependent on expansion opportunities as they arise over time. However, irrespective of growth, any new development and planning should consider placemaking as the greatest opportunity for this campus, given its challenging location among the larger university campus. Placemaking would encompass building identity for the College; creating a more complete and healthy campus environment for students, faculty and staff with increased services and amenities; and improving the integration with McMaster University. This can include enhancing the existing courtyard as a gathering place and destination for Mohawk-oriented events, to showcase programming and to invite the McMaster University community and surrounding community in. It can also include improving signage and wayfinding at the entrances and on route to the building.

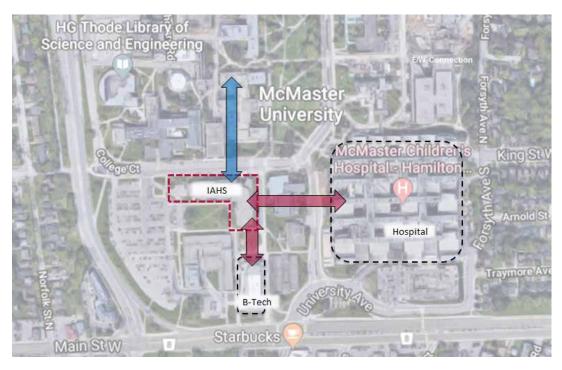


1st and 2nd Expansions (Schedule A to First Amendment)



2017 McMaster University Campus Master Plan Update

THE CONTEXT

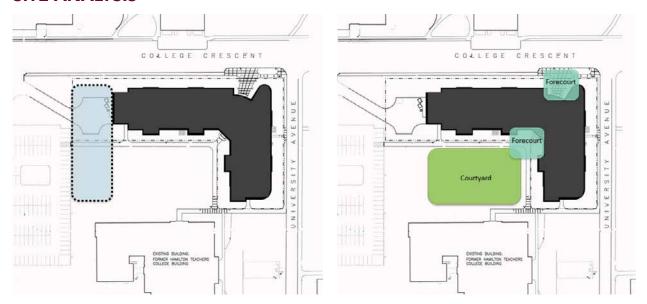


The Context and Identity Building:

Mohawk College programs and services on the McMaster University grounds are predominantly located within the IAHS building (70% use), but also in part in McMaster's Engineering Technology Building (ETB) where the Bachelor of Technology (B-Tech) program is hosted. The greatest challenge for Mohawk within this campus' context is creating the feeling of "home" and identity for its students and staff.

Opportunities: Opportunities relative to identity building would include improved signage and public art that relates to Mohawk, located at key entrance locations, in the central courtyard and along the routes towards the IAHS building. Architectural improvements to the building could also be a branding opportunity using particular colours and other unique Mohawk features.

SITE ANALYSIS



Campus Expansion: The campus property is small and includes one building framing an open space courtyard. Building expansion opportunities are limited within the constraints of the small site and are subject to the plan options outlined in Mohawk's shared legal agreement with McMaster University. However, expansion through shared use of space in some of McMaster's existing and proposed new buildings is an additional opportunity.

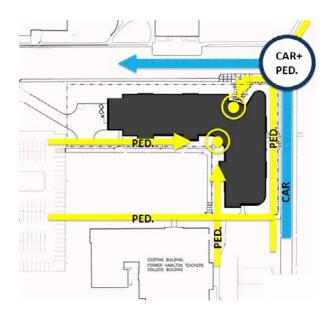
Opportunities:

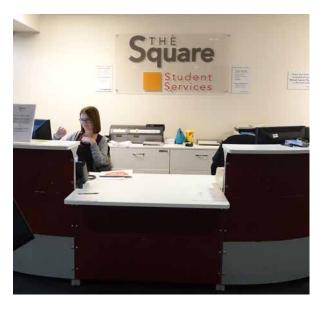
Expansion opportunities include

- Negotiations with McMaster University to occupy a greater proportion of the current building use;
- Expanding into a new building west of the existing building;
- Expanding into other McMaster buildings as a shared use scenario; or
- Expanding offsite by moving to the Fennell Campus.

Open Spaces: The primary open spaces relating to the IAHS site include a central courtyard and two forecourts at entrances into the campus building. There are also perimeter landscapes along streetscapes and pathways with generous planting areas.

Opportunities: There is opportunity to enhance the overall greenspace including the streetscapes, paths, perimeter landscapes, the courtyard and adjacent open spaces. Enhancements to the open spaces could include more tree planting, seating and lounging space and specialized planting for teaching and therapy. The courtyard specifically can be enhanced in its physical layout and programming, to become more usable and pleasant to dwell in and to increase use throughout the year, towards an improved user experience.





Gateways, Wayfinding and Circulation:

Vehicular circulation and access into the campus is from College Crescent and a secondary vehicular road—Brockhouse Way—serves as a laneway for drop-offs and service vehicles. It is a dead-end road. The pedestrian network is well connected with multiple pathways alongside the building and across the courtyard towards entrances and streetscapes.

There are two key entrances into the IAHS campus, both entering the internal atrium space: one from the side of the courtyard used by those arriving from the parking lots and from transit and the other from the northeast vehicular intersection of Brockhouse Way and College Crescent. The latter is associated with a main gateway for the campus and is considered the primary signature entrance to the campus. It is complemented with a Mohawk sign to support wayfinding and open view corridors.

Opportunities: Wayfinding to the building can be improved with better signage and with enhancements to the public realm along streetscapes and pathways, framing view corridors and providing landmark features.

Services and Amenities: Services and amenities are limited due to the small square footage of the campus and cater to core student needs only. They include student services, a bookstore, small library, a pharmacy and minimal food amenities. Athletic facilities and greater food choices, among others, are not offered, but the exploration of partnership opportunities with McMaster University for shared access is in progress.

Opportunities: There is opportunity to enhance the campus experience for students and staff at this campus location by providing an enhanced level of services and amenities. This can be done either through continued collaboration and coordination with McMaster University to share their services, improving connections to the main Fennell Campus services, or adding services in new space.

3.3 DESIGN DIRECTION

The outcomes at the end of Phase 1 of the project process were a series of Design Directions—both for all campuses and another set specific to each individual campus. These Design Directions are outlined below.

3.3.1 DESIGN DIRECTION FOR ALL CAMPUSES

- Design for net-zero and low carbon campuses.
- Design campuses
 as pedagogical
 tools—create a
 visible learning
 environment (indoor
 and outdoor).
- Develop a diverse, cohesive and comprehensive open space system.

- Create a compact, walkable and safe campus environment.
- Connect with city initiatives for streetscape, transit and cycling initiatives.
- Incorporate
 opportunity for
 recognition and
 awareness of
 the Indigenous
 community.

- Create more welcoming, communityoriented, accessible and connected campuses.
- Create new highquality buildings that are iconic, build campus identity and support the public realm.
- Create a new servicing, parking and alternative mobility strategy.

- Improve the interface of the college to adjacent communities and create active frontages.
- Internally, improve wayfinding and circulation and increase and diversify social and amenity spaces.
- Provide student residence opportunities.

3.3.2 DESIGN DIRECTION FOR INDIVIDUAL CAMPUSES

FENNELL CAMPUS

- Improve the Fennell Avenue West and West 5th Street frontage with enhanced landscaping, new building frontages, public spaces and welcoming pedestrian connections.
- Create new internal and external spaces to increase academic program opportunities and to enhance the social environment.
- Diversify the design of open spaces to include a natural landscape character and to increase outdoor recreational space.
- The International Square and The Square should have better proximity.
- Phase out Building Wings J and F, as well as the portables to create new building and open space opportunities.
- Bring industry partners onto the campus and provide physical outdoor and indoor space to do so.

- Consider new amenities for the campus and community such as mixed-use commercial/institutional uses, a new residence, or a hotel.
- Remove all traditional apprenticeship programs from Fennell Campus
- Connect to Upper James Street, the future BRT station and the City of Hamilton's new bike route initiatives.
- Provide space/building opportunity for a substantial new wellness centre, as well as an augmented and virtual reality centre (or lab space) shared by multiple faculties and open to the community and wider region.
- Develop the North Lands with a focus on wellness with connections to the Escarpment and its trails and expand the forest into the campus south as a significant landscape feature.

STONEY CREEK CAMPUS

- Improve the prominence and visibility of the campus' front door from Barton Street.
- Provide more green space and transform the central parking area into a teaching, gathering and demonstration open space.
- Improve student service and student life offerings on campus to create a more complete campus environment.
- Consider building/expanding vertically
- Consolidate all traditional apprenticeship programs onto Stoney Creek campus.
- Bring industry partners onto the campus and provide physical outdoor and indoor space to do so.

IAHS/MCMASTER CAMPUS

- Improve visibility of Mohawk College on the McMaster campus.
- Enhance the communal green space as the social heart with seating and increased pedagogical and programming opportunities.
- Support the public realm enhancements identified in the 2017 McMaster University Campus Master Plan.
- Work with McMaster University to enhance student services and student life offerings on campus.
- Relocate non-collaboratory health programs to Fennell Campus. Grow research at IAHS.
- Bring industry partners onto the campus and provide physical outdoor and indoor space to do so.

PART B is structured to set out the overall Vision and Guiding Principles for the Campus Master Plan at the forefront, as well as general policies that apply to all Mohawk campus environments. It is then compartmentalized by campus.

Each campus section features an overall Concept Plan and description and follows with associated design frameworks and campus-specific recommendations.



PART B: THE PLAN





4.0 VISION AND **PRINCIPLES**

The following Vision and Guiding Principles were developed in collaboration with the College community and the wider public during engagement events. They are important tools that have provided guidance throughout the evolution of the Plan, specifically in the development of the Concept Plans for each campus and Plan Frameworks. They should be reviewed and updated at regular intervals throughout the Plan's implementation process.

4.1 CAMPUS-WIDE VISION

The Campus Master Plan Vision that was crafted by the Mohawk community will help to inspire and guide decision-making as Mohawk expands and develops in the next few years and into the future. The Vision serves to highlight and qualify the College's deepest values as an institution and place of learning, dwelling and being. It sets the tone for the design process and becomes the measure against which implementation can be tested for alignment. The Mohawk College Campus Master Plan Vision is outlined on the following page.

Mohawk College campuses will be...

Welcoming and vibrant places of education,

where learning and pride permeates all aspects of the campus environment for students, alumni, faculty, staff and visitors. In all its physicality, Mohawk College will be a great living lab: an integrated, pedagogical and inspirational environment that showcases student leadership, sustainability, adaptability and innovation and sparks the development and sharing of new ideas. Mohawk College will be, in all aspects, a learner-centred, industry-focused, transformative and future-ready campus.

It will also be a place of wellness—a sanctuary supporting walkability, recreation, accessibility, diversity and healing. Mohawk College will continue to grow and develop as a key city destination and a hub for the community, a place for gathering and sharing knowledge, offering continuous new experiences and discoveries for all.

4.2 CAMPUS-WIDE **GUIDING PRINCIPLES**

The following nine Guiding Principles provide a foundation for design work, policies and related recommendations in the Campus Master Plan and guide the development of the Concept Plan and Plan Frameworks for Mohawk College

AN INNOVATIVE AND **COLLABORATIVE LEARNING ENVIRONMENT**



- Make education, research and innovation visible.
- Respond to new trends in the design of learning spaces such as outdoor classrooms and online learning.
- Offer a diversity of space types-for gathering, repose, study, meetings, makerspaces and others.
- Provide flexible space for partners and community events.
- Campus as a "living lab": incorporate food production and other sustainable initiatives in the landscape.

GUIDING PRINCIPLES (CONT'D)

A COMMUNITY-ORIENTED CAMPUS AND DESTINATION



- Create 24/7 animation.
- Consider all seasons.
- Make the campus accessible and connected to neighbours and the City of Hamilton.
- Offer a mix of flexible and programmed spaces and a variety of amenities to share with the community.
- Create a welcoming and inviting public realm.
- Celebrate heritage resources as community assets.

AN ENVIRONMENT THAT SUPPORTS DIVERSITY AND INCLUSIVITY



- Create an environment that is inviting and accessible to all social, ethnic and cultural groups.
- Provide comfort and accessibility to all populations.
- Create a wayfinding strategy that considers language and disability barriers.

NEW AND ENHANCED INDIGENOUS SPACES ON CAMPUS

A FULLY ACCESSIBLE **ENVIRONMENT**



- Make Indigenous presence visible and a core part of campus identity.
- Create indoor and outdoor spaces that support land-based learning and gatherings while celebrating the arts and cultural practices.
- Uphold commitments to the Indigenous Education Protocol.
- Create classrooms that support Indigenous pedagogical approaches to teaching and learning.



- Create an environment that prioritizes the pedestrian.
- Promote multi-modal commuting options, focusing on transit and active transportation.
- Incorporate associated amenities.
- Provide clear wayfinding.
- Implement Transportation Demand Management (TDM) principles, together with a more sustainable parking strategy.
- Promote streetscape enhancements in support of an animated public realm.
- Spaces that meet the principles of Universal Design.

GUIDING PRINCIPLES (CONT'D)

A QUALITY AND ATTRACTIVE ENVIRONMENT



- Create pleasant places to linger, with iconic and innovative architecture and landscapes that showcase and celebrate identity and pedagogy.
- Enhance and expand the existing open space network to create a greater diversity of spaces, indoors and outdoors.
- Design buildings with animated and transparent façades.
- Apply quality materials and attractive design for new buildings and open spaces.

A PLACE OF WELLNESS, HEALING AND TRANSFORMATION FOR ALL



- Create a place of wellness and transformation in all aspects of the built and natural environment.
- Provide a diversity of spaces for repose, recreation, socializing, healing and growth, to promote and develop healthy bodies, minds and souls.
- Connect to the natural environment.
- Incorporate therapeutic landscapes.

A SUSTAINABLE, **RESILIENT AND FUTURE-READY CAMPUS**



- Incorporate in design, new trends and bestpractices in resilience and sustainability.
- Embed flexibility into the Plan to respond to and adapt to climatic changes, technological advancements and programmatic needs over time.
- Continue to build on sustainable goals and initiatives already underway such as carbon neutrality and being net zero.
- Develop a flexible, robust and realistic implementation strategy.

A CAMPUS THAT EMBRACES THE NATURAL ENVIRONMENT AND CONTEXT



- Take advantage of and celebrate historic, cultural and natural assets of Mohawk College.
- Support and enhance the natural ecology and its surrounding environment.
- Connect to recreational and neighbourhood trails and enhance streetscapes.
- Increase recreational opportunities.
- Increase the forest and tree canopy on campus.



5.0 RECOMMENDATIONS FOR ALL CAMPUSES

5.1 CAMPUS PLANS

The Concept Plans for the three campuses are comprehensive illustrations of the Campus Master Plan Frameworks and supportive policies and are to be used as a guide for future campus development. The Plans reflect the design intent and direction set forth in the Vision and Guiding Principles, supporting opportunities for quality architecture and open spaces, placemaking and sustainability to create a unique, welcoming and distinct place. Specifically, the Plans reflect a physical campus structure that is defined by the following highlights:

- Community-oriented campuses that are welcoming, accessible and connected;
- Compact campus structure to encourage walkability;
- A balance of built form and open spaces that create unique functioning places that support an internal and external campus experience;
- Enhanced existing buildings and new buildings for academic expansion, student housing, services and amenities and potential partnership initiatives;
- Enhanced existing and new functioning open spaces that are beautiful, purposeful, flexible, diverse, pedagogical and inspirational; and
- Pedestrian-oriented streets and pathways that encourage multi-modal use, all defined by street trees and landscaping and that link the campuses internally, to the surrounding community and beyond.

Each campus has a unique character defined by a set of buildings, spaces and attributes that manifest the outlined highlights above and a set of unique recommendations towards their achievement and these are outlined in Sections 6.0, 7.0 and 8.0. However, there are a series of recommendations that are universal to all campuses and these are outlined below.



Built form serves to balance and frame open spaces.



Scale height and massing supports character of place.

5.2 BUILT FORM

5.2.1 BUILT FORM STRUCTURE

The built form structure is an important framework that guides development towards establishing cohesion and appeal in a campus environment and offers potential to reinforce its visual identity. It considers the College's short-term and longer-term development potential for the campus and is very flexible in nature to adapt to change over time. In its vision, the built form structure responds to current known space needs but more importantly, it prepares campuses for future growth and the unanticipated programmatic shifts that may occur.

Overall, the built form supports and complements the network of open spaces and connections, with the goal of conserving existing landscapes and open space assets, as well as defining new spaces and linkages. New building sites are positioned strategically to complete or define existing or new open spaces and others to instigate animation on the surrounding streetscapes and to strengthen the face of the College to the community. In all instances, the careful consideration of the height, scale, massing, orientation, frontages and architectural definition of new buildings,

as well as the human scale, is critical to support a safe, attractive, accessible and comfortable environment for a range of uses.

The Phasing Strategy that is part of this Plan guides the phasing out of buildings and uses that, in the long term, will not contribute to the campus Vision. It also encourages exploration of partnership opportunities and new land acquisition opportunities as part of the future plan.

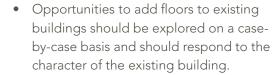
5.2.2 BUILT FORM RECOMMENDATIONS

Height and Massing

- Future new development should hold to a general campus datum line of four storeys for academic buildings. This height limit maintains efficiency in classroom structuring, programming and accessibility.
- Certain common use buildings such as a library building, residence, or mixed-use building can have additional height, within a massing configuration respectful of other policies below. Additional height should be reserved for the emphasis of gateway moments and focal points.
- Any additional height above 4 storeys should step back to define a podium condition.



Design buildings to mitigate winds and shadows in open spaces and along pathways and building edges.



- The height and massing of buildings should allow for physical and visual permeability through the campus and the protection of key views towards landmarks, heritage assets and natural features.
- The height and massing of buildings should be scaled to support character of place and to animate the ground floor.
- Larger building masses should allow for comfortable mid-block passageway corridors.

Mitigation of Climatic Conditions

- Buildings should be designed and oriented to maximize solar gain in the winter months and minimize the heating effect in the summer months.
- Buildings should mitigate/minimize shadows cast onto adjacent buildings and open spaces in a most optimal way.
- Consider the placement of buildings in a
 way to protect the campus's public realm
 from dominant winter winds, such as using
 built form to frame open spaces. Articulating
 building faces and mitigating height also
 assists in reducing wind tunnels.



Architectural features can become signature landmarks on campus and help with wayfinding.

- Provide canopies and plant trees as wind breaks, respite from heat and protection from rain along pedestrian routes.
- Integrate sheltered warm areas in buildings, such as atrium spaces, along key pedestrian routes and in proximity to transit stops.
- Consider interior connections integrated into the built form.

Building Views

- The placement and orientation of buildings and associated architectural features should consider building view opportunities such as defining: gateway moments, symbolic landmarks, terminus views and focal points-in support of campus identity and wayfinding.
- The sequence of building views as you move through the campus should consider the opportunity to create moments of mystery and reveal and focus, to enhance spatial experience.
- Both long and short views should be considered in the placement and design of buildings.
- Creating a sequence of views through built form should support wayfinding on campus.
- Consider the strategic location of towers and building podiums to support long views out



Transparent frontages create connection between indoors and outdoors and activate spaces.



Design building entrances to be human scaled and welcoming.

through the campus and to the surrounding context.

 Where a building is placed in the context of a view termini, special attention should be paid to the massing, height and design of the building to create an attractive signature statement.

Frontages and Transparency

- All campus buildings should have articulated frontages on all sides, in order to address and provide an attractive face to the surrounding public realm and open spaces.
- Frontages should be inviting, transparent and human scaled to cater to the pedestrian and encourage and activate the spaces before them.
- Frontages should have clearly defined entry points that directly access the sidewalk and pathways.
- Frontages should be designed to respond to and complement their adjoining public realm environment–streetscape or open space.
- Frontages should be designed with durable, high-quality materials that relate to the existing natural and built context.

Building Entrances

- Building entrance character and architectural language should reflect a welcoming environment and consider the human scale.
- Building entrances should be designed to universal design standards and be frequent along the building faces.
- Building entrances should be located to directly connect internal and external safe paths of travel.
- Building entrance façades should be transparent and provide ample visual connection between interior and exterior to support safety and security.
- Safety and security should be further encouraged through lighting and building transparency, to improve visibility within and into, public spaces.
- Front entries should be easy to locate with clear view lines, well lit and accessible via safe pathway connections.



Architectural form and materiality reflect character of place, and relate to outdoor spaces.



- New buildings and additions to existing buildings, should be carefully designed to relate to and help define adjacent open spaces, streetscapes and pathways.
- Architectural form and materiality should reflect character of place and enhance identity.
- The architectural character, including materiality, of new buildings should be respectful of the existing and emerging character of the campus built environment and draw on the assets and qualities of existing building elements.
- The design of buildings should offer comfortable human-scale exteriors and interiors that are welcoming and inviting and are highly permeable towards open spaces (i.e.: include doors and windows).
- Buildings should be designed with quality interior spaces that enhance the learning and social environments.
- Design should integrate and make a connection between interior and exterior spaces.



Protect and celebrate heritage buildings and complement their setting.

- High-quality building materials should be used to support longevity of the building structure and safety for the user.
- All retrofits and new builds should support the College's commitment to sustainability in design, such as using local materials in construction, or optimizing the performance and maintenance standards.

Heritage Conservation

- All heritage properties should be preserved and enhanced in accordance with the Ontario Heritage Act policies.
- The setting of heritage properties should be enhanced with landscape and art and signage features to further celebrate the history and story of the building use.





Providing a diversity of open spaces responds to the diversity of user needs and cultures present on campus.

5.3 OPEN SPACE

5.3.1 OPEN SPACE STRUCTURE

The open space structure comprises of a diversity of natural, manicured, hardscaped and open green landscapes, in combination with a series of complementary internal public spaces. The diverse exterior landscapes relate to and enhance the built form on campus and all spaces enrich the overall campus environment and experience for the College community and wider neighbourhood.

The open space structure responds to a diversity of user needs – for gathering, socializing, play, recreation, performance, study, repose, contemplation and more. It also has embedded educational opportunities, whether it be a demonstration of a sustainability initiative such as edible planting or photovoltaics, or through interactive public art and displays related to the College curriculum. The open space structure also considers a spectrum of space sizes, both active and passive: for individual quiet study, small group work and socializing and larger group gathering.

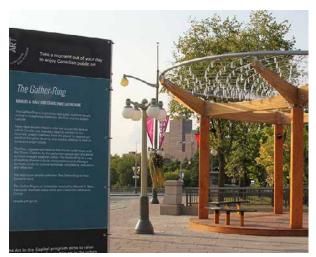
Overall, the internal and external open spaces are configured to work as a collective and to have a strong interrelationship with buildings and streets, providing opportunities for continuous physical and visual interaction between all. Open spaces also work to strengthen wayfinding across campuses, host sustainability initiatives, support all season use and provide innovative and new educational opportunities and tools.

The approach to expanding the open spaces and built form development varies from campus to campus depending on context. Fennell Campus focuses more on the natural and heritage environment and bringing that landscape into the campus, as well as completing a network of spaces that invite and welcome the wider community in. Stoney Creek Campus focuses on developing a very flexible central heart for demonstration and learning. IAHS/McMaster Campus desires to enhance its great courtyard to build identity and a Mohawk sense of place. At all campuses, however, the goals of diversity of spaces, connecting the internal and exterior environments and enriching the experiential and learning opportunities are an important constant.

5.3.2 OPEN SPACE RECOMMENDATIONS

Heritage Landscapes

 Where heritage landscapes are present, such as the south orchards and Niagara Escarpment at Fennell Campus, these should be preserved and expanded as an identity feature of Mohawk College as a whole.



Interpretive signage helps reinforce and bring awareness to heritage and cultural landscapes and features.



 There is opportunity to enhance heritage landscapes with informative signage that outlines the history and story of that landscape.

Recreational Spaces and Trails

- Recreational components of campuses, such as sports fields, courts and recreational trails should be preserved and extended where possible.
- New opportunities for recreation should be incorporated where it is possible, such as open flexible fields for informal recreational use, or a running trail or outdoor exercise stations.
- Consideration should be made for the potential to accommodate alternative forms of active transportation along pathways, such as rollerblading or skateboarding.
- Recreational facilities, where appropriate, should have weather protection to extend their use throughout the seasons.
- Consideration for multi-purpose spaces that transform with the seasons should be made, such as a running trail transforming into a cross-country ski route in the winter, or an open space being flooded for winter skating.



Planting can be utilized to delineate paths of travel and to provide shade for pedestrians.

Planting Strategy

- Planting should be utilized as an opportunity to
 - support restoration and enhance natural areas;
 - frame open spaces and pathways;
 - enhance building edges;
 - provide shade and wind protection in larger open spaces;
 - strengthen identity; and
 - signalize a gateway or landmark moment.
- Planting should be respectful of key view corridors identified at each campus location and aim to protect and enhance them.
- Planting should be used to enhance the sensory experience of the campus, all the while being sensitive to potential allergic reactions and avoiding prickly plants right next to paths of travel and greatest use areas.
- The therapeutic potential of plants should be considered and incorporated into the landscape in support of community wellness.
- The cleansing and filtering properties
 of plants should also be considered and
 incorporated in open spaces in support of
 environmental sustainability and stormwater
 management.



Provide ample seating spaces around campus and a variety of types.



Public art can assist in wayfinding and mark gateway and entrance moments.

Site Furnishings

- Open spaces should be outfitted with appropriate site furnishings that support a walkable, comfortable, safe and universally accessible environment.
- Seating areas should be provided in every open space, by every main building entrance (internally and/or externally), as well as along streetscapes and pathways.
- Seating should be comfortable and should consider materials that support year-round use.
- Materials for seating should be durable to maintain long-lasting quality and to remain attractive.
- A dual separated system for garbage and recycling should be provided across campus and, where possible, a compost opportunity should also be incorporated to support a sustainable disposal system.
- Bike parking should be available in close proximity to every main entrance to campus buildings.
- Sufficient lighting should be provided along circulation corridors and within open spaces to improve safety and security on campus.

Public Art

- Public art should be present at all campuses and be utilized as an opportunity to
 - assist in wayfinding;
 - mark gateway moments and signature open spaces;
 - celebrate heritage and Indigenous roots;
 - celebrate students' work;
 - contribute to building identity and a sense of place;
 - provide an educational or spiritual experience; and
 - add visual interest.
- Public art can also be incorporated into a functional element such as seating, canopy protection from wind and rain, or a utility box.
- The style and scale of public art should complement its architectural and landscape settings.
- A public art strategy should be developed for each campus as a whole and key locations for public art placement identified.



Maintain pathways in the winter for safety and to promote walking.



Winter Design and Programming

Programming opportunities are diverse and respond to location, adjacencies, size of space and context.

- Open spaces should be designed to maximize southern exposure to take advantage of sunlight, in coordination with the design of building masses and heights that would affect it.
- Open spaces should include mitigation measures from wind, snow and rain, such as trees, canopies from buildings, stand-alone structures, heated winter huts, or art.
- Deciduous tree species should be planted along the edges and in grouped patterns within open spaces to act as wind breaks. Evergreen trees should only be planted as windbreaks in the forested, landscaped open spaces and not block view corridors to and through spaces.



Provide winter programming to animate public space.

- Streets, sidewalks and plazas or hard-surface spaces should be designed for efficient snow clearance in winter.
- Consideration should be made for the creation of winter recreational opportunities and event programming during the winter months, as an opportunity to engage the community.
- Year-round patios should be designed with comfort and seasonal use in mind.
- Consideration should be made for durable wood as a comfortable and warm material for seating in the winter.



Pedestrian paths should connect to entrances, frame views and provide ample room for high traffic circulation.



Pathways can be enhanced with tree plantings, providing shade in the summer, as well as wayfinding signage.

5.4 MOVEMENT

5.4.1 MOVEMENT STRUCTURE

The movement structure is the thread that weaves together the built form and open spaces, provides ease of movement through the campus environment and connects it with the wider community. It considers all transportation users including pedestrians, cyclists, personal vehicles and service vehicles. All components of the circulation—streets, paths, cycling lanes, sidewalks, loading areas and access points—must work in coordination with each other to create a network that supports an efficient and seamless flow of movement.

The movement structure is centred around transportation demand management (TDM) principles, supporting the creation of a multimodal network for travel and access to the campus. To that effect, the movement structure puts a primary focus on the pedestrian and creating a walkable campus environment that considers comfort, safety, usability and orientation. Wayfinding and signage in particular play an important role in orienting users of the space and articulating movement into and out of buildings,

across open spaces, towards trails and sidewalks and into the community. The choice and standard of lighting as well as pavement materiality also strongly influence usability of the pathway system, as they play an important role in creating a sense of safety and security at all times of day and all seasons.

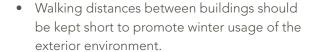
5.4.2 MOVEMENT RECOMMENDATIONS

Pedestrian Network

- Pedestrian paths should be developed to be continuous and connected throughout the campus, linking open spaces, buildings, facilities and landscape features, in support of a walkable campus environment.
- Pedestrian paths should also link to exterior community pathways and trails, to support connectivity and active transportation modes as a way to travel to campus.
- Pedestrian paths should serve to enhance the user experience of the campus environment as a whole.
- New pathways should aim to accommodate desire lines where suitable
- The pedestrian network should prioritize safety and comfort in all seasons and all times of day, taking into consideration: safe surface materials, lighting and other safety measures.



Provide amenities such as bike shelters to promote cycling as a more sustainable commuting option.



- Tree plantings on either side of sidewalks and pathways, and canopies where appropriate, should be incorporated to protect pedestrians from winds and rain.
- Pedestrian connectivity should be improved throughout all parking lots to minimize conflict with vehicles.
- Crosswalks should be implemented at all intersections to support a safe pedestrian crossing, to be designed in compliance with the Ontario Traffic Manual.
- Pathways for pedestrian circulation should exceed AODA standards.
- The pedestrian network should be outfitted with key amenities, which contribute to safety, comfort and orientation of the user, such as seating and rest areas, emergency phones, wayfinding signage, protective canopies and other wind and sun barriers where appropriate.
- The minimum pathway width should be 2.0m and where there is multi-use (bikes and pedestrians), it should be increased.
- A proper maintenance plan should be developed and implemented for all sidewalks and pathways.



Bus stops should be safe and comfortable, supported with shelters and seating, to promote transit use.

Cycling Network

- Connections to City and neighbourhood cycling routes should be re-enforced and expanded upon where possible. The College should continue conversations with the City of Hamilton to provide these opportunities.
- The College should investigate ways to promote cycling to campus by incorporating dedicated bike paths and support these with amenities such as bike racks, additional secure and covered storage, changerooms and showers.
- Bike racks should be located near every main entrance and near major open spaces.
- Cycling facilities and amenities should be properly maintained in all seasons to support more frequent, year-round and comfortable use.

Transit Network

Conversations and coordination with the City of Hamilton should continue, to expand frequency of transit connections to each campus location and expand service beyond the regular city bus, to include additional appropriate services as the opportunities become available. Examples include adding GO service to Stoney Creek Campus, or a BRT stop to Fennell Campus.



Streets should provide clear delineation from the pedestrian realm utilizing curb cuts and landscape and/or special paving.



- Clear and direct pathway connections should be created to building entrances from bus stops, that are universally accessible and incorporate covered walkways where deemed appropriate.
- Transit stops should be designed with covered shelters to mitigate climatic conditions and with amenities such as benches and timing signs to cater to passenger comfort and in support of increased transit use.
- The College should investigate ways to promote transit use by staff and students and provide incentives.

Vehicular Network

- Streets that are accessible to vehicles should incorporate in their design a clear delineation from their adjacent pedestrian realm.
- Where streets are designed as shared streets with pedestrians, a rolled curb or no curb cut scenario should be used and the delineation between street corridor and sidewalk should be made using elements such as bollards that still allow pedestrian flow-through but limit vehicular entry into the pedestrian zone.



Emphasize building entrances and gateway moments with special features, clear views and ample lighting.

- Vehicular access points should be clearly marked and wayfinding mechanisms utilized to guide vehicles to drop-off points and parking lots.
- A proper maintenance plan should be developed and implemented for all vehicular routes, in coordination with sidewalk maintenance.
- A clear emergency vehicle route should be identified, with a review of all associated code requirements and the design should aim to integrate seamlessly with all other streets and paths.

Gateways and Entrances

- Building entrances should have safe and accessible connections from the main paths of travel across campus and align where possible with desire lines.
- Building entrances should align with the greatest flow of travel.
- Building entrances should be emphasized with sufficient lighting and easily visible from a distance, in line with view corridors.
- Key gateway entrances—both building front doors and campus entrances from main streets—should be further emphasized with campus identity features such as: special signage, thematic sculpture or other public



Building entrances should connect directly to paths of travel and be supported with amenities: seating, planting, etc.



- Key entrances should also be supported with amenities, including seating and bike racks, information panels and maps, etc.
- Vehicular entrances should incorporate traffic slowing measures to signal entry into a pedestrian-focused environment where safety is a priority.
- Drop-off zones should have appropriate crossings, signage and traffic slowing measures to support safe and efficient circulation for vehicles and pedestrians.

Signage and Wayfinding

- An effective and clear signage and wayfinding strategy should be established for each campus to support easy navigation and orientation between buildings and open spaces and to highlight special places such as gateway moments, building entrances, major gathering plazas and ceremonial gardens.
- A logical building naming convention should be established, supported by unified graphic signs and features, to simplify orientation from building to building.

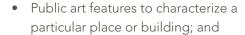


Consider location, clarity and boldness in the design of wayfinding signage.

- Signage should be bold and of a good size to be visible from a distance and should be located within the frame of view at a pedestrian scale.
- Wayfinding signage should have a clear structure and be located to strategically align with major paths of travel.
- Orientation maps and building names should be located near all main entrances and be visible within the line of sight along paths of travel.
- All signs and maps should be presented in an accessible form and maps should be linked to the campus website.
- A diversity of other wayfinding elements and tactics are encouraged, beyond just signs and maps, to assist in place recognition and to contribute to building identity and a sense of place. These include
 - Feature plantings that emphasize the character and use of a space or pathway;
 - Special pavement treatments to emphasize a particular moment such as a gateway, or to draw the eye along a key corridor;
 - Incorporating landmark buildings and securing view corridors towards them;



Public art can assist with wayfinding by characterizing particular places on campus.



- Adding Indigenous Languages to wayfinding signs to expose visitor's to the College's history and heritage.
- Linkages between interior and exterior paths of travel should be an extension of one another, well connected physically and visually.
- Visual connections through transparent building façades, between interiors and exteriors are encouraged where pedestrian circulation occurs alongside a building perimeter.
- Wayfinding is further supported by a well-designed campus, which considers a clear structure and relationship of campus streets and pathways to buildings. Buildings should front main circulation paths and have clear views at the front entry point. Open spaces should be organized with a clear sequence and hierarchy and should be connected with pathways and clear view corridors.



Provide good lighting at building entrances and along pathways.

Lighting, Safety and Security

- An effective and comprehensive lighting strategy should be created for each campus for a well-lit night time environment that feels safe and secure.
- Lighting should be incorporated into all parking lots, around building exteriors and in particular at every building entrance and along primary pedestrian corridors between buildings and pathways that lead to transportation commuting options.
- Consideration should be made for balancing secure levels of lighting with minimal light pollution into the surrounding neighbourhoods.
- Open Space Planning Principles of Crime Prevention Through Environmental Design (CPTED) should be applied across all campuses to support a high degree of safety in the public realm.
- Programs should be put in place to support safe walking and commuting options.



Design parking lots with aesthetic appeal and to manage stormwater and mitigate climate.



Incorporate on-street parking to reduce surface lot sizes.

5.5 PARKING AND **SERVICING**

5.5.1 PARKING STRATEGY

The parking strategy for all campuses is centred around reducing overall parking demand and increasing opportunities for alternative modes of travel by implementing principles of Transportation Demand Management (TDM) and staying abreast of new age transportation technology on the market such as autonomous vehicles. This would allow for the incremental reduction of surface parking lots over time towards the longer term, to make way for more valuable land uses. The parking strategy also considers the potential to shift some of the existing parking demand from a surface parking condition to underground parking lots as the opportunities arise with new development, as well as considering structured parking subject to a feasibility study.

The approach to parking is to create safe and attractive environments, that do not take away from the aesthetic quality and experience of the campus itself and to support sustainability principles such as managing stormwater runoff and providing air filtering planting.

5.5.2 PARKING AND SERVICING **RECOMMENDATIONS**

Surface Parking Lots

- Surface parking lots should be designed with safety as a first priority, providing proper vehicular circulation and access widths, traffic slowing triggers such as signs and speed bumps and well delineated and safe pedestrian pathways throughout the lots, that connect to the wider pedestrian circulation network.
- Planting and trees should be incorporated throughout the parking areas to mitigate views and offer shade relief in the summer.
- Protection from winter winds should be considered in the form of plantings or structures.
- Stormwater should be managed with sustainable solutions such as bioswales.
- Surface parking lots should be located away from the front of buildings, with the exception of accessibility spots.
- Parking entrances should be well marked and visible from the main streets.
- Offset the environmental impact of surface parking by considering the addition of photovoltaics, heat islands and electric vehicle charging stations.



Consider safety as a priority in the design of service entrances, mitigating conflict between pedestrians/cyclists and vehicles.



Consider construction materials and methods that optimize the performance and maintenance of buildings.

Street parking and lay-by parking

- Lay-by parking should be considered for all campus streets to service buildings and especially for the purpose of immediate handicap accessibility.
- Lay-by parking should not obstruct main passageways and entry points to buildings.
- The design of on-street parking and surrounding public realm should consider doors opening, accessibility and summer shade.

Servicing and Loading

- Service and loading areas should be located away from main entrances and out of conflict with pedestrian routes and public realm spaces.
- Service entrances and loading areas should be integrated in the building footprint or consolidated where possible along shared service corridors.
- Existing service entrances and loading areas that are currently exposed to the public realm should be appropriately screened and integrated into the campus landscape.

5.6 SUSTAINABILITY

5.6.1 SUSTAINABILITY STRATEGY

The approach to building sustainable campuses considers the planning of all aspects of the Campus Master Plan, from the physical campus structure to the open space and circulation networks, to be planned, designed and reviewed through the lens of sustainability. As such, a number of recommendations pertaining to sustainable initiatives have been woven throughout all frameworks in previous sections 5.1-5.5. Furthermore, initiatives must consider all physical opportunities and operations, as well as the life-cycle of materials and processes. The Campus Master Plan offers a number of opportunities towards this venture, including promotion of Transportation Demand Management (TDM) principles, stormwater management solutions and policies around construction processes and building materials. It also offers unique features in the landscape of different campuses such as a greenhouse and edible gardens at Fennell Campus and photovoltaics incorporated into parking lots across campuses.



Implement TDM strategies, including supporting alternative transportation modes.



Provide incentives for reducing parking demand, such as reduced parking fees for carpooling.

5.6.2 SUSTAINABILITY RECOMMENDATIONS

Construction and Materials

- Commitment to sustainable building development should be prioritized in order to optimize the performance and maintenance standard of buildings.
- New construction (buildings, additions, open spaces) should contribute to the College's commitment to becoming a low carbon campus.
- New buildings and building additions should aim for LEED® Zero Carbon and WELL® certification.
- Open spaces should be designed to LEED-ND®.
- Sustainable design principles should be employed in all aspects of operations such that, as a system, the campus can work towards operating at peak performance and efficiency.
- Construction materials and methods should consider life-cycle costing and disposal.
- All buildings must adhere to the College's sustainable management policies.

Energy Management

Energy usage in existing buildings should be reviewed and improved where possible, taking into consideration systems and fixtures and R-values for exterior walls.

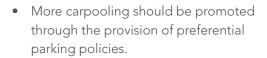
- New buildings and outdoor features should be built with energy generation and conservation in mind, considering also orientation and placement to maximize solar gain and minimize heat loss in the winter.
- Renewable energy opportunities should be explored and incorporated in the design of the campus.

Transportation Demand Management (TDM)

- Conversations with the City of Hamilton should be undertaken to improve multi-modal connections to campus that are useable, safe, comfortable and attractive - such as walking and cycling connections and transit connectivity and frequency.
- Emphasis should be put on building an attractive, well connected, comfortable and safe pedestrian and cycling network in and around the campuses, with supportive amenities at transit stops and key locations across campus.
- Connections for transferring between travel modes should be well designed to be simple and supported with appropriate amenities.
- A variety of incentives for reducing parking demand and encouraging alternative modes of travel should be explored and implemented. Examples of initiatives include:



Educate students and staff on the benefits of using alternative transportation modes for commuting purposes.



- A program of education and outreach should be considered to assist students with information on alternative travel options.
- Campus parking management and TDM should be promoted through parking charges.
- The benefits of TDM should be promoted, in keeping with the College's Sustainability objectives, which include: reduced congestion and pollution, educating on environmental and health benefits for the College community and convenient and sustainable alternatives to auto dependency that are cheaper and more time efficient.
- Consideration should be given to reinstating a cross-campus shuttle system that offers an efficient alternative transportation option for students and staff.
- Programmatic and scheduling opportunities to reduce peak parking demands should be explored.
- A trip-planning online application should be implemented that supports multi-modal trips and rideshare.



Implement stormwater management strategies.

Stormwater Management

- New buildings should strive to reduce water consumption (potable water demand) and should be designed to collect, use and then restore all needed grey water.
- New buildings should be designed to reduce stormwater impacts and could incorporate, or contribute to, rainwater capture and re-use systems.
- The campus should continue to administer stormwater management strategies and build upon them further. These can include a combination of increased permeable surfaces, bioswales and stormwater filtering and reuse techniques.

5.7 UNIVERSAL ACCESSIBILITY

5.7.1 UNIVERSAL ACCESSIBILITY STRATEGY

One of the overarching goals for the Mohawk Campus Master Plan is the creation of a universally accessible campus environment. As such, all aspects of the built environment must be designed and reviewed through the lens of accessibility. A universally accessible built environment considers a campus that is welcoming and inviting, inclusive and accessible



Design accessible environments that blend seamlessly into the landscape.

for all to use and enjoy with ease. The Campus Master Plan is structured to provide direct physical and visual connections between interior and exterior spaces, as well as access into and through all public open spaces. It is also designed to accommodate equal opportunities for all those with and without ability impairments, considering potential visual, hearing, mental and physical barriers. Everyone becomes a priority and this is especially important in terms of meeting class schedules and exam times and carrying out daily and nightly activities such as accessing the cafeteria, enjoying the open spaces, traversing the campus sidewalks and participating in events and learning opportunities.

5.7.2 UNIVERSAL ACCESSIBILITY RECOMMENDATIONS

Mohawk College is committed to providing accessible facilities and the design of all new buildings and additions must comply with the Facility Accessibility Design Standards (FADS) developed by the City of London and adopted by Mohawk College for all new facilities and major renovations/additions. For smaller renovation and retrofit projects, the campus's built environment and public spaces must comply with the Barrier-Free design requirements of the Ontario Building Code and the requirements outlined in the Accessibility for Ontarians with Disabilities Act (IASR and DOPS - Integrated Accessibility Standards Regulation and the guide to Design of Public Spaces Standard).



Incorporate specific barrier-free elements such as ramps into the environment.

Where possible, the design should exceed the mandatory requirements by implementation of best practices to ensure equitable access for all people. Consider the following:

- Work with an accessibility specialist to help create a built environment accessibility standard:
- A universal design checklist for all aspects of campus development, including buildings (interior and exterior), entrances and connections, parking structures, streets, open spaces, pathways and trails.
- Integrate barrier-free elements seamlessly into the rest of the design whenever possible.
- Implement best practices to exceed the minimum barrier-free requirements, such as
 - Incorporate automatic operable doors where possible.
 - Incorporate at least two accessible elevators per building, in case one fails to work.
 - Provide sloped walks or ramps throughout the outdoor spaces and at entrances.
 - Locate accessible parking and access aisles so they are connected directly to the path of travel leading to the entrance.
 - Provide covered passenger drop off and pick up areas at entrances that are visible from the entrance vestibule.

6.0 FENNELL CAMPUS MASTER PLAN

6.1 CAMPUS DESIGN CONCEPT

The physical Campus Master Plan vision for Fennell reflects a beautiful, welcoming and transparent environment defined by unique and inviting open spaces and buildings, distinct iconic architecture and art and an energy generated by pedestrian movement and activity. It is a vibrant and inclusive place that engages the college community as well as the neighbouring community-residents, the hospital, the school, the City of Hamilton-year-round and in all seasons. It is an exceptional teaching and learning environment in which pedagogy is reflected in the buildings, landscapes and art both internally and externally. Fennell Campus is a place that inspires, that visibly showcases leadership in sustainability and technology, with growing gardens, forested canopies and photovoltaics absorbing energy. The campus is pedestrian. It is a place with a multitude of pathways and connections that encourages a seamless flow of movement from internal to external, from edge of campus to internal campus, weaving through and linking a diversity of social spaces and distinct campus neighbourhoods.

The Campus is defined by three distinct land areas, the east campus, the west campus and the North Lands, the latter referred to in this document as the "Potential Campus." Although there is ample room for future build-out of the Fennell Campus, the Campus Master Plan focuses on a compact approach to development reflecting a 20-30 year planning horizon. In this timeframe, the emphasis of growth and development is on the east campus, with enhancements to the west campus and the north Potential Campus. Development of the west campus area fits within a longer term planning horizon in which the lands are held as a land bank for future growth and development. In the shorter planning horizon, surface parking lots remain to facilitate parking but also to function as a forum for sustainable initiatives. The Campus Master Plan as such, builds on the existing campus structure, which celebrates existing assets, enhances sustainability, creates distinct and inclusive places for teaching, learning, socialization, recreation, health and wellness and community integration.





6.1.1 CONCEPT PLAN

BUILT FORM:

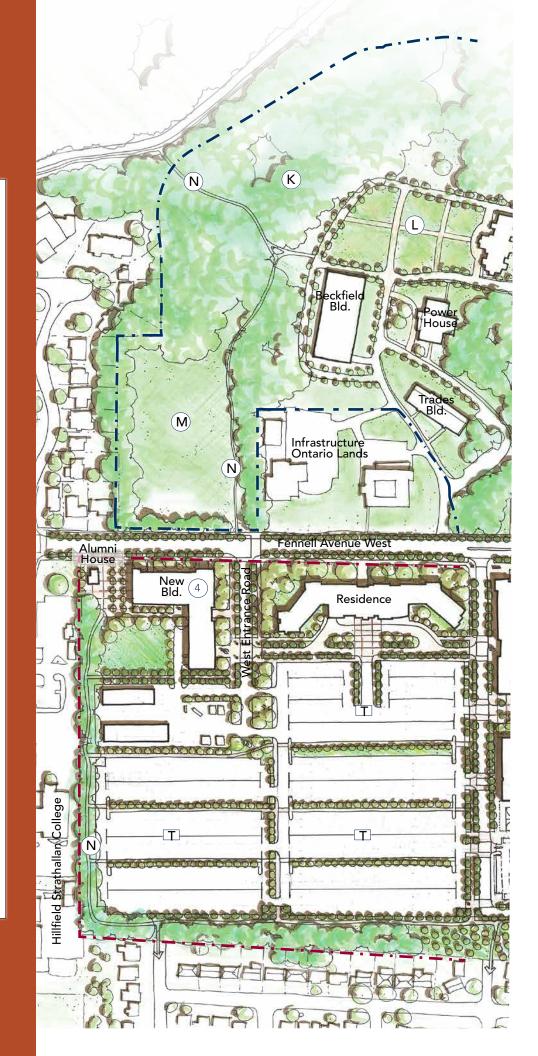
- 1 to 5 Future Buildings (New Bld.)
- (6) to (12) Future Expansions (BE)

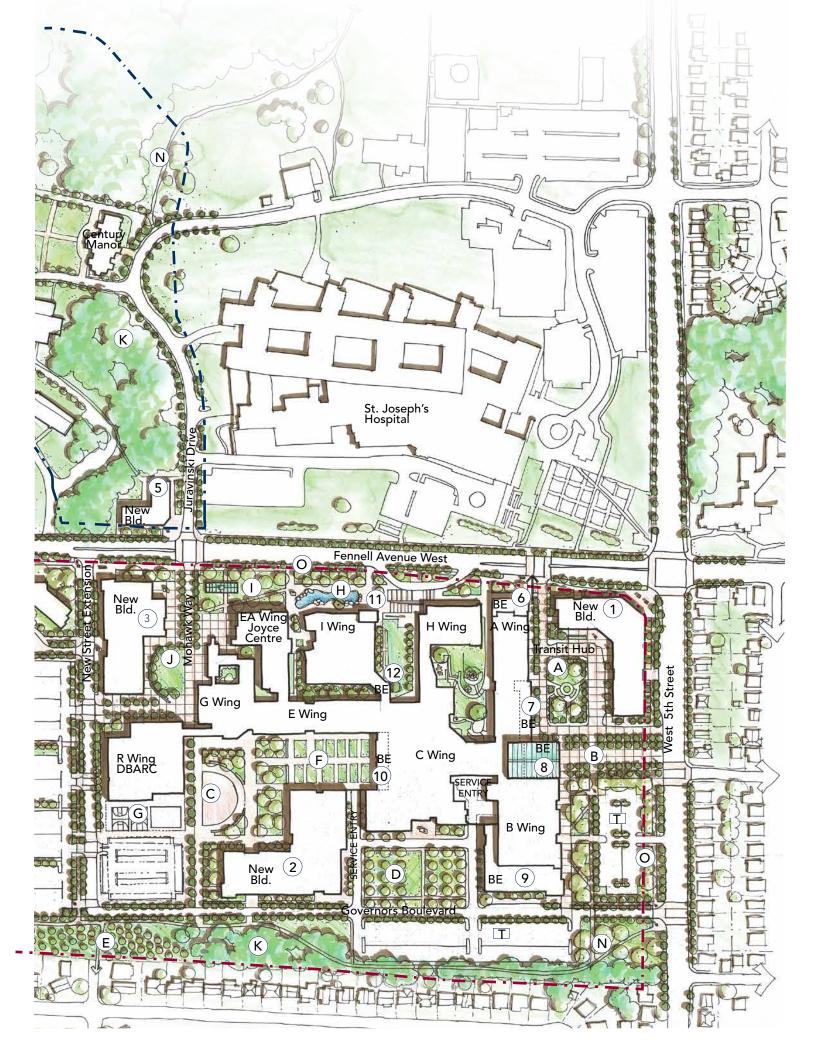
PUBLIC REALM:

- A Transit Hub and Indigenous Garden
- B East Main Plaza
- C Central Plaza
- D East Orchard
- E West Orchard
- (F) Rooftop Community Garden
- G Courts
- (H) The I Wing Pond
- Greenhouse & Gardens
- J The Cellar Plaza
- (K) Forest
- L Botanical/Wellness Gardens
- M Community Field
- N Community Trails
- O Streetscape Enhancements

OTHER

- - Property Line
- - · Potential Campus Property Line
- Surface Parking
 - improved walkways throughout

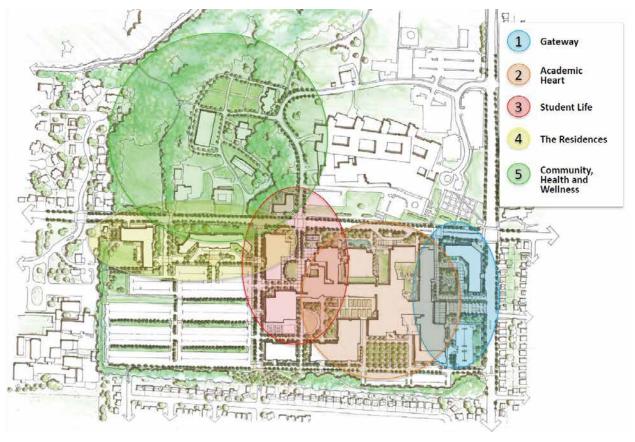




6.1.2 THE FENNELL CAMPUS NEIGHBOURHOODS

The campus is best described by its unique campus neighbourhoods. This structure emphasizes the approach to creating distinct places on campus - a collection of interconnected destinations that builds campus placemaking and identity. The approach allows for clarity and guidance in decision making in terms of the appropriate location of uses and the function, design and programming of buildings, spaces, streets and pathways. Each neighbourhood is defined by buildings and open spaces focused around a central gathering place or hub, both internal and external. This creates a selection of places to go to gather, socialize, integrate and experience the unique aspect or draw of each place, creating "social magnets" at each corner of

the campus. The unique features of each area are enhanced and celebrated, whether it is an open space, a building, a heritage feature, or special street. Each neighbourhood can also be defined by specific uses and functions, or by the academic contribution to place - a focus on technology or athletics, or a grouping of residences, a celebration of Indigenous culture, or the primary gateway to the campus. Although each neighbourhood can be defined by the strength of an academic program, it should be designed to reflect and accommodate a mix of uses and programs to build in long term flexibility and to futureproof the campus. Each campus neighbourhood is described below in detail, from east campus to west campus and to the North Lands.



Fennell Campus Neighbourhoods

The Gateway Neighbourhood

The Gateway Neighbourhood is one of the most important places on campus as it is meant to function as the primary face of the campus to the community. It is the main front door at the most public of intersections. It is designed as a dynamic and animated place reflecting the hustle and bustle of the college community as it meets the city and neighbouring community. It is the transfer point and confluence between campus and city, engaging city transit and pedestrian movement internally and externally to the campus. The heart of this neighbourhood is defined by two significant open space destinations and gathering places, the Indigenous Square and the East Plaza, supported and framed by transparent building frontages that are intended to engage and animate these spaces. Two iconic buildings, the corner gateway building and the east atrium (new C Wing entry) function as significant architectural landmarks that visually provide identity, distinction of a quality place and are the key wayfinding features of this neighbourhood. The Front Gateway Neighbourhood needs to be carefully designed and well thought out as it is the place to go as a visitor and newcomer to the campus, where you are introduced to Fennell campus, become versed in the wayfinding of place, experience the welcoming amenities and are immediately immersed in the vibrancy that defines the campus.



Key plan of the neighbourhood area (showing the location of the rendered view below).



Rendered view of the East Plaza and Indigenous Square, looking west towards the new East Atrium addition onto the C Wing.

Academic Heart Neighbourhood

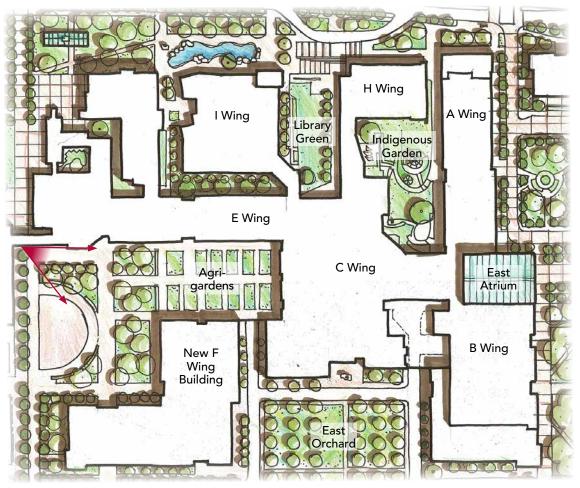
The Academic Heart Neighbourhood functions as the internal engine of the campus and as the primary student hub. It is defined by the existing central building structures - Buildings A, B, C, E, H, I, EA and a new building to replace Building F, complimented by a series of significant external open spaces of varying sizes and functions including the Agri-Gardens, the orchard, the Indigenous Garden, the pond and the Library Green. That said, the heart of this neighbourhood is primarily focused on the internal spaces as the magnet, showcasing a diversity of organized existing and new social gathering and amenity space destinations including the theatre, the Square, the bookstore, cafes and more, all connected by a generous and centralized circulation network. The amenities and services are student focused, catering primarily to student needs and the enhancement

of day-to-day student life. The corridors that define the circulation network are public social spaces, offering places to sit, lounge, study, eat, sleep, converge, collaborate and circulate. The corridors are also places of pedagogy, with transparent faces to classrooms, labs and teaching spaces. Academia is highly visible, adding to the animation of the heart.

Although the internal campus is the focus of the Academic Heart, existing buildings are enhanced and new buildings are designed, to bridge the gap between interior and exterior spaces, providing a highly transparent, accessible and seamless relationship between the indoor and outdoor realm, especially along the movement corridors. The corridors provide windows into the outside environment, drawing you out physically and visually and allowing a continued connection to the outdoor spaces and landscapes.

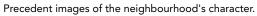


Rendered view of the Central Plaza with Agri-gardens, looking east towards the McIntyre Permorming Arts Centre.



Key plan of the neighbourhood area (showing the location of the rendered view on the facing page).







Student Life Neighbourhood

The Student Life Neighbourhood is a very special area on campus. It is positioned at the "new" centre and crossroads of the campus and will be enhanced even more so as the campus continues to grow west and connect north. This Neighbourhood hosts a multitude of distinct and significant campus assets including the heritage Cellar, the MSA Building (G Wing) and the DBARC (Athletics R Wing). These are complemented by new buildings that address the street corners on the north and south side of Fennell and by unique significant open spaces and features such as art, a greenhouse and gardens, the Cellar Plaza, an enhanced MSA Plaza and pedestrian-oriented streets and generous pathways. The compilation of these buildings and spaces creates a very distinct place that builds a strong identity for Mohawk at a key location of the campus.

Similar to the Academic Heart, the Student Life Neighbourhood is intended to be very student oriented, but the focus is more external. This Neighbourhood is well positioned to be the place to showcase the progressiveness of the campus externally and to the community, focusing on state-of-the-art buildings and programs such as sustainability and athletics, supported by high-quality open spaces. In the heart of this environment are the MSA and Cellar Buildings which function as the magnets and the energy of the Neighbourhood. These buildings and their functions should be enhanced to be in keeping with the character and stature of place as the jewels in the heart of the Neighbourhood.



Rendered view of the Central Four Corners Gateway into campus, looking southward along Mohawk Way.



Key plan of the neighbourhood area (showing the location of the rendered view on the facing page).







Precedent images of the neighbourhood's character.

The Residences Neighbourhood

The Residences Neighbourhood is primarily defined by existing and new student residences that front Fennell Avenue West, which are supported by expansive green landscapes, treed street connections and linked pedestrian pathways. The focus of this Neighbourhood is to create an attractive, green and welcoming environment that functions as a home away from home for students but also as an attractive environment for conferences, hotelling and other related functions. It is designed as an extension of the adjacent residential community, as well as an extension of the North Lands escarpment landscape across the street. An enhanced Alumni House and plaza at the northwest corner of Fennell Avenue West can function as the magnet of the Residences Neighbourhood, with opportunities for amenity-oriented retail such as a network café. The new residential building is also an opportunity to add a mix of uses to the northwest area of the campus, building on the existing conference facilities and amenities.



Precedent image of the neighbourhood's character.



Key plan of the neighbourhood area.

Community Health and Wellness Neighbourhood

The Community Health and Wellness
Neighbourhood constitutes the potential campus in the North Lands. The proximity of the lands located next to the hospital east, the escarpment north and the residential community west positions this neighbourhood as a place that represents and fosters campus and community health and wellness. Its many assets such as the recreational fields and enhanced trails, the connection to the escarpment and the forest and the botanical gardens that celebrate a new repurposed Century Manor all contribute the sense

of place defined by health and wellness. The landscape is intended to be a welcoming reprieve for day-to-day exercise and enjoyment throughout the seasons, a place to engage in unique community-oriented activities such as cricket, as well as a place for campus and community events. It is envisioned as a place of visible pedagogy, a learning and teaching environment in which the re-purposing of the buildings with new programs and uses and the design of the landscape with teaching and food gardens, can contribute to building the identity of Mohawk as a healthy, learner-centred, sustainable and resilient community-oriented college.



Key plan of the neighbourhood area.

6.2 BUILT FORM FRAMEWORK

6.2.1 APPROACH AND STRUCTURE

The Fennell campus as it exists today has ample room for build-out, but the approach to building development over the longer term focuses on a more compact building form and limiting building footprints in support of a greater and richer public realm, as well as for the preservation and celebration of its natural assets. The built form structure concentrates on

- Completing the framing of gathering spaces to improve connectivity between internal and external environments;
- Enhancing the frontages of the main streets
 Fennell Avenue West and West 5th Street to
 better connect to the community and enhance
 the face of the College;

- Providing signature buildings as gateway landmarks along Fennell Avenue West to support identity building; and
- Enhancing existing buildings to open views to the landscape and to improve access in and out of buildings for improved connectivity across campus, and towards the community.

The built form structure also responds to the natural and historic context of the site. Buildings on the North Lands have been kept to a minimum and sensitively placed in the landscape as not to disturb the natural wealth of the Niagara Escarpment conservation area and nature trails, as well as to support visual and physical connections to the forest. Historic buildings – Century Manor and the Cellar – are also deemed to be preserved and enhanced and the new built form structure supports their celebration by providing ample room around them for clear views and public realm space.



Building Expansion Opportunities

6.2.2 NEW BUILD

A series of new buildings are proposed in the master plan concept for Fennell Campus that align with the approach to the overall built form structure. They include:

Building 1

The new building at the corner of Fennell Avenue West and West 5th Street is intended to serve as a key gateway landmark for the campus and to build overall College identity. It should also assist in improving the transition in major grade changes on the site and to support a comfortable and direct access to the campus interior from a future BRT transit stop planned for the north-east corner of the intersection.

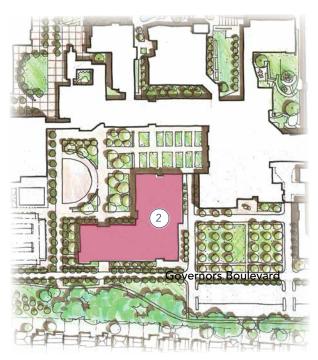


Building 1 Key Plan

- Focus the building's architectural character to highlighting the identity of Mohawk College in a signature way.
- Design all building faces to be transparent and to relate to the human scale at the grade level, to support a welcoming face into the campus from the community, as well as to relate to the internal courtyard space.
- Incorporate visual transparency through the building from the corner of the street intersection to the internal courtyard, in line with the main path of travel from the future BRT to the main entrance into the C Wing.
- Mitigate significant grade changes between the street and the A Wing and new courtyard through the interior of the building, using principles of universal accessibility and introducing high-quality architectural design.
- There is opportunity for increased building height with unique architectural detailing, to make an identity statement from a distance and to draw long-range visibility along Fennell Avenue West and West 5th Street.
- Relate building design to the external public realm and create multiple access points.

Building 2

A new building is proposed in place of the existing F Wing and neighbouring portables M, N and Q, to provide better opportunities for improved space allocation and utilization, as well as better framing of the main Central Plaza and a better face to the southern residential community. The new building envelope also allows for an increased area for the Central Plaza and for the creation of an adjoining new garden open space to the east of it. It retains a strong face towards the southern main entranceway, framing a new orchard garden and with the re-alignment of Governors Boulevard, there is also opportunity to create a streetscape relationship with the southern face of the building.

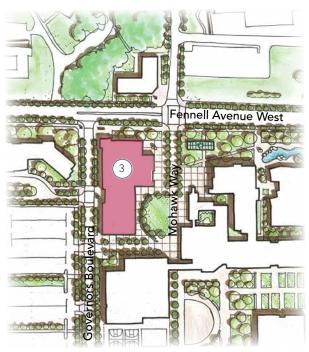


Building 2 Key Plan

- Design the new building as an instigator of an animated public realm facing the Central Plaza with a transparent façade and multiple access points, as well as internal and external spaces for dwelling and lingering in, as to complement the intention of the plaza as a major gathering place.
- Consider the comfort of all-season use of the Central Plaza, with the potential to provide canopies and other weather protection along the building façades facing the plaza. There is opportunity to provide amenities on the interior of the building that support winter uses in particular—such as changerooms if skating were to become available.
- Focus the southern building face design to support a comfortable pedestrian-scaled public realm along the Governors Boulevard streetscape to provide a safe and comfortable environment for the community to cross the campus.
- Relate the design of the southern face to respect the privacy and comfort of the residential neighbours and to reflect the natural setting across the street.
- Design the eastern face of the building to relate to the southern main entrance drop-off and pick-up drive. Consider also its architectural design relationship to the orchard landscape directly across the drive.

Building 3

Building 3 is positioned at an important academic gateway central to the campus grounds, located specifically on the south-west corner of Fennell Avenue West and Governors Boulevard. It is intended to be a focal point and signature moment along Fennell Avenue West that emphasizes the location and identify of Mohawk College as an institution of excellence and innovation. It also has an important role to transition and link together the activities and unique characteristics of the north and south sides of Fennell Campus-from historic buildings set in the midst of a forested landscape, to a more compact and formal urban setting-as well as the characters of the student-centred activities of the west side of campus with the more academic function of the east side.



Building 3 Key Plan

- Design the building with great care for architectural sensitivity to its diverse surrounding context, relative to massing, height, articulation, aesthetic quality and views. Neighbouring uses and spaces for consideration include
 - A community-oriented precinct with a student residence to the west;
 - A natural forest setting and health precinct across Fennell Avenue West to the north;
 and
 - A mixed-character open space setting south and east of the building, which includes a major gateway street into the campus, a plaza that celebrates the historic Cellar building and a garden landscape that emphasizes leadership in innovation.
- Design the building, together with its adjoining public realm, as an iconic statement of Mohawk College's identity.
- Consider increased height to leverage the iconic design and further emphasize a key gateway moment for the campus.
- Consider all façades to be prominent, transparent and to relate to the human scale at the grade level, to support a welcoming face into the campus, as well as to relate to the series of open spaces and streetscapes that surround it.
- Focus the grand entrance and main lobby space on the north and/or east sides of the building to relate to the community and campus public realm.
- Provide a direct entrance point into the building along the main path of travel from the nearest transit stop.
- Provide bike parking amenities for cycling commuters alongside or near Fennell Avenue West.

Building 4

Building 4 is positioned as the western gateway and entrance into the Mohawk College campus. It becomes the first visible sign of the College along the Fennell streetscape corridor. It is intended to serve as a landmark that reflects the Student Life character area on campus, as well as bridge the gap in the campus' built environment on the east side, connecting the existing residence on site with Alumni House. The opportunity here is to highlight the history and culture of the students, the land and the College.

Recommendations:

- Design the building to complement the residential and natural context of the setting, but with prominence as a landmark for the College.
- Consider incorporating height in the building design.
- Orient the building and internal layout to maximize long -range views from the building towards the forested landscape of the North Lands, as well as easterly views towards the campus setting for inspiration and wayfinding purposes.

- Organize internal space uses to animate the ground floor along Fennell Avenue West and wrapping around the western face towards the Alumni plaza.
- Create generous and comfortable access and visible connection, to the green courtyard on the west side.

Building 5

Building 5 is positioned to assist Building 3 in creating an identity moment for Mohawk College at the central gateway into the campus along Fennell Avenue West. It is intended to be of a more intimate scale and lesser prominence however, to complement the characteristics of the North Lands as a place of wellness, nestled in the forest landscape.

- Identify a building mass and height that is intimate in scale and appropriate for its lower density and natural setting.
- Create a design that contributes to the identity of Mohawk in a visible and profound way.
- Provide an inviting and welcoming façade that speaks to the wellness character of the North Lands.



Building 4 Key Plan



Building 5 Key Plan

Building Structures Enclosing Service Areas

The Concept Plan for Fennell Campus includes building structures enclosing the two main service areas located at the heart of the campus grounds. The intent is to improve aesthetic appeal around campus, improve safety where there are currently conflicts between trucks and pedestrians and provide opportunity for useable public space above.

- Design the enclosures for servicing operations to support rooftop use as public realm space.
- Give attention to the quality and durability of the structure and aesthetic appeal to the front facades.
- Blend the front façade design with the adjacent building character.
- Lay out the internal space workings to maximize efficiencies as a "central service hub" and provide ease of manoeuvrability for trucks.
- Connect the interior space with the wider service network and consider broader connection opportunities to minimize the need for other service locations on campus.



Enclosed Service Areas highlighted in purple.

Building Additions

Building additions are an important component of the built form framework, providing multiple new opportunities including: new and enhanced entrances to the campus that are accessible, transparent and welcoming; an increased amount of public spaces for socializing and studying; more academic and amenity space; increased sunlight penetration; and transparency to the outdoors, activating spaces and improving the physical and visual connection between the interiors and exteriors. All building additions further function to improve the face to the community and offer opportunity to build Mohawk's identity.

[Each building addition is described in more detail in Section 6.2.6.]

- Design building additions to be transparent towards the public realm and attractive architecturally.
- Design building additions to be prominent and to create a statement that speaks to Mohawk's pride and sense of place.
- Design building additions to complement the original building architecture.
- Design building additions to relate to the public realm and celebrate its character.



Building Additions (highlighted in blue)

6.2.3 HEIGHT OPPORTUNITIES

Most of the buildings across campus are kept to a maximum of four storeys and follow the general height and massing policies outlined in the previous chapter. The opportunities for building above four storeys present themselves at gateway moments and key entrances to the campus buildings, specifically at locations where a strong identity-building opportunity is available and where negative impacts from building shadows are minimal. Increased height is reserved specifically to new buildings numbers 1, 2, 3 and 5.

Recommendations:

- Reserve additional height to a portion of the building mass only and step back appropriately from the building's edge.
- Conduct a thorough shadow study of the building and reduce impacts onto the open spaces and building façades affected.
- Incorporate architectural features into the design of the tower that relate and highlight the identity of Mohawk College.
- Orient the towers to face key gateway view corridors.
- Design the internal spaces of the towers to take advantage of long-range views towards the natural setting of the Niagara Escarpment as well as across the campus.



Building Height Opportunities

Buildings at 1-4 Storeys

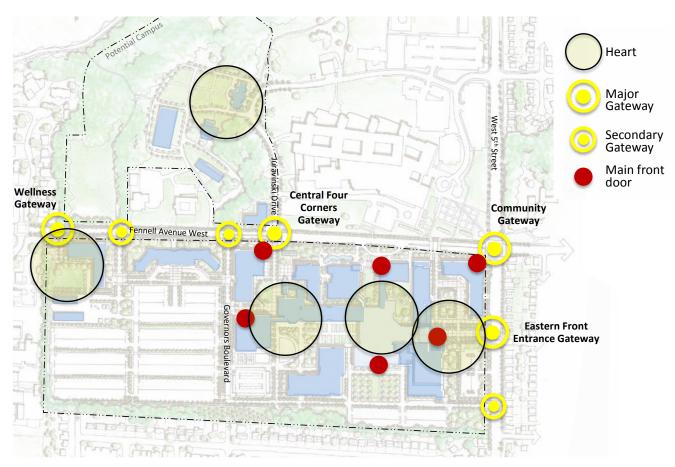
Height Opportunity

6.2.4 GATEWAYS, ENTRANCES AND HEARTS

Gateways

The Campus Master Plan identifies new gateway moments to support a stronger face and visibility of the campus to the community, as well as to contribute to an improved wayfinding strategy. Gateway moments are distributed across Fennell Avenue West and West 5th Street where the greatest flow of traffic occurs and are focused around main access points into the campus grounds for vehicles, transit users, cyclists and pedestrians. Gateway moments are defined by architectural landmarks and entry drives into the campus. There are four major gateways identified that respond to primary entrances into the campus and three secondary gateway moments that relate to secondary entrances.

- 1. The wellness gateway: At Fennell Avenue West by the residences: this gateway should emphasize the bucolic and natural context of the campus and relate to the Wellness character of the North Lands in particular, but also the campus as a whole. The escarpment forest trickles south and permeates into the south side of the campus. The student life character area should be reflected in the built form and detailing.
- 2. Central four corners gateway: At the crossroads of the northern, western and eastern parts of Fennell campus and its neighbouring hospital, this gateway functions as a bridging point between all four corners. It is an important moment for pause and for grand celebration of Mohawk College identity and pride and it should be designed as such. This is the moment to celebrate leadership in innovation, technology and health. It is an opportunity to celebrate heritage building assets and to frame views towards them.



Gateways, Entrances and Hearts

- 3. Community gateway: The moment at the intersection of Fennell Avenue West and West 5th Street is the moment for Mohawk College to make a statement in the community context. This is a major crossroads for traffic flowing from and into downtown, as well as across the City of Hamilton and to the airport. This is also the location of a future BRT stop, which signalizes an increasing flow of pedestrians at this intersection, accessing the campus grounds. The architectural design and features, as well as placement and orientation of the new building, should reflect and emphasize the relationship and partnerships that Mohawk College has with the neighbourhood and greater Hamilton community.
- 4. **Eastern front entrance gateway:** The eastern gateway is anticipated as a grand entrance to the Fennell Campus relative to a large public realm space that supports multiple significant programming opportunities. The architectural landmark that defines the gateway view corridor is the front lobby and glass atrium addition to C Wing. The key theme reflected in the gateway design is one of invitation and pride for the internal Mohawk community of students, staff and faculty.

Front Doors

Multiple front doors are identified for Fennell campus, with spaces that reflect design quality and prominence, help improve the experience of the user from the moment they walk into the campus, irrespective of commuting choice and which side of campus they enter. Multiple moments for identity and pride and social gathering are created from all sides of the campus, including entrances through the new gateway buildings 1, 3 and 4, as well as H Wing from the North side, new building 1 and C Wing from the east side, C Wing and new Building 2 from the south side and R Wing and new Building 3 from the west side.

Hearts

There are five key "hearts" identified for the campus, each relating to a specific campus neighbourhood. They support opportunities for gathering, socializing and showcasing Mohawk's identity, indoors and outdoors. Their locations and purpose are outlined below:

- 1. At the eastern front entrance to C Wing: a "grand lobby" and celebration space.
- 2. At the core of C Wing: the student social heart of the campus where many services and student amenities are provided and where informal gatherings and activities occur.
- 3. At the MSA Plaza: the community heart of campus for large external gatherings and festivals.
- 4. Centred around the new residence building and Alumni House and Plaza: the student residential heart for gathering and informal recreation.
- 5. Future Heart-Centred around Century Manor in the North Lands: this heart speaks to the therapeutic and wellness character of the surrounding natural landscape.

Each campus heart acts as a draw into the College grounds and an anchor for gathering and community building.

- Design the built environment at gateway moments in cohesion with the public realm environment and unify the identity theme being portrayed and emphasized at each location.
- Orient architectural features and entrances towards main circulation access points into the campus and gateway intersections.
- Support gateway moments with a combination of public art, flexible space, activity, iconic features and programs that speak to the identity of the College.

6.2.5 BUILDING VIEWS

The connection between internal and external environments can be strengthened with visual connections between the two, through building façade transparency and windows. At Fennell Campus, it is important for buildings to maximize both long-range views towards the forested landscape on the North Lands, as well as views to internal open spaces. Long-range views to nature have a significant impact on a person's health and wellbeing, while visual connection to open spaces also provides "eyes on the public realm" in support of safety and security and also connects people to community events and activities. The key views to consider at Fennell Campus are outlined in the diagram below.



Building Views

6.2.5 HERITAGE BUILDING **CONSERVATION**

The historic buildings that remain on campus today include seven buildings in the Potential North campus and one south of Fennell Avenue West. Two of these, namely Century Manor and the Cellar, hold heritage designation under Part IV and V of the Ontario Heritage Act and must be preserved.

Recommendations:

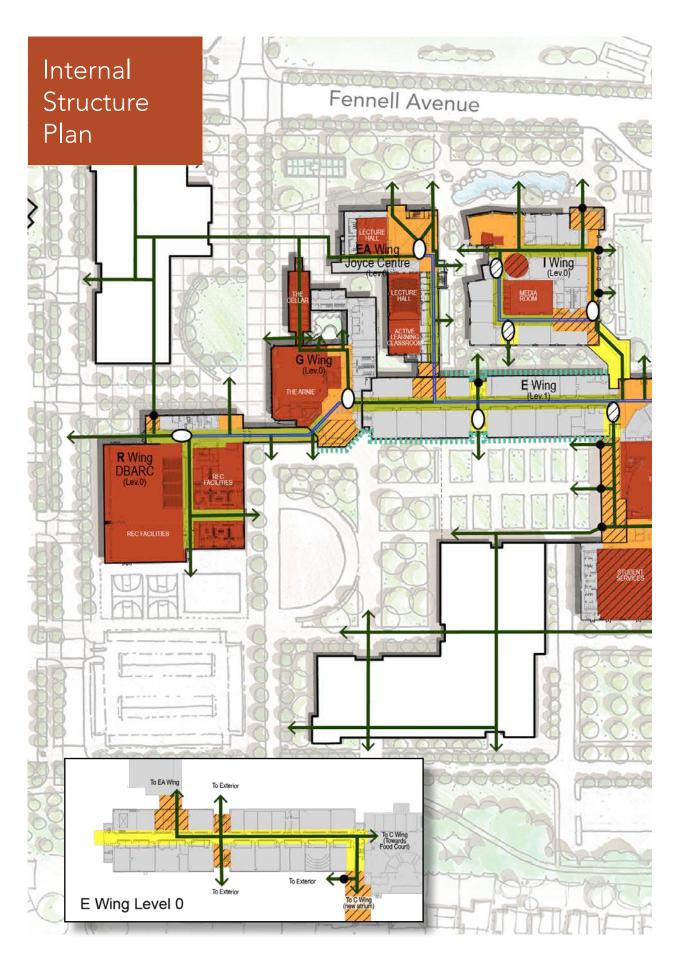
• Conduct a heritage assessment and study on all historic non-listed buildings to determine the strategy towards re-purposing them.

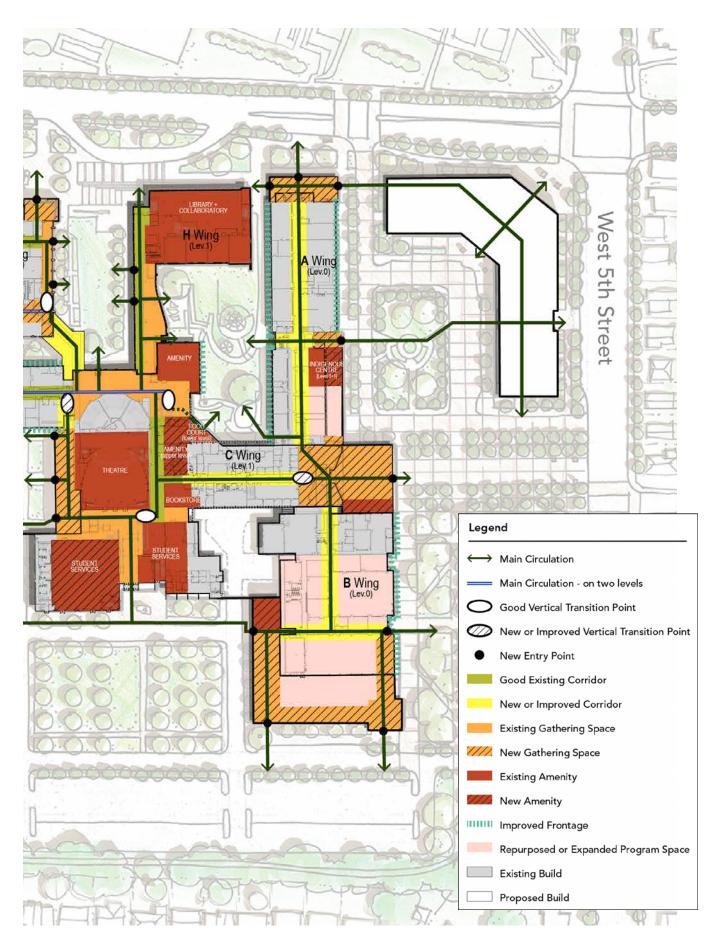


- Designated Heritage Buildings
- The Cellar
- **Century Manor**

Heritage Buildings

- Conduct an in-depth heritage assessment on the Cellar and Century Manor buildings to identify what elements of the heritage buildings are worth preserving and enhancing, beyond those listed as part of their designation.
- Identify an appropriate use for Century Manor that is in keeping with the story of the site, focusing on health, restoration and wellbeing.
- Any future additions proposed to the Century Manor building must be in keeping with conservation guidelines and respectful of the Victorian architectural style and detailing.
- Design the open space around the building to celebrate and enhance the building use and its architectural character and preserve all views to the building from various angles.
- Preserve views towards the forest lands from inside Century Manor, to support improved wellbeing of the community and the workers inside.
- Should an alternative use of the Cellar be contemplated, consider the history of the building as a root storage cellar and one that promoted self-sustenance and the cultivation of food on-site.
- Preserve and celebrate the building structure by opening view corridors towards it within its surrounding context and creating an open space and animated public realm around it.









6.2.6 INTERNAL BUILDING STRUCTURE-CORE CAMPUS

The internal building structure of the core campus focuses on improving connections and access throughout the campus buildings and responding to a need for an increase and a diversity of public spaces. More specifically, it responds in the following ways:

- An increase in open spaces, balancing social, study and quiet spaces of varying scales, creating a strong central heart of the campus and animating main entrances, corridors and external public spaces.
- Enhanced front entrances into the campus to be more welcoming and to support wayfinding and accessibility, designed as open atria with lots of light penetration, openness and seating (Wings A, C, I and B).
- A consolidation of major student services and amenities in the C Wing core, to create a "one-stop-shop" for students, as well as faculty and staff.
- A distribution of food- and event-related amenity spaces across all areas of the campus and within each building, to provide greater choice and within shorter walking distances.

- Universal accessibility across all main paths of travel to create an inclusive and welcoming environment.
- A more prominent and expanded Indigenous Centre to increase awareness and celebrate Indigenous culture.
- Visual connectivity into and out of all public spaces at all levels of buildings and an increased number of access points from interior to exterior spaces to improve permeability and flow of pedestrian circulation.
- Widened or re-faced hallways in certain areas of the campus, including the bridge connection from C Wing to I Wing, to: increase the visual access to teaching and amenity spaces; increase access to sunlight; provide added seating and social space; and improve wayfinding with new placerecognition landmarks.
- Improved connectivity between campus buildings with increased circulation choices and more direct connections and linkages to outdoor public spaces.





- Accommodate a diversity of internal public space typologies, including spaces for individual and small group quiet study, contemplation, recreation, flexible use, lounging, events and large and small group gatherings.
- Utilize more generous corridors to double as social/study space for students and staff.
- Increase transparency of all building façades facing the community and open spaces, to showcase a learning environment and improve visual connectivity and wayfinding.
- Emphasize and showcase pedagogy throughout the internal campus environmentalong corridors and in open spaces-through public art, project displays and outside of classroom learning.
- Provide barrier-free, AODA-compliant access at all vertical transition points across the main campus circulation routes, within the context of a seamless flow of movement.
- All main circulation routes should be a minimum of 4m clearway across.

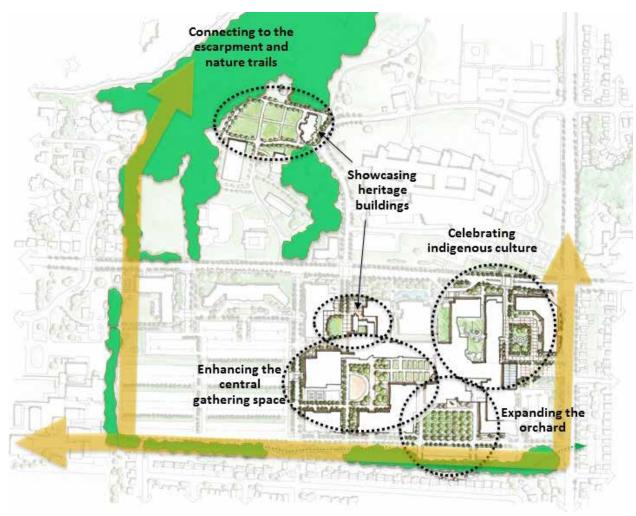
- Locate all back-of-house activities for amenity spaces, such as the kitchen of a restaurant, away from main building façades facing public spaces.
- Review the overall servicing network to consolidate as much as possible into a centralized location and improve overall efficiencies.
- Increase the amount of access points across all building façades towards public spaces.

6.3 OPEN SPACE FRAMEWORK

6.3.1 APPROACH AND STRUCTURE

The approach to the open space structure is to respond to and celebrate the historic, natural and cultural assets of the site (as described in Section 3.2.1 of this document), which encompass the themes of wellness and healing, recreation, Indigenous roots and food cultivation and builds on the concept of a self-sustainable campus. At the time when the psychiatric hospital operated on the campus grounds, all food and materials were supplied and created on site. Even dating back to Indigenous times, the people lived off the land and had strong ties to the forests of the escarpment lands. The grounds were a place of natural therapy, recreation and healing and the new campus master plan supports the continuation of these opportunities and ties to the land.

Courtyards and open views showcase the Cellar building and Alumni House and a botanical garden creates a new context for Century Manor. The orchard and community gardens are expanded and serve to celebrate a main entrance and the main heart of campus. Indigenous culture is celebrated at the main gateway to the campus through art in the landscape, specialized themed gardens and programming and amenities that can be part of a new gateway building. The forest canopy from the neighbouring escarpment is drawn into the campus landscape, defining a new open space typology.



6.3.2 OPEN SPACE TYPOLOGIES AND CHARACTER

The overall open space network offers an improved and diversified set of public spaces across the campus lands. They are designed to respond to a variety of users, attract the community, enhance front doors, signalize gateway moments, highlight history and culture and contribute to a restorative and sustainable environment. Some open spaces are more urban in nature, incorporating more hardscape, while others are more natural and reference their forest context. The pages that follow outline and describe the different new spaces and features at Fennell Campus, alongside their policies.



Indigenous Square

The Indigenous Square is an important place at a key gateway node on campus. It is a crossroads for people entering and leaving the campus, a meeting place and a resting spot. At its heart is a reflective open green, edged by formal planting, with a symbolic sculptural trellis in the middle reminding everyone as they enter the campus of the native people and historic culture of this land. The Square also hosts a low-profile Transit Hub that functions as a shared space with pedestrian traffic. The Hub is supported by covered bus shelters and internal waiting areas and amenities to enhance the experience of waiting for friends and buses in any given weather.

Recommendations:

- Create a curbless and safe transition for the pedestrian, from the new Gateway Building, across the Indigenous Square, towards the main eastern front entrance. This route is anticipated to become a major thoroughfare once transit opportunities improve and the BRT plan for a stop at the corner intersection is implemented.
- Reface the transit route with special paving to improve the character of the space and to signalize a slowdown in vehicular speed. This route should be reserved to transit vehicles only.
- The sculptural trellis structure is intended to be transposed from its current location alongside Fennell Avenue West and enhanced in its setting with Indigenous landscaping and potential herb or edible garden.
- Create an attractive and animated public realm along the new gateway building and A Wing addition. Provide visual connections towards the buses for better wayfinding and ease of access.

East Plaza

The East Plaza is designed as a ceremonial and welcoming ground towards the redefined eastern front entrance atrium to the College, from West 5th Street. The linear and formal design emphasizes the grand entrance as an architectural landmark and a point of welcome to the whole community. It is designed as a wide hardscaped area lined with processional trees defining its edges and doubles up in function as a gathering space for ceremonies and community events. It is intended to be open and inviting, attracting residents in to sit and chat in the plaza even on weekends and off times, contributing to a 24/7 animation of the campus.

- Specify special paving for the plaza that matches the paving in the street of the transit hub.
- Use a tree species that has a uniform and dramatic impact with seasonal change.
- Integrate the design of the plaza with the streetscape design along West 5th Street and provide bollards or a creative alternative as a safety barrier from nearby vehicular traffic.
- Provide seating within the plaza, distributed in such a way as not to inhibit the main paths of travel.
- Provide bike parking and other cycling amenities within the area and incorporate a smooth transition for cyclists entering the space from the West 5th Street multi-use path.



Кеу Мар

Central Plaza and Agri-gardens

The Central Plaza (MSA Plaza) is the outdoor social heart of the campus and gathering place for both the College community and wider neighbourhood community. It is a place of greatest programming opportunity for a diversity of events, both big and small, and is designed to accommodate that flexibility. There is a large open hardscaped area in the centre accessible from all buildings that frame the space and a series of more intimate social spaces that surround it. The intimate garden spaces feature a tree canopy and seating opportunity to provide relief from summer heat or winter winds and retreat from the intensity of lots of activity. The Central Plaza is coupled with a large community Agri-garden to the east, intended for a mix of edible plants, medicinal plants and pollinator plants. Together, the different landscapes at the heart of the outdoor campus tell a story of the history of the land and its people and activities that once took place here. It is an important story of food sustainability, therapy, healing and community and an important place of identity for Mohawk College.

- Limit the height of the built form surrounding the community garden to maximize natural sunlight, providing the best opportunity for the garden to thrive.
- Incorporate a variety of plants in the community garden to support biodiversity and food sustainability for the College. There is also opportunity to feature Indigenous medicinal plants that can be shared with the wider community.
- Formalize the design of planters within the community garden to strengthen the visual and physical connection from C Wing towards the Central Plaza and to support wayfinding.
- Create view corridors between all gardens and spaces within the bigger landscape context, to support wayfinding and visual accessibility throughout.



- Tree planting in gardens should be informal to mimic and tie in with the informal nature of the forest: it plays an important part in defining the feel of the Fennell Campus as a whole.
- Frame the north-south pedestrian connection alongside the R Wing with a row of trees to mitigate the scale and blankness of the tall exterior facade.
- Incorporate amenity space such as cafés and food services within the periphery of G Wing and new building 2, with an outdoor spill-out zone with tables and seating.
- Make all three landscapes within this central context read cohesively and blend seamlessly into one another.
- Incorporate public art throughout the landscape that serves as a pedagogical tool or cultural symbol and contributes to a Mohawk specific sense of place – consider both static and interactive types.

The I Wing Pond and Gardens, the Greenhouse and the Cellar Plaza

Another key collection of public spaces is found at the central gateway into the campus from Fennell Avenue West. It is a combination of a sustainability demonstration garden with a stormwater pond and greenhouse in front of I Wing and The Joyce Centre and a green courtyard and plaza space that frame the heritage-listed Cellar Building. This is an important identity moment for the College and the landscape must work together with the built environment to build a strong sense of place and pride. Views into the space from the community and long-range views through to the Central Plaza are also emphasized with a march of tree plantings. Mohawk College seeks to position itself as an institution paving the way for innovation and technology. This is a place on campus that provides a great opportunity to do just that.

The Joyce Centre in itself is a symbol of innovation and sustainability and it is complemented with an open space for demonstration of the research that takes place inside. The pond acts as a stormwater reservoir and the greenhouse is intended for both research and as a place for teaching and experimentation. The garden landscape that faces Fennell Avenue West contributes to the wider green corridor along the campus edge and combines forest canopy with smaller plant species that speak to the topics of forest conservation, food sustainability and biodiversity.

Moving towards the south where Governors Boulevard enters the campus environment, the identity story continues with a landscape that celebrates and emphasizes heritage conservation. View frames towards the Cellar building are cleared and enhanced within an open concept plaza to the north and open green to the west and the relationship between interiors and exteriors is improved.

Informal seating and tables in the plazas and open spaces at this gateway support the internal uses and amenities of the Cellar building, the new gateway Building 3 and The Joyce Centre. Cafés and other food and retail opportunities should be concentrated along the building edges facing the



open spaces to support the connection between the internal and external environments and to invite the community into the campus. This also supports an animated public realm at all times of day and throughout all seasons.

- Line internal amenities and services to face the internal open spaces.
- Design the exterior around buildings to provide opportunity for spill-out zones and seating.
- Consider a paving pattern that blends with the streetscape design and across all spaces in this area. Consider the paving pattern to contribute to the branding and identity of the College.
- Align spaces and plantings to frame key views into the campus and towards the Joyce Centre and Cellar building.
- Consider edible and pollinator plants in the garden spaces, to support food sustainability and biodiversity.
- Line the main gateway street—Governors Boulevard-with ceremonial tree species with seasonal interest.
- The street should be flush, or have a roll curb only and share matching paving with the rest of the plaza space.
- Provide delineation for safety of the pedestrian in an attractive and creative form that will integrate with the greater design of the entire open space area.





The Indigenous Gardens

The Indigenous Gardens serve as a place for ceremony and peaceful gathering, centred around the Hoop Dance. The space respects Indigenous traditions and sets the tone for experiences within the space. The planting palette supports the therapeutic nature of the courtyard and offers respite and a quiet moment amidst a busier surrounding. It has a relationship with the internal adjacency of the Food Court, offering a seasonal barbecue area and amphitheatre seating for lunchtime eating, socializing and siestas.

Recommendations:

- Increase access points to the gardens from the buildings surrounding it.
- Improve visual connectivity from A Wing in particular to provide "eyes on the space." It is important for the Indigenous Gardens to be protected through visual surveillance over the course of the day.

The Library Green

The Library Green is an open landscape dedicated for a mix of uses, from lounging on a sunny day, to larger group gatherings during summer camp weeks. It is an important component of the face to the community, with the Mohawk name sculpted at the front entrance along the streetscape. A seating edge sits next to it for a pause or social moment. Enhancements to its landscape grading and additional building connections provide greater potential for its use and improved connectivity across the green, from building to building.

- Provide landscaping feature plantings within the courtyard.
- Frame the pedestrian path with tree canopy, maintaining permeability across the common but providing a more comfortable walking environment.
- Face seating towards the interior of the space.
- Mitigate the grade change by incorporating it creatively in the improved design of the common. Consider a hillside that supports potential programming, such as amphitheatre seating.





Botanical/Wellness Gardens

There is a real opportunity to position Century Manor as a real gem in the landscape of the North Lands. The proposed botanical gardens at the back of the heritage building provide for an important setting and complementary outdoor use. The gardens are intended to be therapeutic in nature to support the wellness character and history of the grounds as a health institute. They also enhance the immediate views out from inside of the building.

Recommendations:

- Choose low plantings to secure views towards the escarpment landscape.
- Create a connected pathway around and through the gardens, that is universally accessible from both the Century Manor building and the nature trails around.
- Incorporate medicinal and therapeutic plants and offer programming to support therapy in the landscape.
- Create a design that is welcoming to the whole community and that will attract residents from across the City and beyond.
- Incorporate art features into the gardens that speak to and celebrate the history of the place.

Community Field and Recreational Courts

The open space framework supports recreation as part of a well-rounded wellness campus. Above the running trails incorporated into the green periphery corridor, a large flexible field is located on the North Lands and basket ball courts south of R Wing. These recreational spaces are intended as a shared amenity serving both the inter-mural and varsity College community as well as the residents in the neighbourhood at all other times. The large field is also intended as a flexible space for field games or community gathering and informal play.

- Design recreational spaces to be open and usable to the broader community on off-peak hours.
- Provide access and connectivity with the wider pedestrian network.
- Provide seating areas for viewing and resting opportunities.

The Orchards

The East and West Orchards, both located on the south end of campus facing the community residential neighbourhood, offer a tie to the landscape that once was an active farmland and orchards when the Hamilton Psychiatric Hospital Institution operated on the lands. The east orchards build on the existing west orchards to spread and increase the asset across the land. Where the west orchards are nestled in the forested landscape edge of the campus, the east orchards serve as a formal bosque garden to emphasize a main entrance to the campus. The rectangular shape of the entrance drop-off route helps to further define a formal edge and shape to the orchard landscape.

- Organize tree plantings in a formal bosque configuration, considering key view corridors towards the front entrance doors to the building and across Governors Boulevard in line with the sidewalk.
- Provide a directional paved pathway towards the entrance to C Wing and design the rest of the plaza as softscape.
- Different tree species are permitted within the same open space, but must be fruit or nut producing.
- Consider incorporating signage and public art amidst the orchards to emphasize their symbolism and tell the story of their past.



Landscape Heritage



The Orchards



The natural forest of the Niagara Escarpment is a great natural asset of Mohawk College at the Fennell Campus. The open space framework recognizes the forest's therapeutic and wellness value and extends it along all of the campus' periphery and into all public spaces. The form and density of the natural plantings and tree canopy varies across the different spaces and edge landscapes around campus to relate to the character of each place's setting and character area.

Internal to the campus, the forest is reflected in informal tree groupings that complement open spaces but maintain visual corridors for wayfinding and more open landscapes to welcome the community. The peripheral landscape is a circuitous green corridor with denser forest and ecological plantings and orchards along the western and southern edges, which transition into more formal streetscape planting along West 5th Street and Fennell Avenue West.

Incorporated into the forest edge and entire peripheral landscape is a running trail and complementary recreational amenities such as workout stations, taking advantage of a connected circuitous route with multiple experiences along the way.



Exercise stations along the running trail

- Design the multi-use pathway around the periphery of campus to be universally accessible and to link to the escarpment recreational trails and to the ecological trails at Hillfield Strathallan College.
- Also incorporate and connect into St. Joseph's Hospital and the City of Hamilton's plans for multi-use paths that accommodate cycling.
- The pathway should be a minimum of 3m-wide and be designed as a multi-use path that can accommodate cycling in a safe way.
- Incorporate signage associated with a specific 1 km running route (or longer).
- Connect the multi-use trail to the wider campus pedestrian and cycling network and provide wayfinding signage.
- Incorporate interpretive plantings and signage along the more ecological western and southern campus edges and throughout the North Lands, to support teaching and learning and biodiversity.

Edge Landscapes

The edge landscapes have a primary purpose of improving the interface with the community and inviting them in. They are the "string of pearls" that define the campus identity—a series of unique and attractive landscapes that welcome and invite everyone in. The edge landscapes offer a diversity of opportunities for repose and contemplating, gathering and socializing. They incorporate sensory experiences and serve as a pedagogical tool for all ages. Together, the edge landscapes tell the story of a welcoming and beautiful place, with lots of moments for mystery and reveal and for dwelling and gathering.

- Maintain clear views at key moments along the path of travel within the edge landscape.
- Design the eastern and central green corridors (along West 5th Street and south side of Fennell Avenue West) with a mix of formal and informal arrangements, to offer greater permeability and visual connectivity along these streetscapes.
- Incorporate high levels of pedestrian lighting to create a safe environment in the evenings and extend its hours of potential use.



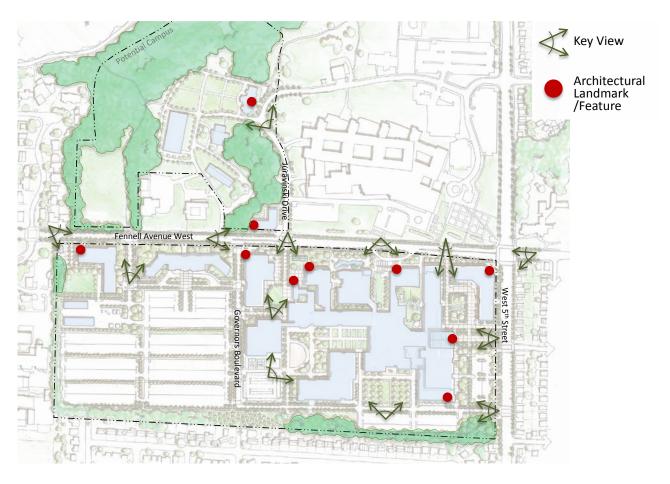
Edge Landscapes

6.3.3 OPEN SPACE VIEWS

There is a multitude of view corridors across the campus that are created through the configuration and relationship of buildings to open spaces. View corridors are defined by architectural landmarks, unique open spaces and sculptural features in the landscape. They all assist in wayfinding around campus and support the building of a distinct Mohawk College character.

Specifically, a series of view corridors are highlighted along Fennell Avenue West and West 5th Street towards features that speak to the identity of Mohawk College, including new gateway buildings 1, 3 and 4, as well as the Joyce Centre, the H Wing and the eastern grand entrance. Together, gateway views speak to leadership in innovation and research and to

the campus as a welcoming place for the whole community, with visual focus on main entrances around campus. Another series of view corridors face inward to the campus towards open space features and iconic landscapes, including orchards and community gardens, main gathering plazas, Indigenous structures and the setting around the Cellar heritage building. These also all relate to elements that contribute to a Mohawk sense of place and that highlight the historic roots of the campus lands.



Open Space Views

6.4 MOVEMENT FRAMEWORK

6.4.1 APPROACH AND STRUCTURE

The approach to the movement framework is to create an inviting, permeable and connected pedestrian realm as a first priority, supporting a welcoming feel for the whole community. Furthermore, the framework promotes an accessible environment with multi-modal commuting options to support sustainable transportation and an improved alignment and clear hierarchy of streets.

Safety consideration is of utmost importance. A connected pedestrian network with new pathways across the most challenging areas on campus such as parking lots, supports improved safety and security, as well as a re-routed service route to decrease conflicts between vehicles and humans.

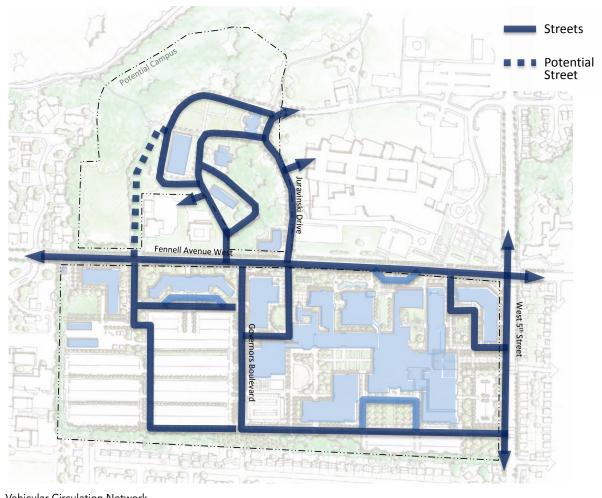
The movement framework incorporates improved cycling and transit networks to support sustainable commuting options. Cycling is promoted with the incorporation of a new multi-use pathway system that connects to city-wide trails and bike lanes and with the provision of increased supporting amenities. The transit hub is improved with a complementary open space and opportunities for new waiting areas internal to the campus.



Overall Circulation Network

6.4.2 VEHICULAR CIRCULATION AND STREET HIERARCHY

All streets within the campus and along its periphery are envisioned as enhanced landscape corridors, lined with mature tree canopy and a generous and comfortable walking environment. They should all incorporate traffic calming measures for safety and support a pedestrian priority environment, with crosswalks located at every intersection.



Vehicular Circulation Network

Governors Boulevard

Governors Boulevard plays an important role in structuring the street network across campus. It is the main collector road for all other streets and doubles as the main entrance into the campus. The boulevard is realigned in a straight line across both the east-west axis and north-south axis creating a stronger gateway connection and view into the College and establishes efficient future development of blocks. The realignment also supports an expanded forest edge and community amenity on the south end and an improved public realm along the entire streetscape, with a better relationship between internal and external activity and visual connection.

Recommendations:

- Design the boulevard with one travel lane flowing in each direction, wide enough to support larger vehicles including service trucks, emergency vehicles and transit buses.
- Incorporate on-street parking on one or both sides of the street to relieve pressure on surface parking lots and provide opportunity for short-term and accessible parking near specific buildings.
- Incorporate a generous sidewalk on either side of the streetscape and tree planting, as well as seating.

Plaza Streets

Plaza streets include the eastern entrance route from West 5th Street and the main entrance drive from Fennell Avenue West-Mohawk Way. Plaza streets have the important role of drawing people into the campus and providing a special moment of pride. They focus one's eye towards a unique feature or space within the campus that relates to Mohawk's identity and sense of place.

Recommendations:

- Plaza streets should feel like a processional drive toward an important and special place. Incorporate a linear alignment of feature trees and special paving to support this notion.
- Incorporate a roll curb into the street edge and blend paving with the surrounding plaza design.
- Incorporate traffic slowing features, such as the paving treatment and attractive bollards.

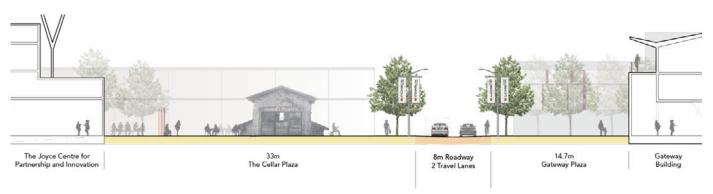
Fennell Avenue West and West 5th Streetscape Enhancements

The streetscapes of Fennell Avenue West and West 5th Street are envisioned to enhance primarily in the design of the public realm and the series of adjoining open spaces that together create a welcoming place for the community. The design of the streets themselves will follow the City of Hamilton's direction to create the character of an Urban Avenue and to incorporate cycling opportunities and accommodate transit stops with bus amenities.

The streetscapes on the campus side will incorporate cycling lanes, enhanced landscaping and generous and comfortable pedestrian sidewalks. At particular moments along the streetscapes, special places will be revealed through open connections and view corridors to invite the community in and conversely the campus's peripheral open spaces will be designed to connect back into the streetscape, unified by in paving and materials palettes. Seating and other amenities should be incorporated into the design to provide opportunities for pause and socializing.



Section-Elevation A-A': Fennell Avenue West, looking west



Section-Elevation B-B': Roadway demonstrates typical plaza streets



Section-Elevation Location Key Plan

Juravinski Drive

Juravinski Drive is the gateway street for the North Lands. It is intended to be a meandering scenic drive nestled in the forest landscape, evoking mystery along its route and reveal of a historic landmark further ahead-namely Century Manor. Formal trees give it the character of a processional allée and sidewalks line both sides of the street to support pedestrian connectivity towards the feature building and botanic gardens.

Drop-off drives

- Drop-off zones are located at key entrances to the campus buildings.
- Prioritize pedestrian safety and signal a slowdown in movement.
- Design the drives as one-way routes and accommodate two vehicle widths-one for travel and a second one for stopping and short-term parking.
- Incorporate signage to discourage idling.
- Consider door swing space and the crossing of pedestrian flows in the design of the public realm.

6.4.3 PEDESTRIAN CIRCULATION

Pedestrian connectivity is improved throughout the campus environment, with a primary focus on safety, comfort, accessibility and quality. East-west and north-south campus spines are established with additions of new internal and external open spaces and connecting corridors, linking into the wider network of paths and trails through forest landscapes, across open spaces and along animated streetscapes.

The east-west spine aligns with a grand entrance plaza and atrium lobby, across the C Wing corridor, alongside the theatre and back outside through new corridors. The connection continues through the community gardens and Central Plaza, or on the internal equivalent through the E Wing and finally across the Athletic Centre or alongside it on the exterior.

The north-south spine aligns with two key entrances into the campus and a main heart. The connection is primarily internal, with an option to walk externally alongside H Wing. The spine connects through the hub of student activities and services, down towards the beautiful orchard and forest landscape beyond.

The greater pedestrian network is enriched with a multitude of alternative paths and connections that cater to desire lines and shortcuts through the open landscape. Wayfinding is simplified with plenty of visual connections between internal and external environments through improved transparency and permeability of all building

façades facing the public realm. The internal paths and streets are further connected to the wider peripheral multi-use pathway system, which features an ecological and interpretive trail on the south and west sides up through the North Lands and with exercise stations throughout. The eastern entrance and Fennell Avenue West campus edges are defined by an animated streetscape public realm dotted with a series of unique landscape features to discover along the way.

Considering safety as a priority, new pathways through the parking lots have been included to connect to the residence building and new building further west. Service loading areas are also hidden from view and mitigate pedestrian conflict zones with redesigned sidewalks and marked crossings.





Pedestrian Circulation Network

6.4.4 BICYCLE CIRCULATION

The cycling network is completed and connected throughout the campus and into the neighbourhood. The overall system comprises of a mix of typologies, including shared streets with vehicles, dedicated off-street bike lanes along Fennell Avenue West and West 5th Street and multi-use trails shared with pedestrians along the forested periphery of the campus on the south and west sides and throughout the North Lands. The public realm is also outfitted with a variety of complementary amenities to promote cycling as a commuting option, in an effort to reduce vehicular parking needs and contribute to a more sustainable campus environment, as well as for the health of individuals. (Reference general policies on cycling network for details on amenity types, signage and wayfinding requirements.)

- The incorporation in the public realm of a large covered bike parking area to accommodate a greater student and staff population. The location should be near a main front entrance, but away from the key views and pedestrian flow towards it.
- Connect all multi-use trails into the escarpment trail system and work with the City of Hamilton to expand route options and provide wayfinding signage towards the College along the routes.



Bicycle Circulation Network

6.4.5 TRANSIT CIRCULATION

Transit circulation is expanded within and around the campus context as the College works with the City of Hamilton to increase opportunities. A future BRT stop is planned for the northeast corner of Fennell Avenue West and West 5th Street, which will bring a greater flow of commuters into the campus at the gateway moment. The regular bus route continues to travel through the Transit Hub on the opposite gateway corner around the Indigenous Garden. A new gateway building offers a comfortable flowthrough route for BRT commuters and waiting area for the transit hub as an additional option to waiting at bus shelters. The ease of access and shorter walking distances, in particular during colder weather, will encourage greater use of the transit system.

- All general policies apply relative to supplying shelters and transit amenities for user comfort and safety.
- Provide additional signage to discourage idling of buses.
- Provide safe and wide crossings at the Transit Hub to accommodate a greater flow of pedestrian traffic.



Transit Circulation Network

6.4.6 ACCESS AND SERVICING

The primary route for service vehicles and access points to loading zones are concentrated along Governors Boulevard, with a smaller loop off of Fennell Avenue West circling the residence building. A large proportion of buildings are serviced from a dedicated centralized location below ground in the C Wing building and new Building 2, to support efficiencies and reduce the number of exterior loading zones. There are two access points for service vehicles, one on either side of the southern front entry orchards.

Loading zones are covered and the front entrance façades are designed to blend with the rest of the building wall for a more attractive campus environment. Security and safety at access points are of utmost priority.

- The flow of service vehicles should enter primarily from West 5th Street, and the two entrances from Fennell Avenue West used sparingly.
- Incorporate safe pedestrian crossings at loading zones as extensions of the sidewalk.
- As much as possible, connect all building servicing to the centralized service area as one consolidated system.
- Design loading doors and their façades to contribute to, rather than detract from, the appeal of the campus and sense of place.



Access and Servicing

6.4.7 PARKING AND TDM

The Concept Plan emphasizes a new parking strategy for Fennell Campus that provides the opportunity to make better use of valuable campus lands and enhance the edges and face of the campus to the community. The strategy focuses strongly on implementing TDM principles to promote commuting via alternative transportation modes and reducing vehicle numbers through shared use programs and incentives. It is also anticipated that future travel modes such as the autonomous vehicle will further reduce parking demand, providing new opportunities for an enhanced public realm.

Surface parking lots are concentrated on the western side of campus, away from the public face along Fennell Avenue West and edged with forest landscape and attractive streetscapes. Landscaping and sidewalks throughout also redefine and enrich the environment through the lots. Furthermore, there are two smaller parking lots at the southern entrance from West 5th Avenue, reserved for accessible spots, visitor parking and for the convenience of car shares as an incentive. They also serve the community during evenings and weekends for access to the trail system, exploration of the campus and closer access to the community gardens and event spaces.



Parking

The plan also integrates on-street parking on existing and new streets to minimize the visual impact of entire lots. On-street parking provides more direct access to buildings and opportunity for short-term parking and better efficiencies and it acts as an additional safety measure for the pedestrian on the streetscape. The structure of the plan does allow for some of the parking spots to transfer below grade when new buildings get constructed, if configuration and feasibility allow for it. This is to be determined on a case-by-case basis.

- Develop a strategy for implementation of TDM principles and promotion of alternative transportation modes to reduce parking demand.
- Integrate sidewalks in the east-west direction throughout the western parking lots, for all areas to have a direct and continuous, safe path of travel to the campus.
- Provide north-south connections along main connector streets in the form of sidewalks, with tree planting and additional low hedge planting for enhanced aesthetic appeal and pedestrian experience.
- Integrate bioswales in the surface parking lots to mitigate substantial stormwater flow.
- Consider incorporating photovoltaics into parking lots in the short term, to contribute to a net-zero campus environment.
- Explore underground parking opportunities for new builds.



6.5 SUSTAINABILITY **FRAMEWORK**

6.5.1 SUSTAINABILITY INITIATIVES

The Fennell Campus has a rich set of opportunities towards the building of a net zero campus environment. It includes the following initiatives as part of a comprehensive strategy:

- Preservation of the Niagara Escarpment forest canopy and extension of the tree canopy across other parts of the campus to increase natural capital.
- Opportunities for food production including two large orchard plantings and a community garden dedicated to a combination of edible, medicinal and pollinator plants, contributing to food sustainability and biodiversity.

- Incorporation of bioswales with strategic plantings across surface parking lots to capture and treat stormwater.
- The opportunity to provide geothermal fields under parking areas.
- Green roof opportunities on all buildings subject to a structural review case by case, increasing green capital and attracting pollinating insects and birds.
- Implementation of programs towards TDM, including dedicated parking lots for car-share programs.
- Incorporation of photovoltaic carports within surface parking lots.



7.0 STONEY CREEK CAMPUS MASTER PLAN

7.1 CAMPUS DESIGN CONCEPT

The Stoney Creek Campus Concept Plan reflects a more complete campus environment featuring new buildings fronting the streets and framing a variety of new open spaces that offer places to linger, socialize, study, learn and recreate. A large flexible central plaza space defines the campus heart and functions as an outdoor classroom, as a college and community destination to host events and to showcase programming. As well, it is a place that fosters innovation and encourages the engagement between campus community and the surrounding community. It is an environment that inspires students to stay beyond classroom hours and for the community to enjoy as a destination year-round.

The new buildings and enhanced landscapes support a welcoming front door to the campus and greater exposure to the street. The streets are enhanced so they are more pedestrian-oriented and improve the connectivity throughout the campus and to the neighbourhoods. The Concept Plan further supports and incorporates sustainable initiatives, creating an attractive compact, pedestrian-oriented environment with new amenities, academic program space, open spaces and improved multi-modal access.





7.1.1 CONCEPT PLAN

BUILT FORM:

1 to 3 Future Buildings (New Bld.)

4 to 5 Future Expansions (B.E)

PUBLIC REALM:

(A) Gateway Plaza & Gardens

B Demonstration Plaza & Courtyards

C Commons

(D) Sassafras Forest

OTHER:

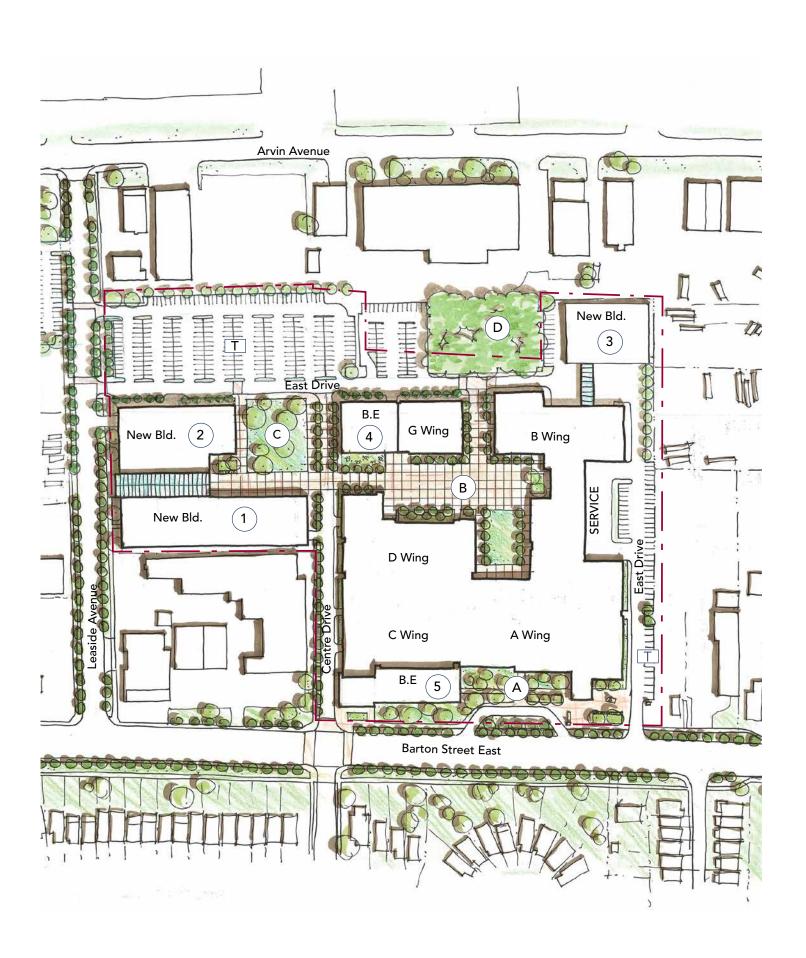
— Property Line

Surface Parking





Rendered view of the heart of campus, looking westward towards new Buildings 1 and 2.



7.2 BUILT FORM FRAMEWORK

7.2.1 APPROACH AND STRUCTURE

The approach to the built form structure at the Stoney Creek campus is to create a stronger street frontage and campus presence along Leaside Avenue and Barton Street East and to define a series of new central open spaces internal to the campus. New buildings and additions help frame the open spaces and provide shelter and views onto them. Furthermore, new gateways into the campus are strengthened with signature architectural details and building features that speak to the identity of the campus and the College.

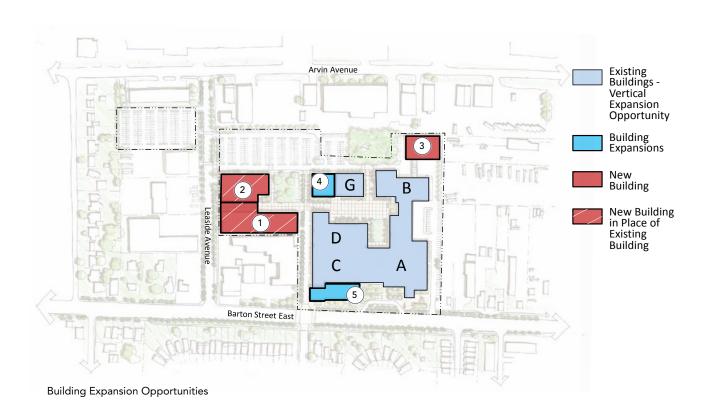
The concept incorporates vertical growth on new, as well as existing, buildings subject to structural review, but the opportunity is constrained by program activities at the campus that require at grade access and heavy load bearing floors.

7.2.2 NEW BUILD

The campus' built form framework incorporates three new building structures, two of them replacing Wings E and F, which would be demolished, as well as two building additions—one onto C Wing and another onto G Wing.

Buildings 1 and 2

New Buildings 1 and 2 are an opportunity to improve and re-organize the internal workings of E and F Wings to gain operational and space efficiencies, as well as create a new welcoming face to the community along the Leaside Avenue streetscape. New buildings are also reconfigured to better respond to and frame the open space structure: a longer Building 1 structure reinforces the strong east-west pedestrian spine and views towards the central open plaza, while shorter Building 2 offers relief for an open green space and better connections towards the parking lots. It also creates an improved softer edge to the north end of campus.



Recommendations:

- Design building façades along Leaside Avenue as transparent and permeable, with enticing and animated activities in their internal spaces. Consider architectural articulation and detailing that speak to the street and relate to the industrial character of the area.
- Design the eastern façades also as transparent faces that address and connect to the open spaces and streetscapes.
- Design the southern face of Building 1 to respond to the close proximity of the neighbouring industrial building. Consider that side of the building as an opportunity for back of house amenities and concentrate window views into the public realm towards the other three faces of the building.
- The remaining building façades (north side of Building 2 and partial north side of Building 1) should also consider a transparent façade for a better relationship with the public realm, but if enclosed walls are required for structural or program-related reasons, articulate the exterior architecture to provide interest along those façades for an improved pedestrian experience.
- Incorporate a connecting atrium component in the design of the buildings that will bridge them together and offer a protected and comfortable, as well as bright, internal connection towards the interior of the campus grounds.

Design the atrium to be open to the public with views into the classroom and workshop spaces for an animated and enriched experience along the passage. Incorporate informal seating and gathering spaces to respond to the need for more social spaces across campus.

Building 3

The new Building 3 is proposed north of the B Wing to accommodate increased Motive Power programs and other uses. Its placement along the main service vehicle route with ample hardscape area in the front allows for ease of access and manoeuvrability for specific vehicles required for program purposes.

- Design the building with a transparent front facing the street as well as the forest to the west, to take advantage of views and to showcase learning inside.
- Consider incorporating a bridge connection to B Wing, as well as safe at-grade external access between the two buildings.
- Design the building with sensitivity to the neighbouring properties.

Building Addition 4

• The addition onto G Wing doubles the building's current size. The placement and massing help define the central open space as well as a stronger edge to the internal campus streetscape and further still to the common to the east. The specific location of the building at the intersection of two internal campus streets and on an angle with a key view corridor into the campus brings opportunity for a real landmark design with increased height.

Recommendations:

- Design the building addition with sensitivity to the G Wing building face being enclosed.
- Design all other façades to respond to the external public realm and connect visually to the different characters. The southern and western façades should have the greatest transparency and animation.
- If incorporating a tower component into the building, conduct a shadow study and design accordingly to minimize shadow effects on the western green common and southern garden.
- Provide a permeable north-south pedestrian corridor along the connection between existing G Wing and the appended building addition.

Building Addition 5

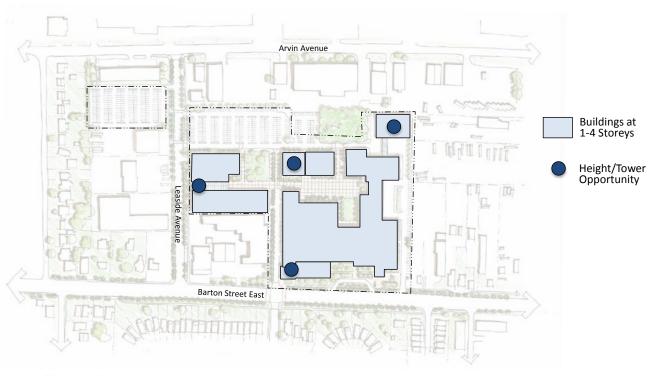
• A new building addition is located at the south-west corner of the core campus facility to bring the building face closer to the street and provide opportunity for iconic architecture to support wayfinding and visibility from the street. It is an opportunity to expand the steam lab and incorporate transparency into the lab, enhancing the pedestrian experience on the streetscape and enticing visitors to enter. Additional height can also be located at this corner and serve as a more substantial landmark that can stand more prominently within the streetscape view corridor.

- Design the addition's façade to draw the eye into the building and provide an internal use that speaks to Mohawk's leadership in innovation and technology relative to the Stoney Creek campus.
- Provide permeability into the building with access doors from both sides, connecting into the larger pedestrian network.
- Consider the building addition as a second gateway into the campus for pedestrians and include attractive internal lobby and social space in response.

7.2.3 HEIGHT OPPORTUNITIES

Height opportunities at Stoney Creek Campus are for architectural features or slim tower moments. They appear at the new front entrance gateways and in the new G Wing addition and are associated with major view corridors into the campus. More specifically, the southwestern corner addition to C Wing and the new atrium between new Buildings 1 and 2 should speak to the identity of Mohawk College and of the Stoney Creek Campus character and signal a special moment in the streetscape. The opportunity in the north is to create a landmark for the north end of campus and taller views into the open space, as well as provide additional space for program expansion or a residence.

Overall, the campus has the opportunity to expand vertically as the need arises-subject to a structural review of existing buildings and up to a maximum permitted four storeys-but the limitation is to the type of facilities required for specific programs offered at this campus, which are more conducive to tall ceilings, ground-floor access for larger vehicles and machines and for heavy load purposes. Vertical expansion could serve for offices and teaching classrooms, as well as additional amenities.



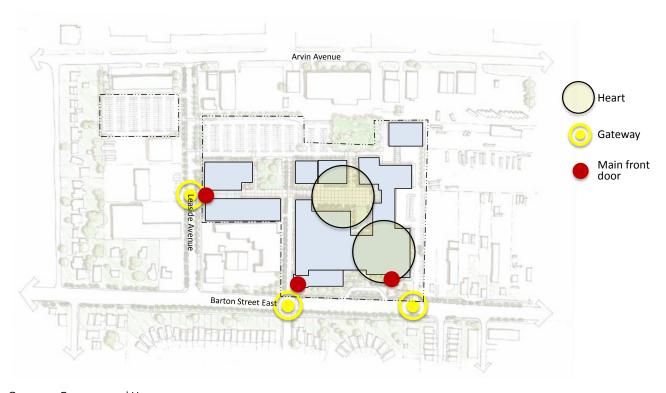
Building Height Opportunities

7.2.4 GATEWAYS, ENTRANCES AND HEARTS

Gateway moments for the Stoney Creek campus are identified along Leaside Avenue and Barton Street East at the intersection with campus streets and at the front entrance to the main building facility. They are proposed as enhanced spaces with iconic landscape features and represented by new building frontages and iconic architecture. Signage can function as public art and be integrated in the gateway public realm. Art can also function as gateway treatments.

There is a clearly defined main front entrance into the campus building interior from Barton Street East and two new "front door" access points are proposed to enhance the overall points of access into the campus and to improve wayfinding. These would feature signature architecture and could be supported with sculpture and feature landscapes. The Leaside Avenue front door is envisioned as a large linear atrium space with a long view corridor to draw the community to the campus interior.

Two big "hearts" are created for the campus, one being the internal grand lobby space that serves as a venue for gatherings of all sizes and types and a second entirely re-imagined external heart, creating increased opportunities for demonstration, learning, gathering and celebration in all seasons. The hearts complement one another in function and potential use and are also connected through pathways and social spaces on the interior.



Gateways, Entrances and Hearts

7.2.5 BUILDING VIEWS AND **FRONTAGES**

Key views from buildings around Stoney Creek are focused on the central plaza space, the green common and the front entrance gardens, deeming those façades as really important. Other key frontages are those that relate to all streetscapes.

- Design key frontages to be transparent and animated for views into buildings as much as outward and to relate to the human scale.
- Consider incorporation of canopies in strategic and most useful locations for protection from weather, as well as heating lamps for winter comfort. Likely places would be alongside the central plaza buildings to accommodate viewing of activities during events and expositions even if it is raining or cold. The front entry near the bus stop location may also be a good opportunity for the comfort of transit users.



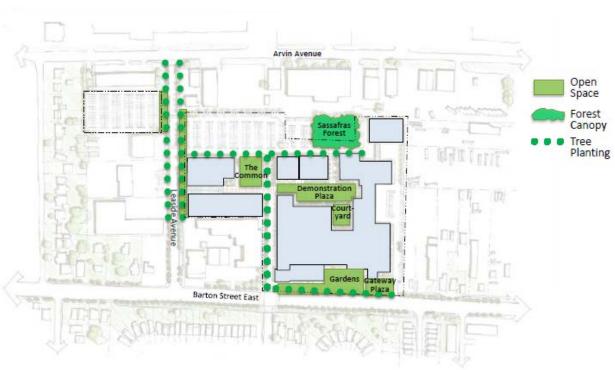
Building Views and Frontages

7.3 OPEN SPACE **FRAMEWORK**

7.3.1 APPROACH AND STRUCTURE

The approach to the open space framework at Stoney Creek is focused around a major structural shift in the public realm to create a compelling and animated central heart to the campus grounds. The heart is further reinforced with smaller open spaces of varying characters to add diversity and interest across the campus and different options for study, repose, socializing and gathering. Enhanced streetscapes that define the campus edges and face to the community, alongside internal paths and streets complete the open space framework and act as the connective tissue across the campus to support a walkable and attractive campus environment.





Open Space Typologies

7.3.2 OPEN SPACE TYPOLOGIES AND CHARACTER

Demonstration Plaza and Courtyard

The central heart of the campus is redefined as a large gathering space for events, ceremony and the community, a place for demonstration and learning and on all other days a place for repose and contemplation and more intimate social interactions. It becomes a real gem within the wider neighbourhood and aims to invite residents and industry-partners in for year-round animation, including evenings and weekends and winter months too. Most of the space is a hardscaped demonstration plaza, with a complementary green courtyard. The space is framed with tree planting, providing relief opportunities during hot summer days and cold windy days. Seating opportunities are embedded throughout as well as other amenities. Building façades are transparent to connect the activity with the internal world and to conversely extend demonstration and learning looking into the buildings from the exterior.

Recommendations:

• Maintain view corridors into the space from west and north entrances.

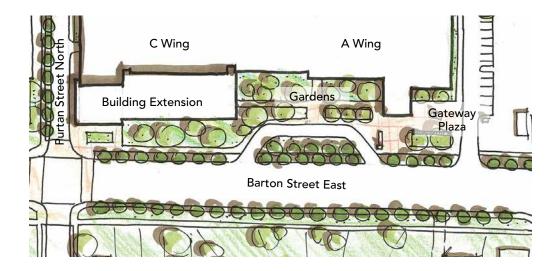
- Choose paving material that supports heavy truck loads to enable demonstration and hands- on learning in the plaza.
- Develop a program to animate the space throughout the seasons and promote community and industry-partner use at different times of day.

The Common

The Common is an open green space intended for passive recreation and flexible use. It can serve as an outdoor classroom space one day and a place to throw a frisbee on another. It is an instant relief from all the hardscape and built form of the industrial lands and parking lots surrounding the campus-a moment of therapy amidst a green setting of tree canopy above and grass below. It is the transitional open space in the public realm as you enter the heart of the campus from parking.

- Maintain the space as a flexible green.
- Provide seating along the edges, facing onto the green space.
- Provide pedestrian pathways on either side of the green as accessible circulation corridors.





Gateway Plaza and Gardens

The primary "front door" to the campus along Barton Street East is supported with a forecourt plaza space and beautiful gardens that feature the grand architecture of the entrance lobby and invite the community to come in and linger. The plaza is enriched with special paving and large planting beds with seating. It is intended to serve as the external counterpart and extension of the internal grand lobby space, increasing the opportunities for events and large gatherings. It also serves to enhance opportunities for identity building and a more welcoming address to the community.

Recommendations:

- Locate plantings and tree canopy strategically to frame views towards the campus' feature entrance and plaza space to emphasize identity and invitation to the community.
- Incorporate visible and attractive signage of Mohawk's name on either end of the gardens and plaza to assist in wayfinding for all commuters driving or riding along Barton Street East.
- Design planting with a diversity of species and incorporate edible plants to support food sustainability as part of the larger net-zero campus strategy.

The Sassafras Forest

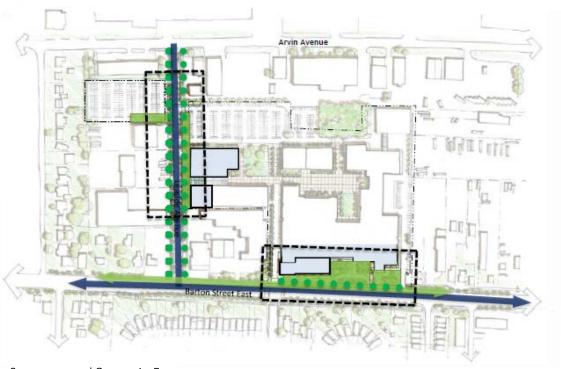
The forest on the north end of campus, partially within the boundary of the campus lands and partially belonging to the neighbour, holds landscape value as it contains a collection of Sassafras trees. There is merit and benefit in maintaining the space as a forest land, in particular as contributing natural capital towards a more sustainable campus, but the opportunity is in propagating the unique Sassafras tree and replacing other tree species of lesser value mixed within it. A maintenance and conservation plan should thereafter be established.

Enhanced Streetscapes and Community Face

The key streetscapes of Barton Street East and Leaside Avenue define the edges of the campus and the face to the community. They present the greatest opportunity for identity building and for attracting the community inwards into the campus. Streetscape enhancements incorporate a green boulevard of tree canopy lining the street edge and a generous sidewalk alongside that connects directly to internal campus paths and streets. It is a comfortable and well-lit environment, supporting walkability around campus.

- Incorporate seating in particular near entrances into the campus and near bus stop locations.
- Incorporate bike parking into the streetscape, ideally entrance doors closest to interior changeroom and shower locations.

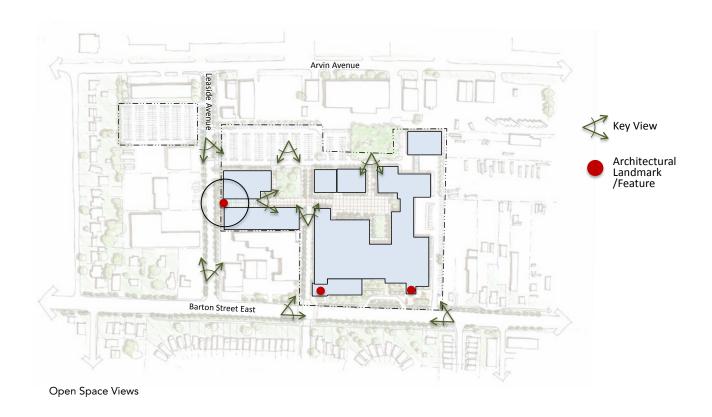
- Consider view corridors into the campus to highlight architectural and landmark features, as well as to provide moments of mystery and reveal.
- Incorporate Mohawk brand and wayfinding signage within long-range views from the street to signal approach to the campus early
- Continue conversations with the City of Hamilton to incorporate crosswalks at all intersections for a safer approach into campus from the neighbourhood and bus stop locations.
- Review cycling route plans with the City of Hamilton and encourage incorporation of a dedicated lane along Barton Street East at a minimum.



Streetscapes and Community Face

7.3.3 OPEN SPACE VIEWS

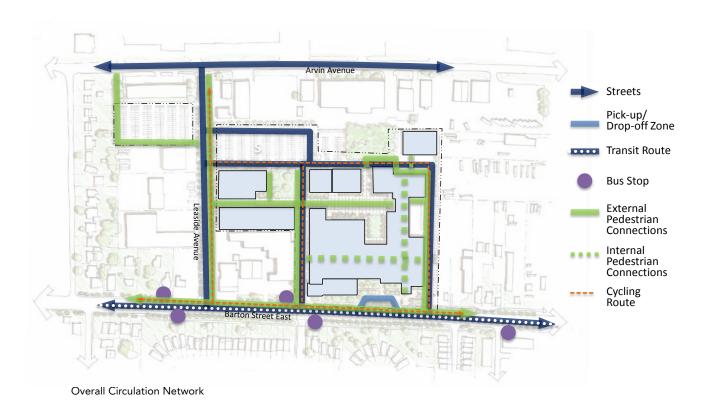
Highlighting and framing view corridors across campus exposes to the community the unique identity of the Stoney Creek Campus as a technical institute leading the way in trades and technology. Particularly important to frame are the views towards the demonstration plaza where a wealth of learning opportunities through events and expositions and outdoor teaching occurs, as well as into the two main entrances from Barton Street East and Leaside Avenue. Key entrances have architectural and sculptural features that are designed to specifically brand an image of the campus.



7.4 MOVEMENT **FRAMEWORK**

7.4.1 APPROACH AND STRUCTURE

The movement framework for the Stoney Creek Campus is structured around reinforcing the community-facing public realm along Barton Street East and Leaside Avenue and providing greater pedestrian permeability into and through the campus. Entrance drives into the campus are transformed into attractive and comfortable pedestrian-oriented connections linking into the transformed heart of the campus where gathering and lingering occurs. Internal paths of travel are connected to new external corridors linking all buildings and open spaces together. The movement framework is further supported with incentives to reduce parking demand through TDM strategies, thereby allowing surface parking to be replaced over time with richer public realm opportunities.



7.4.2 VEHICULAR CIRCULATION AND STREET HIERARCHY

The location of the parking on the north end of campus funnels primary vehicular movement along Leaside Avenue if coming from the west and along the eastern edge of campus if arriving from the east. An internal east-west street alongside the parking connects the two entrance routes. In this way, vehicular movement has an efficient flow along a circuitous route and allows for a rich uninterrupted pedestrian-oriented campus environment at the heart of the site.

This is not to say that vehicles don't have access to that central heart—the hardscaped plaza is designed with appropriate load to support even large trucks—but the purpose for access would be limited to events and teaching opportunities at particular times of the year and to showcase the vehicles that are a part of this campus's identity with a strong program in automotive and technological studies.

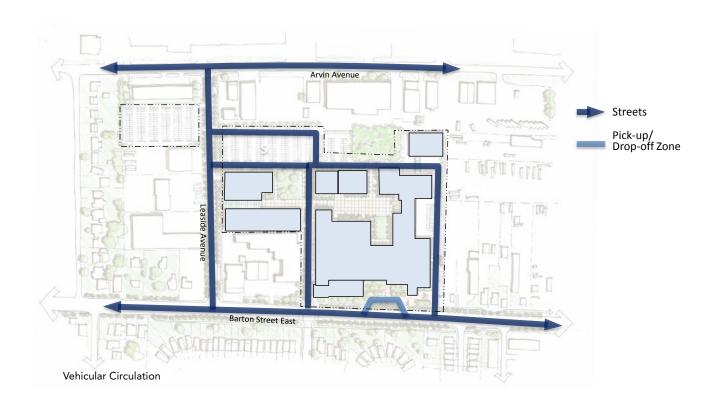
There is also a secondary north-south street internal to the campus that does allow vehicular access if it becomes the preferred choice of entry. However, its character and design are that of a shared street with pedestrians and cyclists, serving a significant flow of transit and cyclist commuters.

Leaside Avenue

Leaside Avenue has two travel lanes, one in each direction. Improvements include tree planting and aesthetically enhanced bioswales that also treat stormwater and a proper sidewalk for pedestrians. Sharrows should also be painted on the street for safer shared cycling use.

Barton Street East

Barton Street East is a wide and fast-moving 5-lane street, with two travel lanes in each direction and a central lane for turning. Proposed enhancements to the street, which would be subjects to negotiations with the City of Hamilton, would include road dieting, reducing traffic speed permitted and incorporating a dedicated



cycling lane on- or off-street. Plans for a signalized intersection and crosswalks at the western entrance into campus are already underway, which will significantly improve safety and connectivity for pedestrians. Enhancements to the public realm on the campus side included in the Campus Master Plan encompass more tree planting and garden plantings, more seating and cycling amenities in particular near the front entrance and a reduced drop-off drive, shifted away from the grand front entrance to make way for a larger and richer public plaza space. There is also the architectural corner addition onto the C Wing building and proposed new signage and public art as landmarks and features in the landscape, to assist in wayfinding and to highlight this particular campus's identity. Transparent façades along all building faces contribute further to improving the face to the community and becoming a welcoming place for all.

Internal Campus Streets

Streets internal to the campus are designed as slow traffic two-lane streets, with additional sidewalks and tree planting where feasible. They are designed to accommodate slow vehicular traffic flow, to allow for safe pedestrian crossing.

The northern street-East Drive-incorporates crosswalks, providing safe pedestrian flow between parking lots and the core campus area. The far eastern street-continuation of East Drivedoubles as a service road and includes short-term and accessible parking on one side. The central campus street-Centre Drive-along the west side of C and D Wings incorporates tree planting in place of parking for a more pleasant pedestrian condition and edge to industrial neighbours. Special paving is integrated into Centre Drive at the north end where it becomes integrated into the central plaza and garden spaces at the heart of campus. This section of the street is also designed to be flush with the plaza grade.



Section-Elevation: Roadway is typical of internal campus streets



Section-Elevation Location Key Plan

7.4.3 PEDESTRIAN CIRCULATION

The pedestrian environment and connectivity across campus is improved with new sidewalks and pathways lined with tree planting and landscaping that provide clear circulation routes and enhance pedestrian safety and comfort. The pedestrian realm is further enhanced with buildings that provide animated and transparent frontages, creating visible connections between the internal and external campus environment. The public realm in the heart of the campus is also transformed into plaza space that is a safe crossroads environment for pedestrians to meander through and travel between buildings.

7.4.4 BICYCLE CIRCULATION

Although the location of Stoney Creek campus makes commuting by bike a limited option, it should still be supported and encouraged to reduce parking demand and promote wellbeing of the community. Support systems include providing key amenities such as bike storage and showers and in conversation with the City of Hamilton incorporating sharrow markings along Leaside Avenue for a shared-street scenario and a dedicated bike lane along Barton Street East to improve cycling safety.

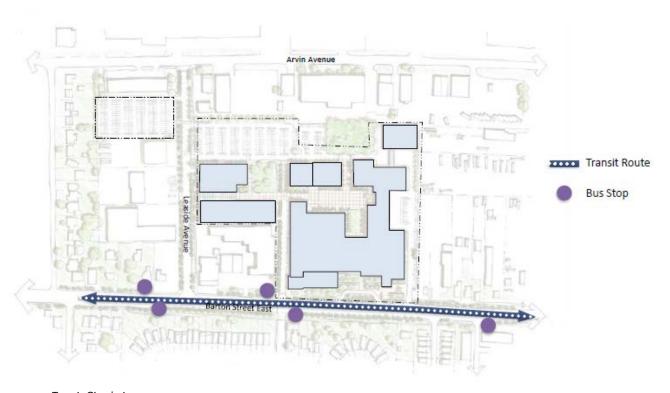
Cycling as a commuting option is currently limited to students and staff who live and/ or work relatively near the campus, but there is opportunity to coordinate with the City of Hamilton to provide a GO Bus stop closer to the campus, within a comfortable cycling distance, if not walking distance. New opportunities may also arise in the future should alternative transit options become available, such as the LRT line.



Pedestrian and Bicycle Circulation

7.4.5 TRANSIT CIRCULATION

Transit routes catering to Stoney Creek campus run along Barton Street East, with a conveniently located bus stop at the front entrance to campus, outfitted with a covered shelter for winter comfort and the option of waiting indoors as well. Efficiencies, frequency of service and better connectivity to the rest of the City of Hamilton should be encouraged through continued conversations with the City of Hamilton. A new crosswalk at the eastern entrance to campus will provide a safe crossing for transit users arriving on the south side of Barton Street East.

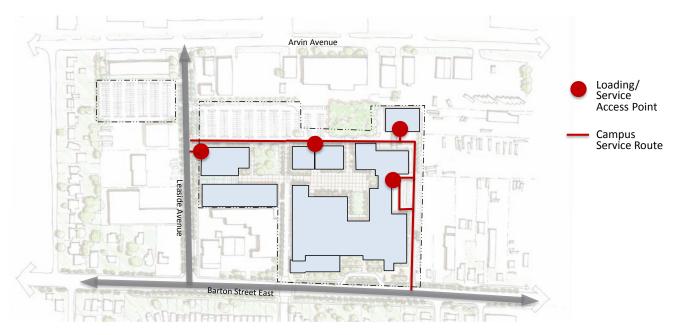


Transit Circulation

7.4.6 SERVICE AND LOADING

The main service entrance into campus is from Barton Street East, along East Drive. Further up the drive is a loading zone at the side of B and A Wings. This loading zone is shifted away from the central open space heart to reduce conflicts between vehicles and pedestrians and to improve the overall condition and opportunities for a richer public realm experience. Service vehicles can exit back to Barton Street East, or travel west towards Leaside Avenue along the north end of campus.

Most buildings on campus are serviced by this one centralized location. New buildings along Leaside Avenue can be accessed from internal campus streets, bypassing the central plaza space.



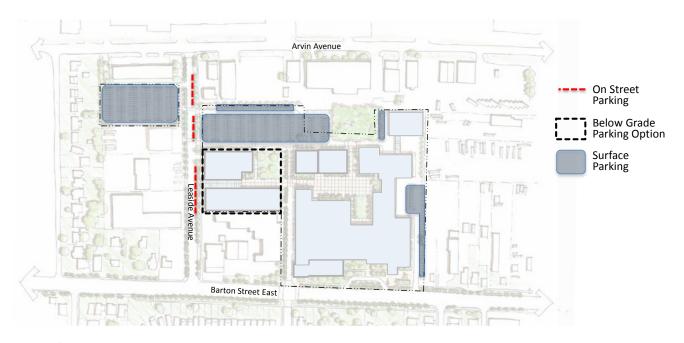
Service and Loading

7.4.7 PARKING AND TDM

The approach to parking on campus is to reduce the overall need for parking as we move into the future of autonomous vehicles and other technologies and make way for more valuable public realm space for socializing, learning and repose. The strategy is to first promote and reinforce alternative transportation options for commuting by improving connections and enhancing the pedestrian public realm, and further implementing programs to reduce parking numbers by promoting car-sharing opportunities and better coordinating class schedules for efficiencies. To accommodate the remaining parking demand, a series of surface parking lots are offered primarily on the north side of campus and across from Leaside Avenue, with a smaller accessible lot for short-term parking along the eastern edge.

It is important to consider the population that commutes to the campus, where they are coming from and what the barriers are to taking an alternative transportation mode, whether it be a timing challenge of arriving straight from work, or the challenge of carrying a heavy load of class materials, or simply the distance and lack of efficient and timely transit service and safe cycling options.

- Continue conversations with the City of Hamilton to improve cycling and transit connections and frequency of bus service.
- Improve the safety of pedestrian crossings towards the campus from neighbourhood trails and transit stops, across Barton Street East and Leaside Avenue.



Parking

- Implement strategies to reduce parking demand.
- Promote car-sharing through incentive programs.
- Promote cycling to campus by providing amenities on campus such as covered bike parking and showers and changerooms.
- Consider a residence on campus to reduce driving needs.
- Consider underground parking alternatives for new buildings and weigh the benefits of future expansion in built form and open space onsite, versus acquiring new land to accommodate growth.

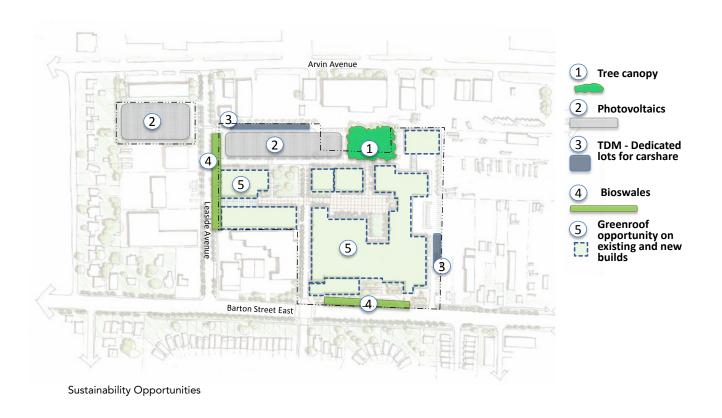
In the long term, surface parking will be phased out as part of a new parking strategy, with the build of a structured parking facility, the integration of below-grade parking for all new buildings, on-street parking and improved transit connections. Surface parking will be maintained in certain locations at the periphery of the campus. The parking strategy involves creating a more pedestrian-oriented environment, while facilitating car-oriented programming needs.

7.5 SUSTAINABILITY **FRAMEWORK**

7.5.1 SUSTAINABILITY INITIATIVES

Stoney Creek Campus presents a variety of opportunities to increase contribution to the College's overall goal of reducing carbon emissions and reaching net zero. Those opportunities are defined as follows:

- Increasing the tree canopy along streetscapes and within public spaces, as well as in the garden spaces at the front of the campus, increasing natural capital.
- Developing green roofs on new buildings and on existing ones wherever the structure permits it.
- Incorporating edible plants in garden spaces and on rooftops.
- Incorporating bioswales and raingardens into the streetscape design to mitigate and treat stormwater runoff.
- Implementing photovoltaics across surface parking lots.
- Applying transit demand management strategies as part of a great goal to reduce surface parking lots.



8.0 IAHS/ MCMASTER CAMPUS MASTER PLAN

8.1 CAMPUS DESIGN CONCEPT

The Campus Master Plan for the Institute for Applied Health Sciences at McMaster University showcases a newly defined and enriched place for study and socializing—a place of true pride for the Mohawk student and staffer and a magnet for the surrounding community.

The Campus Master Plan Concept strengthens Mohawk College's identity in a multi-faceted way, with new signature architecture, diversified landscaping and public art. Wayfinding is also enhanced through unique and visible signage at entrances and gateway moments. Streetscapes and pathways are enriched with tree planting and pockets of specialized gardens and seating spaces.

The Plan outlines a new building extension to IAHS along the west side of the site—an iconic piece of architecture, transparent and permeable, accessible from all sides. A beautiful courtyard complements the building at the heart of the campus, with quality landscaping, seating and lots of flexible space to invite the community to gather together, to celebrate or recreate, learn and innovate, or just enjoy a sunny lunchtime break.

The Concept Plan proposal also increases amenities and services including recreational facilities and food choices to create a more independent and sustainable Mohawk presence, as well as improved teaching spaces and social gathering space.





8.1.1 CONCEPT PLAN



BUILT FORM:

- 1 Future Building Opportunity
- 2 Shared Use Buildings

PUBLIC REALM:

- A Central Courtyard
- B Enhanced Public Realm

OTHER:

- Property Line

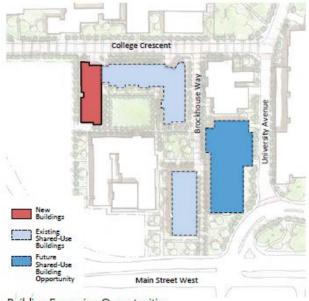
UG Underground Parking Opp.

8.2 BUILT FORM **FRAMEWORK**

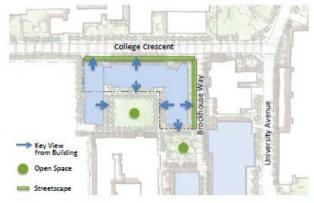
8.2.1 APPROACH, STRUCTURE **AND NEW BUILD**

The approach to the built form framework for Mohawk College on the McMaster Campus is focused primarily on better framing the green courtyard on the site from the west side and providing a stronger and more animated edge condition in place of a parking lot view. This is achieved with a new building structure directly connected to the west facade of the existing structure. It is oriented in a north-south direction to complete a U-shaped frame. The building is intended to provide the additional space needed for academic, research, amenity and social spaces. It also serves as a new gateway opportunity and avenue for showcasing Mohawk's identity within the greater context of another much larger institution. In addition, the built framework recognizes the limitation of the site property and incorporates in its strategy the potential for shared use of McMaster buildings ideally that are located in the vicinity of the IAHS in an existing or a future building.

- Consider the new building as a landmark within the campus and design it as such, using architectural detailing and articulation, additional height and sculptural elements as examples.
- Design all frontages to relate to the typology of the public realm they face onto. All façades should be transparent and in particular the north and east sides should incorporate animation and multiple access points. The western side will need to respond to the new development plan for the transit hub site.
- Design the building to take advantage of views into the courtyard and towards the streetscapes.
- Provide frequent access points along all façades.



Building Expansion Opportunities



Building Views

- Provide north-south permeability through the main building, between the courtyard and College Crescent.
- Design the north side of the interior of the extended building as a largely transparent and open flexible space that welcomes all passersby inside. Extend that transparency into the courtyard from College Crescent. Incorporate an amenity into the space as well.
- Incorporate a rooftop garden into the design of the building.
- Assess the feasibility of incorporating underground parking levels to alleviate space for built form and open space.

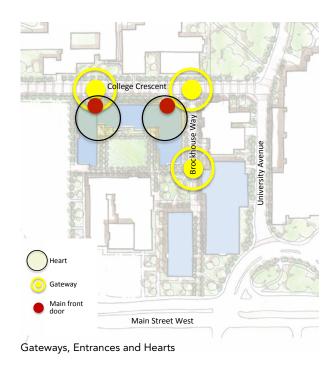
8.2.2 GATEWAYS, ENTRANCES AND HEARTS

Despite the small size of the site, there are in fact multiple gateway moments for the campus and two front doors, making it a very permeable and welcoming place within its greater context. Gateway moments are identified at every corner of the IAHS Building and of its proposed extension. They are the opportunities to feature signature architectural landmarks, complemented with landscape features—plantings or public art where the space permits for it. They should highlight Mohawk's identity as a larger College institution, but also express the sense of place that relates to this specific campus.

There are two main entrances identified into the extended campus building—both along College Crescent where the greatest pedestrian flow occurs. There are also two opportunities to create "hearts" within the campus; one at the north-east entrance around the central open atrium space and the other within the new extension on the north end.

Recommendations:

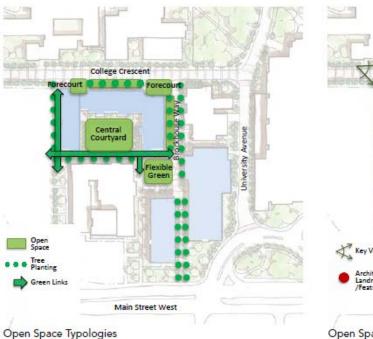
- Reveal campus identity within the hearts of the campus as well as at each identified gateway, with featured signage and art and support these hearts further with wayfinding signage.
- Connect the two hearts within the campus via pedestrian links and view corridors.
- Create a concentration of accessible amenities and social spaces within the hearts.
- Provide wayfinding and signage that is large and clear at each main entrance.
- Provide views into the courtyard and onto the streetscapes from inside the buildings, out.



8.3 OPEN SPACE FRAMEWORK

8.3.1 STRUCTURE AND OPEN SPACE TYPOLOGIES

The open space framework is composed of an enhanced public realm along the College Crescent and Brockhouse Way streetscapes (as outlined in the movement framework), connected with green linkages throughout and an enriched green courtyard in the centre of the site. The courtyard at the heart of the U-shaped building serves as a meeting place-a place for ideas and activities to converge and interact in order to build community and spark innovative thought. It is also intended to invite outdoor learning and teaching, events large and small and, at off times, an opportunity for reflection and repose. In addition, there is great opportunity in creating a functioning greenroof with ecological plantings on the rooftop of the new building extension, in support of biodiversity and increasing green capital and overall public realm space.



College Crescent Main Street West

Open Space Views

Recommendations:

- Design the courtyard as a flexible space for a diversity of activity opportunities.
- Provide ample seating throughout.
- Incorporate trees for shade and shelter, in particular on the periphery of the site, along main pathways and sidewalks.
- Enhance the space with additional low-level plantings, considering species types that contribute to food sustainability and as an educational tool to support the "outdoor classroom" concept.
- Design a greenroof with biodiversity in mind and access for students and staff as a place for reflection and repose, as well as a teaching space.

8.3.2 OPEN SPACE VIEWS

The site is proliferated with multiple view opportunities to frame, direct and celebrate spaces and landmarks, for the purpose of wayfinding, identity and permeability.

- Frame and direct views across open spaces and streetscapes towards the entrances and all gateways.
- Views into the green courtyard space are of utmost importance and must be provided both from inside buildings as well as through the buildings and from all paths on the exterior.
- Utilize linear tree planting and/or low landscaping to help direct the eye towards particular view termini, entrances and public art features.

8.4 MOVEMENT FRAMEWORK

8.4.1 APPROACH AND STRUCTURE

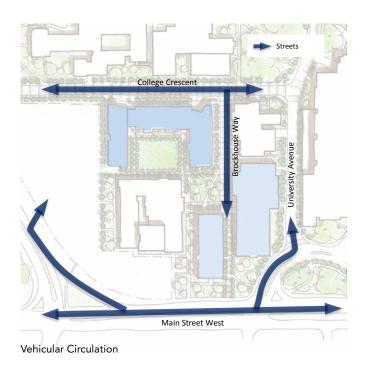
The approach to the movement framework focuses strongly on creating a comfortable and attractive network of pathways and sidewalks in support of the major pedestrian flow around and through the site. Mohawk College campus within the greater McMaster Campus context is sited near the main vehicular and pedestrian entrance streets and paths, as well as directly next to a future transit hub. Visibility, connectivity through the site and drawing people in will be of a great advantage to the College in building its identity and enhancing presence.



There are two streets on the periphery of the site: College Crescent on the north and Brockhouse Way on the east.

College Crescent

College Way is a wider two-lane, two-way street with a reduced speed and serves as the main vehicular access point into the site as well as towards the parking. It is urban in character and employs a number of traffic-calming measures in its design. It is also a main entrance leading into the wider McMaster University Campus, which provides the opportunity for Mohawk College to utilize this street as a moment to brand itself. The public realm along the street edge should be reinforced with public art and landscaping that provide clues into the identity of Mohawk College. The architecture itself would contribute as a key landmark. Lots of seating and a unique design in particular at the two gateway entrances into the College should be employed, to create magnets for visitors to come and dwell in these spaces and to give pride to the College community that studies and works here

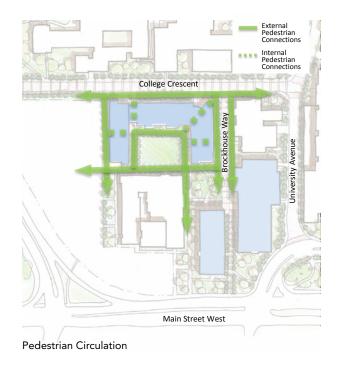


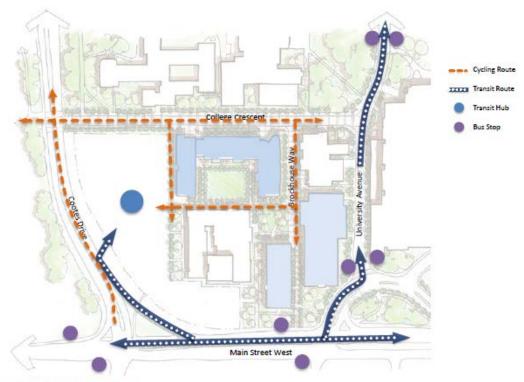
Brockhouse Way

Brockhouse Way runs along the eastern side of the College, presenting a great opportunity for exposure and branding. The College should embrace this opportunity and provide a unique landmark along the street face, either incorporated into the building design with a feature architectural piece or façade treatment, or utilize the outdoor public realm with feature landscaping and public art. The street is highly pedestrianized and unique in character with feature paving and sidewalks and tree planting. It should be enhanced for the pedestrian with more seating and framing of view corridors as well.

8.4.3 PEDESTRIAN CIRCULATION

The IAHS site is highly permeable and anticipates a significant crossroads of students, staff and faculty, as well as many partners and visitors from the community. Its location near the main entrance into the larger McMaster University campus, as well as directly next to the new transit hub, will have people crossing south, north, east and west around the site, as well as on axis across the courtyard and through the IAHS Building. This is a huge opportunity to build on. All desire lines for pedestrian routes through and around the campus must be considered and accommodated in a most comfortable, safe and attractive way. Paying attention to safe paving materials and lining paths with trees for shade and to draw the eye towards view terminus and key entrances and linkages, as well as incorporating a strong maintenance plan for pathways throughout the seasons, will be very important. Providing seating, gardens, and signature landmarks in architecture and in the landscape will also be key to building Mohawk College's identity.





Transit and Bicycle Circulation

8.4.4 ALTERNATIVE TRANSPORT MODES: CYCLING AND TRANSIT

Given the limitation of the campus's size, access via bicycle and transit is subject to the transportation plans of the City of Hamilton and McMaster University. The College's role in improving alternative transportation mode options is to stay in close communication with these partners and influence change towards benefiting proximity and connectivity to the Mohawk campus site. Advantageously, the College's IAHS building and B-Tech classrooms are well served with bus transit stops nearby on Main Street West, GObus stops located northward along College Crescent, safe cycling throughout the campus and bike racks near the entrance at the corner of College Crescent and Brockhouse Way. It is only anticipated to improve when a new transit hub is built right next to the site on the west side. New opportunities would be to incorporate dedicated cycling lanes along Main Street West and more cycling amenities with covered roofs directly on site. The College can further work with the City of Hamilton to improve connectivity options and

more frequent and direct bus service with the Fennell Campus and overcome the challenge of the "up the hill-down the hill" phenomenon, as well as improve programming and class scheduling to reduce the need for movement between the two campuses in general.

8.4.5 SERVICE AND LOADING

With all sides of the campus being important front faces and having exposure to the greater public realm, service and loading must be incorporated cleverly and attractively into the architectural and site design. Service access is provided from College Crescent with loading on the west side of the new building extension. Of utmost importance will be designing the entry and loading zone to be void of conflict with the pedestrian pathway crossing, favouring the pedestrian and providing safety measures in an attractive and integrated way with the functional aspects of a loading zone. For example the entry pavement should be flush with the pedestrian pavement for a combined improved public realm space, using minimalistic design such as bollards to signal to pedestrians and service vehicle alike to slow down.



Parking, Service and Loading

8.4.6 PARKING AND TDM

Parking is currently supplied on a shared lot with McMaster University, just west of the Mohawk campus site. The future plan is for a transit hub with an alternative parking configuration to be determined. The goal of the Mohawk Campus Master Plan is to reduce parking demand with better connectivity through alternative transport modes and programs that promote carshare options, in support of TDM principles. Underground parking should also be considered and studied for feasibility under the new build, to reserve land for a greater public realm and community gathering instead of surface lots. Lastly, it is really important that streetscapes incorporate drop-off zones near entrances in anticipation of future transport modes, such as autonomous vehicles.

8.5 SUSTAINABILITY FRAMEWORK

8.5.1 SUSTAINABILITY INITIATIVES

At IAHS, initiatives for improving sustainability include

- Increasing the tree canopy and lower vegetation along streetscapes and inside the courtyard as natural capital.
- Incorporating a green roof on the new building structure.
- Incorporating edible and pollinator plants into the landscape.
- Implementing photovoltaics within the nearby surface parking lot in the short term, in coordination with McMaster University.
- Applying transit demand management strategies as part of a great goal to reduce parking demand.



PART C: IMPLEMENTATION





9.0 IMPLEMENTATION

9.1 A LIVING DOCUMENT

The Campus Master Plan is intended to be a living document, written and structured to provide Mohawk College with a flexible decision-making framework to accommodate specific opportunities and needs as they emerge over the next 20-year time horizon. It is anticipated that some aspects of the Plan will continue to evolve and change over time but it is critical that through this process, the Plan remains true to its Vision, Principles and Plan Frameworks. Some aspects of the Plan that may evolve include the specific use, height and architecture of individual buildings, or the program of open spaces, for example. Other aspects should not evolve or deviate from this Plan, such as the overall Plan structure for each campus in terms of building frontages in relation to streets and open spaces, major road alignments and connections, or protected view corridors. The buildings and open spaces, for example, are designed to provide a symbiotic relationship and balance between built form and open space, allow for the highest degree of accessibility and walkability, and allow for the most efficient use of campus lands, all of which support the Plan's Vision and Principles.

The Mohawk College Campus Master Plan, in summary, should function as a "Living Document", as follows:

- The Campus Master Plan Report-in its entirety is approved by the Board of Governors and maintained as a development directive through continuity of Plan administration and governance, consistent application and regular updating and review.
- The Plan-The Vision, Principles and Frameworks of the Campus Master Plan Report are approved as College Policy by the Board of Governors.
- Applying the Campus Master Plan-To enable continuity and clear interpretation of the Plan over the years, Facility Services is to ensure that every project is measured against the Campus Master Plan at all stages of the project development and approval process. A Campus Master Plan Implementation Committee should be established as part of the implementation process as the review and governing body for the College.
- Updating the Campus Master Plan-The Plan is structured to respond to changing needs over time and therefore requires periodic updating, which can occur in two ways: through a Plan Amendment Process, or through a General Review Process, either of which is recommended to take place every five years and should include engagement with key stakeholders.

9.2 ADMINISTRATING **AND MONITORING** THE PLAN

The Campus Master Plan plays an important role as a decision-making framework to guide the physical evolution of the campuses over the long term. For this reason, the Campus Master Plan figures prominently in the College's planning processes. It should be referred to throughout all development planning and design processes so that it can effectively influence each project's design in a comprehensive manner.

All decisions regarding the physical form and ongoing management of the campuses should be consistent with the Plan and make reference to it. It should also be widely distributed amongst members of the Board of Governors, staff, faculty, students and members of the broader community.

9.2.1 PLAN GOVERNANCE AND **JURISDICTION**

The Plan will be used by Mohawk College as part of its strategic planning framework to plan and implement different projects in order to enhance and grow the campuses. A Campus Master Plan Implementation Committee will be created that consists of members from the Steering Committee as well as other College Stakeholders.

Ultimate authority over the Plan and its implementation will rest with the Board of Governors who have decision-making authority over major capital projects. Any revisions to the Plan must be undertaken in a transparent and collaborative process that involves the broader Mohawk College community and are subject to the approval of the Board of Governors.

9.2.2 PLAN REVIEW PROCESS

The Plan Frameworks are structured to deliver on creating an attractive and inclusive quality environment, on building campus identity and recognition, on achieving a quality campus lifestyle and on placemaking for the College and community. The Campus Master Plan Review Process is intended to ensure the delivery of these objectives as the Plan is implemented over the long term. The review process should be flexible enough to allow for a comprehensive plan overview in the event that new opportunities or new approaches to the Plan arise that prove to be of a greater benefit to the College in the long term.

Generally, the Plan should be reviewed approximately every five years. There should be at least two review periods during each of the recommended phases of development outlined in Section 9.4 Development Phasing. A stakeholder engagement process should be included in the five-year review period.

9.2.2.1 Project Review

As opportunities present themselves, they should be considered comprehensively in the context of the Campus Master Plan and should be evaluated against the Vision, Principles and Frameworks of the Campus Master Plan.

For any given development project, a preliminary report should outline all possible opportunities to achieve synergies with other development initiatives that are either happening concurrently or are being considered in the future. In this way, design ideas and potential funding can be consolidated toward achieving larger pieces of the vision and to ensure that the project under review is complementary to future built form, open space and circulation opportunities in the same area.

Built form and open space projects should always be considered together. For each new planned building, there should be a plan for the development of an adjacent open space or the enhancement of an adjacent existing open space and their corresponding circulation. The public realm is one of the primary opportunities to build community, integrate the College and develop as a welcoming place. Priority consideration should be given to creating meaningful, useable, sustainable, accessible and connected places on campuses that are well defined by the built form.

9.2.3 CITY PARTNERSHIPS AND **APPROVALS**

While decision-making authority for this Plan rests with the Mohawk College Board of Governors, the City of Hamilton is anticipated to play a key role in assisting the College with the development and enhancement of the campuses. Cooperation between the City and College is of particular importance in regard to the enhancement of the public realm, including connectivity to campus, addressing safe pedestrian access and in the beautification of the city's streetscape interface to each campus. This is particularly important for Fennell Avenue West, West 5th Street, Barton Street East and Leaside Avenue street characters, traffic speeds and signalization and pedestrian crossings. This Plan recognizes that these streets and right-of-ways are ultimately the jurisdiction of public agencies, but the College welcomes the opportunity to discuss how the design and provision of this infrastructure by the City can be aligned with the Vision for the campuses.

As the Plan unfolds, particularly at the onset of development projects, the College will continue to engage and work with the City in the context of project development review and coordination as part of the City's development approval process of campus projects. The City should continue to be a key stakeholder in the development of the Plan and should also be engaged during the five-year review intervals.

9.2.4 AMENDING THE PLAN

If and when, amendments of substance to the Campus Master Plan are required, these should be undertaken in a manner that recognizes the imperative of engaging the broader Mohawk community—students, staff, faculty, the City, Indigenous community leaders and surrounding residents. Revisions to the Plan should be approved by the Board of Governors and by any other regulatory bodies, as required.

9.3 ONGOING **ENGAGEMENT**

As the Plan evolves, it is critical that the College community and stakeholders continue to be involved in conversations about its implementation and updates. This continued engagement and collaboration between the College and internal and external stakeholders is an important aspect of the Plan's successful evolution over time.

Recommendations:

- The College should liaise with the City Planning staff on a regular basis to maintain an ongoing relationship and dialogue regarding the advancement of the Plan and to increase the College's familiarity with the City's Planning Approvals process.
- Regular conversations with the Indigenous community at Mohawk College regarding the evolution of the Plan and the enhancement of Indigenous representation and presence on campus should occur.

9.4 DEVELOPMENT **PHASING**

The Campus Master Plan provides a strategy for the implementation of the Plan over the estimated 20-year time horizon. The Plan reflects the recommended long-term development of Mohawk College's Fennell Campus and Stoney Creek Campus, towards improving buildings, open spaces and circulation in an ongoing and simultaneous approach that is in keeping with the Vision and Guiding Principles.

Early Considerations of the Plan (quick win initiatives that entail no or low capital funding such as open space improvements and reprogramming, circulation and accessibility improvements and internal existing building enhancements) can be implemented over the nearterm and should be prioritized according to the College's strategic objectives. These initiatives can include costefficient projects that can start soon after the Plan is approved and assist in continuing the momentum generated for the Plan.

Short-Term Initiatives may happen over the next five years, focusing on internal building improvements that need a greater amount of capital funding, existing open space enhancements, new building and open space needs and sustainability initiatives to continue to work towards achieving a low carbon campus.

Mid-Term Initiatives, five to 10 years, envisions the continued evolution and development of the campuses in a compact manner, with new buildings and building additions as recommended in the Plan, complemented by new and enhanced interior and exterior open spaces, streets and connections.

The Long-Term Initiatives, 10- to 20-year-plus development time frame, looks at the build-out of the rest of the Campus Master Plan, strengthening key gateways, building out towards the streets and campus edges, creating new street and pathway connections and setting up the campus lands for future development opportunities.

The following section illustrates and outlines the comprehensive phasing of initiatives across the campuses, specifically focusing on Fennell and Stoney Creek Campus. The illustrations reflect a recommended sequencing of initiatives based on best development practices, engagement outcomes and the Fit-to-Function Assessments. That said, as initiatives are dependent on funding resources, the prioritizing and sequencing of the initiatives are to remain flexible and be reviewed on a regular basis as the Plan is implemented.

Phasing opportunities for the IAHS Campus should be in alignment with any development phasing strategies outlined in the 2017 McMaster University Campus Master Plan. Timing for expansion and review of expansion opportunities should be done in collaboration with the University. The College should endeavour to continue collaborative discussions with the University to align initiatives.

9.4.1 EARLY CONSIDERATIONS

The following priority projects are considered immediate opportunities for improvements that do not require excessive groundwork or fiscal commitments. They should take place before the official Short-Term initiatives and are simple yet effective steps towards revitalization. Most of the initiatives identified include landscape interventions that would increase the visibility, permeability and accessibility of the campus; make the campus feel more safe, welcoming and pedestrian friendly; increase the use of the open spaces; and initiate TDM strategies to start shifting the modal split from predominantly singleoccupant vehicular use.

All Campuses

The recommended Early Considerations for all campuses include the following:

- Increase the tree planting on campus in areas that are not identified for development and in accordance with the Open Space Framework.
- Increase the public spaces and amenities within the existing buildings.
- Enhance the internal building circulation corridors-widen and reface, vertical transition, accessibility.
- Improve pedestrian connections across campuses to improve safety and reduce pedestrian/vehicule conflicts.
- Optimize internal building space, increasing utilization and creating ideal proximal relationships.
- Improve visibility within and into campus.
- Initiate strategies to reduce the parking demand.
- Develop a new internal and external signage and wayfinding system and approach that works College-wide.

Fennell Campus

Refurbishment of the Internal Core Campus Social and Amenity Space, Main Circulation **Network and Sustainability Opportunities**

The College should continue to build on the refurbishment of the internal campus core as per the Recommendations brought forward in the Internal Campus Master Plan. The initiatives include

- Relocating functions into more appropriate locations to achieve the character area objectives outlined in Section 6.1.2 The Fennell Campus Neighbourhoods.
- Repurposing and/or reconfiguring space to allow for increased social gathering areas and additional amenities.

- Enhancing existing social and amenity space.
- Enhancing the existing courtyards so that they are attractive, accessible and functioning spaces.
- Incorporate food production planting and landscaping in the courtyards and forest landscape.
- Increasing the building transparency to the outdoors.
- Enhancing the Main Circulation Network, including widening corridors such as the I Wing and C Wing bridge connection, incorporating a transparent pedagogical approach to design, addressing grade change transition points to make them AODA accessible and aligning internal access points to external connections and pathways and to adjacent buildings.
- Creating a new Signage and Wayfinding Strategy for the internal and external campus core.
- Implementing greenroofs on the existing building structures and improving building efficiencies.

Increasing the Campus' Overall Forest Canopy and Trails

The College should identify opportunities throughout the campus to increase the tree canopy, locating trees in keeping with the structure of the Campus Master Plan Open Space Framework. The College should collaborate with the City on streetscape improvements and bike lanes along Fennell Avenue and West 5th Street. Areas for tree enhancements, bioswales and LID stormwater management include

- Parking lots
- Existing Courtyards
- Perimeter landscape
- The North Lands
- Streets

Enhancement of the Existing Fennell Campus Residence Public Realm

The landscape fronting the existing residence should be redesigned to be more welcoming, attractive and pedestrian accessible from Fennell Avenue West. The rear landscape should be redesigned to improve pedestrian circulation. This initiative includes

- Redesigning the front landscape to increase sightlines to the building from the street and to create a useable open space to contribute to the series of distinct open spaces proposed to front Fennell Avenue.
- Creating new pedestrian pathway connections to the building from the street and connect to existing or new building access/egress points.
- Providing new pedestrian pathways that connect to the city sidewalks.
- Collaborating and coordinating with the City on improvements and pedestrianization of the streetscape along Fennell Avenue West.
- Reconfiguring the parking lot so that it is more pedestrian friendly and establishing it as a dedicated lot for carshare (with reduced fees).

Potential North Campus Development

In the event that the North Lands becomes part of the College's ownership, there are a number of early considerations to address including activities related to ensuring that Century Manor is properly secured; and ensuring the site becomes part of the College by adding signage and security measures.

Stoney Creek Campus

Increasing the Campus' Overall Forest Canopy

The College should identify opportunities throughout the campus to increase the tree canopy, locating trees in keeping with the structure of the Campus Master Plan Open Space Framework. Areas for tree enhancement include

- Parking lots.
- Internal streets (including new Centre Drive and East Drive).

Front landscape in the Gateway Plaza and Gardens.

The College should also collaborate with the City on tree planting and landscaping improvements along municipal streets: Leaside Avenue and Barton Street East.

9.4.2 SHORT TERM INITIATIVES (1-5 YEARS)

The following provides an outline of project initiatives to be implemented over the next five years.

Fennell Campus

Refurbishment and Addition to Building B Wing and Adjacent Service Area

The relocation of the Automotive Programs onto the Stoney Creek Campus provides an opportunity to repurpose Building B Wing on the Fennell Campus for new academic programming, to increase the social and amenity space and to hide the servicing areas. This initiative includes

- Developing the building addition at the south end of Building B Wing. This addition can be multi-levels accommodating social and amenity space at grade and program and office space in the upper levels.
- Refurbishing Building B Wing internal spaces.
- Internalizing Building B Wing and C Wing servicing area as part of the B Wing expansion.
- Reducing and reconfiguring Parking Lot P2.

Implementation of the Orchard Courtyard, Gateway Parkette, Forest Enhancements and Parking Lot Reconfiguration

The implementation of the Orchard courtyard and the enhancement of the forest landscape south of Governors Boulevard should be undertaken in conjunction with the expansion of Building B Wing. This initiative includes

• Relocating the data centre to the internal campus and removing the south Visitor's Parking lot.

- Developing the orchard landscape and reconfiguring the access loop road with pedestrian sidewalks and crossings.
- Realigning the east portion of Governors Boulevard northerly to accommodate a consolidated visitor parking and car share area (with reduced fees).
- Tree planting and landscaping of Governors Boulevard and the area south of the reconfigured parking lots.
- Developing the Gateway Parkette at the entry to Governors Boulevard and West 5th Street.

Implementation of Photovoltaics, Bioswales and Pedestrian Pathways on Surface Parking Lots

The Sustainability recommendations envision the rollout of photovoltaics on Fennel Campus' west parking lots over a five-year timeline. This initiative should also be considered for the Stoney Creek surface parking lots at the northerly perimeter of the campus. In addition, the implementation of Bioswales and pedestrian pathways should be considered to increase sustainable measures on the campus and to improve the safety of pedestrian circulation.

Potential North Campus Development

In the event that the North Lands become part of the College's ownership, the repurposing of the buildings and open space should be considered in the short-term phasing of the Campus Master Plan. This initiative includes

- Refurbishing the Century Manor Building.
- Converting Beckfield Building, Trades Building and the Power House for adaptive reuse, providing for flexible program space for the College and the community.
- Enhancing the open field.
- Providing additional tree planting and landscaping.

- Planting new street trees to define the street network.
- Increasing trail connections.
- Improving the road conditions as needed.

Stoney Creek Campus

Relocation of the Automotive Faculty to Stoney Creek

One of the first implementation initiatives includes the relocation and consolidation of the automotive programs to the Stoney Creek Campus. This initiative triggers the redevelopment of Building B Wing on the Fennell Campus. This initiative includes

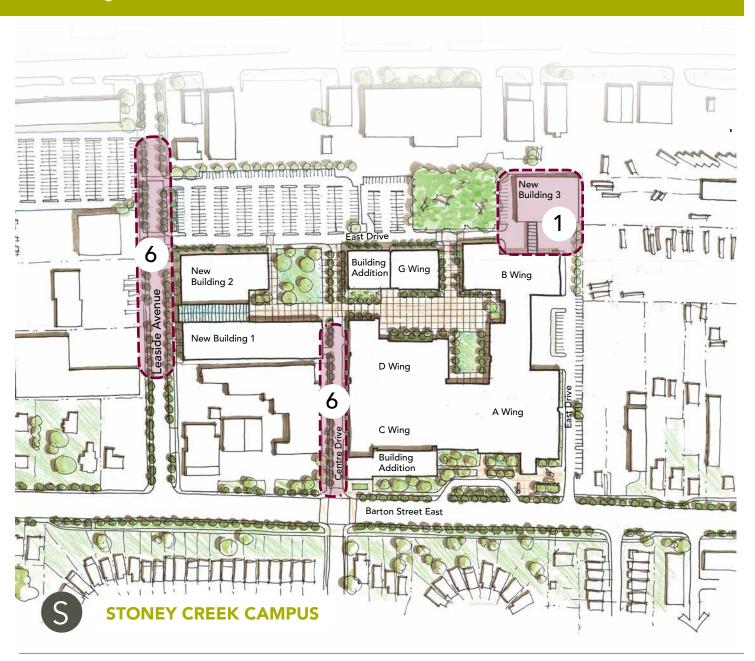
- Developing the new Building 3 on the Stoney Creek Campus to accommodate the new programs and in a location directly adjacent to the existing Automotive Power programs.
- Creating an above-grade connection between the new building and the existing Building B Wing.

Enhancement of Stoney Creek Campus Streets

Enhancement of the internal campus streets should follow or be considered at the same time as the development of the new Automotive building. The initiative is intended to address an increase in student population on campus with the new build, providing more pedestrian-friendly access and circulation through the campus. This initiative includes

- Coordinating with the City of Hamilton to improve the streetscaping along Barton Street East and Leaside Avenue, with street tree planting, sidewalks on both sides of the street and pedestrian crossings at all intersections.
- Undergoing streetscape improvements to the internal campus streets-Centre Drive and East Drive-including continuous sidewalks and pedestrian crosswalks.

Early Considerations and Short-Term Initiatives



Legend



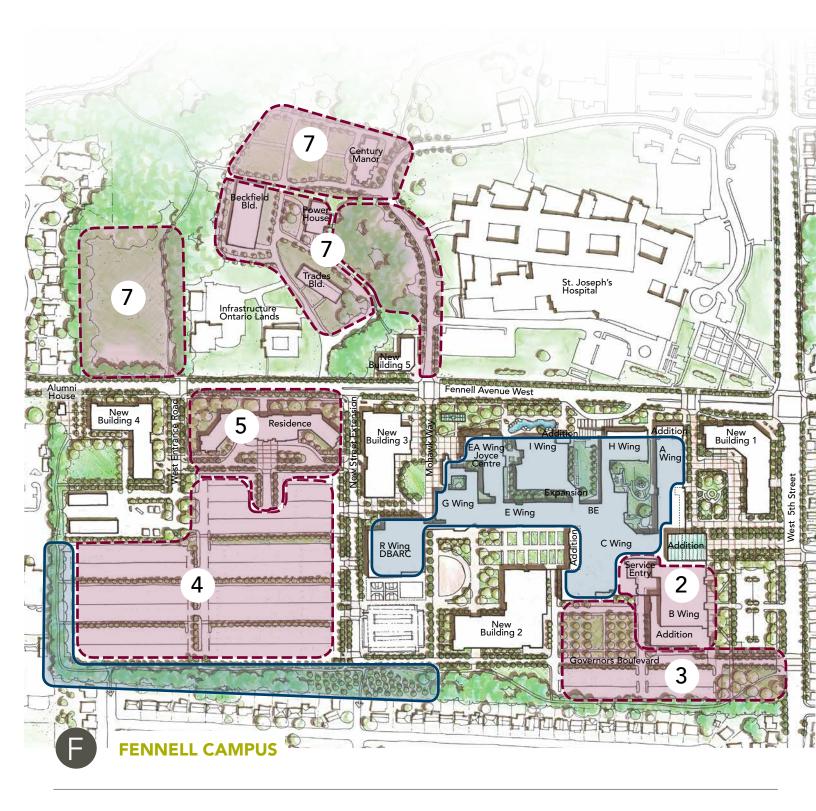
Early Considerations



Short-Term

Initiatives

- S 1. Relocation of the Automotive Faculty to Stoney Creek into New Building 3.
- P 2. Refurbishment and Addition to Building B Wing and Adjacent Service Area.
- **6** 3. Implementation of the Orchard Courtyard, Gateway Parkette, Gorvernors Boulevard realignment and Forest Enhancements.



- **F** 4. Implementation of Photovoltaics, Bioswales and Pedestrian Pathways on Surface Parking Lots.
- **5**. Refurbishment of the Existing Student Residence to Establish a Front Door to Fennell Avenue.
- **S** 6. Enhancement of Stoney Creek Campus Streets.
- **7**. Potential North Campus Development.

9.4.3 MID-TERM INITIATIVES (5-10 YEARS)

The following provides an outline of project initiatives to be implemented over the next five to 10 years.

Fennell Campus

Demolition of the F Wing Building and Portables and Development of the New Building 2, the Enhanced Central Plaza, Roof-**Top Community Gardens and South Forest**

This initiative reflects the development of a new building and open space, the enhancement of a significant existing open space, the refurbishment of the core service area, the realignment of the west side of Governors Boulevard and the enhancement of forest planting. This initiative includes

- Removing the portables.
- Demolishing the F Wing and replacing with a new building.
- Development of Building Addition to Building
- Enhancing the existing courtyard space with increased tree planting, landscaping, art and furnishing.
- Internalizing the core servicing area and covering with a new building expansion.
- Implementing community gardens on the servicing area roof deck.
- Reconfiguring the west side of Governors Boulevard to create a frontage and streetscape for the new building.
- Enhancing tree planting and landscaping to expand the forest edge.

Development of a New Student Residence and **Enhancement of the Alumni House**

A new student residence and the repurposing of the Alumni House should happen concurrently, in addition to the relocation of the service yard and storage sheds. This initiative includes

- Developing a new student residence building fronting Fennell Avenue West.
- Developing a new road access into the campus from Fennell Avenue with streetscaping and crosswalks along Fennell Avenue and internally.
- Implementing two new green spaces, one that defines the west side of the new street as a forested entry into the campus, the other defined by an open lawn for flexible recreational space.
- Repurposing and enhancing the Alumni House and developing a new plaza open space.
- Relocating the service yard to the rear of the student residence with tree planting and landscaping to screen the view into the campus maintenance functions from the student residence building and from the adjacent neighbours.

Enhancement of the "String of Pearls" Open Spaces Fronting Fennell Avenue

The implementation of two new garden spaces and an enhanced existing open space continues the development of a series of distinct open spaces fronting Fennell Avenue. This initiative includes:

• Enhancing the open space fronting the Building H Wing, improving pedestrian circulation and AODA accessibility, and providing new tree planting and landscaping.

- Implementing a feature water body and green space fronting Building I Wing, with enhanced landscaping, art and furnishing.
- Developing the Building Addition to Building
- Implementing a greenspace fronting the Joyce Centre EA Wing with the inclusion of a signature greenhouse.

Stoney Creek Campus

Development of Building Addition to Building G Wing and the Central Demonstration Plaza

The development of a new building as an expansion of Building G Wing should be planned in conjunction with the pedestrianization of the central open space. This initiative includes

- Developing the Building Addition to Building G Wing.
- Redesigning the central parking lot area with enhanced paving, new courtyard spaces and tree planting.

Relocation of the Building A and B Wing **Servicing Access**

The relocation of the service access of Building A and B should be shifted to the east side of the building in order to create a pedestrian-oriented courtyard space. This initiative includes

- Relocating the service access doors to the east side of the building, to be accessed by the east service road.
- Enhancing the east service road with continuous sidewalks adjacent to the building.
- Reconfiguring the parking lot to accommodate servicing on the east side.

9.4.5 LONG-TERM INITIATIVES (10-20+ YEARS)

The following provides an outline of project initiatives to be implemented over the next 10 to 20+ years.

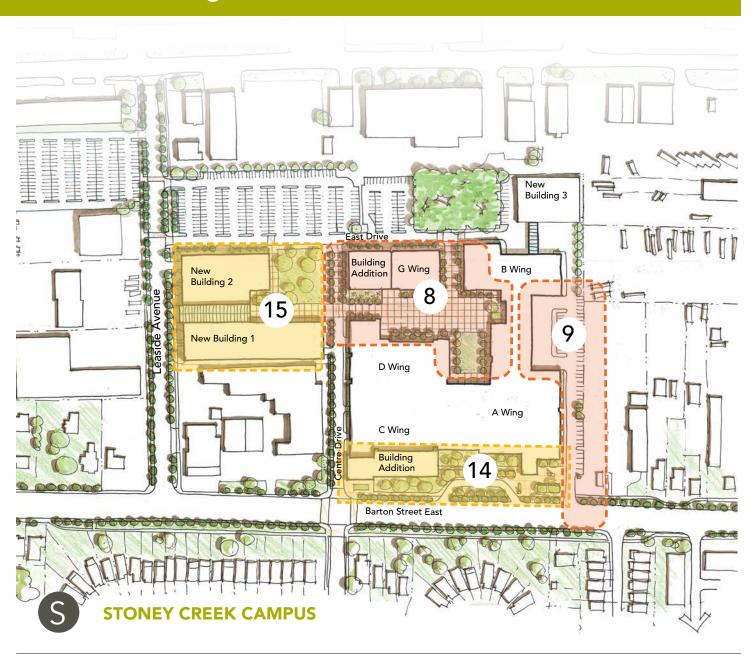
Fennell Campus

Development of the East Campus Area

The build-out of the east campus area is envisioned to happen some time after the redevelopment of Building F Wing. It will be one of the most significant initiatives for the Fennell Campus as it will realize the full development of the Gateway Neighbourhood with a new frontage, presence and identity for the College at the intersection. This initiative includes

- Demolishing the J Wing Building.
- Developing the new gateway Building 1 at the corner of West 5th Street and Fennell Avenue West.
- Refurbishing Building A Wing with new building expansions north and east to create a new distinct entryway to the campus core building. increasing internal public space and enhancing the internal corridors and connections.
- Developing the grand East Plaza with enhanced paving, tree planting, landscaping and art.
- Enhancing the existing transit hub with enhanced paving and landscaping.
- Relocating and configuring the Indigenous Garden as the central feature of the public space.
- Reconfiguring Parking Lot 1 as a dedicated lot for car share (with reduced fees) and new pathways and landscaping.

Mid- and Long-Term Initiatives



Legend



Initiatives

- S 8. Development of Building Addition to G Wing at Stoney Creek and the Central Demonstration Plaza.
- S 9. Relocation of Building A and B Wing Servicing Access.
- 10. Demolition of the F Wing Building and Portables and Development of the New Building 2, the Enhanced Central Plaza and Roof-Top Community Gardens.



- 11. Development of a New Student Residence and Enhancement of the Alumni House.
- 12. Enhancement of the "String of Pearls" Open Spaces Fronting Fennell Avenue.
- 13. Development of the East Campus Area.
- 14. Development of Building Addition to Building C Wing at Stoney Creek and Enhanced Front Landscape.
- S 15. Development of the New Buildings 1 and 2 and Courtyard Open Space.
- F 16. Development of the New Building 3 at Fennell and Cellar Plaza Landscape and New Campus Roads.
- F 17. Potential Campus Development on the North Lands.

Development of the New Buildings 3 and Cellar Plaza Landscape and New Campus Roads

This initiative incorporates the heritage Cellar Building with a new building and plaza, an enhanced pedestrian-oriented street and a new north-south main campus street. This initiative includes

- Developing a new building with an address along Fennell Avenue West.
- Developing a new plaza space with enhanced paving, green spaces, tree planting, pathways and art.
- Pedestrianizing a new street (formerly Governors Boulevard link to Fennell Avenue West) as Mohawk Way including enhanced street paving, pedestrian-scaled lighting, street tree planting and furnishing.
- Extending Governors Boulevard directly north (to align on the east side of the existing student residence) with street tree planting and landscaping, street lighting and furnishing, the integration of LID stormwater management, sidewalks and pedestrian crosswalks.

Potential Campus Development on the North Lands

In the event that the North Lands become part of the College's ownership, a new building is proposed for the south-east corner to create a strong gateway presence at the entryway into the site. This initiative includes

- Developing a signature building at the corner.
- Providing new trail connections from the building to the Escarpment and other buildings.
- Providing new tree planting and landscaping.

Stoney Creek Campus

Development of Buildings Addition to Building C Wing and Enhanced Front Landscape

This initiative can happen in the latter phases of development but can also be positioned in the shorter term if building visible campus identity and presence is considered a priority. This initiative includes

- Expanding the Building C Wing on the southwest corner to increase campus identity, to provide additional social and amenity space, as well as office space.
- Enhancing the existing front landscape with increased pedestrian pathways, tree planting and landscaping, furnishing and art and enhanced paving for the east plaza.

Development of the New Buildings 1 and 2 and **Courtyard Open Space**

One of the final development initiatives in the context of the Campus Master Plan time frame for Stoney Creek includes the development of two new buildings on campus and new open spaces to complete the central plaza. This initiative includes

- Developing New Buildings 1 and 2.
- Expanding the east central plaza space with enhanced paving and landscaping.
- Developing a new green open space with tree planting.
- Enhancing Centre Drive with new street trees and enhanced paving and furnishing.

9.5 STRATEGIC **PARTNERSHIPS**

It is anticipated that certain components of this Plan may be implemented in partnership with private entities. These may range from partnerships with private businesses to provide support-type services for the College (food service, retail operations, housing), to partnerships to develop land and new buildings (comprising potential market-oriented uses).

For the purposes of developing its lands, the College should consider different development strategies including administering development programs through an arms-length development trust that is accountable to the Board of Governors. The full range of development strategies should be closely investigated and considered with advice from qualified professionals. Any development of land will be subject to the Vision, Principles and policies of this Plan.

For any development partnerships the College considers, highest and best use studies, a detailed land use plan, a market feasibility analysis and architectural guidelines should be created to guide development. In addition, the studies outlined under Section 9.6 should be considered to further support and inform any partnerships and/or development opportunities.

9.5.1 HILLFIELD STRATHALLAN COLLEGE

The Campus Master Plan provides opportunities for increased synergies with Hillfield Strathallan College. New open spaces, trail connections and buildings provide opportunities for communal programs and events including sports, graduation, Indigenous education, summer programs and integrated learning. Summer programming for students on the Campus enables the animation of the Campus throughout the year.

9.5.2 ST. JOSEPH'S HOSPITAL

The College should consider expanding partnership opportunities with St. Joseph's Hospital located in close proximity to Fennell Campus. Opportunities include: coordinated programming, community outreach, sharing of internal and external spaces for events, connected trail networks, shared wellness programs and spaces and wider site related sustainability endeavours.

9.5.3 MCMASTER UNIVERSITY

The Campus Master Plan also provides opportunities to increase and diversify student services and amenities, as well as shared teaching and research spaces in coordination with McMaster University. Conversely, there are opportunities for Mohawk students and staff to share spaces in McMaster University facilities and continued collaboration is of utmost importance.

9.6 SUPPORTING **DOCUMENTS**

As part of this Campus Master Plan process, the following studies and processes were undertaken to support the design and development of the Mohawk College Campus Master Plan.

9.6.1 ENGAGEMENT EVENT SUMMARY

The Engagement Summary provides an overview of the robust four-phase engagement process that was used to shape and guide decisions toward the development of the Campus Master Plan.

9.6.2 FIT-TO-FUNCTION **ASSESSMENTS**

The Fit-to-Function Assessments were undertaken to inform and support the development of the Plan and to guide decisions for the long term implementation strategy. The Fit-to-Function

Study analyzed the supply of internal building spaces on the campus and the anticipated space needs for each program, faculty and department. The report draws on information from stakeholder interviews, as well as enrolment statistics and existing space and allocation plans. The study and its conclusions can be found in Appendix B of this report.

9.6.3 SUSTAINABILITY WORKSHOP **SUMMARY**

The Sustainability Workshop was an opportunity to engage with Mohawk's capital, operational and sustainability planning teams to plot a course towards meeting the College's initiative of creating a carbon neutral campus. The outcomes of the workshop resulted in the creation of a low carbon campus roadmap as a tool to use to achieve their goals. The workshop outcomes also guided the refinement of the sustainability recommendations and initiatives brought forward in the Campus Master Planning process.

9.7 RECOMMENDED **STUDIES**

The Campus Master Plan provides the necessary level of design direction and guidance to create a clear framework for future development. To assist in the implementation process, the Campus Master Plan recommends further detailed studies to be undertaken that are necessary in realizing the full Vision of the Plan. Some of these studies will be tailored to specific development applications and as such, should be undertaken at an appropriate time to best support those projects, while others will provide long-term strategic guidance to support the implementation of the Campus Master Plan.

9.7.1 CAMPUS INFRASTRUCTURE **STUDIES**

Further studies to examine the infrastructure of the campuses from structural, mechanical and electrical perspectives are recommended, assessing roof loads for opportunities to build vertically or implement greenroofs.

9.7.2 TRANSPORTATION ANALYSIS **REPORT**

A report to examine mode share, circulation, traffic volumes, parking supply, transit ridership, cycling facilities and other components of the campus movement system will inform future parking demand, identify opportunities through development for greater multi-modal transportation integration and alignment and provide analysis to support efficient operation of new and existing roads. This report should be structured around a highly collaborative engagement process with the City of Hamilton especially as it pertains to identifying the best opportunities to service the College via transit and the future of the BRT.

9.7.3 UTILITIES ANALYSIS REPORT/ INFRASTRUCTURE PLAN

Assessing the functional servicing capacity of existing infrastructure will help to inform the analysis of the feasibility of new development and identify potential infrastructure improvements. This can be complemented with an Infrastructure Plan that identifies improvements required to support the continued operation and expansion of the campus, along with appropriate phasing.

9.7.4 OPEN SPACE MASTER PLAN AND PROGRAMMING

An Open Space Master Plan builds on the structure and recommendations of the Plan's Open Space Framework and provides a greater level on the design of each of the proposed open spaces, along with suggested design improvements to enhance or re-purpose existing spaces and to support increased use and greater connectivity and visibility. It is recommended that this study also examine programming strategies to promote efficient use of open spaces, as well as opportunities to increase community and yearround use.

9.7.5 WAYFINDING AND SIGNAGE **STRATEGY**

This document can provide strategies to improve campus legibility and identity, facilitate connectivity and access and foster a greater sense of place through cohesive signage and campus mapping.

9.7.6 MARKET FEASIBILITY AND **ECONOMIC ANALYSIS**

In support of development opportunities, financial Pro forma analysis should be undertaken, including analyzing the market absorption rate of potential uses on each campus (retail, residential and office).



APPENDICES



APPENDIX A: ENGAGEMENT EVENTS SUMMARY



A1 ENGAGEMENT EVENTS TIMELINE

PHASE 1 0 0 2018

STAKEHOLDER INTERVIEWS

STUDENT POP-UPS (AT ALL CAMPUSES)

BOG KICK-OFF

STEERING COMMITTEE WORKSHOP 1

STUDENT ONLINE SURVEY

STAKEHOLDER WORKSHOP 1

CORPORATE SERVICES WORKSHOP

BOG WORKSHOP 1

STAFF/FACULTY ONLINE SURVEY

APRIL 2, 4, 11

APRIL 4, 11

APRIL 11

APRIL 17

APRIL 27-MAY 15

MAY 2

MAY 3

MAY 4

MAY 30-JUNE 15

PHASE 2 0

STAKEHOLDER WORKSHOP 2

STAKEHOLDER INTERVIEWS

OPEN HOUSE 1 AT STONEY CREEK CAMPUS

OPEN HOUSE 1 AT FENNEL CAMPUS

STAFF AND FACULTY POP-UPS

PAC ONLINE SURVEY

STEERING COMMITTEE WORKSHOP 2

JUNE 20

JULY 12, 17

JULY 12

JULY 17

JULY 16-18

AUGUST 1-15

AUGUST 21

PHASE 3 O

STEERING COMMITTEE WORKSHOP 3

BOG WORKSHOP 2

SUSTAINABILITY WORKSHOP

STAKEHOLDER INTERVIEWS

STAFF AND FACULTY POP-UPS (AT ALL CAMPUSES)

OPEN HOUSE 2 AT STONEY CREEK CAMPUS

OPEN HOUSE 2 AT FENNELL CAMPUS

SEPTEMBER 25

OCTOBER 10

OCTOBER 16

OCTOBER 17, 19, 29

OCTOBER 18

NOVEMBER 21

NOVEMBER 27

PHASE 4 0+

FINAL PRESENTATION TO THE BOG

TOWN HALL FOR STAFF AND FACULTY

FINAL PRESENTATION TO STRATEGIC PARTNERS

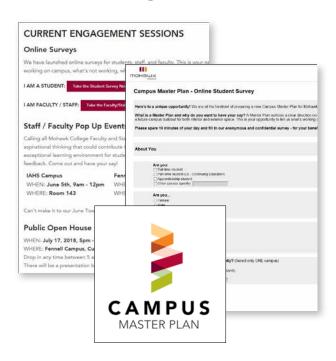
2019

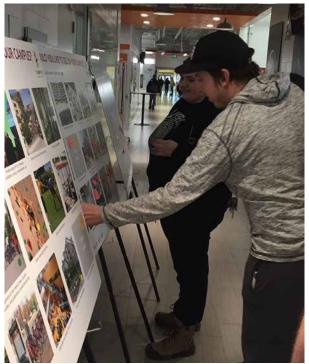
FEBRUARY 13

APRIL 25

APRIL/MAY

A2 ENGAGEMENT EVENTS





Student Pop-ups during Phase 1 (April 11, 2018)

PROJECT WEBSITE AND BRAND

A project website was created at the outset of the Campus Master Plan process, working together with the College's Communications Team. Branding was created specifically for the study with the goal of improving accessibility to the project and increasing awareness.

The objectives of the website were to:

- Inform on the background, purpose, objectives and process of the Campus Master Plan;
- Provide links to relevant background documents, studies and reports;
- Inform on how to participate in the process;
- Stimulate thinking about the future of the Plan area by providing information on best practices from elsewhere;
- Advertise engagement events, their objectives and expected outcomes;

- Disseminate outcomes of public engagement and update on progress of the project; and
- Provide contact information of an individual with whom people may be able to communicate.

PHASE 1 ENGAGEMENT

The first phase of the project kick-started the engagement process with the following events:

- A series of internal and external stakeholder interviews. This was a venue where candid thoughts and ideas were shared on what is working on campus and what are some key challenges. Any initiatives and studies that were being conducted concurrently were shared with the Project Team to inform the Campus Master Plan.
- Student pop-up events at each campus. This was an informal panel display for all passersby to interact with. Participants had an opportunity to place sticker dots and



Phase 1 Stakeholder Workshop 1 (May 2, 2018)



- Separate online surveys for both students and staff/faculty. The surveys provided an opportunity to share a whole set of ideas on favourite and least favourite places and spaces and other elements of the physical environment at each campus.
- A series of workshop sessions for stakeholders, the College Community, CMP Steering Committee, Board of Governors and the Corporate Services Team.

Workshops were between one and three hours in length, organized and facilitated by the CMP Project Team. The general format involved an introductory presentation that outlined where we were in the process, what we had heard to date and new work under development. This followed with a working session in smaller groups where participants



Phase 1 Corporate Services Workshop (May 3, 2018)

had a chance to engage in conversations, debate ideas put forward, share new ideas and "get their hands dirty" in the process.

We heard from hundreds of voices in this first phase of work and the input gathered was invaluable. Input was received from both the user perspective as well as an outside perspective. The information gathered on big ideas and opportunities and constraints was reviewed and synthesized.

Outcomes from Phase 1 included

- An overall Vision and Guiding Principles for the Campus Master Plan; and
- A series of Design Directions for both individual campuses, as well overall for all campuses of Mohawk College. These can be found in Section 3.2 of this report.



Phase 2 Stakeholder Workshop 2 (June 20, 2018)

PHASE 2 ENGAGEMENT

Phase 2 of the project process began with a review of the Design Directions put forth in Phase 1, to inform the development of Concept Plans for each campus. Draft Concept Plans were then taken out to the public and stakeholders for a critical review and workshop discussions. There was also another opportunity to review the Vision and Principles in more detail, against the draft Plans.

Engagement events included

- Staff and faculty pop-up events. A second round of pop-up displays of interactive panels were held at each campus to update the public on phase 1 outcomes. All were invited to comment on the Vision, Principles and draft Concept Plans displayed, using sticky notes and sticker dots.
- A workshop with key stakeholders and the CMP Steering Committee. This workshop followed a similar format as previous workshops, but with a focus on developing Concept Plans for each campus. The main objective for participants was to review

- draft Concept Plans prepared in advance of the workshop, alongside a series of design frameworks—built form, open space, circulation, parking and sustainability—against the project goals, Vision and Design Directions put forth earlier in the process.
- in-person moment where the conversation was opened up to the broader community to inform them of the Campus Master Plan project process and where we are to date. It was also a moment to provide capacity building as well as open the floor for comments and fresh ideas from a new perspective. A series of interactive panels were displayed across the room and a formal presentation provided by the Consultant Team.
- An online survey for the Program Advisory Committee. The survey provided a venue to learn about the Committee's views on the opportunities and constraints for the Campus Master Plan.



Phase 2 Public Open House at Fennell Campus (July 17, 2018)

Outcomes from Phase 2 included:

- A refined Vision Statement and set of Guiding Principles;
- Commentary on the Draft Concept Plans for each campus and their associated design frameworks, to inform refinement in the next phase of work; and
- Insight into new opportunities and considerations, relative to the College's concurrent and new projects and initiatives being revealed at this time.

PHASE 3 ENGAGEMENT

Phase 3 events focused on refining the draft Concept Plans for each campus environment based on input from the previous phase. A conversation on space planning and phasing was also initiated, to inform more realistic opportunities and time frames for better future planning and towards the development of an implementation strategy.

Engagement events included

- A meeting with the City of Hamilton.
 - The College engaged the City of Hamilton planning and transportation staff earlier in the process during stakeholder interviews and workshops. This particular meeting was a focused platform for the City of Hamilton to share their current initiatives as they relate to each campus Concept Plan and to discuss, as a group, opportunities to work in partnership to align plans. (Reference Section 2.2 for details on the City of Hamilton's relevant policies and initiatives).
- A Steering Committee workshop. The workshop was held to review the Concept Plans in more detail with an opportunity for thorough discussions around key topics and decision-driving factors. A preliminary discussion was also held relating to low hanging fruit. The workshop structure had a strong focus on sharing and listening in a larger group format, while making use of plans and drawing material on the table. Input was noted and Concept Plans were later revised relative to the more critical components identified during the workshop.



Phase 3 Steering Committee Workshop (September 25, 2018)

A Board of Governors (BOG) workshop.

During this session, the BOG were brought up to speed on the draft Concept Plan designs for each campus and all the input that formed them, alongside the design frameworks. In smaller group format, there was opportunity to finalize the Vision Statement and Guiding Principles, understand and comment on the draft Plans and also begin a conversation on implementation and phasing relative to design priorities. The workshop was broken down into two sessions with a report-back period.

• Sustainability Workshop. This was a workshop unique to a Campus Master Planning process, catering to identifying Mohawk's short- and long-term roadmap towards a low carbon campus. The event was structured over a 2.5-hour working session with key sustainability staff placing initiatives and comments on a printed roll-out timeline that spanned 30 years. The outcomes directly informed components of the sustainability framework for each campus and helped guide the development of the concept plans overall.

- Staff and faculty pop-up events were held once more at each campus to provide an update on the revised components of the Campus Master Plan to date. Again, the event structure was informal with a panel display that staff and faculty could interact with as they passed by at any given time throughout the day. Sticky notes were provided for comments.
- Program Advisory Committee Focus Group.
 This was an opportunity for the Committee to review the Concept Plans and provide targeted comments. This was done in a small group session with open discussion around the table.
- Public Open House 2. A second public Open House was held near the end of Phase 3 at both the Fennell Campus and Stoney Creek Campus locations. This was an informal opportunity for the public to learn about the progression of the Vision and Principles of the Mohawk Campus Master Plan towards Concept Development and, furthermore, through the frameworks and policies associated with each Plan.



Sustainability Workshop (October 18, 2018)



Public Open House 2 at Fennell Campus (November 27, 2018)

Outcomes from Phase 3 included

- Final Concept Plans for each campus;
- Refined design frameworks; and
- A draft phasing and implementation strategy.

PHASE 4 ENGAGEMENT

Phase 4 work focused on completing the draft Campus Master Plan report, circulating it for review and approval, and creating strategies for the socialization and implementation of the Plan. Engagement events included presentations of the final Campus Master Plan to the Board of Governors, Mohawk employees during the Annual Town Hall events, and our strategic partners.

APPENDIX B: FIT-TO-**FUNCTION ASSESSMENTS**

OVERVIEW

An important master space planning consideration involves qualitative, high-level fit-to-function assessments that establish the existing or potential suitability of spaces to accommodate activities taking place within them.

The assessments are guided by two related questions:

- Is the basic building plan configuration capable of providing contemporary standards for teaching, research or office environments?
- · Can the existing building be upgraded to meet modern building code and environmental standards for the current use?

Answers to these questions can be instrumental in shaping planning directions and recommendations.

ASSESSMENT CRITERIA

The criteria for fit-to-function assessments vary depending on the function being accommodatedinstruction, student services, academic offices and ancillary services such as food, shipping and receiving, etc. The assessments consider, for example:

- Structural configuration and dimensions that have the capacity to provide properly proportioned volumes and sightlines.
- Structural configuration and dimensions that allow for the creation of repeated modules aligned with the institution's space allocation standards.
- Clear floor-to-floor dimensions that provide enough height to accommodate building mechanical systems that support the function(s) being accommodated.
- Access to natural light (for offices in particular).
- Intuitive and efficient internal circulation system.

Buildings that were originally designed and have since continued to house the same function tend to receive more favourable fit-to-function assessments. Buildings that were converted and renovated to other uses several times over their lifespan tend to receive less-favourable fit-to-function assessments.

RATINGS

Fit-for-Function	Building plan configuration and building systems generally suited for the
	current use
Deficient	Basic configuration and building systems suitable or adaptable for current use with significant investment in improvements
Unfit-for-Function	Investments in renovations would not provide suitable accommodation for the current use

FIT-TO-FUNCTION ASSESSMENTS

Total Net Assignable Square Feet

		Classroom	Laboratory	Learning Support	Research	Academic Offices	Student & Client Services
ECS Campus Name	ECS Fit-to-Function	A1	A2	A3	A4	A5	B1
Fennell	Fit-for-Function	64,378	66,749	40,443	15,331	17,189	18,787
	Deficient	47,821	107,442	9,125		35,211	5,589
	Unfit	1,128	3,317			16,988	
	TBA		25,556			3,848	
Fennell Total		113,327	203,064	49,568	15,331	73,237	24,376
IAHS	Fit-for-Function	21,843	27,823	5,771	222	15,422	2,667
	TBA		4,920				
IAHS Total		21,843	32,743	5,771	222	15,422	2,667
Stoney Creek	Fit-for-Function	28,467	117,652	3,816		14,048	2,628
	Deficient		16,257			593	
Stoney Creek Total		28,467	133,909	3,816		14,641	2,628
Grand Total		163,637	369,715	59,155	15,554	103,300	29,671

Percentage of Total Net Assignable Areas

		Classroom	Laboratory	Learning Support	Research	Academic Offices	Student & Client Services
ECS Campus Name	ECS Fit-to-Function	A1	A2	A3	A4	A5	B1
Fennell	Fit-for-Function	6.7%	7.0%	4.2%	1.6%	1.8%	2.0%
	Deficient	5.0%	11.2%	1.0%		3.7%	0.6%
	Unfit	0.1%	0.3%			1.8%	
	TBA		2.7%			0.4%	
Fennell Total		11.8%	21.2%	5.2%	1.6%	7.6%	2.5%
IAHS	Fit-for-Function	2.3%	2.9%	0.6%	0.0%	1.6%	0.3%
	TBA		0.5%				
IAHS Total		2.3%	3.4%	0.6%	0.0%	1.6%	0.3%
Stoney Creek	Fit-for-Function	3.0%	12.3%	0.4%		1.5%	0.3%
	Deficient		1.7%			0.1%	
Stoney Creek Total		3.0%	14.0%	0.4%		1.5%	0.3%
Grand Total		17.1%	38.6%	6.2%	1.6%	10.8%	3.1%

Percentage by Space Type

		Classroom	Laboratory	Learning Support	Research	Academic Offices	Student & Client Services
ECS Campus Name	ECS Fit-to-Function	A1	A2	A3	A4	A5	B1
Fennell	Fit-for-Function	39.3%	18.1%	68.4%	98.6%	16.6%	63.3%
	Deficient	29.2%	29.1%	15.4%		34.1%	18.8%
	Unfit	0.7%	0.9%			16.4%	
	TBA		6.9%			3.7%	
ennell Total		69.3%	54.9%	83.8%	98.6%	70.9%	82.2%
IAHS	Fit-for-Function	13.3%	7.5%	9.8%	1.4%	14.9%	9.0%
	TBA		1.3%				
AHS Total		13.3%	8.9%	9.8%	1.4%	14.9%	9.0%
Stoney Creek	Fit-for-Function	17.4%	31.8%	6.5%		13.6%	8.9%
	Deficient		4.4%			0.6%	
Stoney Creek Total		17.4%	36.2%	6.5%		14.2%	8.9%
Grand Total	·	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Common Use / Student Activity Space B2	Athletics / Wellness B3	Welcome / Assembly B4	Food Services C1	Retail & Commercial Services C2	Te Administrative Offices D1	echnical Services / Campus Operations D2	Building & Grounds Maintenance D3	Grand Total
19,494	43,698	20,275	17,662	6,012	28,298	8,738	4,226	371,281
4,565		,	664	463	17,586		90	228,557
					10,534	134		32,101
							15,049	44,453
24,060	43,698	20,275	18,326	6,475	56,418	8,873	19,364	676,391
			1,731		490	985	737	77,691
								4,920
			1,731		490	985	737	82,611
	2,450	33	4,357	3,538	2,076	741	317	180,122
						2,081	50	18,981
	2,450	33	4,357	3,538	2,076	2,822	366	199,103
24,060	46,148	20,308	24,414	10,013	58,984	12,680	20,467	958,105

Common Use / Student Activity	Athletics /	Welcome /		Retail & Commercial	T Administrative	echnical Services / Campus	Building & Grounds	
Space	Wellness	Assembly	Food Services	Services	Offices	Operations	Maintenance	Grand Total
B2	B3	B4	C1	C2	D1	 D2	D3	
2.0%	4.6%	2.1%	1.8%	0.6%	3.0%	0.9%	0.4%	38.8%
0.5%			0.1%	0.0%	1.8%		0.0%	23.9%
					1.1%	0.0%		3.4%
							1.6%	4.6%
2.5%	4.6%	2.1%	1.9%	0.7%	5.9%	0.9%	2.0%	70.6%
			0.2%		0.1%	0.1%	0.1%	8.1%
								0.5%
			0.2%		0.1%	0.1%	0.1%	8.6%
	0.3%	0.0%	0.5%	0.4%	0.2%	0.1%	0.0%	18.8%
						0.2%	0.0%	2.0%
	0.3%	0.0%	0.5%	0.4%	0.2%	0.3%	0.0%	20.8%
2.5%	4.8%	2.1%	2.5%	1.0%	6.2%	1.3%	2.1%	100.0%

Common Use / Student Activity	Athletics /	Welcome /		Retail & Commercial	Administrative	Technical Services / Campus	Building & Grounds	
Space	Wellness	Assembly	Food Services	Services	Offices	Operations	Maintenance	Grand Total
B2	B3		C1	C2	D1	D2	D3	
81.0%	94.7%	99.8%	72.3%	60.0%	48.0%	68.9%	20.6%	38.8%
19.0%			2.7%	4.6%	29.8%		0.4%	23.9%
					17.9%	1.1%		3.4%
							73.5%	4.6%
100.0%	94.7%	99.8%	75.1%	64.7%	95.6%	70.0%	94.6%	70.6%
			7.1%		0.8%	7.8%	3.6%	8.1%
								0.5%
			7.1%		0.8%	7.8%	3.6%	8.6%
	5.3%	0.2%	17.8%	35.3%	3.5%	5.8%	1.5%	18.8%
						16.4%	0.2%	2.0%
	5.3%	0.2%	17.8%	35.3%	3.5%	22.3%	1.8%	20.8%
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Detailed Fit-to-function Assessment by Campus, Building and Floor-Total Net Assignable Square Feet

				Classroom	Laboratory	Learning Support	Research Aca		Student & Clier Service
CS Campus Name	ECS Fit-to-Function Fit-for-Function	Building Code FC	Floor Code	A1 4,831	A2 1,033	A3 4,203	A4	A5 4,076	В
Silileli	Tit-lot-i diletion	10	1	6,606	14,076	6,759		285	10,05
			2	1,961	6,664	97		662	7,28
		FC Total FE	1	13,397 4,484	21,772 11,084	11,059 1,181	2,942	5,023 3,803	17,33
		FE Total		4,484	11,084	1,181	2,942	3,803	
		FEA	1	6,878		3,046			
			2	3,649	8,396	6,125	2,347		
			3		3,294		7,481		
		FEA Total	4	10,527	11,690	9,171	2,562		
		FF TOTAL	0	10,527	5,289	9,171	12,389	110	
		FF Total			5,289			110	
		FG	2			332			26
		FG Total	2			332			26
		FH	0	6,802					
			2	3,596		6,382 6,225		728	
		FH Total		10,398		12,608		728	
		FI	1	6,673	4,126	4,684		1,212	59
		FI Total	2	2,688 9,361	9,801 13,927	4,684		1,039 2,251	65
		FJ	0	6,003	798			3,210	
			2	8,145	1,020	649		2,063	55
		FJ Total FR	0	14,148	1,818	649		5,273	5
		110	1	2,062		760			
		ED T-4-/	2			700			
		FR Total SEV	2	2,062	1,168	760			
		SEV Total	-		1,168				
	Fit-for-Function Tot		•	64,378	66,749	40,443	15,331	17,189	18,78
	Deficient	FA	1	6,296 3,628	14,768 3,590	4,498		671 5,034	
			2	15,619	0,000	1,100		5,774	
		EA T	3	05.540	10.050	49		44.470	
		FA Total FB	1	25,542	18,358 30,532	4,547		11,479 781	
		FB Total			30,532			781	
		FE	0	8,132	7,477	700		1,753	
			3	5,871 1,480	9,512 18,073	722 740		6,894 2,884	38
		FE Total	3	15,483	35,062	1,462		11,531	38
		FF	1	5,485	23,023			9,516	
		FF Total FJ	1	5,485 1,310	23,023 467	3,115		9,516 1,904	5,20
		FJ Total	1	1,310	467	3,115		1,904	5,20
	Deficient Total			47,821	107,442	9,125		35,211	5,58
	Unfit	FM Total	1					10,927 10,927	
		FN	1					10,321	
		FN Total							
		FQ FQ Total	1					6,061 6,061	
		TP11	1	1,128				0,001	
		TP11 Total		1,128					
		TP12 TP12 Total	1		1,128				
		TP12 Total TP13	1		1,128 1,061				
		TP13 Total			1,061				
		TP14 TP14 Total	1		1,128 1,128				
	Unfit Total	TP14 Total		1,128	3,317			16,988	
	TBA	CEN	1		.,.			3,848	
		CEN Total CS	1		1,567			3,848	
		CS Total			1,567				
		CSM	1		,,,,,				
		CSM Total EVA	1						
		EVA Total							
		GFD	1		7,000				
		GFD Total HCH	1		7,000 2,445				
		HUH	1		2,445				
		HCH Total			2,056				
		HCH Total MS	1						
		HCH Total MS MS Total			2,056				
		MS MS Total RES	1						
		HCH Total MS MS Total							
		HCH Total MS MS Total RES RES Total SJHH SJHH Total	1		2,056				
		HCH Total MS MS Total RES RES Total SJHH SJHH Total STORAGE	1		2,056 1,500				
		HCH Total MS MS Total RES RES Total SJHH SJHH Total	1		2,056 1,500				
		HCH Total MS MS Total RES RES Total SJHH SJHH Total STORAGE STORAGE Total VEHICLE VEHICLE Total	1 1 1		2,056 1,500 1,500				
		HCH Total MS MS Total RES RES Total SJHH SJHH Total STORAGE STORAGE Total VEHICLE	1 1		2,056 1,500				

Common Use / Student Activity Space	Athletics / Wellness	Welcome / Assembly	Food Services	Retail & Commercial Services	Administrative Offices	Technical Services / Campus Operations	Building & Grounds Maintenance	Grand Total
B2	B3	B4 3,531	C1 12,912	C2 928	D1 6,923	D2 4,725	D3 1,208	44,369
		10,480	867	2,747	10,961	1,321	39	64,191
		6,264 20,275	13,779	3,675	17,885	6,047	34 1,280	22,968 131,529 23,494
			366			118		23,494 10,409
						118		9,892
						118 118		10,861 10,893
			366			97 571		2,659 44,714
			000	716	858	1,139	2,664	10,775
12,881			2,663	716 1,621	858	1,139	2,664	10,775 17,497
6,613 19,494			2,663	1,621				6,875 24,371
19,494				1,021		217		7,018
			445		1,164	76		12,315 6,301
			445		1,164	293		25,635
					2,452 1,907	107 170		19,848 15,667
			124		4,358 937	277		35,515 11,072
								12,411
			124		937	167		23,483 167
	27,349		286		1,354	246	260	32,317
	16,349 43,698		286		1,742 3,096	414	22 282	18,113 50,597
								1,168 1,168
19,494	43,698	20,275	17,662	6,012	28,298	8,738	4,226	371,281
789 1,041				463	668 4,694			23,654 22,485
					2,177			23,570 49
1,830				463	7,539			69,758
					1,784 1,784			33,098 33,098
					1,147			18,509 23,000
								23,558
2,735			664		1,147 6,057		90	65,067 47,570
2,735			664		6,057		90	47,570
					1,058 1,058			13,063 13,063
4,565			664	463	17,586		90	228,557 10,927
								10,927
					10,534 10,534	134 134		10,668 10,668
								6,061 6,061
								1,128
								1,128 1,128
								1,128
								1,061 1,061
								1,128 1,128
					10,534	134		32,101
								3,848 3,848
								1,567 1,567
								,
								7 000
								7,000 7,000
								2,445 2,445
								2,056 2,056
								1,500
							7,928	1,500 7,928
							7,928 7,121	7,928 7,121
							7,121 7,121	7,121
								10,988 10,988
24,060	43,698	20,275	18,326	6,475	56,418	8,873	15,049 19,364	44,453 676,391
			10,020	0,413		0,073	10,304	010,001

(Detailed Fit-to-function Assessment by Campus, Building and Floor-Total Net Assignable Square Feet continued)

				Classroom	Laboratory	Learning Support	Research	Academic Offices	Student & Client Services
ECS Campus Name	ECS Fit-to-Function	Building Code	Floor Code	A1	A2	A3	A4	A5	B1
AHS	Fit-for-Function	IH	0	2,051	7,754				
			1	4,702	4,194	3,740		7,072	1,603
			2	7,115	11,715	1,686		3,141	1,064
			3	7,975	3,096	346	222	5,209	
			4		1,065				
		IH Total		21,843	27,823	5,771	222	15,422	2,667
	Fit-for-Function Tot	tal		21,843	27,823	5,771	222	15,422	2,667
	TBA	WH	1		4,920				
		WH Total			4,920				
	TBA Total				4,920				
AHS Total				21,843	32,743	5,771	222	15,422	2,667
Stoney Creek	Fit-for-Function	SA	1	9,549	958	3,415		5,298	2,08
			2	2,989				729	
		SA Total		12,538	958	3,415		6,026	2,08
		SB	1		22,747				
			2	4,206				1,478	
		SB Total		4,206	22,747			1,478	
		SC	1	8,011	21,859	401		2,207	543
		SC Total		8,011	21,859	401		2,207	54
		SD	1	3,712	10,415			2,091	
		SD Total		3,712	10,415			2,091	
		SE	1		37,417			890	
		SE Total			37,417			890	
		SF	1		11,252			1,355	
		SF Total			11,252			1,355	
		SG	1		9,486				
			2		3,518				
		SG Total			13,003				
	Fit-for-Function Tot			28,467	117,652	3,816		14,048	2,628
	Deficient	SB	1A		16,257			593	
		SB Total			16,257			593	
	Deficient Total				16,257			593	
Stoney Creek Total				28,467	133,909	3,816		14,641	2,628
Grand Total				163,637	369,715	59,155	15,554	103,300	29,67 ⁻

Grand Tota	Building & Grounds Maintenance	Technical Services / Campus Operations	Administrative Offices	Retail & Commercial Services	Food Services	Welcome / Assembly	Athletics / Wellness	Common Use / Student Activity Space
	D3	D2	D1	C2	C1	B4	B3	B2
10,064		259						
23,909	32	557	278		1,731			
25,368	352	84	212					
17,28	352	85						
1,06		***			. =			
77,69	737	985	490		1,731			
77,69	737	985	490		1,731			
4,920								
4,920								
4,920		005	400		4 704			
82,61°	737	985	490		1,731			
33,130	44	636	769	3,538	4,357	33	2,450	
4,810	44	202	1,092	0.500	4.057	00	0.450	
37,940	44	636	1,861	3,538	4,357	33	2,450	
22,74	100							
5,866	182 182							
28,613	182		216					
33,23 33,23			216					
16,310	91		210					
16,310	91							
38,30	91							
38,306								
12,608								
12,608								
9,59		105						
3,518		105						
13,108		105						
180,122	317	741	2,076	3,538	4,357	33	2,450	
18,98	50	2,081	2,076	3,330	4,337	- 33	2,450	
18,98	50	2,081						
18,98	50	2,081						
199,10	366	2,822	2,076	3,538	4,357	33	2,450	
958,10	20,467	12,680	58,984	10,013	24,414	20,308	46,148	24,060

APPENDIX C: SUSTAINABILITY WORKSHOP SUMMARY



On Octobrt 16, 2018, we held a zero-carbon campus roadmap workshop. The workshop was facilitated by Dialog and RWDI participants included a diverse representation from Mohawk's capital, operational and sustainability planning teams. The intention of the 2-hour session was to review Mohawk's current carbon inventory and to begin to plot a course towards ambitious future goals.

The workshop used "The Low-Carbon Campus Roadmap" (Figure 1) development by Dialog and RWDI as a framework for the workshop and engaged participants to identify challenges and opportunities presented by the seven components of the roadmap.

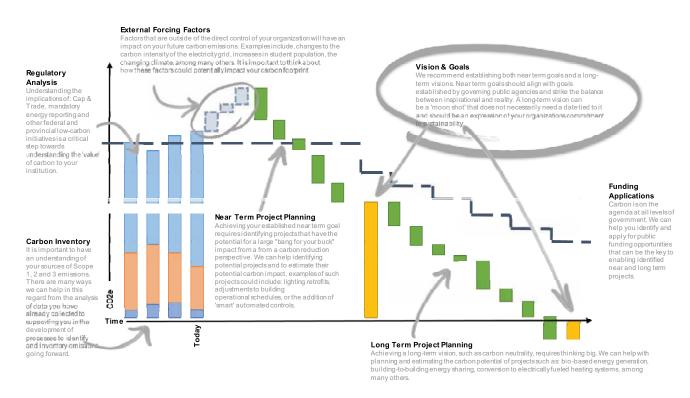


Figure 1: The low-carbon campus roadmap

Participants recorded their campus-specific ideas on colour-coded sticky notes and were encouraged to place the notes on a poster-scale roadmap (Figure 2).

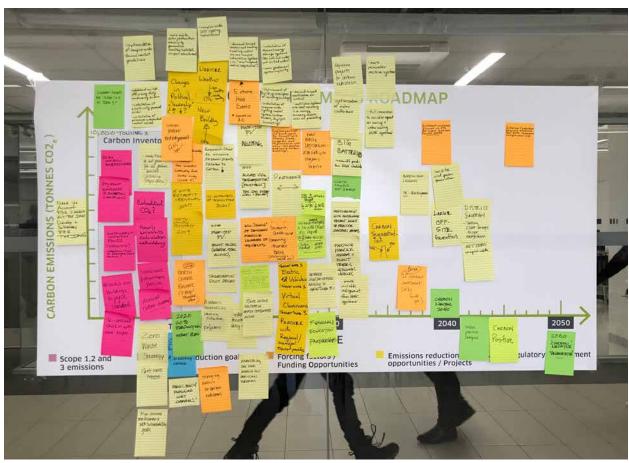


Figure 2: Workshop output roadmap

LOW CARBON CAMPUS ROADMAP

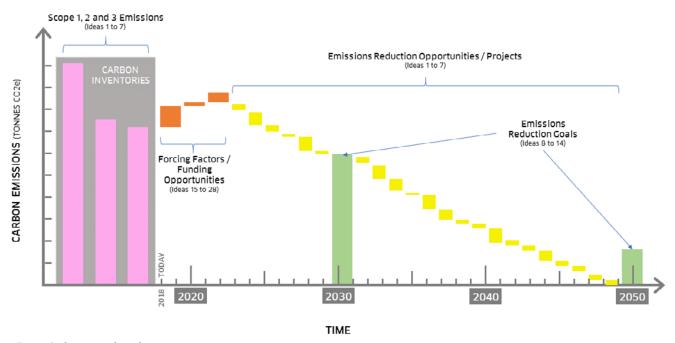


Figure 3: Conceptual roadmap

In total the workshop generated over 75 ideas, which have been summarized in Table 1 and include: seven ideas to enhance Mohawk's carbon inventory, seven new goals to consider adopting, 14 external forcing factors and funding opportunities and 47 projects that could be contemplated to achieved both established and potential new goals. Starting to map the ideas back onto the roadmap (figure 3) begins to bring into focus Mohawk's potential path towards a zero-carbon future.

The workshop itself, development of 75+ ideas and creation of a conceptual roadmap is, of course, just a starting point on the path towards a zero-carbon future. Next steps we suggest taking include:

- · Holding a workshop to identify when the identified projects could potentially be implemented with the goal of organizing them temporally onto the roadmap.
- Identifying the projects and forcing factors anticipated to be key drivers towards near- and short-term goals and undertake carbon modelling studies to begin to quantify each project's potential impact.
- Revisit near- and long-term goals based on increased resolution of the carbon potential of the identified projects.

We encourage you to continue to use the roadmap as a guiding framework as you move forward plotting your course to zero.

Table 1: Workshop-Generated Ideas

L	.egend	
	Pink	= Scope 1, 2 and 3 emissions
	Green	= Emission reduction goals
		<u> </u>
	Orange	=Forcing factors / funding opportunities
	Yellow	= Emissions reduction opportunities / projects

Ref. No.	Idea
1	Need to account for carbon at the IAHS. Develop a strategy for the IAHS
2	Zero Carbon Ambassadors
3	Bi-annual check-in with carbon data holders
4	Annual Carbon Audit
5	Embodied CO₂?
6	Increase overall targets in line with recent IPCC report: 75% reductions to 20 or 30%
7	How to account for carbon sequestration?

(Table 1: Workshop Generated Ideas continued)

Ref. No.	Idea
8	Separate targets for Scope 1 + 2 and Scope 3
9	Establishing our own metrics for emissions reduction
10	2030 - Scope 3 emission targets are down by 50%
11	North Campus net zero
12	Carbon Neutral
13	Carbon Positive
14	Carbon Negative. Regenerative
15	Changes in political leadership
16	Storm water management fees
17	North campus purchase (7 buildings)
18	Changing metrics on carbon reductions
19	Extreme heat events and demands on air conditioning
20	Student, staff and community members habits (electricity and waster use)
21	Raw waste legislation - especially on organic waste
22	Enrolment increase planned at 2% per year between 2018 and 2040
23	Adaptive reuse and retrofits for re-development
24	Internal Combustion engines obsolete for both commercial and personal use
25	Sustainability Initiative Funds (ongoing). Opportunities to strategically deploy?
26	Partnerships
27	Partnership with Sustainable Forest Management to produce carbon offsets
28	District Energy - Selling clear energy to our neighbours

Ref. No.	Idea
29	Student and Employee Education on campus
30	Retrofit old buildings to Joyce Centre standards
31	Align deferred maintenance with sustainability goals
32	Plant more trees
33	Zero waste strategy
34	Sustainable procurement policies
35	Hourly emissions calculation methodology
36	Installation of pressure independent control values
37	Installation of electrically powered boiler
38	Installation of new high efficiency fully condensing boilers
39	Implementation of campus-wide thermal comfort guidelines
40	More onsite solar photovoltaic electricity generation (rooftop installed, car park structures ect)
41	East wing retrofit and renewal
42	SC Expansion or acquisitions
43	Roof top PV on existing buildings where structures allows for it
44	30% reduction plan
45	Sequestration pilot project
46	Academic sustainability learning outcomes and programs
47	Resiliency planning WRT Carbon
48	Research Chair to advance research projects related to carbon reductions
49	Campus-wide LED lighting installations

(Table 1: Workshop Generated Ideas continued)

Ref. No.	Idea
50	Demand based centralized heating and cooling, control via core campus automation system (i.e. time and respond control sequences)
51	Roof-top PV for all new facilities
52	Algae CO2 sequestrate -pondtech- for gas fired generators and boilers
53	More online courses or course components online
54	Target scope 3. Partner with regional / municipal transit providers
55	Target scope 3. Virtual classrooms
56	Target scope 3. Electric vehicles
57	Replacement of old buildings at the Fennel and Stoney Creek Campus and placement with new net positive energy and carbon buildings
58	Installation of campus-wide lighting control system (motion sensors, daylight harvesting)
59	Improvement of building envelopes of existing buildings
60	More geothermal system capacity
61	Installation of thermal energy storage systems (for both hot water and chilled water)
62	Ventilation systems with heat recover (i.e. energy recovery wheels, solar air preheating)
63	Demand-based ventilation air control
64	Increase local / on-campus housing to reduce scope 3
65	Research education partnership
66	More variable refrigerant flow HVAC Systems
67	Reduce parking area and plant trees. Planning for Autonomous Vehicles
68	Big Batteries - use off peak low CO₂ electricity
69	Optimization of solar collectors

Ref. No.	Idea
70	Capstone projects on carbon reduction
71	More rainwater reclaim systems
72	Full conversion to variable speed air moving + water moving. HVAC Systems
73	Large off-site generation
74	On site wind power generation
75	Net Zero campus-wide

