Sir Sandford Fleming College
Sutherland Campus
2018 Campus Master Plan Update

June 19 2018_FINAL DRAFT

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2018 Campus Master Plan Update 2018

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June 19 2018

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Introduction and Summary

Sutherland Campus in Peterborough is Sir Sandford Fleming College of Applied Arts and Technology's (Fleming College) largest campus on 245 acres, with 4,380 students, 418,000 gross square feet (gsf) of academic space in one building, a residence village and a health and wellness centre.

This plan is an update to the 2009 Sutherland Campus Master Plan. It considers all of the projects either completed or planned since the previous effort. Similar to its predecessor, the plan update deals with the improvement of the user experience and with the immediate and future growth of the campus. It introduces the concept of precincts to organize the campus to assist with future development and wayfinding. It contains strategies for overall land use, roadways, entrances, gates, pathways, parking, fields and landscaping; the key landscape projects being the introduction of two significant open spaces (the College Meadow and Green Entry Court) related to the College's Academic Precinct.

The plan establishes an appropriate location for potential new buildings when the need arises. It shows ways to improve the image and sense of arrival to the campus from all directions. It also suggests opportunities for potential partnerships, working together to deliver a successful campus.

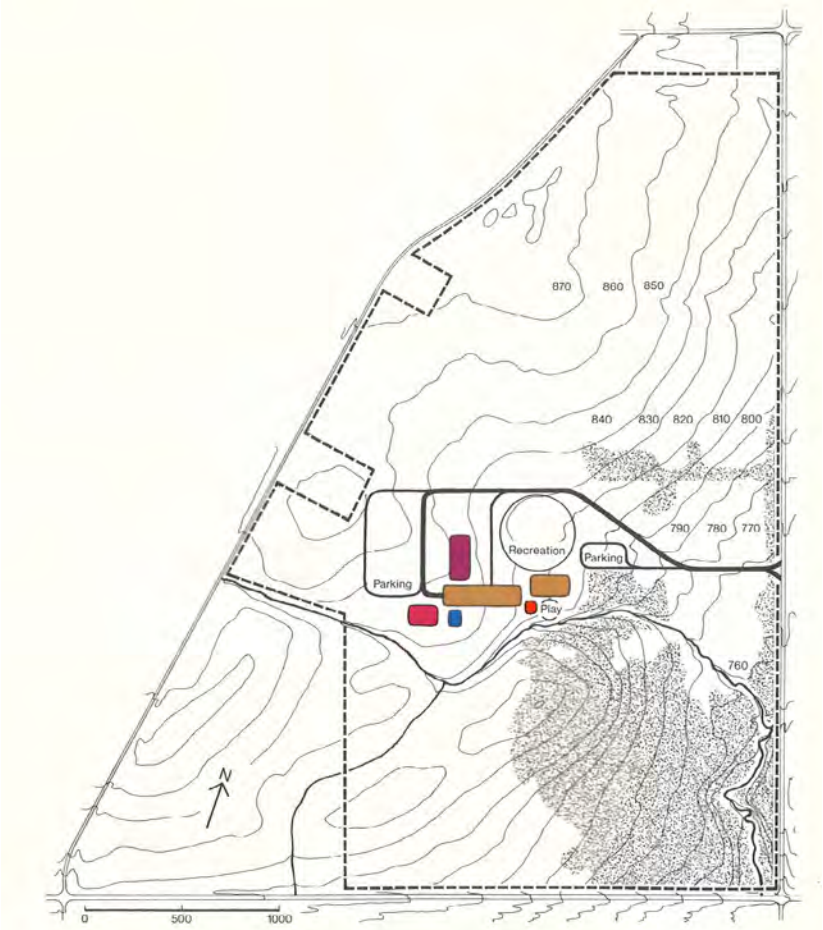
The work was undertaken in close consultation with the College's executive leadership, Board of Directors, and facilities leadership. Engagement with the College community will take place in the future as part of the design and implementation of individual projects.

Chapter 1: Planning History

1.1. THOMPSON BERWICK PRATT MASTER PLAN (1968)

The first plan established the idea of a single building, sited on sloping land up against a large conserved woodlot. An access road from Brealey Drive wound around the north to enter at the top of the slope, so that the built form could work its way down the slope, organized around a pedestrian spine containing common facilities. Student-oriented areas were concentrated at the east end.

The north part of the site was left untouched in the expectation that it could be sold. The plan was intended as a general framework, allowing for future variation in form and content.



1. 1968 Master Plan

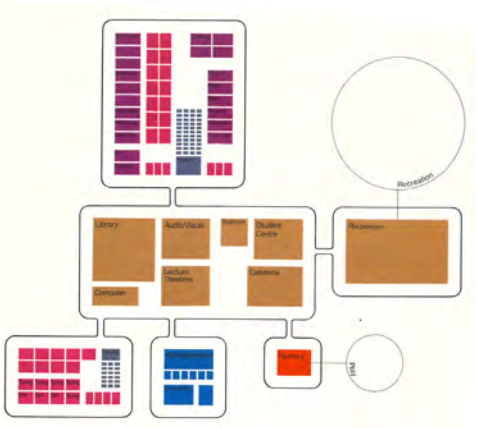
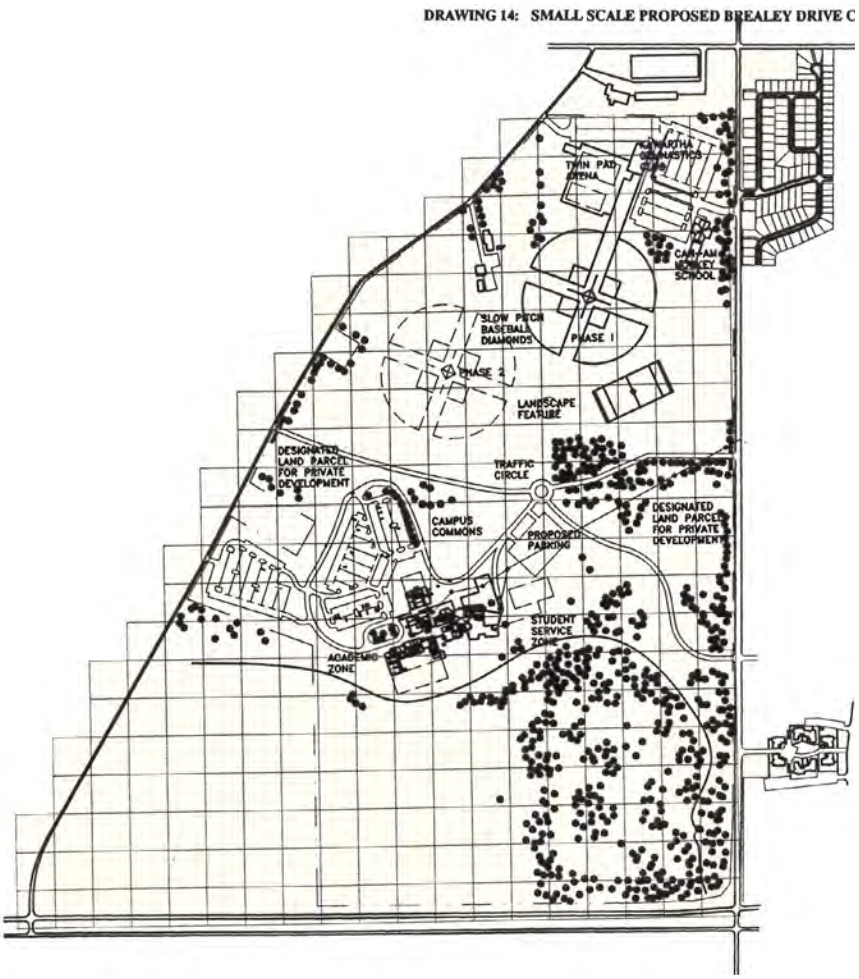


Diagram of the distribution of functions: labs and classrooms to the north; library, cafeteria and other common facilities in the centre; administration facing the woods; and recreation to the east.

1.2. PETER RANKIS/TOTTEN SIMMS HUBICKI MASTER PLAN UPDATE (1989)

This plan proposed a new east-west drive connecting Brealey Drive and Dobbin Road, together with a realignment of the entry drive and an open “commons” north of the building establishing a new “front door” at a more central location. Sports area and baseball diamonds were proposed to the north.



2. 1989 Master Plan

By 1989, the original building had been completed, together with the entry drive and associated parking. The CIM wing was added to the west side of the building in the 80s.

Key Dates:

1968 – Purchase of Dobbin Farm by Province of Ontario

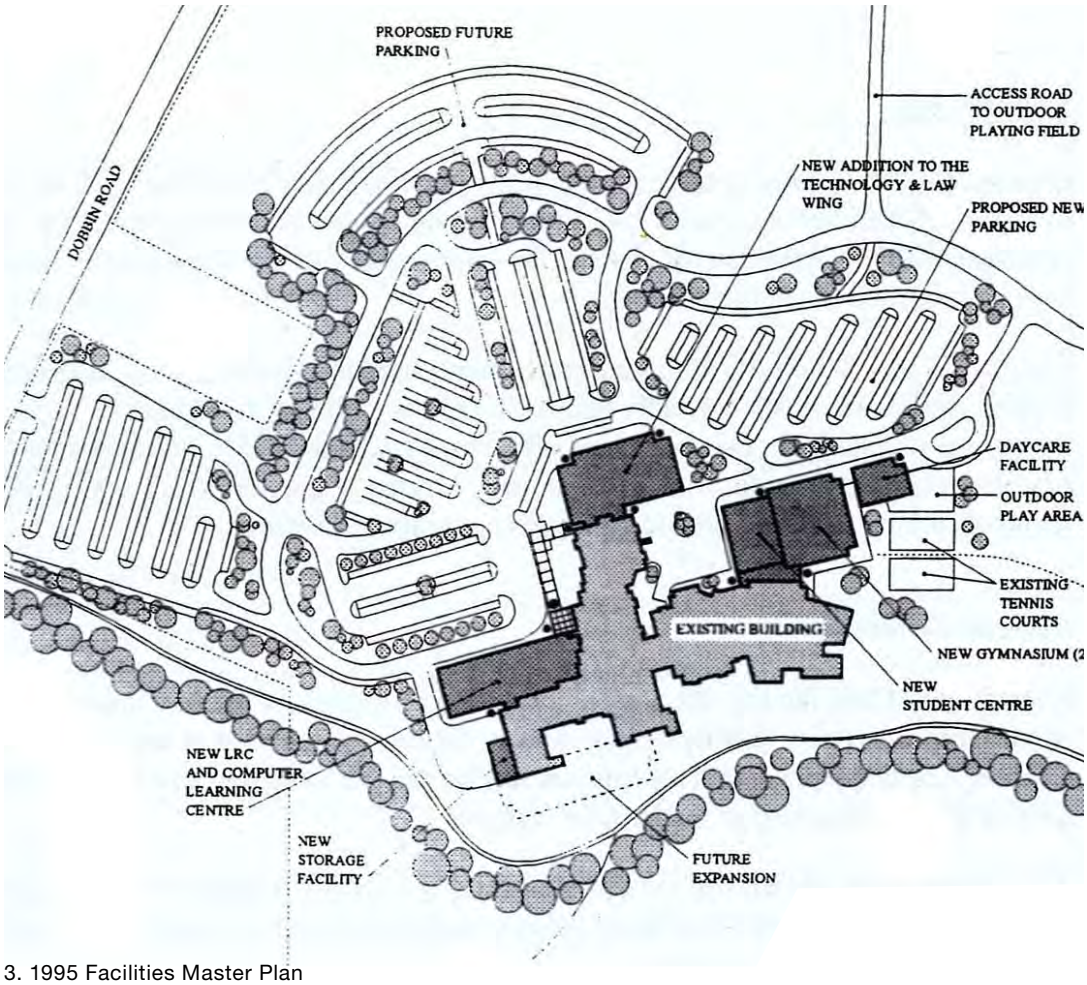
1973 - first two phases of Brealey Campus completed

1983 - Official renaming as Sutherland Campus in honour of the college’s founding president.

1.3. FACILITIES MASTER PLAN (1995)

This plan proposed the consolidation of facilities at the Sutherland Campus from other locations, and the sale of surplus lands. The roads and parking were proposed to be rearranged more tightly around the main building. The addition of a new Technology and Law wing, double gymnasium, Student Centre and Daycare was arranged to spatially enclose a central service court. The Technology Wing was added in 2003 to the west of the main campus building.

The Sports and Wellness Centre was built by the City of Peterborough on land provided by the College on a long-term lease. It opened in 2005 and houses a triple gymnasium that is primarily for College use. The College discontinued daycare operations and now operates a nursery school which is housed in the new St Joseph's at Fleming Long Term Care facility.



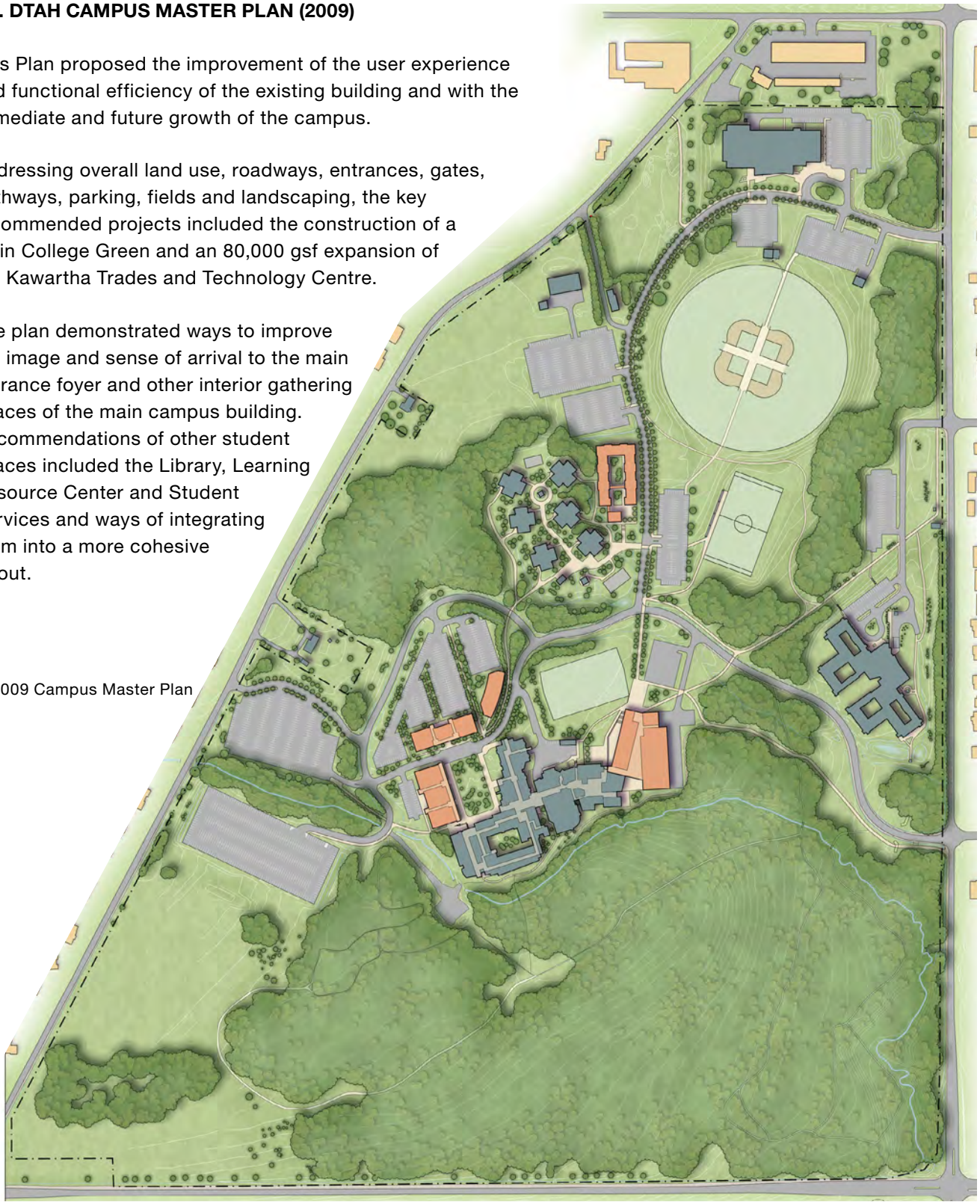
3. 1995 Facilities Master Plan

1.4. DTAH CAMPUS MASTER PLAN (2009)

This Plan proposed the improvement of the user experience and functional efficiency of the existing building and with the immediate and future growth of the campus.

Addressing overall land use, roadways, entrances, gates, pathways, parking, fields and landscaping, the key recommended projects included the construction of a main College Green and an 80,000 gsf expansion of the Kawartha Trades and Technology Centre.

The plan demonstrated ways to improve the image and sense of arrival to the main entrance foyer and other interior gathering spaces of the main campus building. Recommendations of other student spaces included the Library, Learning Resource Center and Student Services and ways of integrating them into a more cohesive layout.



4. 2009 Campus Master Plan

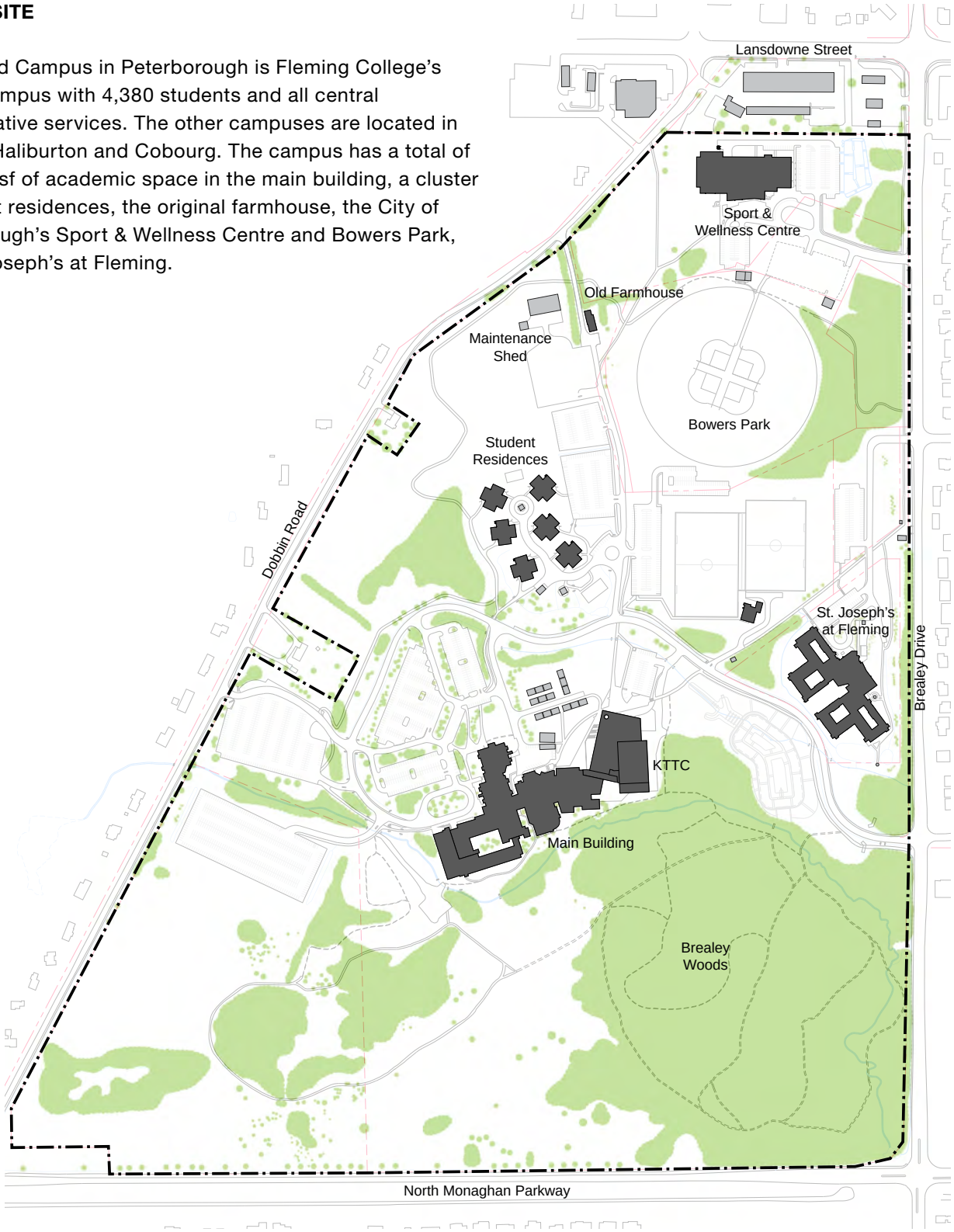
South side of Main Building towards Brealey Woods

Residential Precinct

Chapter 2: The Campus Today

2.1. THE SITE

Sutherland Campus in Peterborough is Fleming College's largest campus with 4,380 students and all central administrative services. The other campuses are located in Lindsay, Haliburton and Cobourg. The campus has a total of 418,000 gsf of academic space in the main building, a cluster of student residences, the original farmhouse, the City of Peterborough's Sport & Wellness Centre and Bowers Park, and St. Joseph's at Fleming.

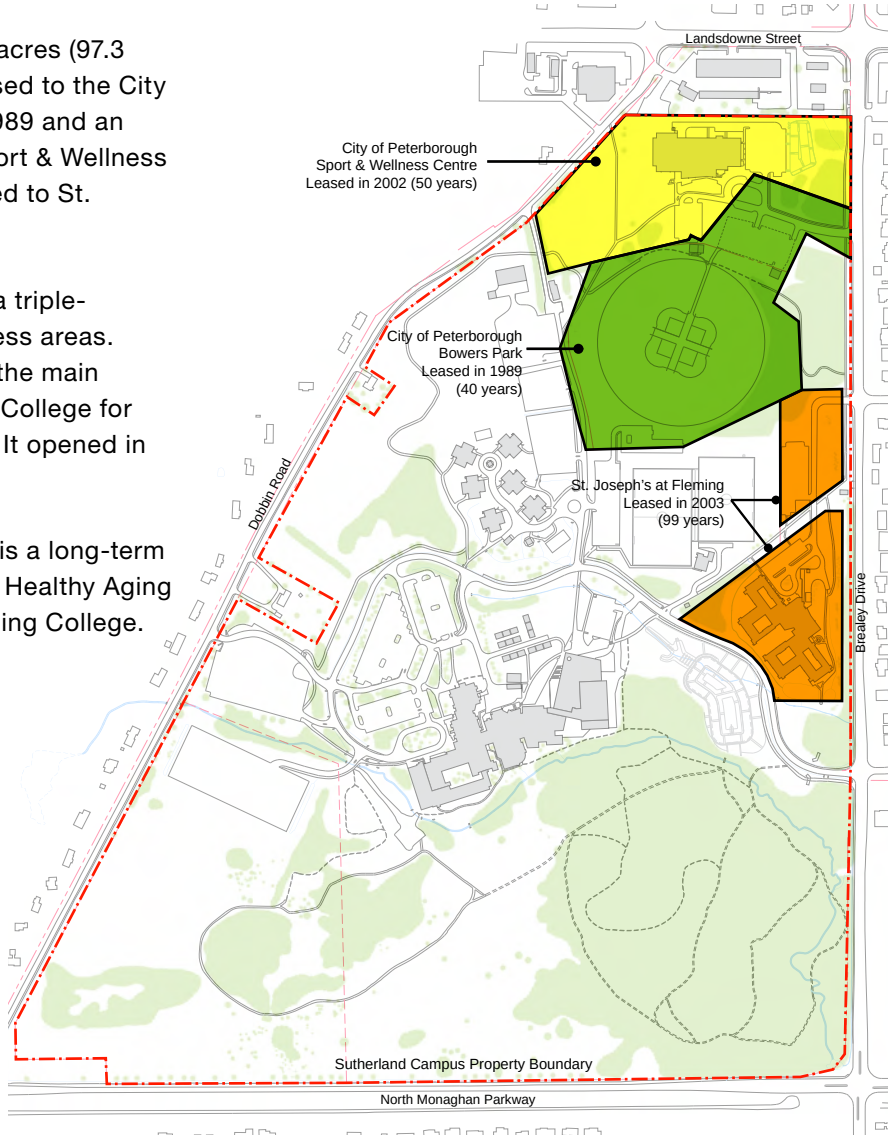


5. Sutherland Campus in 2018

Land Ownership and Leased Lands
The campus occupies an area of 240 acres (97.3 hectares), of which 20 acres were leased to the City of Peterborough for Bowers Park in 1989 and an additional 13 acres in 2002 for the Sport & Wellness Centre. Another 10.5 acres were leased to St. Joseph's Care Group in 2003.

The Sport & Wellness Centre houses a triple-gymnasium, aquatic facilities and fitness areas. Located a short 20-minute walk from the main building, the facilities are used by the College for recreation and varsity sports training. It opened in 2005.

Built in 2004, St. Joseph's at Fleming is a long-term care facility. It houses the Institute for Healthy Aging and Nursery School operated by Fleming College.



6. Land Ownership and Leased Lands

Planning Framework

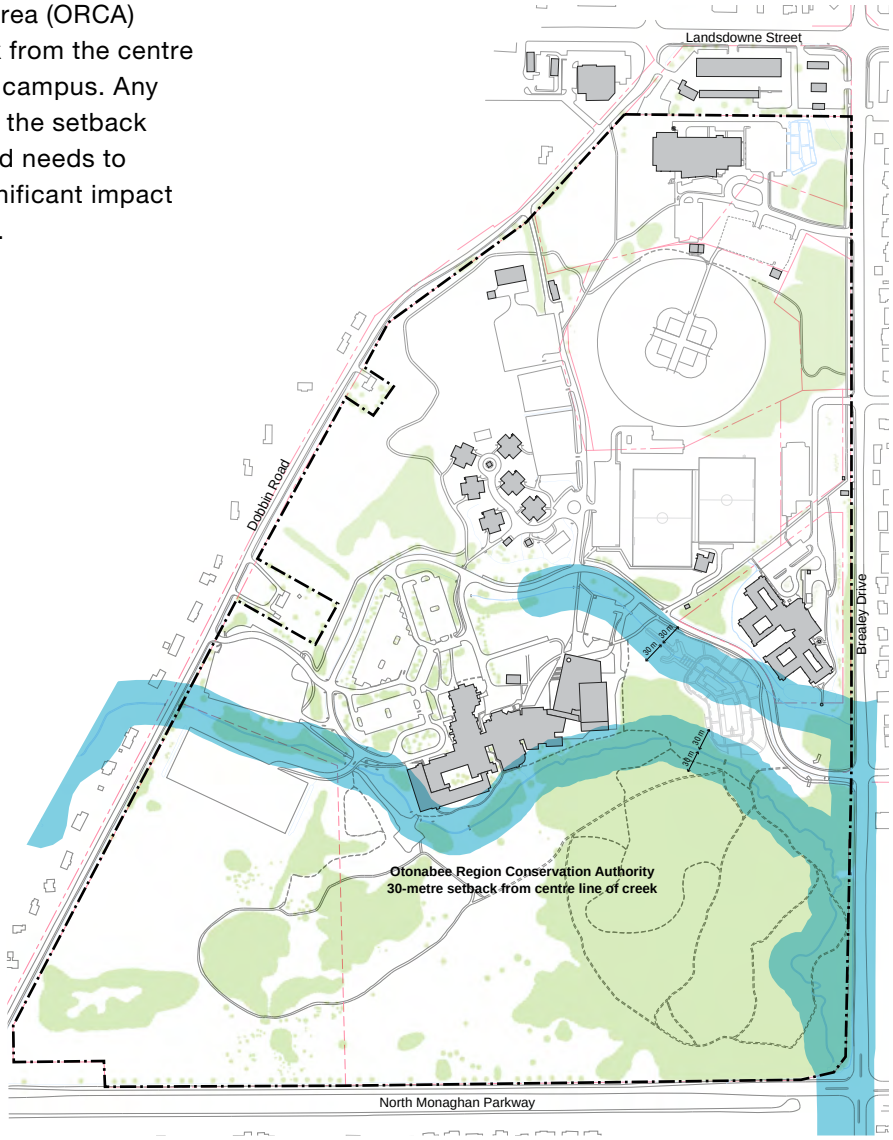
Most of the campus in under the jurisdiction of the City of Peterborough. The Zoning By-Law (Consolidated) includes the following zoning designations:

- University and College District (UC) on all parts of the campus except on Brealey Woods and St. Joseph's at Fleming
- Open Space District 1 (OS1) – Brealey Woods: no buildings allowed
- Open Space District 3 (OS3/UC) – for Bowers Park
- SP 300 – for St. Joseph's at Fleming

The southwest corner of the campus is under the jurisdiction of the Cavan, Millbrook N. Monaghan Township.

7. Planning Jurisdictions and Zoning Designations

The Otonabee Region Conservation Area (ORCA) requires a minimum 30-metre setback from the centre line of the creeks running through the campus. Any proposed development located within the setback is subject to the approval of ORCA and needs to demonstrate that it will not have a significant impact on 100 year/Timmins storm floodlines.

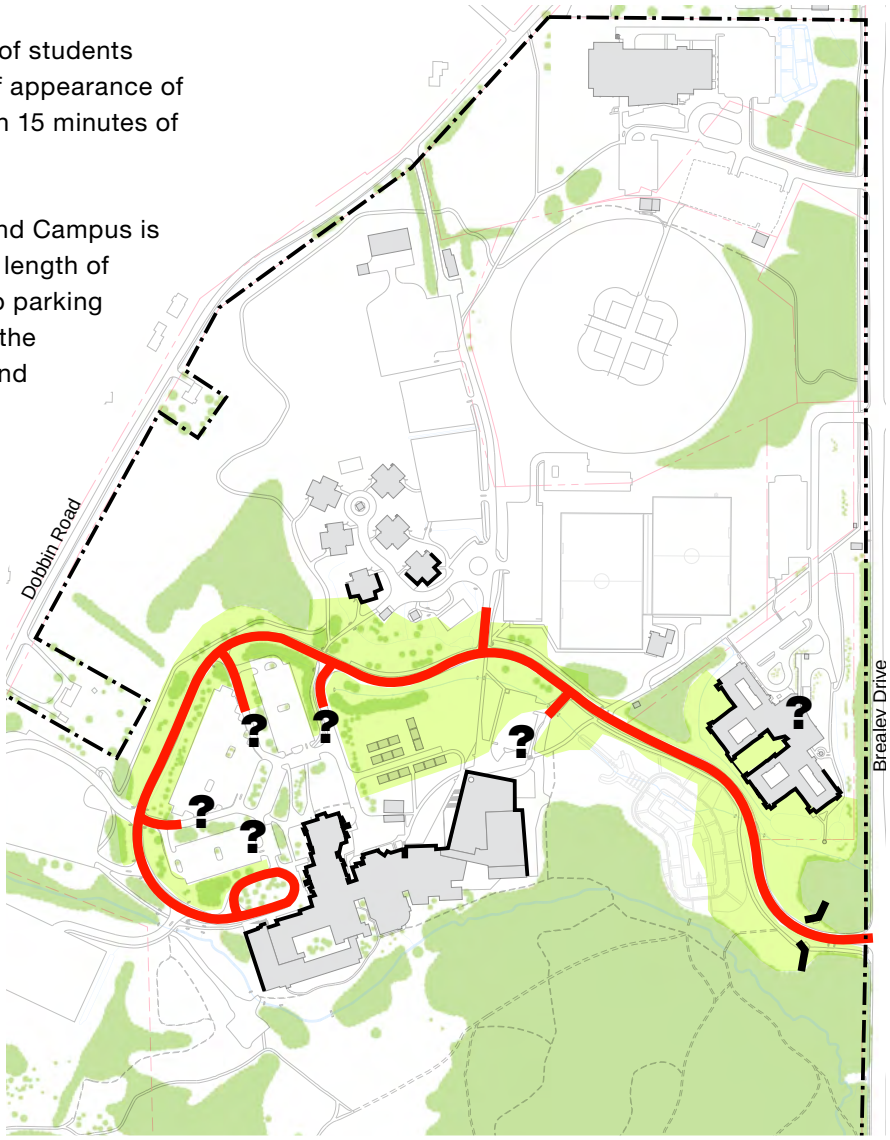


8. Building Setbacks from Creeks

Arrival and First Impressions

One American survey notes that 62% of students choose their institution on the basis of appearance of the buildings and grounds, most within 15 minutes of arriving on campus.

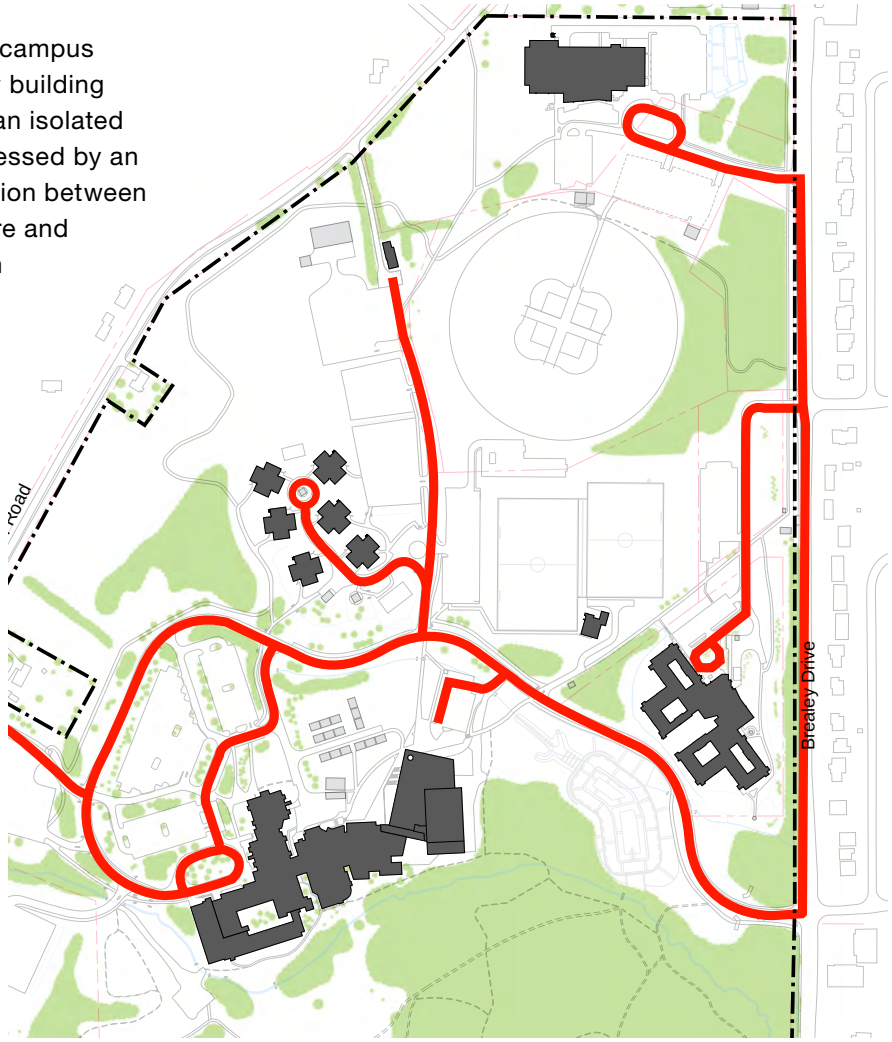
The experience of arriving to Sutherland Campus is wonderfully scenic yet confusing. The length of the driveway, the multiple entrances to parking lots puzzles most first time visitors to the campus, diminishing the experience and sense of arrival. The primary entrance is from Brealey Drive to the east with the main building entrance on the west side of the Main Building, yet many who arrive on campus for the first time believe the Kawartha Trades and Technology Centre is the primary point of access. From the west, the road system is not currently configured to comfortably accommodate increased transit operations, nor is it ideally located to ensure clear and legible movement on campus.



9. Primary Arrival Sequence

Vehicular Connectivity

The site planning of new buildings on campus followed a suburban model. Each new building or cluster of buildings was placed as an isolated piece surrounded by parking and accessed by an individual driveway. Vehicular connection between the main building, the recreation centre and the long-term care facility depends on exiting the campus and using Brealey Drive as the linking road. The lack of connectivity adds to the perception that the campus is only composed of the main college building and its immediate landscape, as opposed to the whole territory within the campus boundary. As the lands to the west of campus develop, it is anticipated that the City of Peterborough will improve Dobbin Road making it a more attractive route to campus; modifications to the internal campus road system should consider these likely changes in advance.



10. Vehicular Connectivity Between Buildings On Campus

Pedestrian Connectivity

The most well used paths on campus connect the main building to the residences, the Health and Wellness Centre and St. Joseph's. The network is not entirely continuous and does not always reflect the most desirable and direct route. Pedestrians often consider the walk from the Main Building to the Health and Wellness Centre long to traverse.

The key entry points to the main building are the main entrance on the west side and from D Block, also known as Kawartha Trades and Technology Centre. The main entrance is highly used by those parking on the west side of the campus or arriving by transit. The D Block entrance is convenient to those parking close to the residences, in the five parking lots to the north of Fleming College Way and using ancillary facilities.

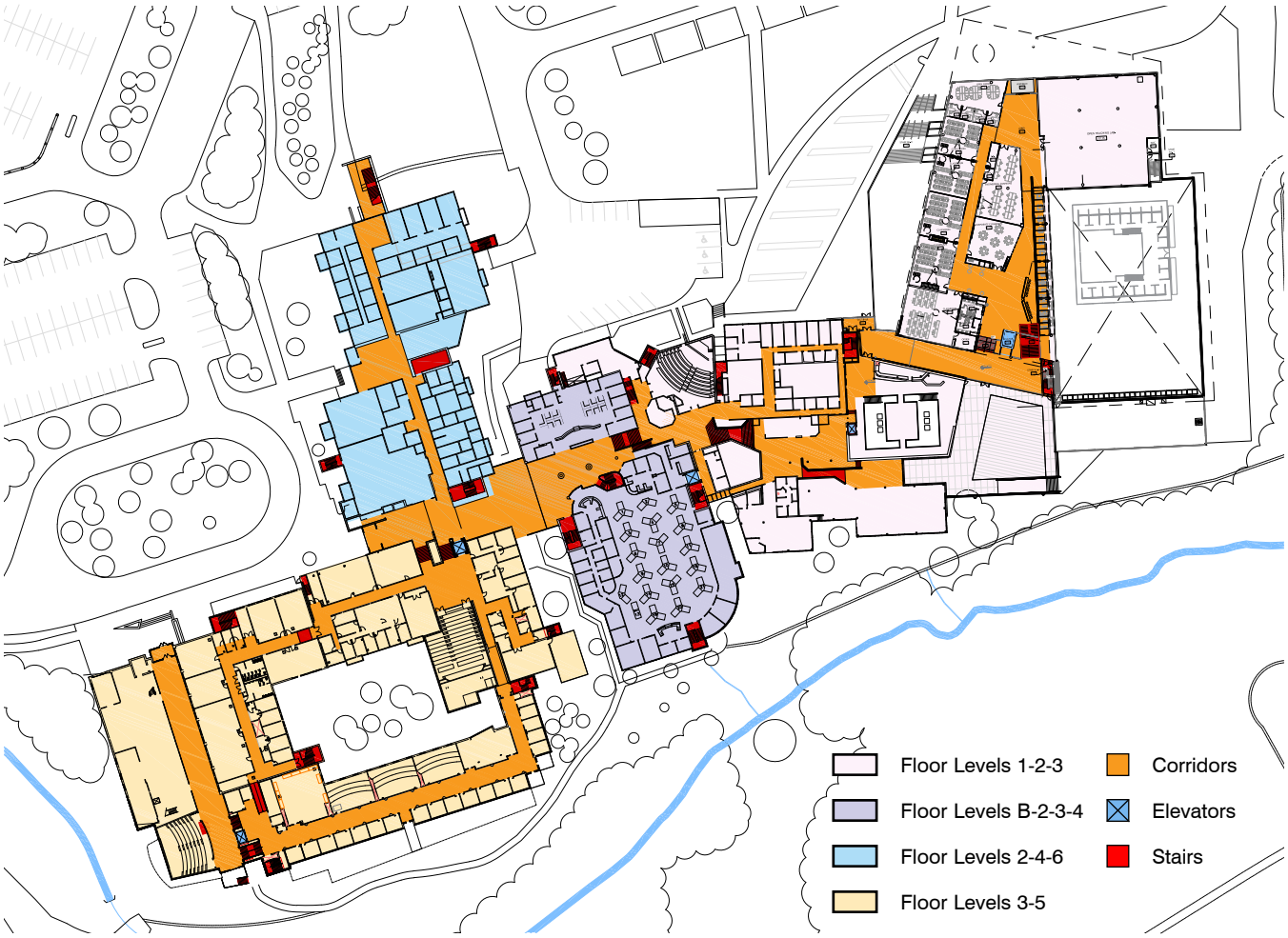
Students take three routes to leave/ enter the campus:

- from the residences to the commercial area off Lansdowne Street for their weekly shopping and entertainment (groceries, restaurants, pharmacy);
- through the trail by St. Joseph's for those who live in the adjacent residential neighbourhood east of campus; and
- along the main walking paths on Fleming College Way for those who live in the private residences off Brealey Drive.

11. Pedestrian Connectivity
(dashed line indicates a missing path)

2.2. THE MAIN BUILDING

As the building follows the contours of the land, it is organized in a series of interlocking levels, as shown below. The colours of the plan show three primary levels around the main segments of the central spine, higher to the West (left) and lower to the East (right). The Kawartha Trades and Technology Centre is a recent addition to the main building at the eastern end with substantially improvements currently underway to 'A' wing.



12. Main Building: Composite Floor Plan

Disconnected Circulation

The main spine and other primary corridors are clearly intended as the public spaces of the College. The spine performs important meeting place and orientation functions, yet does not live up to its potential in several ways. The corridors in A Wing were limited in dimension and cluttered with lockers but this is being resolved with the current improvements. There are several disconnects, such as a lack of a link between the Desbien wing of B Block and the rest of the corridor system, and the narrow right-angled connection to the student centre, which has partially been resolved with the addition of the Kawartha Trades and Technology Centre.

13. Disconnected Circulation

Low Ceilings

While variation in ceiling height (spatial compression and expansion) is often used as an architectural device to enhance spatial experience, it has been less successfully employed in most of the critical places along the central spine: at the entrance, at the staircase changes in level, and at the cafeteria.

14. Low ceilings

Chapter 3: Campus Strategies

The Campus Master Plan is based on a set of planning and design strategies that effectively are Fleming College's institutional policies regarding the physical development of Sutherland Campus. The text and diagrams combine to establish policy and are to be used in the interpretation of all development proposals on campus.

3.1. NATURAL ASSETS

Retain and enhance the major natural features of the site: Brealey Woods, the creek and the mature tree groupings. Sutherland Campus is set within a significant natural landscape, with large forested areas, watercourses, and mature trees. Future projects should enhance and strengthen these valued landscape features that contribute to Fleming College's identity and environmental health. Further, all future projects should satisfy the current policy framework contained within the Fleming College Sustainability Plan 2013-2018.

15. Natural Assets

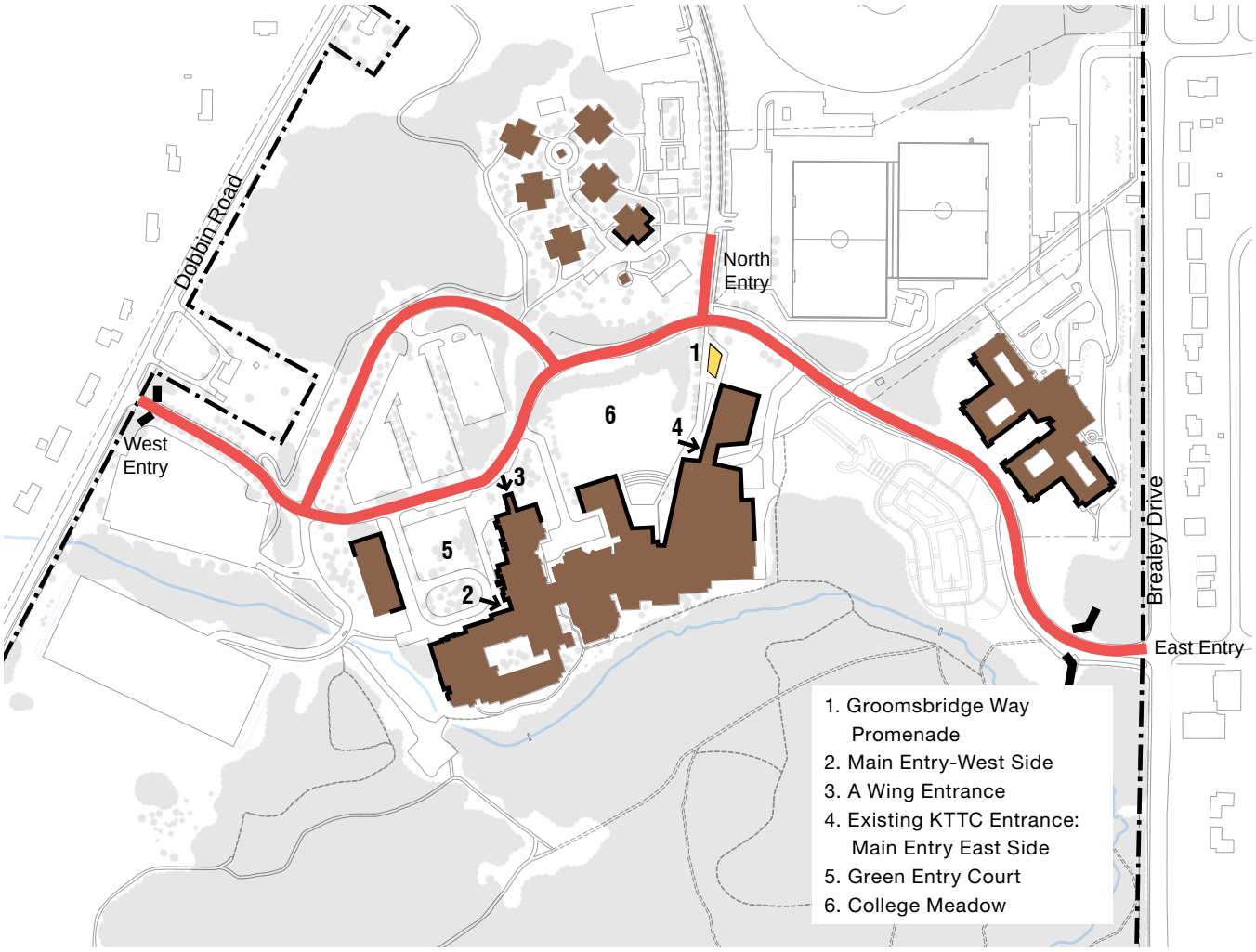
3.2. LAND USE AND PRECINCTS

Develop a compact academic core and intensify the surrounding land uses. Introduce the concept of campus precincts to further assist with future development, identity and wayfinding.

16. Land Use

3.3. ARRIVAL AND ENTRY SEQUENCE

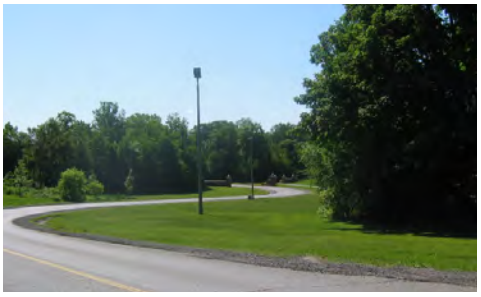
Create a clear sense of destination, arrival and natural orientation. Reroute Fleming College Way to bring visitors more effectively to the College Green, College Meadow and Front Door, and provide a more legible east-west route through the Academic Precinct.



17. Arrival and Entry Sequence

3.4. LANDSCAPE CHARACTER

Emphasize the “clearing in the woods” character of the campus core. Reforest the areas west of Brealey Woods and around the residences, and develop low-maintenance flowering meadows in the existing open fields. Invest in patios and courtyards to extend the use of the outdoors close to the main building.



The campus' manicured landscape leading towards the main gates

College Green, Cambridge

Flowering meadow

18. Landscape Character

3.5. COLLEGE MEADOW AND GREEN ENTRY COURT

The placement, massing and uses of buildings should work together to contain, frame and animate the two primary College open spaces—the College Meadow and Green Entry Court. They should become significant outdoor gathering places in the Academic Core.

The most memorable academic campuses in the world are organized around some form of central landscape feature. The very name “campus”, meaning “field,” derives from this attribute of iconic universities such as the colleges of Oxford and Jefferson’s University of Virginia. Often situated on flat, high points of land, the College greens and commons are the primary source of natural orientation for occupants and visitors, and the primary casual outdoor recreation areas.

Oxford

University of Virginia

McGill University

19. College Meadow and Green Entry Court

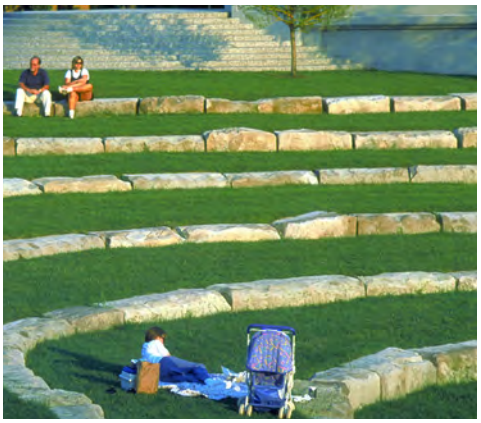
The Meadow is a large green open space ideally situated at the terminus of the north south alignment of Groombridge Way, and defined by the Kawartha Trades and Technology Centre, 'A' Wing, the Main Building service court and Fleming College Way. With the development of the geothermal field within this part of campus, the Meadow provides an opportunity for passive recreation and gathering, informal seating and more naturalistic planting character.

An amphitheatre is an informal space associated with the Meadow, enclosed on three sides by the Main Building and future expansion. It will slope towards the south, with broad landings or steps that support activities such as outdoor performances, lectures, and more casual gathering events.

The Green Entry Court is a more formal open space related to the main entrance on the west side of the Main Building. It is defined by and requires the realignment of Main Street and Fleming College Way to more effectively create a legible sense of arrival.

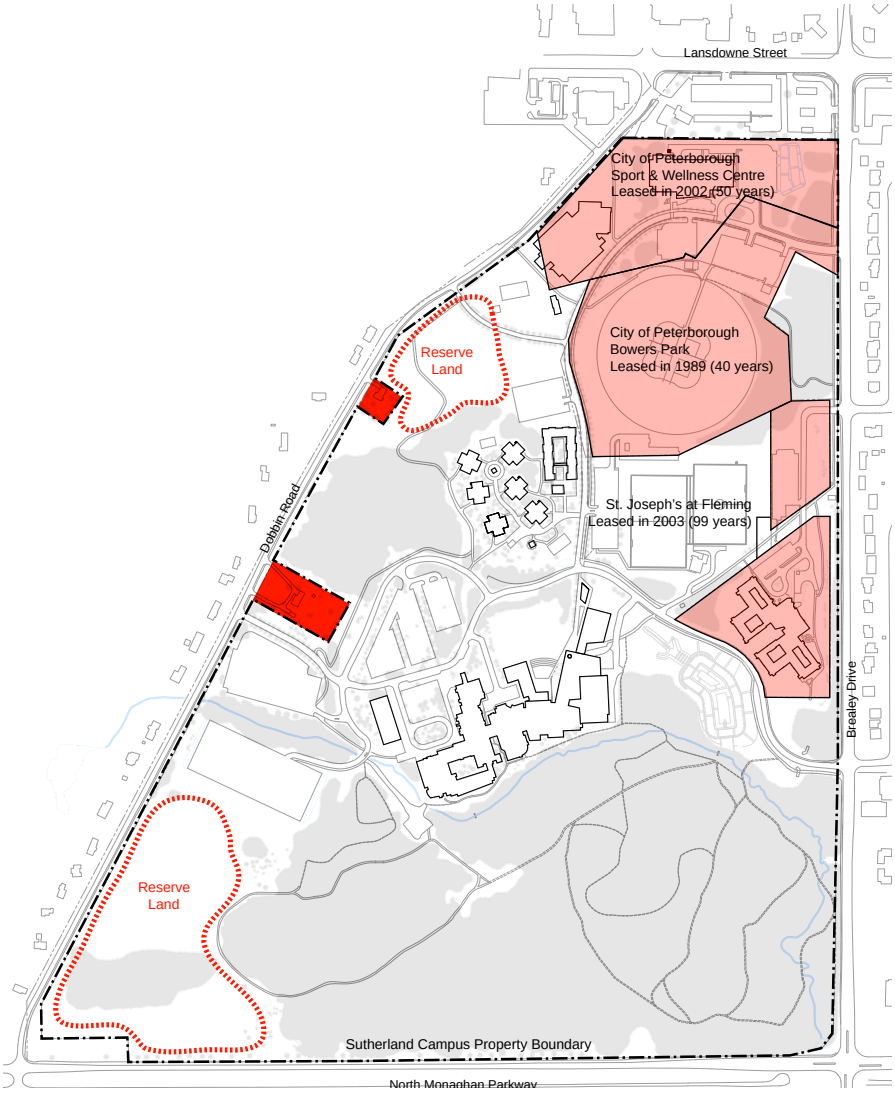

Green Entry Court


College Meadow


Amphitheatre

3.6. LAND OWNERSHIP

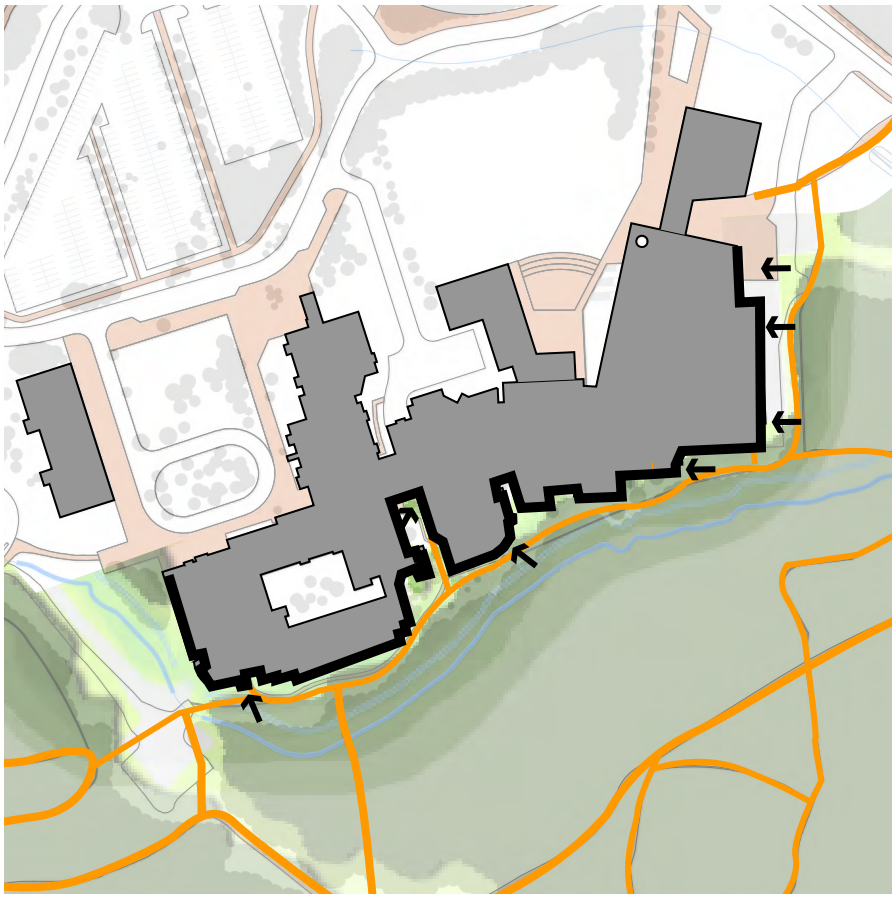
Continue to establish partnerships with other institutions and agencies to enrich the life of the campus. In the long term, consider the purchase of private properties on the east side of Dobbin Road to complete the Partnership & Development Precinct.



20. Land Ownership

3.7. CONNECTION TO BREALEY WOODS

Maximize the transparency of the facade facing the woods to strengthen the visual connection to the outdoors. Continue to complete the trail around the south of the Main Building.



21. Connection to Brealey Woods

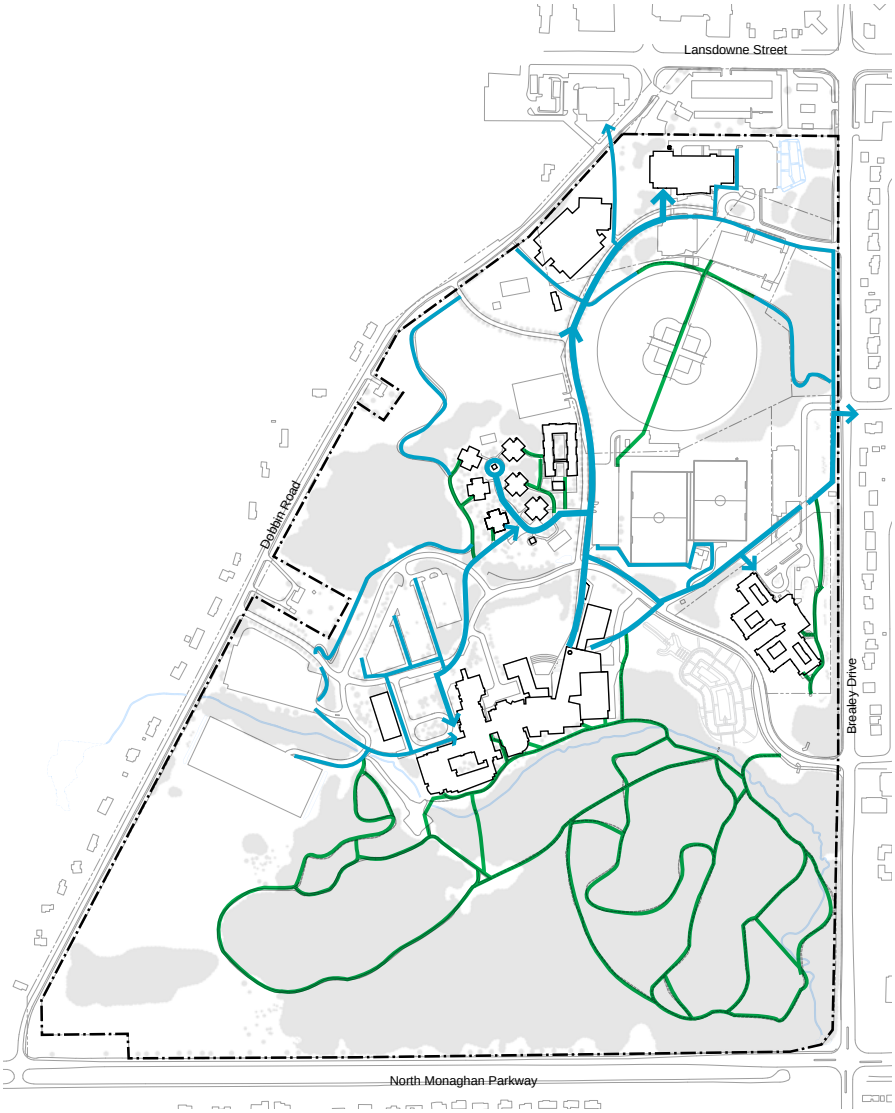
3.8. INTERCONNECTED BUILDINGS

Reinforce the interior pedestrian circulation and organize all buildings around it.

22. Interconnected Buildings

3.9. PEDESTRIAN CIRCULATION

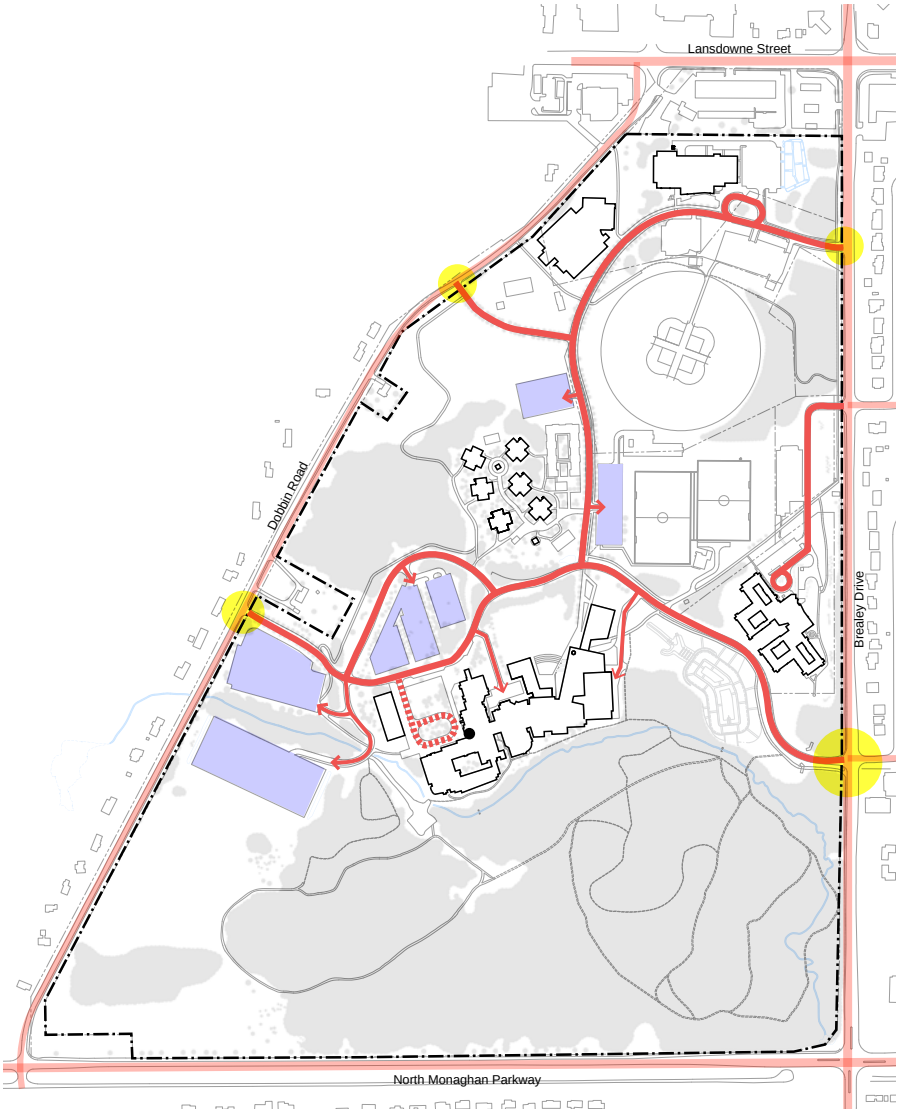
Complete and simplify the network of pedestrian routes between buildings. Reorganize the pedestrian connections between parking lots and buildings to minimize conflicts. Further develop the pedestrian network between the north and south precincts along Groombridge Way.



23. Pedestrian Circulation
(Main paths blue, secondary paths green)

3.10. VEHICULAR ACCESS AND PARKING

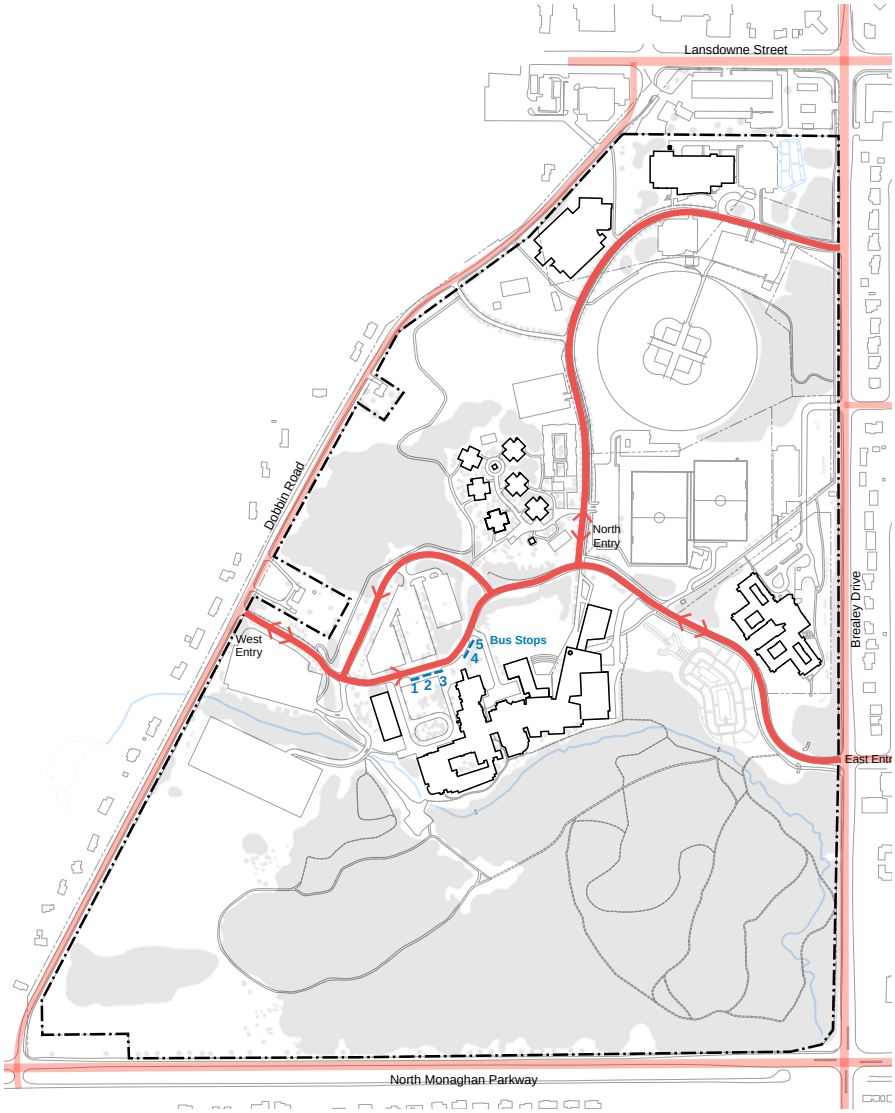
Modify the internal road system to lead visitors to the main entrances of the Main College Building from the east and west. Build a new road to connect the north and south parts of the campus as an extension of Groombridge Way. Reduce the reliance on car access to the campus and subsequent need for parking.



24. Vehicular Access and Parking
(roads and driveways red, parking lots purple, entry points yellow)

3.11. TRANSIT

Provide convenient and central access to transit. Introduce a central, convenient and weather protected location for transit passenger pick up and drop off. For local transit service, a central transit hub along Fleming College Way is sufficient. If more regional transit service is anticipated, explore opportunities to develop larger facilities in the Partnership / Development Precinct.

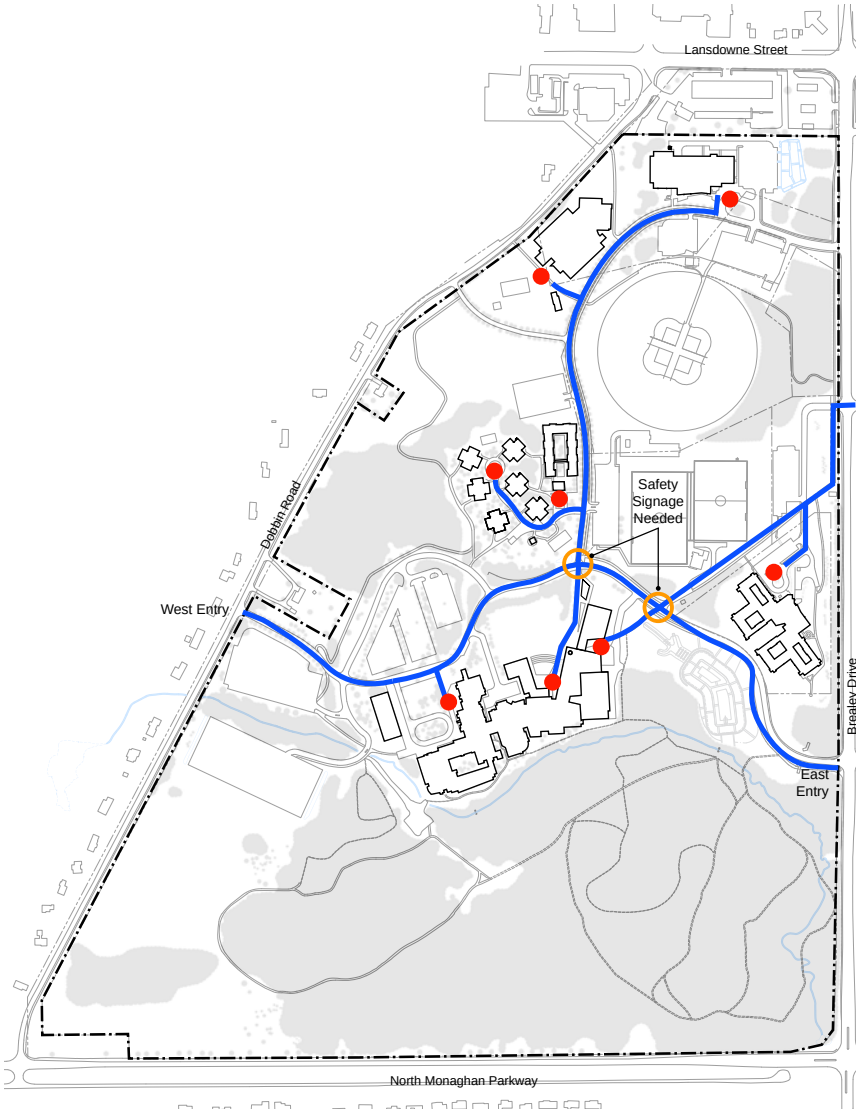


25. Transit Routes
(Bus route red, transit stop blue)

3.12. CYCLING

Continue to promote cycling to and from the campus via the city's broader cycling network and continue to expand end-of-trip facilities.

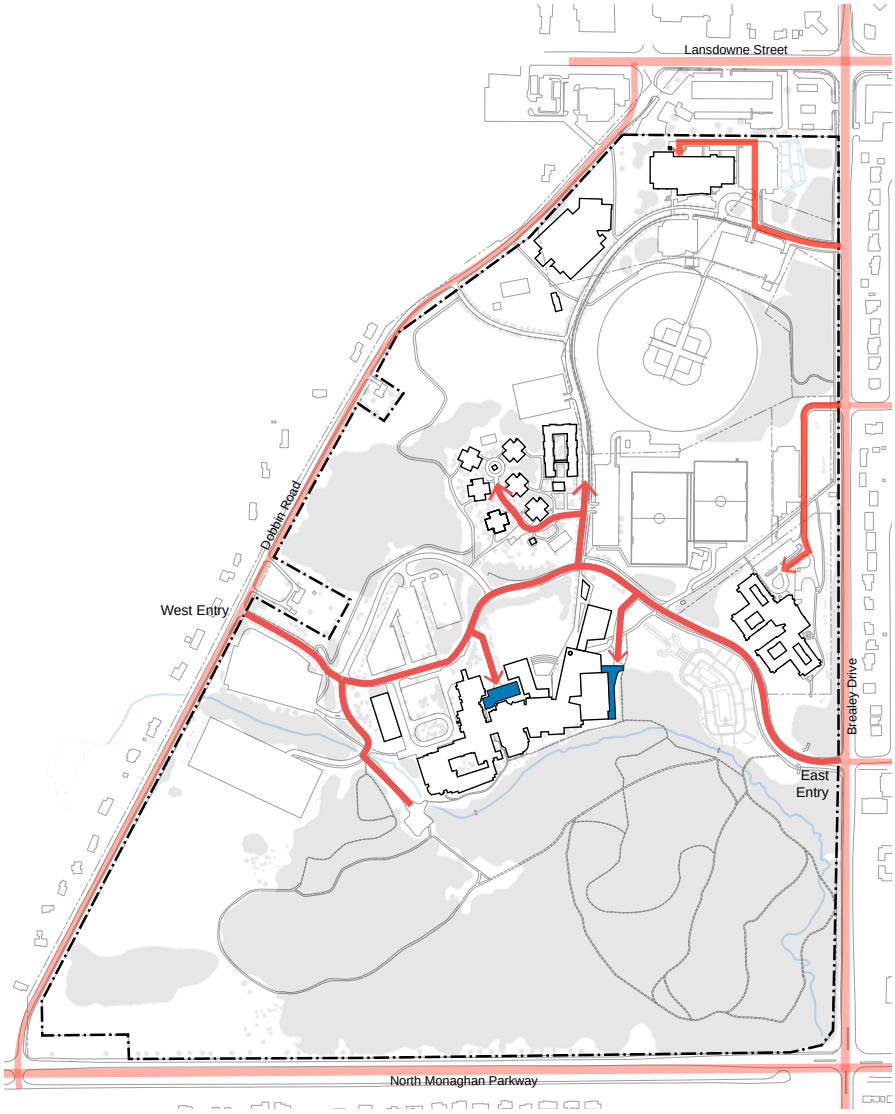
This project of a bicycle shelter at Queen's University with photovoltaic panels on the roof is a simple way to introduce sustainable features to the campus. The shelter can feed electricity back to the grid for 30 years.



26. Cycling Routes
(Cycle route blue, end of trip facilities red)

3.13. SERVICE AND EMERGENCY ACCESS

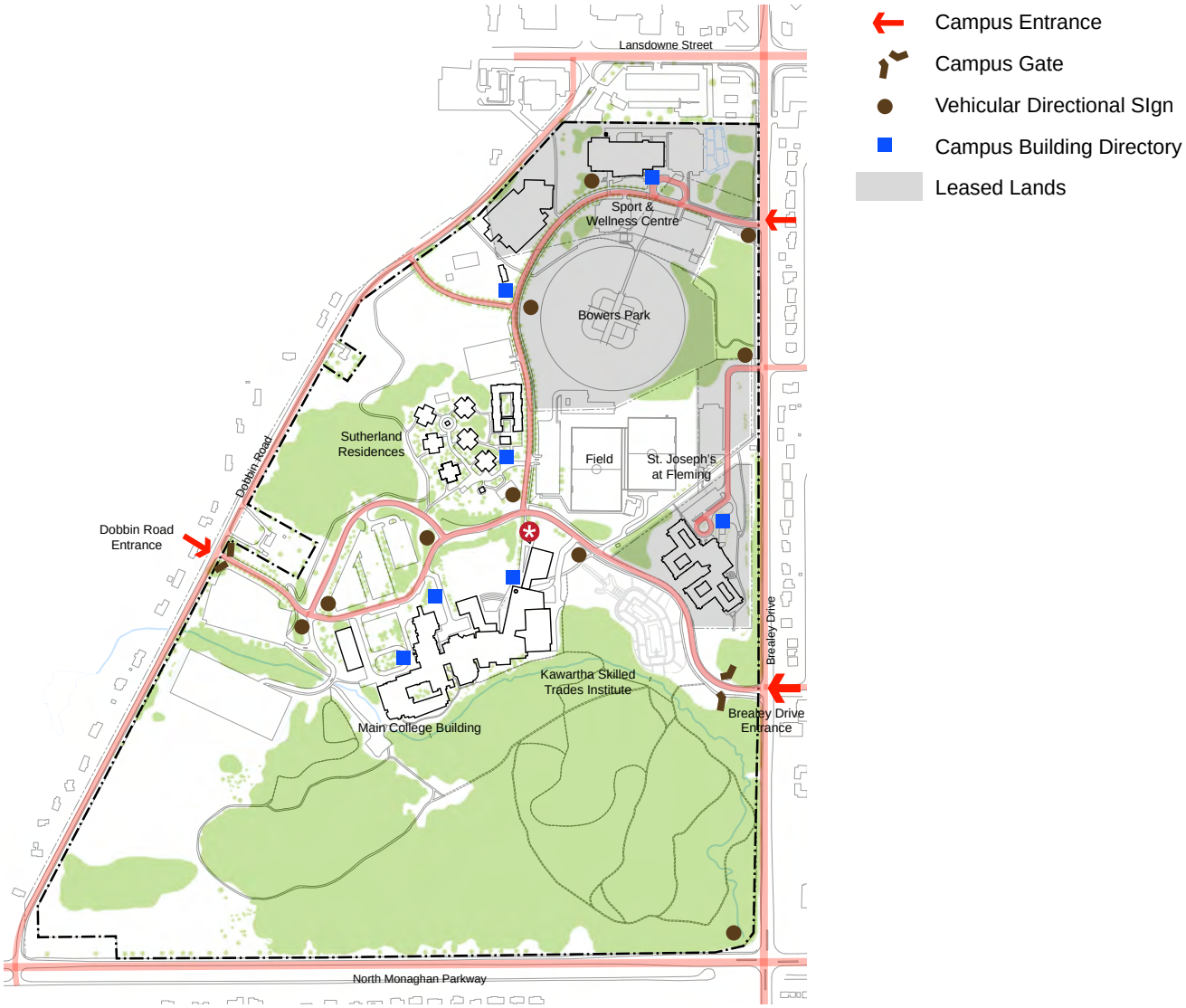
Organize deliveries around two main shipping & receiving areas: the main building service court and the Kawartha Trades and Technology Centre.



27. Service and Emergency Access

3.14. SIGNS AND WAYFINDING

Expand the coordinated sign and wayfinding system that naturally guides visitors, students and staff to their destinations, and to introduce the concept of precincts.



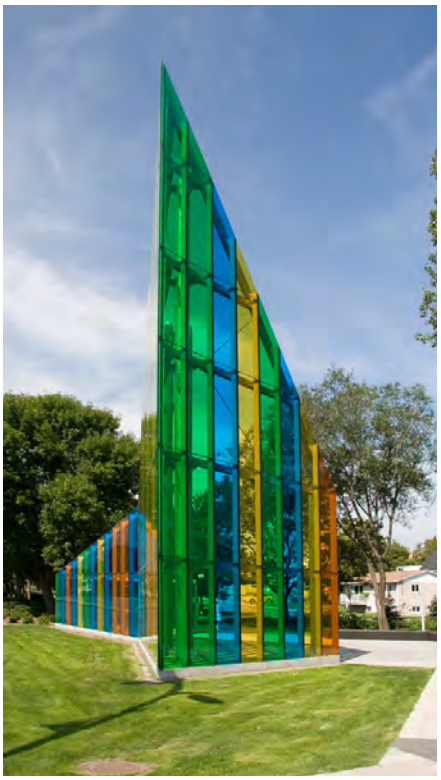
28. Signage and Wayfinding

3.15. IDENTITY AND PLACEMAKING

With every project seek to improve and reinforce the identity of the Sutherland Campus, and to make places that assist with orientation and a sense of arrival. Many of the previously mentioned projects will contribute to this placemaking objective. The realignment of Fleming College Way from Dobbin Road to Brealey Drive will provide a clear and legible structure on which many of the other recommendations will position themselves, including the relocation of the primary transit stops, rearrangement of parking lots relative to the Main Building, refreshing the gateway elements, and the inclusion of a landmark element at the intersection of Groombridge Way and Fleming College Way.

Gateway Sculpture and Landmark

Colonnade



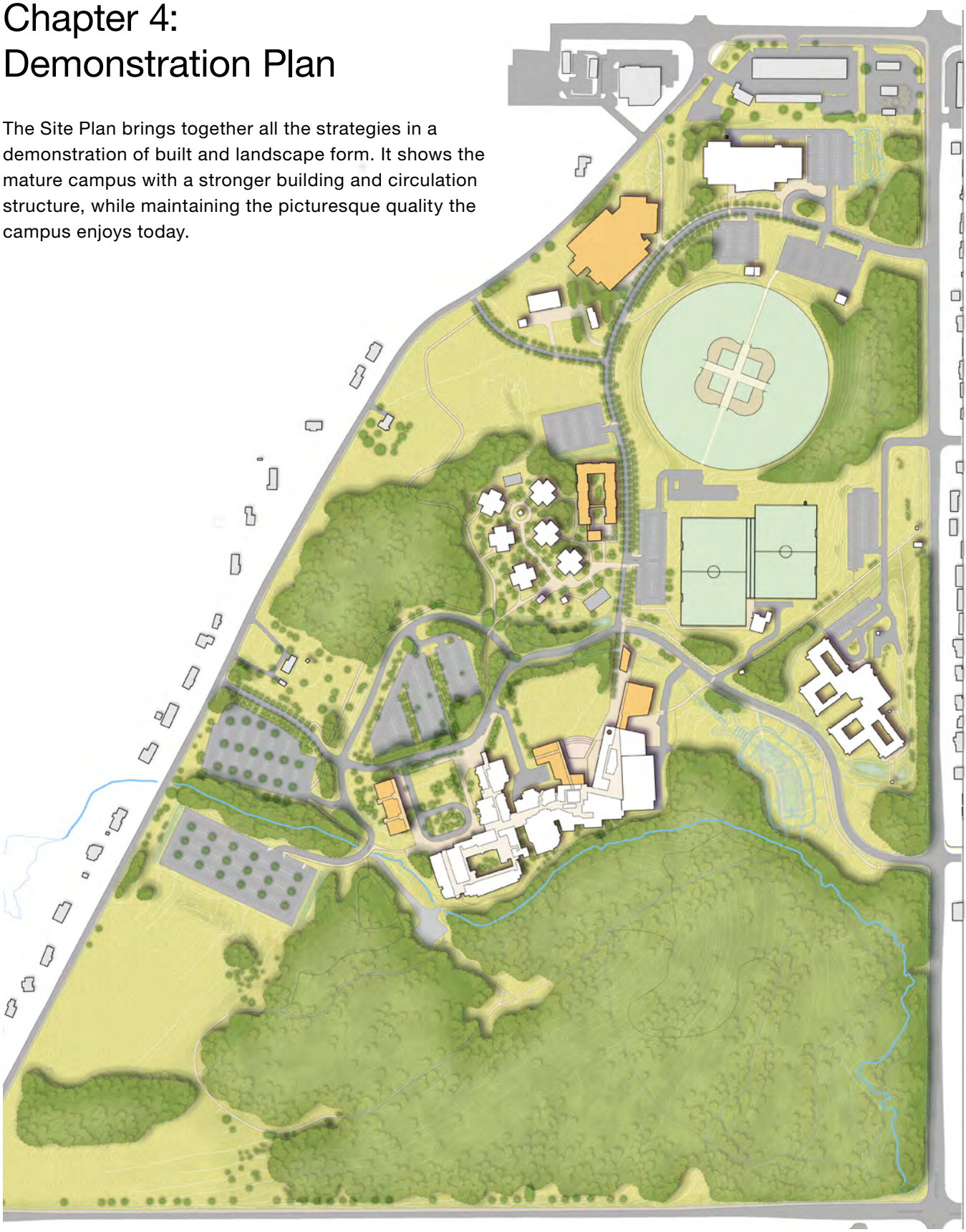
Gateway Sculpture and Landmark

Transit Stop

Covered Walkway

Chapter 4:
Demonstration Plan

The Site Plan brings together all the strategies in a demonstration of built and landscape form. It shows the mature campus with a stronger building and circulation structure, while maintaining the picturesque quality the campus enjoys today.



29. Demonstration Plan: Sutherland Campus
(new buildings yellow, existing buildings grey)

4.1. ACADEMIC PRECINCT

Future growth of academic and administrative facilities should work toward the creation of the College Meadow and Green Entry Court flanked by buildings, concourses and entrances. The Meadow would be largely an open lawn complemented with naturalistic plantings, high branched deciduous trees around the perimeter. The Amphitheatre would include large sloping steps with stone or concrete walls for seating. The reconfiguration of Main Street and Fleming College Way would permit the creation of the Green Entry Court. With these modifications, transit movement on campus would become more efficient and bring the stops closer to 'A' Wing and the western main entrance. The entry road modifications would lead to the rearrangement of surface parking lots to the outside of the roadway system, but still occupy the same general campus footprint within this Precinct.

Existing aerial overlaid with the proposed roads, parking lots and buildings (new roads and parking indicated in red).

The Green Entry Court, together with a new entry element to the existing building, provides a much improved sense of identity and orientation to the campus. The entry road is rerouted close to the

30. Demonstration Plan: Academic Precinct
(new buildings yellow, existing buildings white)

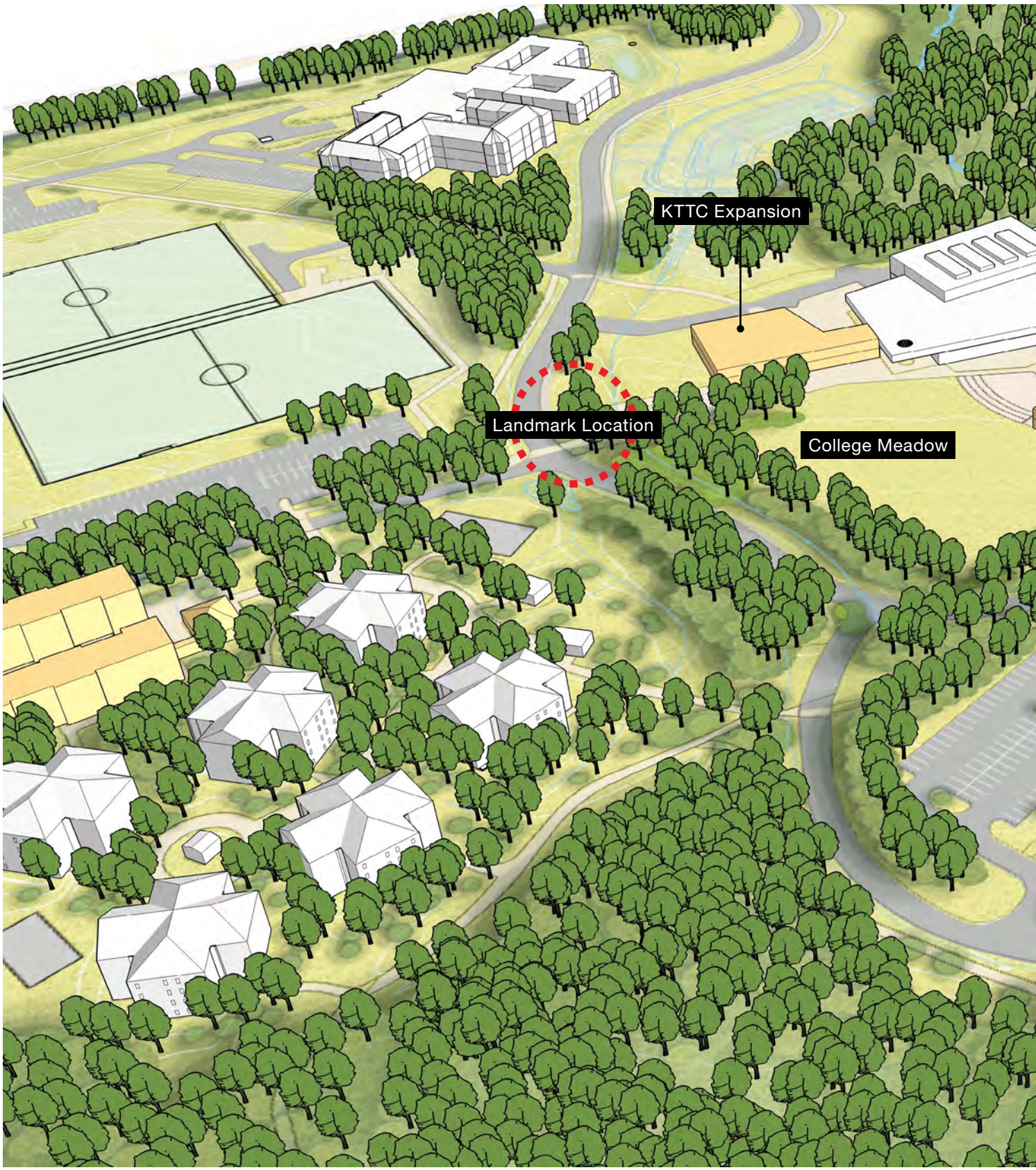
main building, so that it more directly brings a visitor to the Green and front door. In the process, roadways to the parking and loading areas become secondary routes.

Three future building sites are identified in this iteration of the campus plan: one more central to the Main Building, a second associated with the western main entrance and Green Entry Court, and a third as an expansion of the Kawartha Trades and Technology Centre. Of the three sites, the central building is the most likely first phase of expansion. Within the Academic Precinct the potential additional floor area is 93,700 gsf, assuming two storeys for each new building.

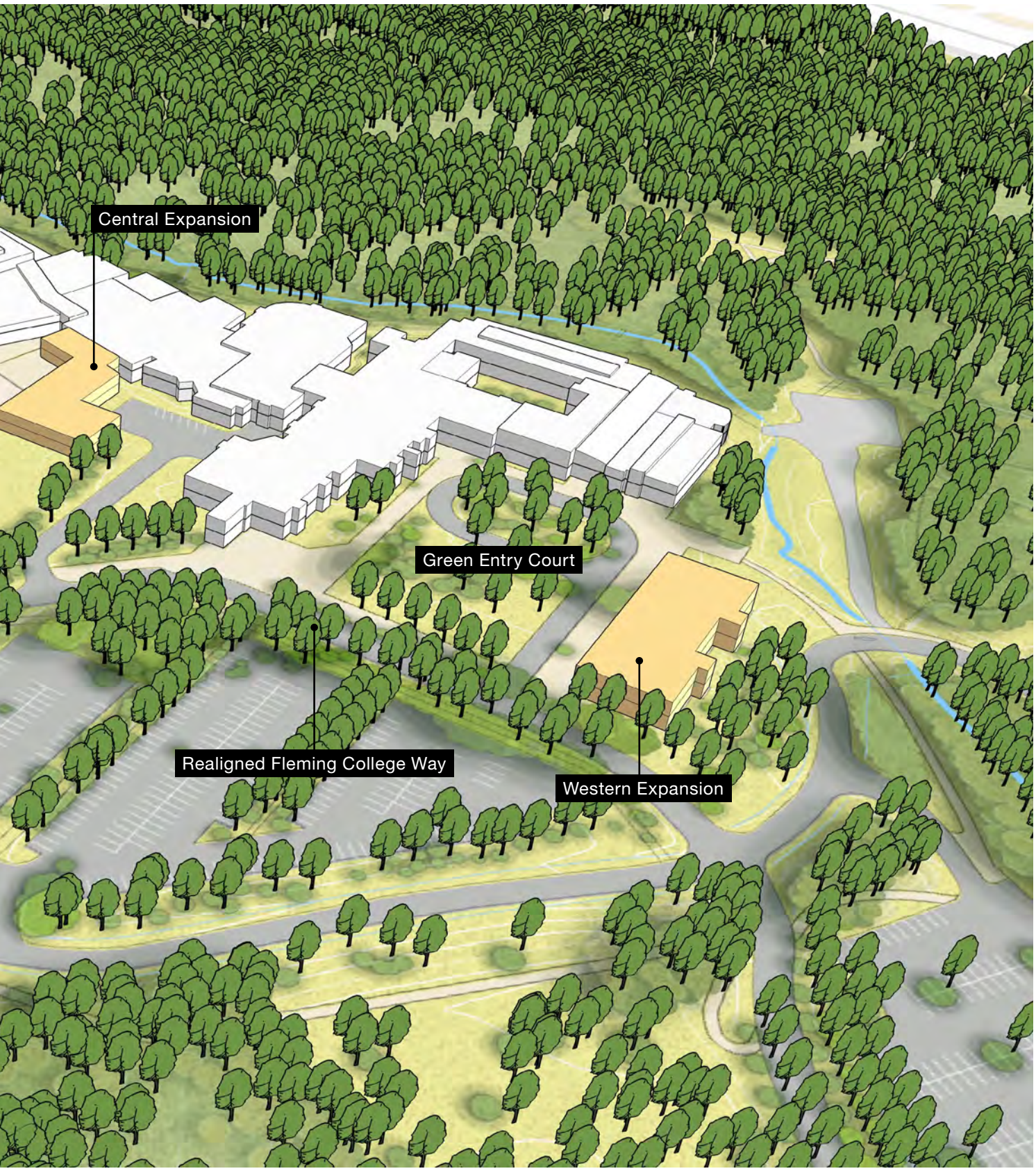
The more central building site will incorporate into its overall footprint the accessory building developed as part of the geothermal field on the College Meadow. The corridors and floor levels will relate to the Main Building and extend the primary pedestrian movement system. This building can accommodate classrooms, shared spaces or administrative functions. This building provides an additional 29,400 gsf, assuming two storeys total.

The site to the west of the Main Building presents a departure from previous expansions, in that the future development will not provide a direct connection to the central corridor system. This building will help to define the western edge of the Green Entry Court, and could support classrooms, shared spaces, physical plant or administrative functions. This building provides an additional 33,500 gsf, assuming two storeys total.

The site extending from the Kawartha Trades and Technology Centre towards Fleming College Way brings the Main Building closer to the primary intersection on campus. This building could include a new welcome centre, academic uses, or administrative functions. This building provides an additional 30,800gsf, assuming two storeys total.



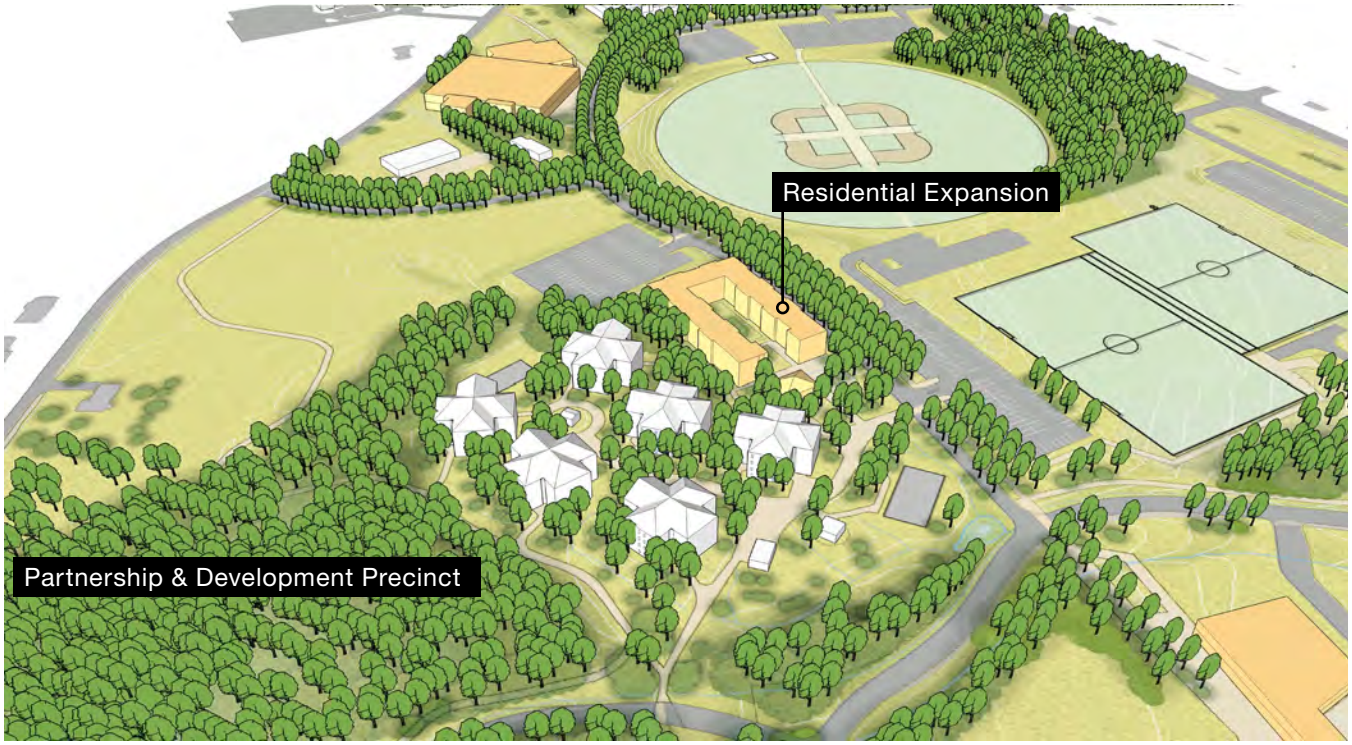
31. Demonstration Model: Academic Precinct and Residential Precinct
(new buildings yellow, existing buildings white)


Central Expansion
Green Entry Court
Realigned Fleming College Way
Western Expansion

4.2. RESIDENTIAL PRECINCT AND PARTNERSHIP & DEVELOPMENT PRECINCT

The area of the student residences is imagined as a pedestrian and well-treed precinct with the existing central road being converted to a wide pathway that can hold emergency vehicles and cars on move-in days. A new residence, located on the Pine parking lot flanks the north-south road and includes a separate pavilion for recreational and social activities. The potential additional floor area is 91,300 gsf, assuming two levels to the new building. With the development of Groombridge Way, the Residential Precinct will enjoy stronger pedestrian connections to both the north and south.

The Partnership & Development Precinct includes undeveloped lands currently held by the College without a specific assigned land use. Two small parcels in this part of campus are not under College ownership, but Fleming should endeavour to purchase them to create a contiguous land holding. Initial thoughts through this update process include opportunities for partnering with research initiatives and other complementary trades and businesses than can extend what Fleming College can offer as part of its current and future programs.



32. Demonstration Model: Residential Precinct and Sports Fields
(new buildings yellow, existing buildings white and grey)

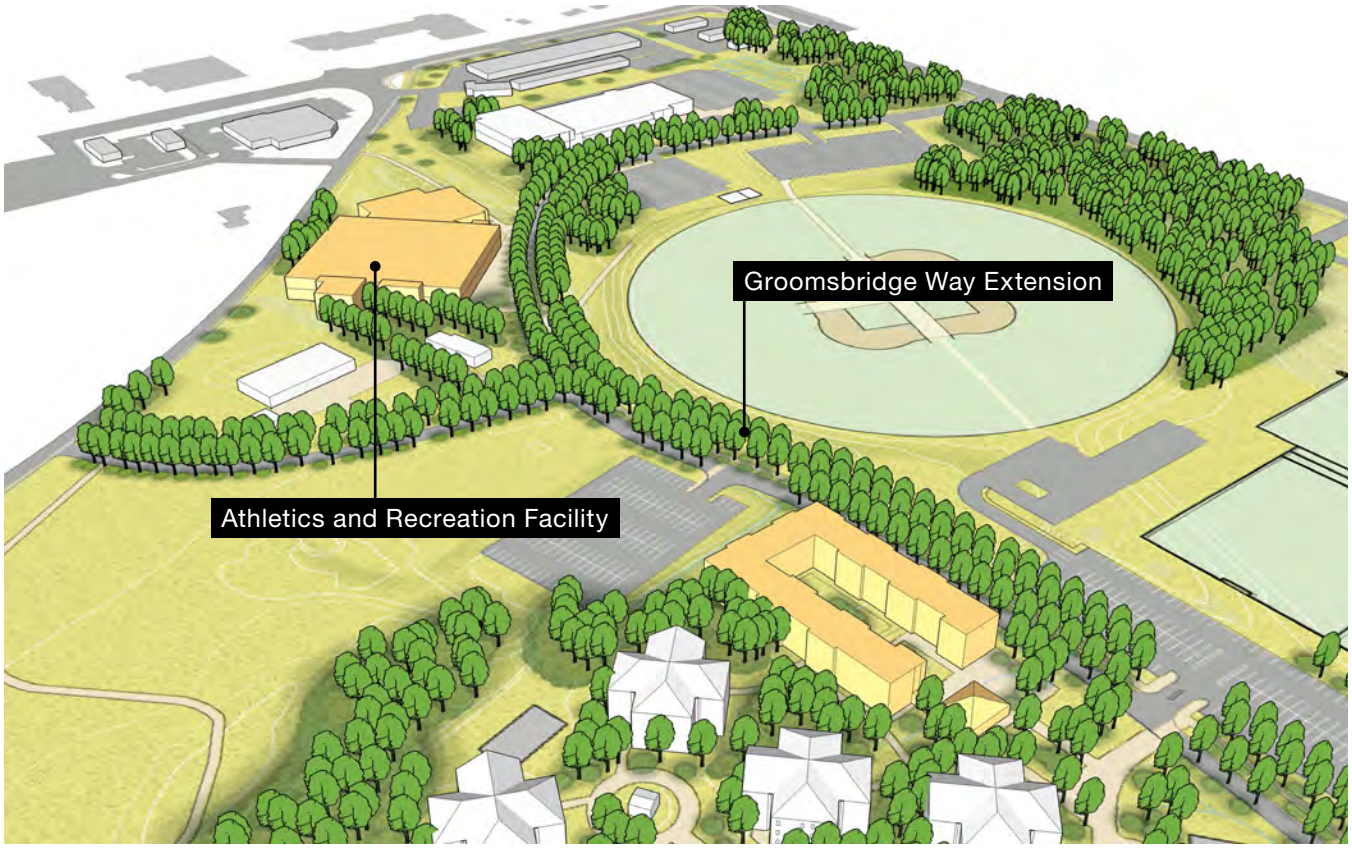
33. Demonstration Plan: Residential Precinct and Partnership/Development Precinct
(new buildings yellow, existing buildings white and grey)

4.3. ATHLETICS & RECREATION PRECINCT

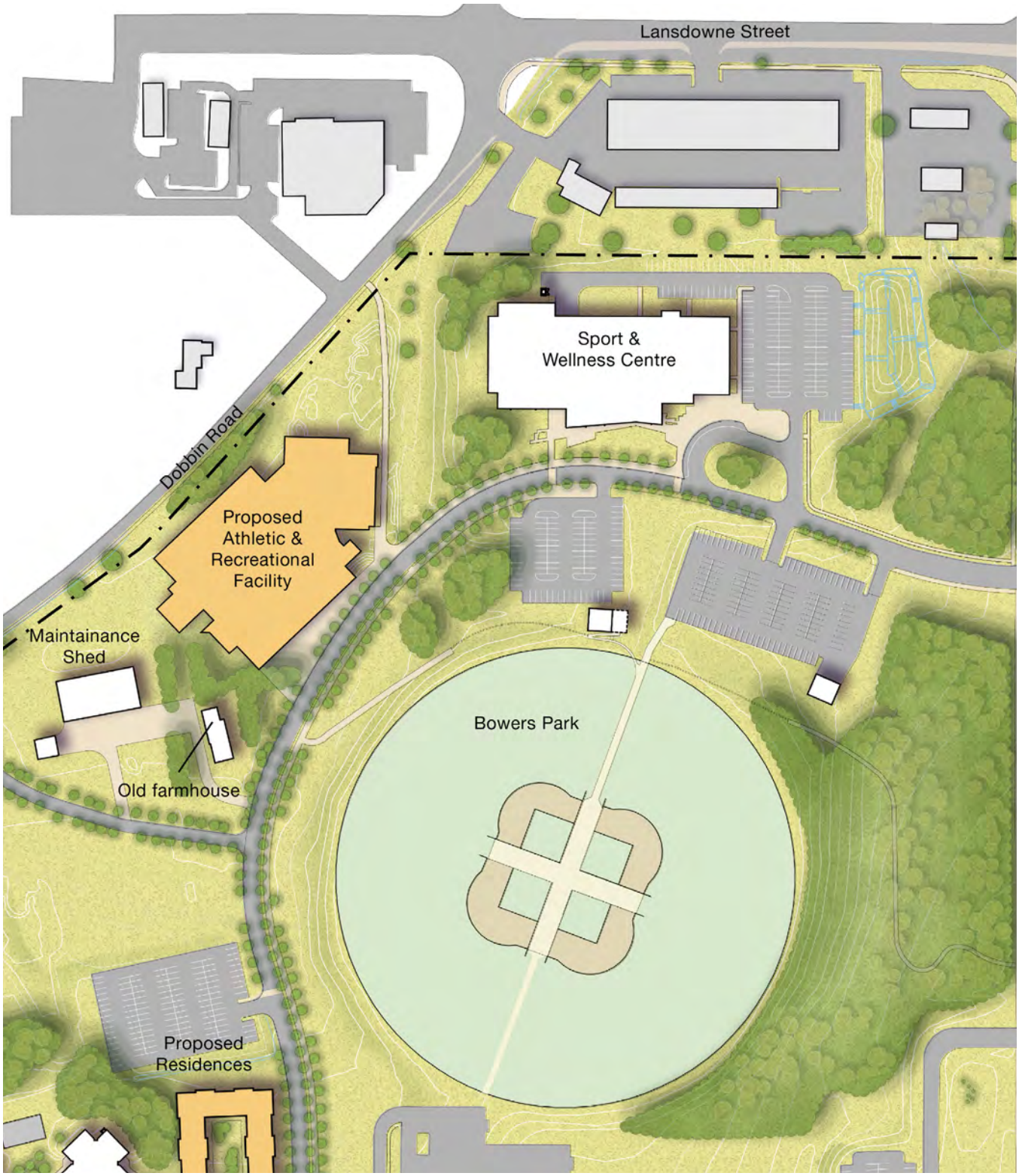
Groombridge Way, a new tree-lined north-south street from Fleming College Way to Brealey Drive, connects the Academic Precinct to the Residential and Athletics & Recreation Precincts. This new street enhances the pedestrian and cycling experience on campus.

New building in this Precinct expand the athletics and recreational offerings on campus, and build upon the success of the Health and Wellness Centre. The facilities are ideally connected but can stand alone. the potential additional floor area is 151,250 gsf, assuming two levels to each new building.

A new east-west street from Dobbin Road to the Groombridge Way extension is the boundary between the Residential Precinct and Partnership & Development Precincts from the Athletics & Recreation Precinct.



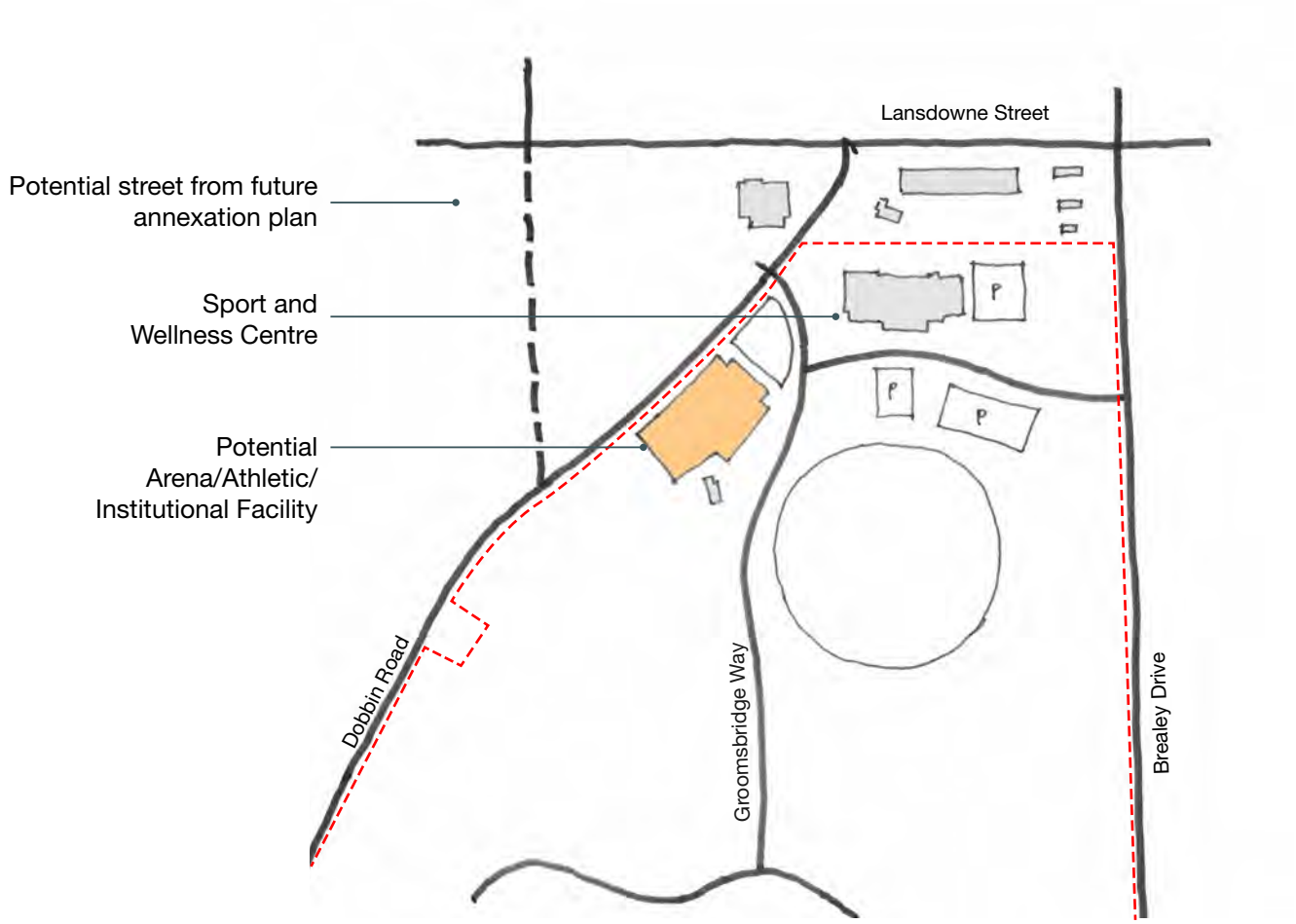
34. Demonstration Model: Athletics and Recreation Precinct
(new buildings yellow, existing buildings white and grey)



35. Demonstration Plan: Recreation and Athletics Precinct
(new buildings yellow, existing buildings white and grey)

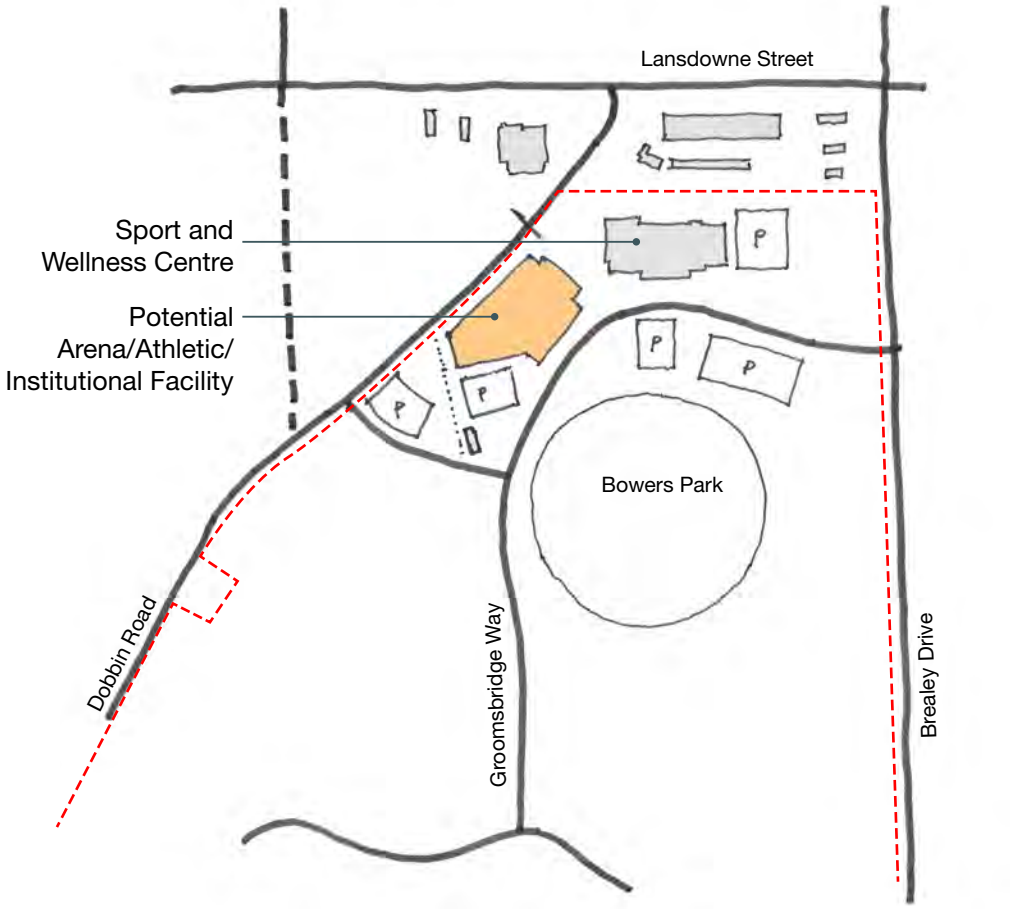
Appendices
Athletics and Recreation Precinct Studies

During the Explorations stage of this Campus Master Plan Update, the consulting team prepared a series of possible options for the development of the Recreation and Athletics Precinct. The preferred option is included in the Main Report, but the other options have ideas and elements that offer potential directions to consider when the development of the Precinct and adjacent lands unfold.



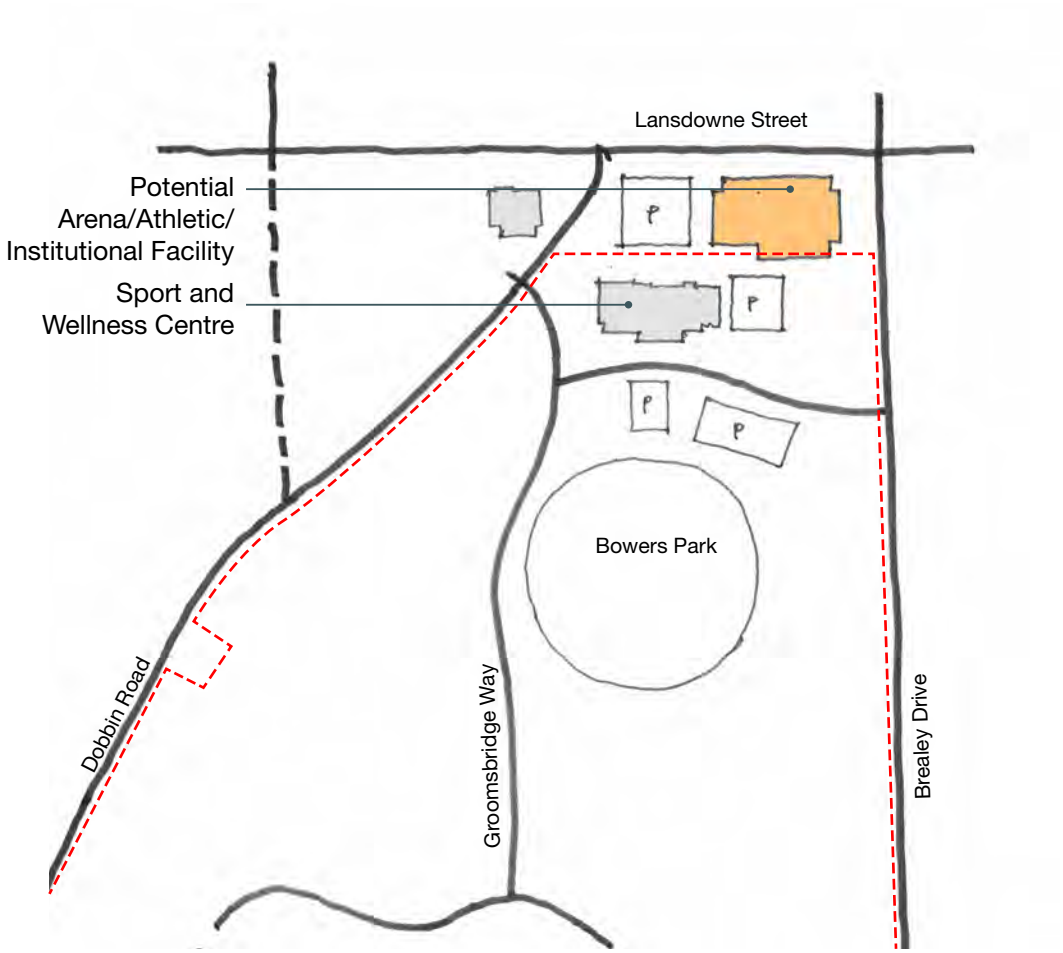
OPTION A: AS CURRENTLY PROPOSED

Potential arena/athletic/institutional facility on Dobbin Road beside the proposed Groombridge Way extention.



OPTION B: PREFERRED

Potential arena/athletic/institutional facility next to the Sport and Wellness Centre, which offers the opportunity of creating an integrated Recreation and Athletics Precinct. Instead of the Groomsbridge Way extension to Dobbin Road as shown in Option A, there is a new street proposed south of the future. Groomsbridge Way is extended to connect with Brealey Drive as recommended in the 2009 Campus Master Plan.



OPTION C

Potential arena/athletic/institutional facility at the corner of Lansdowne Street and Brealey Drive offers the opportunity of a new point of entry for the campus. This new facility would be on lands beyond the current campus holdings and could be part of a City/College partnership.