

University of Alberta

Sector 15 & 16 Plan

for Michener Park

May, 2014

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Note:

The illustrations depicted in the Sector Plans are conceptual only and are intended to graphically describe the intent of the guidelines. The actual character and details of a specific development will be determined during the design stage of that development.

1.0 Introduction

1.1 Sector Plan Organization

For ease of use, Sector Plans used by the University are organized into five (5) sections, plus appendices.

1. Introduction

This section provides an overview of the process undertaken by the University to establish both a Long Range Development Plan (LRDP) and individual development and redevelopment Sector Plans for the University including the specific consultation activities undertaken for Sector 15 & 16. This section also provides an overview of the urban design nomenclature used to understand and identify existing elements of pattern within and between each Sector, defined as planning elements.

2. Sector Characteristics & Vision

This section provides a brief overview of Sector 15 & 16's history, characteristics, and function within the University's institutional planning. This section also presents the vision for the Sector and specific development and redevelopment strategies that will aid in achieving the vision.

3. Visual & Physical Inventory

This section provides an overview of the current state of Sector 15 & 16, as inventoried and analyzed by each sector planning element, based on various sources including the LRDP, other support documentation, a photographic inventory of the Sector, and site visits by the project team. The overview is organized with a section for each sector planning element - Districts, Pathways, Edges, Nodes and Landmarks, with diagrams illustrating each.

4. Sector Specific Guidelines

This section presents project goals and guidelines for future Sector 15 & 16 development and redevelopment based on the Sector structure characteristics - Districts, Pathways, Edges, Nodes and Landmarks. Key items addressed include the following:

- Development sites;
- Development opportunity in the Sector;
- Acceptable uses for those sites;
- Compatibility issues with surrounding development;
- Relationship to services;
- Transition/compatibility to adjacent lands;
- Required open space elements; and
- Wayfinding and signage.

Figures within this section provide conceptual examples of the Sector Specific Development Guidelines.

5. Site Specific Guidelines

This section provides detailed guidelines for development and redevelopment within each existing and proposed site in the Sector. Figures within this section provide conceptual examples of the Site Specific Development Guidelines.

6. Appendix A - Glossary

7. Appendix B - Campus Wide Guidelines

This appendix presents a broader based set of guidelines that should be acknowledged and integrated within each Sector of the Campus. Key items addressed include the following:

- Visual Quality and Design;
- Sector Identifier and Colour(s);
- Landscape Treatment;
- Natural Areas;
- Screening;
- Public Art:
- Signing;
- Lighting;
- Street Amenities:
- Architectural and Open Space Guidelines;
- Sustainability;
- Utilities; and
- Parking, Access and Loading/Maneuvering Areas.

8. Appendix C - Sector Implementation

This section discusses principles and strategies to be observed during the development or redevelopment of the Sector, and further activities required prior to, or during, future development.

9. Appendix D - References

- Related Documents
- Acknowledgements
- Consultation Activities

1.2 Background

In June 2002, the Board of Governors of the University of Alberta adopted a Long Range Development Plan (LRDP) for the University, establishing a vision for shaping and guiding future growth, development and redevelopment at the four (4) Edmonton Campus sites of the University (North Campus, South Campus, Michener Park and Faculté Saint-Jean) to the year 2030.

The LRDP provides a flexible set of strategic planning principles that support the growth of new research, teaching and support facilities, as well as upgrades or replacement of existing structures, within the context of University lands. The LRDP also identifies how University lands and facilities should be developed and outlines initiatives and guidelines that direct appropriate and effective growth and development within the University. Through these principles, initiatives and guidelines, the LRDP has recognized the existing unique characteristics and attributes of the University and promotes future development that fosters desirable Campus life; supports teaching and research; uses physical and financial resources efficiently and effectively; creates, preserves and enhances significant physical assets of the University; provides the flexibility to respond to future trends and growth; and recognizes the planning initiatives of its neighbours and partners.

Within the Edmonton Campus sites, eighteen (18) Sectors have been identified - eleven (11) Sectors within the North Campus, three (3) Sectors within the South Campus, three (3) Sectors in Michener Park and one (1) Sector at the Faculté Saint - Jean. The University has identified the need to establish more detailed Sector Plans for each of these Sectors.

The Michener Park Sector Plan area is identified as 15 & 16. The adjacent Sector 17 is currently leased for non-university development to Westcorp. The area contained within Sector 15 & 16 is the subject of the current report.

The Sector Plans are intended:

- To identify potential development and redevelopment sites that address Faculty, University services and other expansion requirements.
- To outline guidelines for effective and compatible development and redevelopment activities within and between each Sector.
- To identify the required physical linkages to adjacent Sectors and the interface with adjacent neighbours and University partners.

The University will use the Sector Plans, in conjunction with the LRDP, to assist future planning and development initiatives within each Sector and determine if individual development or redevelopment projects are consistent with the directions and guidelines provided.

CONSULTATION IN SUPPORT OF THE CREATION OF THE Sector 15 & 16 PLAN

Future planning for Michener Park is part of the Long Range Development Plan (LRDP). During the development of the LRDP, numerous consultative opportunities occurred between 2001 and 2002:

- 3 Community Workshops:
 - September 12, 2001, November 20, 2001 and February 4, 2002
- 5 Open Houses:
 - September 26, 2001 and two on October 4, 2001 - First LRPD Open Houses
 - November 27, 2001 Second LRDP Open House
 - February 25, 2002 Third LRDP Open House
- 9 meetings where the LRDP was discussed at length:
 - 8 University of Alberta Community Committee (UACC) meetings
 - 1 Garneau community meeting

Since 2002 the U of A has worked with the communities surrounding the South Campus on various planning and development projects. The engagement opportunities since 2002 – though not directly related to the Sector 15 & 16 Plan – have had an indirect impact on the consultation process for the Sector 15 & 16 Plan. Since 2002 we have discussed with our South Campus neighbours issues such as transportation and traffic, green space retention, community connections, sustainability topics and how to better engage neighbouring communities. Information from all of these engagement opportunities informed the U of A as it proceeded with the Sector 15 & 16 Plan.

Currently, the U of A meets with the communities of South Campus through the South Campus Consultation Group (SCCG) which was created through an MOU with the University and the South Campus Neighbourhood Coalition (SCNC) in May 2012. It was through the SCCG that a small sub-committee of community representatives from Malmo Plains, Lendrum and Lansdowne communities was formed to work with the Michener Park Residents Association and the U of A on the Sector 15 & 16 Plan. This sub-committee attended all focus groups and helped to plan the engagement timeline. The following is a list of the engagement events that took place for the Sector 15 & 16 Plan.

- June 5, 2013 Focus Group meeting 1
- June 20, 2013 Public Open House1
- August 7, 2013 Focus Group meeting 2
- September 17, 2013 Public Open House2
- November 12, 2013 Focus Group meeting 3
- November 14, 2013 Public Open House 3
- January 23, 2014 Focus Group meeting 4
- February 19, 2014 Focus Group meeting 5
- March 25, 2014 Public Open House 4
- May 2, 2014 SCCG Sub-Committee Lead will receive copy of final Sector 15 & 16 Plan documentation and asked to provide final comments by May 12, 2014.

OTHER PLANS INFORMING THE DEVELOPMENT OF THE Sector 15 & 16 PLAN

Because of the nature of the Sector, the development of the Sector Plan took information and context from a number of other plans.

Comprehensive Institutional Plans (CIP)

This document includes the University's academic and research plans and performance measures, Capital Plan, and both the 2011-2012 and 2012-2013 institutional budgets, and outlines the University's short-term and long-term plans, goals, and resource needs and implications.

The University of Alberta has a goal of accommodating up to 25 percent of its full time enrolment in purposebuilt, supportive student residences for a number of reasons:

- Academic Success students living in purpose-built student residences with intentional programs tend to do better academically.
- Leadership Development students living oncampus tend to demonstrate a higher sense of civic involvement and giving back to the community.
- Engagement students living on-campus tend to have more quality interactions with peers, faculty and staff and develop life-long support and commitment to their alma mater.
- Retention on-campus community living programs have a significant impact on ensuring students complete their studies.
- Recruitment the University is leveraging its residence capacity to attract international, rural, Aboriginal peoples and graduate students.

This housing goal directly impacts Michener Park development plans. Michener Park has been the University's primary residence for international families, giving it a unique focus relative to the rest of university housing, which in turn creates a uniquely multi-cultural and family-oriented character. The university's objective for the site has a loose target of doubling the current density of the site, retaining its provision for international students and families, while also expanding and diversifying the mix of tenants within Michener Park.

1.3 Sector Structure

The character and physical qualities of each Campus of the University of Alberta is determined, influenced, and shaped by various components: the Campus as a whole, its distinct Sectors, people, and their activities. The visual quality or legibility of these components reinforces the recognition and organization of a coherent Campus and individual Sector "pattern".

Sector structure is based on Kevin Lynch's framework created in his study *The Image of the City*. Lynch presented a method for evaluation of city form by observing how individuals perceive and navigate the urban landscape by forming mental maps with five elements: Districts, Pathways, Edges, Nodes, and Landmarks.

Legibility is a crucial concept in the building of a coherent Sector "pattern". A legible Sector would be one whose districts (areas of recognizable and common character), pathways (urban channels - roads, walkways, greenway corridors, public transit, bicycle routes, etc.), edges (natural and built boundaries), nodes (focal points, plazas, quadrangles, courtyards and gardens) and landmarks (reference points) are easily identified and organized into an overall pattern. Throughout history, these elements have been used to harmonize, identify and characterize the urban environment and establish clear patterns of entry, movement, visual reference, character, social life and experience - in short - to establish a "sense of place".

In order to create a distinctive "sense of place" for each University Campus and Sector, it is important to identify and rely on the existing and potential interaction between districts, landmarks, nodes, edges and pathway development to establish a series of guidelines and overlays in a comprehensive and implementable format. In regards to each Sector environment, existing notions of "sense of place" are physically and cognitively created through existing elements of "pattern", including:

DISTRICTS

Districts include built form areas (e.g. faculties, research centres, student housing, recreational facilities, administration, operational facilities, parking structures, etc.) within each Sector, that integrate with natural features (e.g. river valley, open space, recreational areas, greenways, pedestrian oriented spaces - e.g. 89 Avenue, etc.) and social patterns of life (e.g. the concentration of perceived activity - learning, working and social experiences) to create areas of geographic and visual reference.

PATHWAYS

Pathways include key vehicular and pedestrian routes and their character related to a Sector theme; spatial quality, and landscape treatment; convergence (terminals, directional/wayfinding qualities and networks); and public transit routes, links, stations and stops.

EDGES

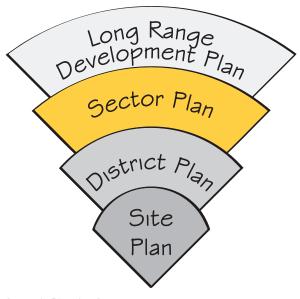
Natural boundaries (e.g. North Saskatchewan River Valley) and built form boundaries (e.g. the density, massing, setback and façade treatment of buildings; key roadway boundaries and seams; and streetscape features - treed boulevards, lighting, furnishings, etc.).

NODES

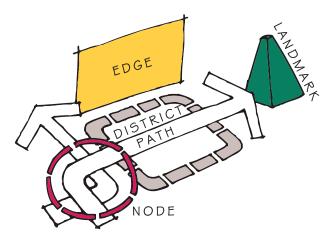
Nodes include landmarks; areas with a high concentration of activity (e.g. HUB Mall, Walter C. Mackenzie Health Sciences Centre, 89 Avenue transit corridor); actively used open spaces (e.g. plazas, quadrangles, and courtyards); key vehicular and pedestrian intersections; public transit links, stations and stops; and Bridge crossings (e.g. High Level bridge, Belgravia overpass).

LANDMARKS

Landmarks include natural features (e.g. North Saskatchewan River Valley, Research Farm); built form (e.g. Universiade Pavilion (Butterdome), Timms Centre, HUB Mall, Rutherford House, etc.) and other significant urban features (e.g. 87 Avenue and 110 Street entrance feature, etc.).



Strategic Planning Structure



Sector Planning Elements

INTEGRATION OF SECTOR ELEMENT

Within each Sector, specific sites have been identified and assessed for their existing use and future development or redevelopment opportunities. Using the concepts of district, path, edge, node, and landmark, each site has been assessed and development and/or redevelopment guidelines may be provided that offer perspective on intended built form, character, site features, or other planning and design criteria. Understanding and identifying these existing elements of pattern to define legibility, the perception and preference for the visual environment, and compatibility of each Sector with human purposes will establish a "sense of place", and the relations, perceptions, attitudes and values that effectively connect people and place.



District – View of existing maisonette district



Pathway – Existing pathway



Edge – The 122 Street Edge Condition



Node – Existing park entry node



Landmark - Main entrance to Michener Park

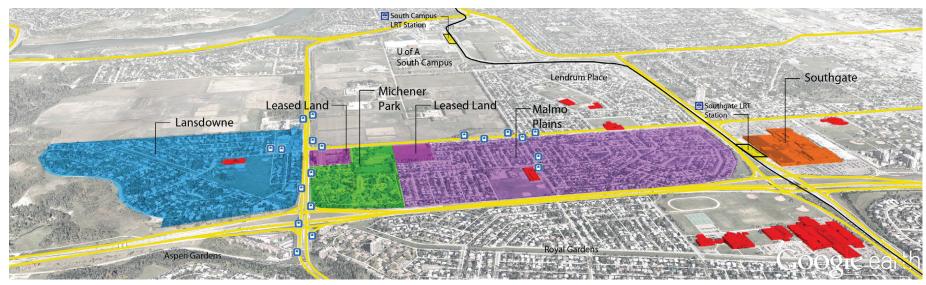
2.0 Sector Characteristics & Vision

2.1. Sector Characteristics

The first group of buildings constructed on the site in 1967, "Michener Park 1," consisted of Vanier Tower and the surrounding staggered two and three floor maisonette townhouses. They continue to function in their original capacity, having been built to house married couples and/or families, the only change being that over time an increasing number of the tenants have become international graduate students and researchers with families. Michener Park 2, nicknamed the "600 Block", added an additional set of townhouses to the parcel adjacent to the northwest corner of Michener Park 1 in 1972. In total, Michener Park contains 386 units. The buildings are nearing 50 years old, are showing their age, and are arranged on the site at such a low density that they can no longer fulfill the housing needs of the University.

The remainder of the Sector 15 & 16 Plan site includes the community garden and green space at the northeast corner of Michener Park 1, and the tennis center to the north. The south edge of the site is separated from Whitemud Drive by a sound barrier. 122 Street forms the western edge, 51 Avenue forms the Northern edge, and the eastern edge is a fence property line between the University's property and the adjacent residential lots of Malmo Plains to the east. Several east/west streets of Malmo Plains (46, 48, and 49) dead-end where they meet the eastern edge of the Michener Park site. While this edge is fenced and the streets dead-end, pedestrian traffic can cross through. Whitemud Drive is

a controlled access highway with an exit and overpass at the southwest corner of the site, 122 Street is a primary north/south arterial route, and 51 Avenue is a significant east/west connection for the area. 48 Avenue is one of the few significant pedestrian routes crossing the site, connecting the residential areas of Malmo Plains and Lansdowne to each other and their elementary schools.



Urban Context

2.2 Sector Vision

The Sector 15 & 16 redevelopment is intended to continue functioning as it currently does – a family-friendly area serving the families and other mature students/researchers that have come to Edmonton. Sector 15 & 16's redevelopment will also support the Comprehensive Institutional Plan's goal of accommodating up to 25 percent of its full time enrolment in purposebuilt support student residences. Sector 15 & 16's continued focus on family housing provides diversity and options for more students to engage with on-campus community living. To meet these objectives, Sector 15 & 16 will:

- Increase site density in line with the University's residential goals for South Campus. The preliminary working number is doubling the site's current density.
- Controlled vehicular access to the site along the west and north edges, balancing parking proximity and convenience with pedestrian and child safety.
- Increase connectivity with neighboring communities through enhanced pedestrian pathways within and through the site.
- Provide allowances for shared amenities and active and passive green space adjacent to the neighbouring communities.
- Provide housing clustered around amenities and green space that supports target demographics.
- Provide not just "gaps between buildings" but coherent green spaces designed as community amenities intended to compliment public amenities.
- Provisions to accommodate and celebrate culturally diverse residents.
- As a whole, the project needs to be financially selfsufficient.
- No capacity taken offline prior to replacement capacity coming online.

Currently Sector 15 & 16 is something closer to a "bedroom community" without a clearly identifiable "place" for the community to come together. The new development will be designed to incorporate placemaking features to increase the connections between residents as well as with the neighboring communities.

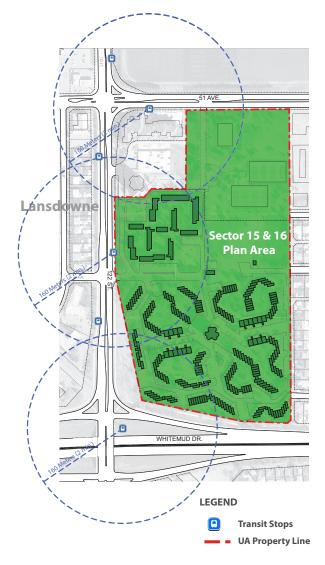
Total Site Area:

31.97 Acres (12.94 Hectares)

Existing Inventory:

- 42 One-bedroom with loft (Vanier House)
- 20 Two-bedroom walkup ground level
- 40 Two-bedroom walkup upper level
- 267 Two-bedroom row house
- 13 Three-bedroom row house

386 Total Units



Sector 15 & 16 Plan Site Boundary

3.0 Visual & Physical Inventory

The Sector 15 & 16 Plan Visual and Physical Inventory is divided into five sections, each devoted to a sector planning element: Districts, Pathways, Edges, Nodes and Landmarks as described in Section 1.3 of this Plan. Existing inventory analysis is based on mapping information, desktop reviews of previous plans, site visits and community consultation.

3.1 Districts

Districts - Built form areas that integrate with open spaces and social patterns of life to create areas of geographic and visual references.

Existing Inventory

Michener Park 1

This district is the original development area of the site containing Vanier Tower, the surrounding two and three storey townhouses, and associated roads and parking. Retaining and renovating Vanier Tower for the future development is a possibility; however, its interior arrangement of spaces and unit layouts are inefficient.

Michener Park 2 (600 Block)

This district was the second phase of development and is also composed of two storey townhouses. None of the buildings in this district are anticipated to be kept.

Garden District

Currently this district is effectively a large green space containing a large manmade hill and the community gardens with a couple small buildings (e.g. the laundry building). Effectively, there is little in terms of existing building stock to demolish if it is eventually designed to contain buildings.

Tennis Centre

The tennis centre is planned for re-location, as part of a separate planning study, and this district is considered open for future development. This district is bordered by existing higher density multi-family residential developments on both the west edge and future multi-family residential on the east edge.

Analysis

Michener Park 1

Vanier Tower is a highly visible landmark for the area, and very solidly built; however, its interior arrangement of spaces is not optimal for redevelopment and it is recommended that Vanier Tower be taken down as part of the redevelopment. The district itself has a somewhat unique condition of being effectively closed off on 3 sides to vehicular traffic, and 2 sides to pedestrian traffic, making it a somewhat isolated "pocket" that is primarily accessed only from the north, except for potentially some pedestrian traffic from the east. The western edge offers an opportunity for an urban frontage capitalizing on the long views of Rainbow Valley. The western edge's distance from the single family residential areas of Plains also makes it an opportunity for higher density development.

Michener Park 2 (600 Block)

None of the buildings are intended to be retained. As with the Michener Park 1 district, the western edge offers an opportunity for an urban frontage due to its proximity to 122 Street, and an opportunity for higher density development due to its distance from the single family residential areas of Malmo Plains.

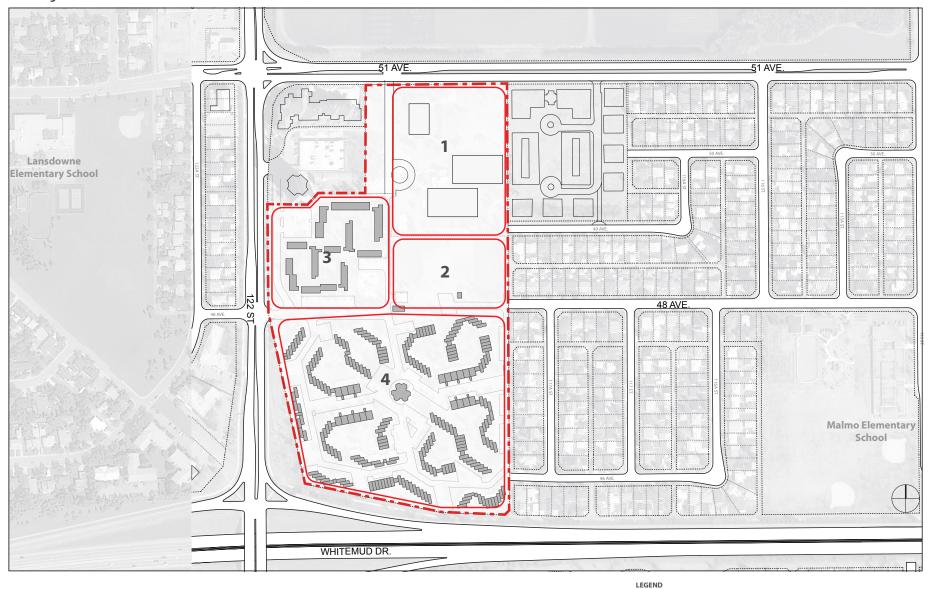
Garden District

Due to its adjacency to the pedestrian connection points with 48 Avenue and 49 Avenue, this district provides an opportunity to retain it as a green space amenity to be shared between Michener Park and the Malmo Plains.

Tennis Centre

This district is bordered by existing higher density multifamily residential on the west edge and proposed multifamily residential on the east edge, making it a natural location for a higher density section of the Sector 15 & 16 redevelopment. In addition to its compatibility with a higher density, due to the project prerequisite of not taking capacity offline before replacement capacity comes online, it is one of the only places within the site that can be developed without requiring demolition of existing Residence buildings. This means that in terms of phasing, the Tennis Centre district has a strong likelihood of being Phase 1.

Existing Districts



4 Maisonettes 1 District

District Boundary

- UA Property Line

3 Maisonettes 2 (600 Block) District

Tennis Centre District
 Garden District

3.2.Pathways

Pathways - Key vehicular, pedestrian, and other active transportation routes.

Existing Pathways

Pedestrian and Bicycle (Active)

There is pedestrian access from all sides of the site, with the exception of the southern edge. This edge is cut off from an existing City of Edmonton multi-use trail by an existing chain link fence. Pedestrian access across this southern edge is through the main entry on 122 Street. Minor pedestrian pathways flow into the site from connection points along all the other edges. The only major pedestrian pathway connects through the site is along the 48 Avenue corridor. This pathway is the main route connecting the Malmo Plains neighbourhood to the Lansdowne elementary school, and vice versa.

Vehicular

Major vehicular traffic pathways enter the site from two points: one on the western edge at the intersection 122 Street and 48 Avenue, and the other along the northern edge coming south into the site from 51 Avenue. The minor vehicular pathways internal to the site are meandering and, for all intents and purposes, best not considered as they are certain to be removed or realigned to suit future development.

Analysis

Pedestrian and Bicycle (Active)

Existing pedestrian access points along the eastern edge of the site are not inviting and do not facilitate interaction between Michener Park residents and the Malmo Plains neighbourhood. A re-design of these entry points to make them clearly signal that "movement across this property boundary is welcome" would significantly improve the interconnectivity between neighbours. Access to the multi-use trail that runs parallel to Whitemud Drive needs to be

improved, possibly involving removing the existing chain link fencing around the site. Generally, minor pedestrian pathways internal to the site need coherent organization and full coverage. The layout of these pedestrian pathways will be a key contributor to creating a community centre that defines Michener Park as a place.

Vehicular

Convenient vehicular pathways into and around the site are critical, but they must be balanced with pedestrian and child safety as well as with ensuring a road through the site does not become a shortcut for outside traffic. Currently, the west access point and the north access point do not connect. There is an opportunity to create a major vehicular pathway connecting the access points providing two vehicular entries to the site. Minor vehicular pathways internal to the site will follow similar strategies to ensure that traffic is balanced with the safety of pedestrians.



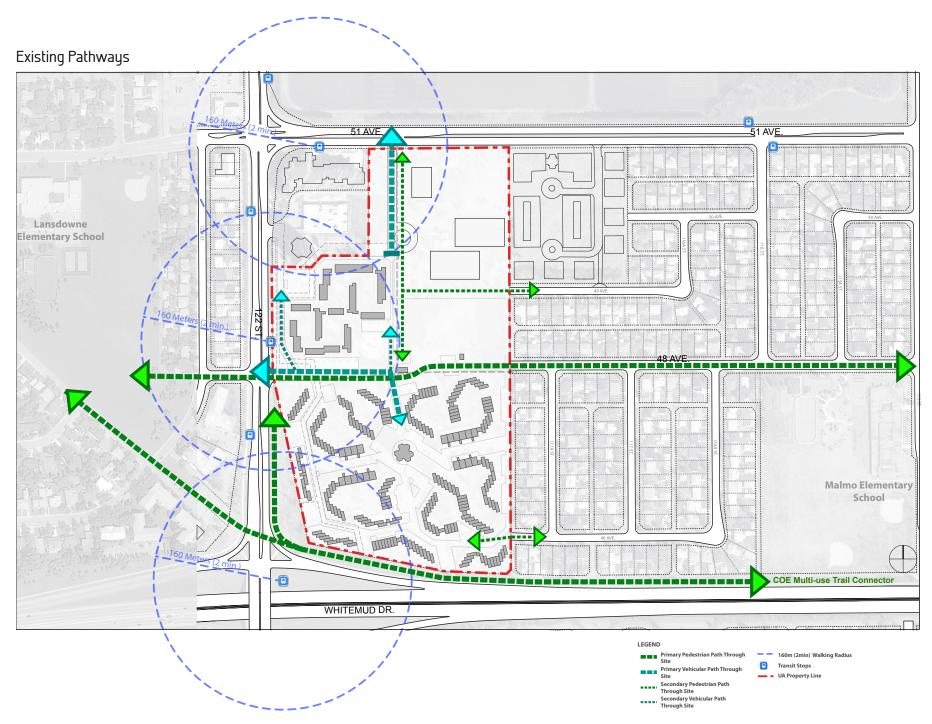
122 Street Main Entry



46 Avenue Pedestrian Access Point



Internal Pathways



3.3 Edges

Edges - Natural and built form boundaries that form spaces.

Existing Edges

North

The northern edge faces onto 51 Avenue and the University of Alberta's South Campus. Currently no substantial development has occurred in this area of South Campus.

East

The eastern edge has two distinct sections—north and south. The northern portion of the east edge is bordered by a future 6–8 storey multi-family residential development. The southern portion of the east edge is characterized by detached single family residential housing. An existing chain link fence runs along the entire length of the eastern edge separating Michener Park from the adjacent Malmo Plains neighbourhood. The fence is broken to allow for pedestrian access to Michener Park at all intersections.

South

Whitemud Drive runs parallel to the southern edge of Michener Park with a sound barrier separating the two. A City of Edmonton multi-use trail runs along the northern side of the sound barrier but is separated by a chain link fence from Michener Park.

West

Like the eastern edge, the western edge is divided into two sections. The northern section is bordered by a higher density multi-family residential development while the southern section is bordered by 122 Street. This represents the most urban frontage for Michener Park and enjoys long views toward Rainbow Valley.

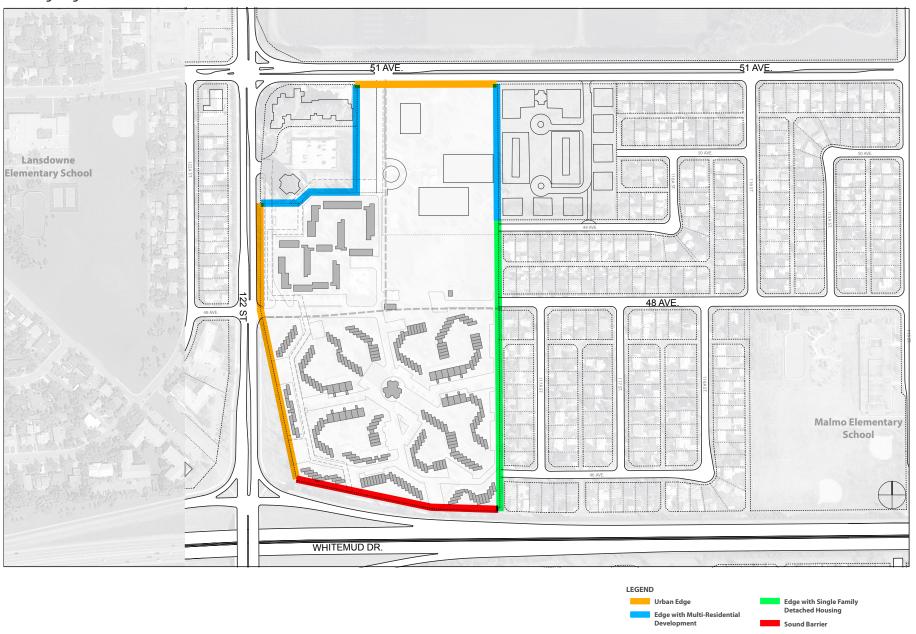


Existing Western Edge - 122 Street



Existing Eastern Edge - Malmo Plains Neighbourhood

Existing Edges



3.4 Nodes

Nodes - Areas with high concentrations of activity; key vehicular and pedestrian intersections; public transit links, stations and stops; and bridge crossings.

Inventory

Generally, the era in which Michener Park was designed and built did not prioritize place-making features within a site plan. While the design was award winning at the time, it does not convey a coherent pattern with legible points of emphasis guiding residents toward where the "there" is. Remedying this condition is one of the key objectives of the current sector plan.

Entrances

The intersection of 48 Avenue and 122 Street is the main entrance to Michener Park for both vehicular and pedestrian access, and includes a transit bus stop just to the north. The entry from 51 Avenue is a less significant secondary entrance and is currently used exclusively for the tennis centre.

Activity

The base of Vanier Tower currently contains an ill-suited multi-purpose space and study spaces that are not acoustically isolated from the multipurpose space. The lack of acoustic separation between the spaces renders the study spaces unusable when large events are held in the multi-purpose space. Outdoor activities are focused in the community garden, the main playground, and various smaller yards and "tot lots" distributed around the site.

Pedestrian / Vehicle Intersection

The intersection at the main entry mentioned above is the only controlled intersection within Michener Park. Currently, the pedestrian paths through the interior of the site are not complete; residents report having to walk with their strollers in the street.

Analysis

The design of the existing site has several problematic features, as indicated above, ranging from the incoherent and incomplete pedestrian network, to the lack of adequate community function space, to the general lack of a centre for the community. These are not the kinds of problems that renovation can fix, so effectively the needs of the University for higher density housing create an opportunity to correct these more fundamental problems of the site design.



Individual Yard Space



View of Exiting Exterior Green Space Node

Existing Nodes



3.5. Landmarks

Landmarks - Important natural, built form and other urban features, serving as reference points for wayfinding.

Inventory

Historic Resources

There are no resources of historic value in the Sector 15 & 16 Plan area

Natural Resources

There are no naturally-occurring natural resources on the site. The large man-made berm and adjacent community garden taken together are the predominant natural features of the site. More generally, the site has a large amount of open green space surrounding the buildings with many mature trees; however their even coverage and lack of organization makes it difficult to function as a landmark.

Built Landmarks

The obvious landmark for the entire site is Vanier Tower as it is clearly visible and identifiable.

Analysis

The same problematic aspects of the site plan design that compromise Michener Park's nodes are responsible for the existing challenges regarding landmarks. The redevelopment of Michener Park offers significant opportunity to update the built features of the site to current understandings of what generates a legible and vibrant urban fabric.



Vanier Tower



Existing Green Space

Existing Landmarks



LEGEND

- 1 Main Entrance
- 2 Vanier Towe
- 3 Lansdowne Elementary School
- 4 Malmo Elementary School
- UA Property Line

17

4.0 Sector Specific Guidelines

The land use planning for Sector 15 & 16 stems from two governing principles:

- Existing housing capacity cannot be taken offline until replacement capacity is ready for occupancy;
 i.e. during the various phases of redevelopment there can be no reductions in housing capacity.
- The development must make a positive contribution to the area and benefit the adjacent neighbourhoods with compatible distributions of density.

These starting premises have significant consequence on the organization and phasing of the project, which in turn must be incorporated with the design requirements needed to produce a site design that will meet the objectives of the University. These starting points, taken together with Sector 15 & 16 being a near complete redevelopment with no existing buildings remaining, create a unique set of parameters that make the Sector 15 & 16 Plan different in kind relative to the sector plans for other parts of the University of Alberta.

Proposed Land-use Plan



4.1 Districts

Objective

The proposed six districts subdivide the site based on a number of variables including neighboring context, existing conditions, overall site design, program distribution and massing, open space and storm water planning, and anticipated construction phasing. Because little of the existing fabric will be kept, the districts can be almost completely determined by project objectives.

GUIDELINES

4.1.1. North Edge District

This district is defined by 51 Avenue on the north, the proposed multi-family development to the east and the Californian Lansdowne condominiums to the west. It serves as the secondary entrance to the overall site and reinforces the street edge to create a pedestrian-scaled environment. Building heights should be sympathetic with the proposed multi-family development and the Californian Condominiums.

- Relocate site entry road to accommodate City requirements for separation between intersections along 51 Avenue.
- Consider median-style entry with landscaped island and green space buffer / storm water conveyance along western edge of site.
- Locate new housing building adjacent to street front with parking internal to the site.
- Provide 12 meter wide storm water retention area and landscaped buffer with pedestrian walking path along east property line.

4.1.2. North District

The North District will establish a community development prototype of building groups sharing an open space with parking areas shared with the North Edge District and the Central District. Building heights along the eastern property line should be sympathetic to both the proposed multi-family development and the adjacent Malmo Plains neighbourhood.

- Site access road with adjacent green space buffer / storm water conveyance along the western edge of the district.
- Locate new housing buildings at the center of the district configured to create a green space courtyard / children's play area facing east / west.
- Provide a 12 meter wide storm water retention area and landscaped buffer with pedestrian walking path along the east property line.

4.1.3. Central District

The Central District will be the key focal point of the Michener Park community. Vehicular and pedestrian paths will circulate along the perimeter allowing the formation of a central open space and community garden. The 122 Street and 48 Avenue intersection will be the primary entry point into the community. The entry road should be designed with a center island, and should be well landscaped and provide areas for storm water retention on both the southern and northern sides. The community building will be located on the northeast side of the proposed traffic circle at the center of the development.

- Allow the extension of the 48 Avenue pedestrian movement to the community building and to 122 Street.
- Locate the primary playground space adjacent to the community building.
- The community may include a childcare facility.
- Locate community garden within this district.
- Provide a 12 meter wide storm water retention area and landscaped buffer with pedestrian walking path along east property line.

4.1.4. South District

The South District is influenced by the Malmo Plains neighbourhood on the east, Whitemud Drive on the south and the Central District on the north. The community development prototype consists of residential buildings sharing a central and open space with parking areas shared on the perimeter of building clusters. The open spaces are oriented east/west and are intended to create a defensible environment that is safe for small children.

- Site access road with adjacent green space buffer / storm water conveyance along the western edge of the district.
- Residential building heights along the eastern edge shall be sympathetic to Malmo Plains neighborhood scale. Buildings along the western and southern edges of the district may have increased scale.
- Provide a 12 meter wide storm water retention area and landscaped buffer with pedestrian walking path along the east property line. The walking path shall connect to the existing path along the north side of Whitemud Drive.

4.1.5. Southwest District

The Southwest District is impacted by Whitemud Drive and 122 Street and is intended to be a higher density building site. Primary site access will be from the Michener Park entry at 48 Avenue. Residential building heights will be governed by parking capacity. Parking is intended to be in structured parking with access points on 48 Avenue on the north and from the internal access road to the east.

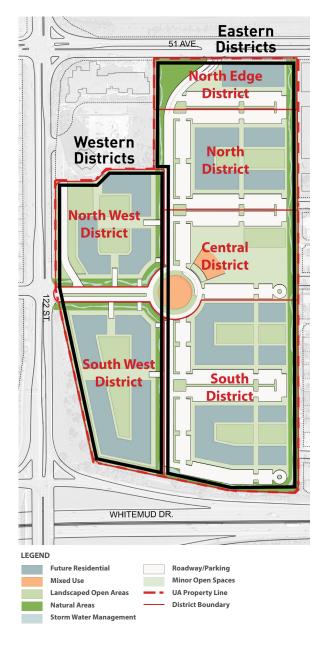
- Residential buildings should form a gateway along the 48 Avenue frontage.
- Building heights and orientation should conform to guidelines for site sustainability and daylighting in the courtyard spaces.
- A green space corridor with storm water retention areas and pedestrian paths will be located along the northern and eastern perimeters.
- A green space buffer should be located along the 122 Street frontage.

4.1.6. Northwest District

The Northwest District is bounded by the Galbraith House residential tower on the north, MacEwan Drive immediately to the west, the 48 Avenue entry on the south and the north/south access neighborhood access road on the east. Similar to the Southwest District, residential building heights will be governed by parking capacity. Parking is intended to be in structured parking with access points from 48 Avenue, MacEwan Drive and from the internal access road.

- Residential buildings should form a gateway along the 48 Avenue frontage.
- Building heights and orientation should conform to guidelines for site sustainability and daylighting in the courtyard spaces.
- A green space corridor with storm water retention areas and pedestrian paths will be located along the northern and eastern perimeters.
- A green space buffer should be located along the 122 Street frontage.

Districts



4.2 Pathways

Objective

Paths give form and are the avenues of activity. In the microcosm of community and neighborhood, paths give form. They are streets, sidewalks, bicycle lanes and foot paths. For Michener Park to become a cohesive community it needs a clear hierarchy of paths for vehicular, bicycle and pedestrian circulation. The sector's paths will be complementary with existing pedestrian pathways along the southern and northern perimeters of the site and will reinforce desired pathways to and from the Malmo Plains neighbourhood. They should be well-lighted and provide firm footing in all weather conditions. Space should be allowed on either side of the paths for snow removal / storage. Landscaping and canopy trees should provide clear fields of view for safety at night.

GUIDELINES

4.2.1. 51 Avenue

A new median break is proposed on 51 Avenue to provide better vehicular access into Michener Park. It is proposed that the entry road will also have a median divider with landscaping to identify the community and provide a park-like north/south boulevard. Sidewalks along 51 Avenue should seamlessly integrate with existing sidewalks and provide smooth transitions with residential building walks. Street trees shall have a clear canopy up to 2 meters and be placed alternately with pedestrian-scaled light fixtures. Accessible curb ramps should be placed at intersecting streets to allow unimpeded travel for persons of all abilities.

4.2.2. North/South Internal Access Road

The north/south access road will provide the primary internal vehicular and bicycle circulation paths for Michener Park. It will flow into a traffic circle at the Central District where the community center will be located. Parking lots to the east of the access road will not be designed as dead-ends but rather as continuous movement for residents and service vehicles. Storm water retention areas will be located along the western edge of the access road and act as landscape buffers between Michener Park's family housing buildings, the adjacent leased properties and the western districts.

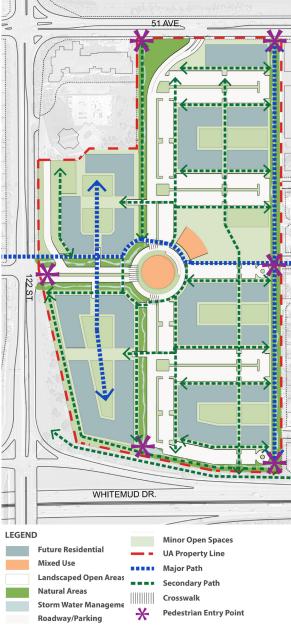
4.2.3. 48 Avenue - East/West Connections

The intersection of 48 Avenue and 122 Street will serve as the primary vehicular and bicycle access to Michener Park. The traffic circle at the community center will serve as a primary terminus of vehicular movement along 48 Avenue but will allow access to the resident parking lot. Sidewalks along 48 Avenue will allow continuous movement from the Malmo Plains School in the east to the 122 Street / 48 Avenue intersection. Canopy trees shall have a clear canopy up to 2 meters and be placed alternatively with pedestrian-scaled light fixtures. Accessible curb ramps should be placed at intersecting streets to allow unimpeded travel for persons of all abilities. A pedestrian portal feature should be placed at the perimeter between Michener Park and Malmo Plains to identify the threshold between the two.

4.2.4. 122 Street

122 Street is the primary vehicular access for Michener Park. Sidewalks along 122 Street should seamlessly integrate with existing sidewalks and provide smooth transitions with intersecting walks at the 48 Avenue intersection. Street trees at the intersection shall have a clear canopy up to 2 meters and be placed alternately with pedestrian-scaled light fixtures. Accessible curb ramps should be placed to allow unimpeded travel for persons of all abilities.

Pedestrian and Bicycle Pathways



4.2.5. Eastern/Southern Perimeter

The eastern perimeter is a pedestrian pathway and storm water retention area with a landscaped buffer between Michener Park, and the future multi-family development and the Malmo Plains neighborhood. The character of the pathway is intended to be naturalistic with plantings and a mix of evergreen, shade and ornamental trees, shrubs and groundcovers. Pathway lighting should be pedestrian-scale, cut-off type fixtures.

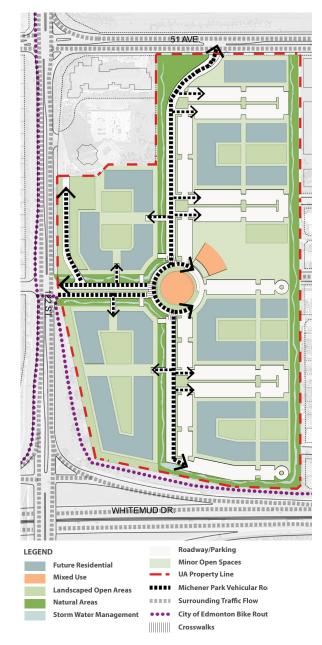
4.2.6. Internal Residential Paths

Internally-located pathways are intended to make pedestrian navigation of Michener Park simple and straightforward. Sidewalks will be located adjacent to parking lots and roadways. A central north/south path will connect the courtyards of the residential buildings to one another. Paths will be well-lighted with pedestrian-scale, cut-off type fixtures. Pathways through parking lots shall be located in landscaped islands.

4.2.7. Whitemud Drive

Access to the existing multi-use trail located along the north side of Whitemud Drive will be improved. The north/south pathways within Michener Park and the eastern perimeter path shall connect to the existing multi-use trail.

Vehicle Pathways



4.3 Edges

Objective

Edges create boundaries and establish character. They help create identity. They can be paths or streets, landscape or built form. They help to provide organization. They can be solid and impenetrable or diffused. For Sector 15 & 16, the edges should communicate that the residents are part of the larger community rather than a standalone University enclave. The edges should communicate welcome but also identify Michener Park as part of the University of Alberta.

GUIDELINES

4.3.1. 51 Avenue

The 51 Avenue edge should keep the character of a residential street with sidewalk, street trees and lawns. Residential building setbacks should be complementary with the Californian Lansdowne Apartments, the WestCorp development and the Malmo Plains neighbourhood beyond. The entry road into Michener Park off of 51 Avenue should be well landscaped and have signage that identifies the community. The eastern perimeter foot path should be clearly visible, well-lighted and should welcome use.

4.3.2. 122 Street

The 122 Street edge should have a well-landscaped buffer along the western edge of the southwest and northwest districts. The entry road at 48 Avenue should have clearly identifiable features with signage for Michener Park and reserve space for signage for the future Northwest and Southwest District developments. The storm water retention areas and sidewalks on either side of 48 Avenue should be well-landscaped with canopy shade trees with clear space beneath of 2 meters. Site lighting should be pedestrian-scaled, cutoff type fixtures.

4.3.3. Whitemud Drive

The southern edge of Sector 15 & 16 should buffer the community from the noise and views of the roadway sound wall. The landscape should be a mix of evergreen and deciduous trees with pedestrian-scaled, cut-off type light fixtures. Canopy shade trees should have a clearance of two meters.

4.3.4. Eastern Perimeter

The eastern perimeter will be of a 12-meter wide landscape zone consisting of a 2 meter high, semitransparent fence along the property line, a 2-meter wide foot path, a storm water retention area, a mix of trees and shrubs and pedestrian scale lighting with cut-off type fixtures. An additional 3-meter wide setback will be provided between the edges of the buffer to the residential buildings. A pedestrian portal should be provided at the point where 46, 48 and 49 avenues intersect the foot path on the Malmo Plains side of the property line.

4.3.5. Northwest District

The perimeter along the property line between the Northwest District/Michener Park entry and the Galbraith House/Californian Lansdowne Apartments shall consist of a 2-meter high, opaque perimeter fence and evergreen landscaping.

Edges



4.4 Nodes

Objective

Nodes are specific points that have name or place recognition value. They signify important intersections of activity, gathering or focal points. They are closely associated with paths and are often identified as transition points between districts. Nodes can be thematic in nature and may be clustered resulting in a discernable sense of association.

GUIDELINES

4.4.1. Community Centre + Plaza

The community center and plaza will be a major node and focal point for community life. During program discussions for this building, several spaces were identified as needing to be housed in the building including administrative offices, a large gathering space, community kitchen, child development center and support space. Outdoor space around the building should be of high quality surfaces to stand up to harsh weather conditions over time.

4.4.2. Main Commons + Community Garden

The main commons and community garden will be the center of Michener Park both figuratively and literally. The commons will be large enough for hosting large events and for both passive and active recreation. It will also be the most likely location for a large play structure for the community's children. The gardens should be approximately double the size of the existing garden space to accommodate the doubling of the resident population. Canopy shade trees should be planted along the perimeters of the space to provide scale and enclosure.

4.4.3. Residential Courtyards

Each residential building cluster will be organized around an east/west oriented courtyard. The courtyard will include sidewalks along the building edge to

provide access to building entries, a north/south path through the courtyard for access to parking lots and other residential buildings, and a small tot lot for small children to play in clear view of the windows of housing units.

4.4.4. Neighborhood Entry Points

Entry roads from 51 Avenue and from 122 Street will have a median divider with landscaping to identify the community and provide a park-like entry boulevard. Street trees shall have a clear canopy up to 2 meters and be placed alternately with pedestrian-scaled light fixtures. Sidewalks along both sides of the entry roads should seamlessly integrate with sidewalks on existing streets and provide smooth transitions and accessible curb ramps to allow unimpeded travel for persons of all abilities.

4.4.5. Pedestrian Portals along the Eastern Boundary

A pedestrian portal will be provided at the point where 46, 48 and 49 avenues, intersect the north/south perimeter foot path along the shared property line with the WestCorp development and the Malmo Plains neighborhood. The portal should be more than a break in the fence with a sidewalk. Consider using a trellis structure with flowering vine, special paving material, or flowering tree accent planting. If the storm water retention area is depressed, consider using a decorative footbridge. The portals should be well-lighted with pedestrian-scaled cut-off type light fixtures.

4.4.6. Bus Stops

Bus stops will be regular gathering places. Consider using a decorative shelter with comfortable seats, decorative paving and good lighting. Students will be using these daily so durable materials should be a priority. Consider creating different themes for each bus stop or including public art installations. Many cities have done this successfully providing local artist an opportunity to contribute to the community at large.

Nodes



4.5 Landmarks

Objective

Landmarks are similar to nodes but are usually understood to be a single element either structural or natural. They are reference points used for way-finding and can be vertically significant such as a sculpture or clock tower or can take the form of plaza spaces, water features, artwork or significant buildings. Landmarks usually contrast with the background so that they stand out which further enhances their visual importance in the landscape as beacons or points of reference.

GUIDELINES

4.5.1. Community Center/Traffic Circle

The community center will be the focal point upon entering from 122 Street onto 48 Avenue. During program discussions for this building, several spaces were identified as needing to be housed in the building including administrative offices, a large gathering space, community kitchen, child development center and support space. Outdoor space around the building should be of high quality surfaces to stand up to harsh weather conditions over time.

4.5.2. 48 Avenue Entry

The entry off of 122 Street should have clearly identifiable features with signage for Michener Park and reserve space for signage for the future Northwest and Southwest District developments. The storm water retention areas and sidewalks on either side of 48 Avenue should be well-landscaped and include canopy shade trees with clear space below 2 meters. Site lighting should be pedestrian-scaled, cut-off type fixtures.

4.5.3. 51 Avenue Entry

A new median break is proposed on 51 Avenue to provide better vehicular access into Michener Park. The entry road should have a median divider with landscaping to identify the community and provide a park-like north/south boulevard. Sidewalks along 51 Avenue should seamlessly integrate with existing sidewalks and provide smooth transitions with residential building walks. Street trees shall have a clear canopy up to 2 meters and be placed alternately with pedestrian-scaled light fixtures. Accessible curb ramps should be placed at intersecting streets to allow unimpeded travel for persons of all abilities.

Landmarks



5.0 Site Specific Guidelines

The following section provides detailed guidelines for development of proposed sites within Sector 15 & 16.

Refer to Appendix A: Campus Wide Guidelines for general development and redevelopment guidelines.

Overall

- If possible, existing trees are to be preserved, particularly those lining the site boundary with the Malmo Plains neighbourhood. Landscape design must be understood as critical to the success of the new Michener Park developing into an interconnected community.
- All effort shall be made to transition scale from the east to west to respect the scale of the Malmo Plains neighbourhood.
- All effort shall be made to create connections between the new proposed buildings and the adjacent landscaping and open spaces.
- Open space shall be designed to ensure a variety of options for play area are available to support a diverse family population.
- When a larger scale infill project is proposed, the front and rear facade should be articulated to reference the community's residential scale and rhythms.
- Accessibility shall be considered for all hard surface transitions to help support stroller and bicycle movements.
- Wherever possible, at-grade access to suites is encouraged to help support a sense of community and resident interactions.

5.1.Building Heights and Setbacks

5.1.1. Building Heights

- Higher density housing will be located in sites adjacent to existing or planned high density developments on neighbouring properties (northern sites).
- Sites adjacent to neighbouring single family houses will be low density.
- A raised first floor and raised front porches are recommended to provide areas for passive surveillance by residents and create a greater sense of community.
- Balconies and grade level defensible spaces shall be incorporated into the design of larger scale developments.

5.1.2. Typical Setbacks

The following typical setbacks are to be taken into consideration in the future design development of any proposed site within Sector 15 & 16. They are indicative of the space guidelines for the development of a quality urban environment.

- Built zone to surface parking 5.5 m
- Built zone to courtyard landscaping 3m
- Mid-block pedestrian corridor 6m
- Built zone to storm water retention areas 3m
- Eastern Districts storm water retention area and landscaped buffer - 12m wide
- Western Districts storm water retention areas and landscaped buffer - 9m wide

5.1.3. Access to Suites

- Multiple entrances from the street are encouraged for multi-unit dwellings to reduce apparent scale and provide a more welcoming sense of arrival for those homes adjacent to the community.
- Where single or municipal street entrances are proposed (for denser developments) consideration on how the building can portray a similar street scale should be considered.



Higher Density - International House



Medium Density - Pinecrest House



Low Density – Tamarack House

5.2. Utilities, Storm Water, Access, and Parking

5.2.1. Utilities

Utility connections are intended to retain their current access points into the site. There is an existing utility right-of-way that runs north/south inside of the western site boundary. In order to successfully develop the Southwest District, the existing utility right-of-way will need to be relocated to a proposed landscaped setback along 122 Street. This will provide more efficient space for redevelopment of a larger parcel of land. At the time of the completion of the Sector Plan, there was no indication that existing utilities servicing sites outside of Michener Park resided within the right-of-way. This will need to be confirmed during the detailed design development of the Southwest District.

Refer to the illustration for the existing and proposed alignments.



5.2.2. Traffic

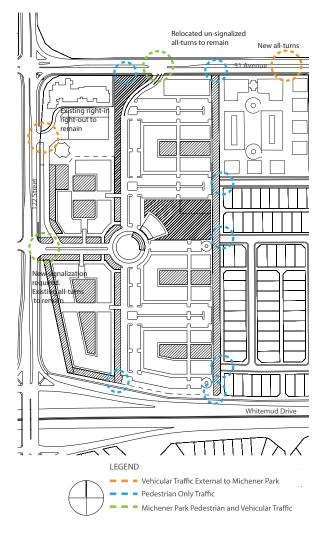
Traffic analysis commensurate to the requirements of land-use planning was undertaken by Bunt & Associates, and all recommended measures to mitigate the traffic impacts of the added residential density have been incorporated into the proposed land-use plan. A more detailed review of site access points is required during future phases of work to determine the specific requirements of the road and intersection design.

5.2.3. Parking

The prevention of overflow parking on the streets of neighbouring communities was one of the most frequently mentioned community concerns. As a means of the ensuring that adequate parking is provided, the following measures have been incorporated into the proposed sector plan land-use areas:

- On the eastern sites, C1 C8, all parking is proposed as surface parking with adequate area allocated. The required number of parking stalls was determined as 1 stall per unit, plus 1 stall per 7 units of additional visitor parking.
- On the western two sites, C9 and C10, resident parking is to be provided at 1 stall per unit in structural parking. Visitor parking at 1 stall per 7 units is to be provided through a combination of surface and structured parking.

Traffic Diagram



5.2.4. Storm Water

The storm water system for the proposed Sector 15 & 16 Plan will include minimal standing water as per the public consultation review. All storm water features are therefore planned to allow for bio-swales, box planters and rain gardens (also called low impact storm water features or LID features) that will only present standing water after a significant storm water event or consecutive storm events.

All rain gardens, box planters and bio-swales should be designed to contain the 1 in a 100 year storm event. The allotted area for the low impact storm water features has been based on the Low Impact Best Management Practices Design Guide (November 2011) produced by the City of Edmonton and current industry best practices. Detailed design of the low impact storm water features will occur during the subsequent phases of development.

The storm water release rate of the site, based on the area of land allotted in the land use plan, is identical for pre and post development, therefore the proposed development will not increase or aggravate any storm water issues currently in the vicinity. The proposed low impact storm water features are vegetated facilities and, as such, will require maintenance. This will ensure that the performance of the facilities will be constant over time.

Key features of the storm water retention strategy are:

- Linear storm water retention areas are to be provided around the perimeter of the site and between major development areas. These will not contain standing water unless immediately after a storm event. Pedestrian pathways and crossing into adjacent neighbourhoods should be considered within this retention zone.
- Depressed vegetated parking medians that will retain and percolate the water runoff from parking areas.



Storm water retention area integrated with sidewalk

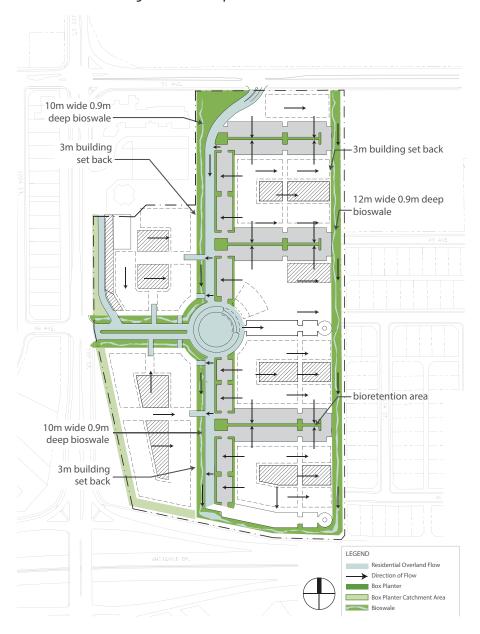


Storm water retention area integrated with roadway – in the neighbourhood of Magrath

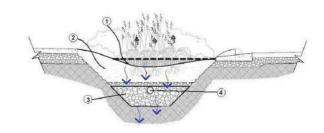


Storm water retention area integrated with surface parking

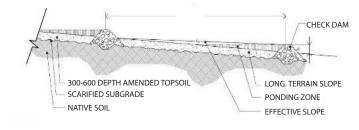
Storm Water Management Concepts



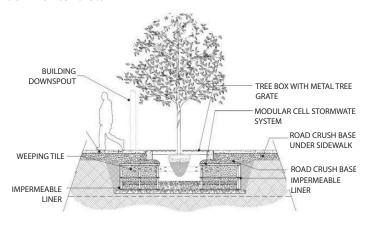
Bio Retention Area Detail



Longitudinal Profil of Bioswale



Box Planter Detail



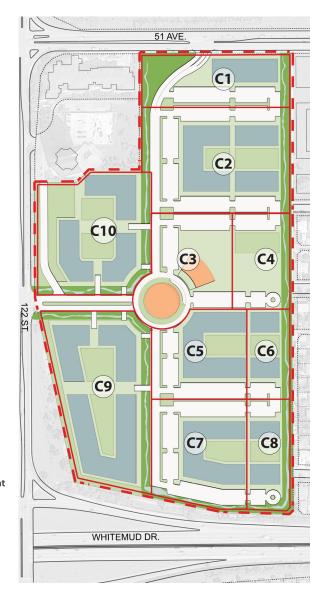
5.3.Sites

Ten specific development sites have been identified within the Sector 15 & 16 Plan. The sites have been determined based on their shared characteristics and future development potential.

Sector 15 & 16 Specific Sites:

- C1 Higher Density Multi-unit Residential
- C2 Medium Multi-unit Residential
- C3 Community Building
- C4 Community Garden and Park Space
- C5 Medium Density Multi-unit Residential
- C6 Low Density Multi-unit Residential
- C7 Medium Density Multi-unit Residential
- C8 Low Density Multi-unit Residential
- C9 Medium Density Multi-unit Residential
- C10 Medium Density Multi-unit Residential

Sites





Natural Areas
Storm Water Management

Roadway/Parking
Minor Open Spaces

UA Property Line

Site

LEGEND

Site Boundary

5.3.1. Site C1

Site Specific Guidelines

The treatment of the north edge of the site should respond to the urban edge fronting 51 Avenue. The built zone of C1 will have the highest density within Sector 15 & 16. Consideration should be given to the relocation of the 51 Avenue vehicular access to Sector 15 & 16. Provisions should be made to improve the edge condition along 51 Avenue to enhance connections to existing transit nodes. This places a greater priority on pedestrian-oriented design enhancements such as:

- Urban-scaled sidewalk widths
- Landscaping
- Street furniture
- Pedestrian lighting

Additionally, the green space on the western edge of the site offers an opportunity for a park that could function as a public node and gateway to Michener Park. All surface parking for site C1 is provided south of the development site and should be screened from 51 Avenue.

The C1 site includes the following sector requirements:

District

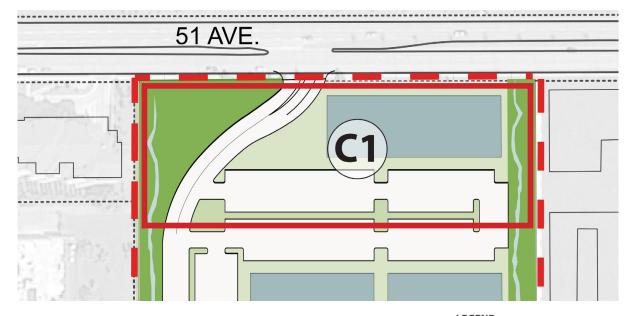
North District

Pathways

- Mid-block pedestrian corridor
- Western storm water retention zone and landscape buffer
- Eastern storm water retention zone and landscape buffer
- Internal roadway

Edges

- Storm water retention zones and landscape buffers
- An engaged urban edge with 51 Avenue
- Existing and proposed multi-family residential



Nodes

■ 51 Avenue Streetscape

Landmarks

New site entry feature



5.3.2. Site C2 Site Specific Guidelines

All the built zones of C2 are medium density as a transition zone between the higher density of C1 and the more residential scale of the sites to the south. This site provides a central exterior courtyard area which has been sized to support the proposed surrounding residential densities. Parking is provided on the perimeter of the development sites. Consideration should be given to the development of a mid-block pedestrian pathway that runs north/south through C2 and links all the eastern districts. The pedestrian connection should extend through parking by providing a safe, landscaped, and hard surfaced pathway. Additional pedestrian connections should be considered between the courtyard area and the adjacent storm water retention zone and landscaped buffer. Ground level units are encouraged to have articulated access (e.g. overhangs, porches, or patios), and above grade units are suggested to have balconies. The courtyard provides an opportunity for structured play areas. Consideration should be given to the design of the tot-lots in so much that the target age and types of the equipment may be varied to support diverse family types.

The C2 site includes the following sector requirements:

District

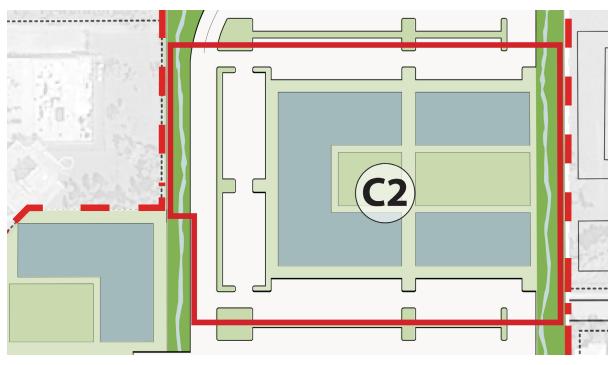
North District

Pathways

- Mid-block pedestrian corridor
- Western storm water retention zone and landscape buffer
- Eastern storm water retention zone and landscape buffer
- Internal roadway

Edges

- Internal Roadway
- Landscaped Open Area
- The 47 Avenue pedestrian connection



Nodes

- Exterior courtyard
- The 47 Avenue pedestrian entry

Landmarks

Structured play areas in courtyards



5.3.3. Site C3

Site Specific Guidelines

This site contains the central community building for the entire Sector 15 & 16 development. The program for the building is to be determined by future phases of work; however, provision is made in the current planning to allow for parking and drop-off zones in the event that the building contains high traffic programs such as a daycare, University shuttle service, and/or City of Edmonton Transit. Dedicated surface parking has been provided to the north of the proposed development sites.

The C3 site includes the following sector requirements:

District

Central District

Pathways

- Mid-block pedestrian corridor
- Internal roadway
- Entrance Boulevard

Edges

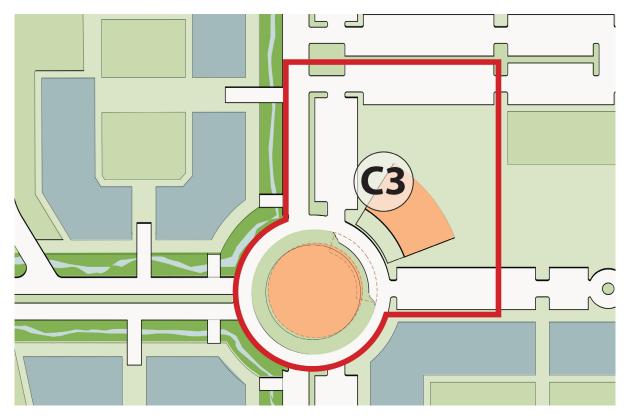
- Internal Roadway
- Landscaped open area

Nodes

- Courtyard
- Drop-off area
- Potential intermodal hub
- 47 Avenue pedestrian entry

Landmarks

- Central gathering space
- Community Building
- Entrance Boulevard





5.3.4. Site C4

Site Specific Guidelines

This site contains the central open space for the entire Sector 15 & 16 development. Key priorities are:

- Community Garden. The proposed community garden is double the area of the current garden.
- Well-defined pedestrian connection along the south edge of the site to define the 48 Avenue pedestrian corridor.
- Pedestrian routes should be well lit with clear sightlines to adjacent areas.
- Opportunities for the open space to provide for a range of activities with different priorities.
 Consideration should also be given to the provision and location of park furniture and amenities like picnic tables, grills, waste receptacles, etc.
- Opportunity for an all-ages playground adjacent to adult recreation areas.

The C4 site includes the following sector requirements:

District

Central District

Pathways

- 48 Avenue pedestrian corridor
- Mid-block pedestrian corridor
- Eastern storm water retention zone and landscape buffer

Edges

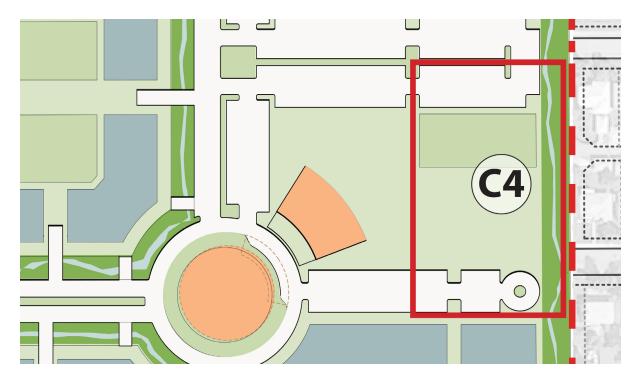
Malmo Plains Neighbourhood

Nodes

- Landscaped open areas
- 48 Avenue pedestrian entry

Landmarks

Community Garden





5.3.5. Site C5 Site Specific Guidelines

The built zone of C5 is medium density. The development site follows the typical courtyard configuration and has been sized to support the proposed surrounding residential densities. Parking is provided on the perimeter of the development sites. Consideration should be given to the development of a mid-block pedestrian pathway that runs along the eastern edge of the courtyard. The pedestrian connection should extend through the parking area and provide a safe, landscaped, and hard surfaced pathway. Ground level units are encouraged to have articulated access (e.g. overhangs, porches, or patios), and above grade units to have balconies. The courtyard provides a clear opportunity for an area to support a diversity of family types.

The C5 site includes the following sector requirements:

District

South District

Pathways

- Internal roadway
- Mid-block pedestrian corridor
- Western storm water retention zone and landscape buffer

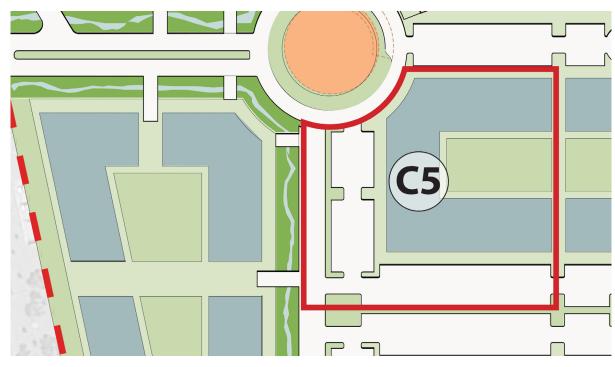
Edges

- Western storm water retention zone and landscape buffer
- Landscape open areas

Nodes

Exterior Courtyard

Landmarks





5.3.6. Site C6 Site Specific Guidelines

The built zone of C6 is low density, providing a transition between the detached single family houses to the east and the proposed medium density buildings on site C5. Consideration should be given to lowering the building a half floor to further reduce the massing and allow for porches and sunken patios. The design of the boundary condition between the courtyard and the storm water retention trail amenity connecting Michener Park necessitates careful consideration to achieve the appropriate balance of courtyard community ownership and openness to users of the trail.

The C6 site includes the following sector requirements:

District

South District

Pathways

- Mid-block pedestrian corridor
- Eastern storm water retention zone and landscaped buffer

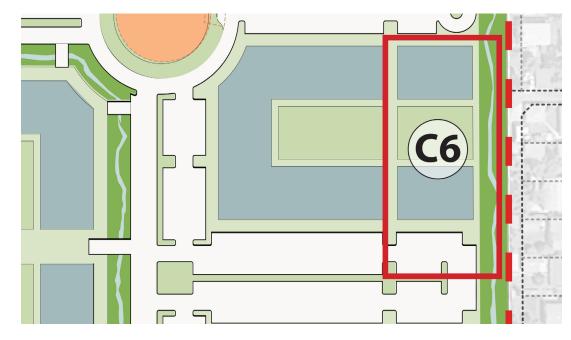
Edges

- Eastern storm water retention zone and landscaped buffer
- Landscaped open area
- Malmo Plains Neighbourhood

Nodes

Exterior Corridor

Landmarks





5.3.7. Site C7 Site Specific Guidelines

The built zone of C7 is medium density. The development site follows the typical courtyard configuration and has been sized to support the proposed surrounding residential densities. Parking is provided on the perimeter of the development site. Consideration should be given to the development of a mid-block pedestrian pathway that runs along the eastern edge of the courtyard. The pedestrian connection should extend through the parking area and provide a safe, landscaped, and hard surfaced pathway. Ground level units are encouraged to have articulated access (e.g. overhangs, porches, or patios). The courtyard provides an opportunity for a "tot-lot" play area to support diverse family types. Consideration should be given to provide connection to the City of Edmonton multi-use trail adjacent to the sound barrier to the south.

The C7 site includes the following sector requirements:

District

South District

Pathways

- Mid-block pedestrian corridor
- Western storm water retention zone and landscape buffer
- Eastern storm water retention zone and landscape buffer
- Internal roadway

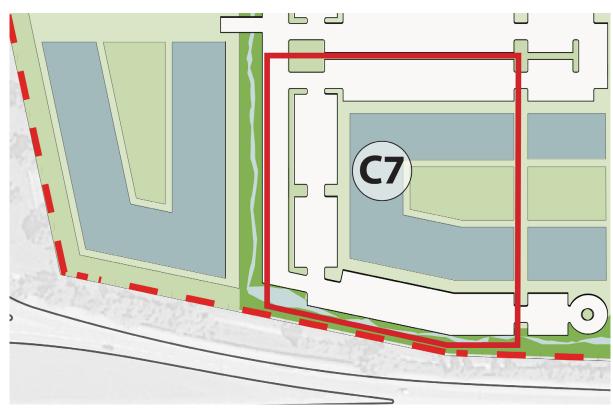
Edges

- Storm water retention zones and landscape buffers
- Landscape open area
- Sound barrier

Nodes

Exterior Courtyard

Landmarks





5.3.8. Site C8

Site Specific Guidelines

The built zone of C8 is low density, providing a transition between the detached single family houses to the east and the proposed medium density buildings on site C7. Consideration should be given to lowering the building a half floor to further reduce the massing and allow for porches and sunken patios. The design of the boundary condition between the courtyard and the storm water retention trail amenity connecting Michener Park necessitates careful consideration to achieve the appropriate balance of courtyard community ownership and openness to users of the trail. Consideration should be given to provide connection to the City of Edmonton multi-use trail adjacent to the sound barrier to the south.

The C8 site includes the following sector requirements:

District

South District

Pathways

- Mid-block pedestrian corridor
- Western storm water retention zone and landscape buffer
- Multi-use trail
- 46 Avenue pedestrian corridor

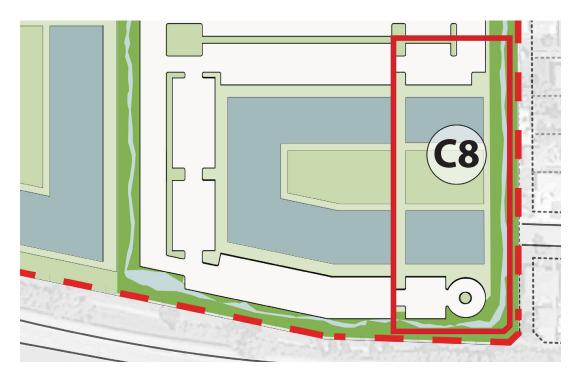
Edaes

- Storm water retention zone and landscape buffer
- Landscape open area
- Sound barrier
- Malmo Plains Neighbourhood

Nodes

- Exterior Courtyard
- 46 Avenue pedestrian entry

Landmarks





5.3.9. Site C9

Site Specific Guidelines

The built zone of C9 is medium density. The development site follows the typical courtyard configuration and has been sized to support the proposed surrounding residential densities. Parking is to be provided in structured parking with access off of the Entry Boulevard and the internal roadway. Consideration should be given to the development of a mid-block pedestrian pathway. Consideration should be given to provide density within the southwest corner to take advantage of long views to Rainbow Valley.

The C9 site includes the following sector requirements:

District

South West District

Pathways

- Mid-block pedestrian corridor
- Western landscaped buffer
- Eastern storm water retention zone
- Internal roadway
- Multi-use trail
- Entrance Boulevard
- 122 Street

Edges

- Landscape buffer edge
- Sound barrier
- Entrance boulevard

Nodes

- Exterior courtyard
- Main entrance

Landmarks

Enhanced main entry feature





5.3.10. Site C10

The built zone of C10 is medium density. The development sites follows the typical courtyard configuration and has been sized to support the proposed surrounding residential densities. Parking is to be provided in structured parking with access off of the Entry Boulevard and the internal roadway. Consideration should be given to the development of a mid-block pedestrian pathway. The MacEwan Drive right-of-way shall be maintained as an access point to Galbraith House.

District

North West District

Pathways

- Mid-block pedestrian corridor
- Eastern storm water retention zone
- Internal roadway
- MacEwan Drive
- Entrance Boulevard
- 122 Street

Edges

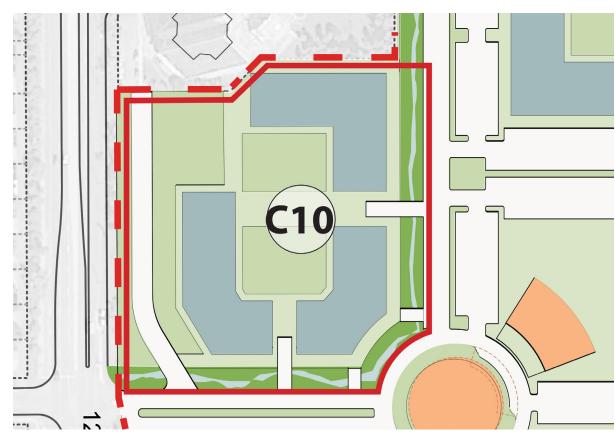
- MacEwan Drive
- Entrance boulevard

Nodes

- Exterior courtyard
- Main entrance

Landmarks

Enhanced main entry feature





Appendix A: Glossary

Plans and Plan Elements

Long Range Development Plan (LRDP)

The LRDP is the overall organizing framework for campus development and is approved by the Board of Governors as the guiding document for land use and future planning. This plan is periodically updated to accommodate changes in the institutional priorities and mandate.

Sector Plan

Similar to the LRDP, sector plans provide the next level of detail in the land and space planning process and builds off the LRDP as the basis for development and consultation. Sector plans provide specific information on nodes, landmarks, pathways, open space, roadways, and specific development zones. They illustrate intentions for the character of the public realm, land use, over-arching facility programming, architecture, infrastructure, transportation and relationships to surrounding neighbourhoods.

Sectors

Given the large expanse of lands held by the university, sectors are created to break down these large parcels into more manageable areas and generally reflect the concept of a university "neighbourhood".

Districts

Districts are a further division of sectors. They generally are discrete multi-purpose development zones, and the edges are typically formed by major site features such as primary pedestrian corridors. They generally reflect the concept of a university "sub-neighbourhood".

Planning Elements

Placemaking

'Placemaking' is both an overarching idea and a handson tool for improving a neighborhood, city or region. It's a transformative approach that inspires people to create and improve their public places. Placemaking strengthens the connection between people and the places they share. It facilitates creative patterns of activities and connections (cultural, economic, social, ecological) that define a place and support its ongoing evolution.

It originated the 1960s, when visionaries like Jane Jacobs and William H. Whyte offered groundbreaking ideas about designing cities that catered to people, not just to cars and shopping centers.

Built Form

The physical shape and character of buildings. Built form is dependent upon aesthetic considerations as well as functional needs.

Compatible Uses

Land uses that interact positively with each other and generate similar levels of overall activity to adjacent land.

Development Density

The relative intensity of building and development. High density areas are characterized by a greater number of people and activities, and therefore typically larger buildings with less space between them than lower density areas.

Edges

Edges are the boundaries between two different development zones.

Greenspace

A term referring to formal and informal landscaped areas. This also includes natural areas.

Landmarks

Landmarks are visual markers that help identify a location as being unique. They help define a strong sense of place and arrival.

Nodes

These are strategic focal points of activity. They may be formal gathering places, locations where several paths cross, or locations where general activity can be concentrated.

Public Realm

This is the public interior and exterior space of campus, and is considered just as important a piece of infrastructure as campus buildings and facilities. The character and quality of the public realm is what provides the campus with its distictive sense of place, important for both campus users and members of the public.

Urban Design

The physical shape and character of all elements of the campus environment, both of buildings and the open space between them.

Wayfinding

Elements of the campus environment intended to aid in investigation. This includes signage, campus gateways, landmarks and other elements that help orient campus users and visitors to their location and find their destinations.

Land-Use Types

Academic

Research, teaching space, administration and academic support buildings.

Commercial

Services or uses that do not include or are not intended to include, in whole or in part, the advancement or support of the educational, research or ancillary needs of a university, its staff or students.

Mixed Use

Mixed use development describes areas where buildings are designed to accommodate more than one type of use. For example, a building that accommodates the functions of academic, commercial, support services and/or residential.

Natural Areas

Lands that will remain in a relatively undisturbed state.

Open Space

A general term identifying spaces between buildings and/or areas of development. These spaces may consist of formal and informal elements including quads, plazas, gardens and walkways. They also include natural environments, whether existing natural areas are preserved or new naturalized spaces that are created.

Partner Lands

Lands identified for development for research and/ or facilities that support the priorities and mandate of the University.

Residential

In the campus context, residential development can mean student housing, work force housing, or market housing. It can come in a variety of forms and densities, from single and semi-detached houses to townhouses and apartments.

- Student residences are developed for undergraduate, graduate or married students.
- Work force housing is developed specifically for staff and faculty.
- Market housing is developed for sale, lease or rental on the open housing market.

Shared Use

Land use where development supports university activities as well as proximal neighbourhoods and the greater community at large. These areas are generally kept to the edges of campus, as public multiple transportation modes would be utilized to facilitate functionality and access.

Storm Water Management

Land developed to accommodate storm flows. At South Campus, these are proposed to take the form primarily of constructed wetlands, dry ponds and bio-swales.

- Bio-swales are vegetated channels designed to convey storm water in a linear fashion.
- Constructed wetlands are storm ponds designed to mimic the natural systems of wetlands with respect to the filtration of storm water and habitat value for flora and fauna.

Support Services

Any services offered or provided to the students, faculty, or staff including parking and residential services, food and beverage, financial, daycare, health or campus life.

Transition

This describes land use/development zones generally between existing development and new development which is of a different use. Transition lands are used to accommodate intermediate compatible uses adjacent to existing development, or are left as open space.

Transit Oriented Development (TOD)

TOD is an approach to development that places relatively high density, mixed use development within a walkable distance of transit facilities and centers.

Transportation

Community Linkages

Connections between campus and adjacent neighbourhoods, services or other city elements. These may take the form of pathways, and/or roadways.

Pathwavs

Outdoor linkages that are primarily focused on providing pedestrians access to, from and through campus. Non road certified vehicles (i.e.: golf carts) will utilize university pathways when service roads do not provide the needed access. From time to time vehicular traffic is allowed to access pathways for special events to gain access to campus amenities.

Multi Use Trails: Maintained, hard-surfaced paths, generally 3 meters in width, designed to be used by multiple non-motorized modes of travel, incuding pedestrians and cyclists. They may also provide service connections for university vehicles.

Sidewalks: Maintained, hard surface paths, generally 3 meters in width, designed specifically to accommodate pedestrian movement. Access for cyclists and university vehicles is discouraged.

Trails: Unmaintained, natural paths, generally narrow in width. These will be generally located to provide access to naturalized areas within or adjacent to the campus.

Roadways

Outdoor linkages that are primarily focused on providing vehicular and cyclist access to the various buildings and spaces within the campus. Given the pedestrian nature of a campus, road widths and speeds are minimized to mitigate the risk associated with pedestrian interactions.

Public: Generally intended for transit and public vehicle access, but can also be utilized by cyclists, service vehicles and emergency services. To the extent possible, these roads are kept to the edges of the campus and shortcutting via the campus roadwork network is mitigated whenever possible.

Service: Primarily for cyclists, university, service, and emergency vehicles to access and service buildings within the campus. These roads are not intended for public vehicles.

Travel Demand Management

A comprehensive approach to shifting travelers to and from U of A campuses out of single-occupant vehicles and into more sustainable modes of transportation, thus reducing overall traffic generation and parking demands.

Appendix B: Campus Wide Guidelines

Visual Quality & Design

OBJECTIVE:

Utilize the Districts, Pathways, Edges, Nodes and Landmarks to create a coherent and unified Campus character.

GUIDELINES:

- Incorporate appropriate building development and natural features to create distinct District characteristics, social life and experiences.
- Use existing and future landmark development to provide a sense of movement and connectivity.
- Enhance the overall Campus, integrating Sectors,
 Districts, and surrounding neighbourhoods through careful planning of edge development.
- Use existing and future visual features to emphasize and define primary, secondary, and tertiary nodes within the Sector.
- Develop a hierarchy of vehicular and pedestrian pathways that physically and visually link key Nodes and Districts within the Sector and surrounding Campus, as well as the surrounding neighbourhood and natural areas.

Sector Identifier & Colour(s)

OBJECTIVE:

Create a strong and unified character and community through the use of a Sector identifier and colour scheme.

GUIDELINES:

- Coordinate and develop an identifier program for each Sector and its Districts to enhance recognition and wayfinding.
- Coordinate and adopt a colour program to demarcate the Sector and provide year-round colour to key nodes, pathways, edges, landmarks and Districts.

- Utilize the identifier and colour(s) in features, such as:
 - Banners (pole and wall mounted)
 - Pedestrian scale lighting
 - Fences and screens
 - Street signing (pole-mounted sign blade and decorative surface plaques)
 - Streetscape features and amenities (e.g., kiosks.
 - Benches, waste receptacles, bicycle racks, tree
 - Grates/quards, etc.)

Landscape Treatment

OBJECTIVE:

Conserve, preserve and enhance the Campus landscape to define and create a distinct, safe and secure Campus environment.

GUIDELINES:

General Landscape Treatments

- Enhance and improve the existing Sector landscape by employing/considering:
 - Existing and future boulevard trees, plantings, and shrub/flower beds to enhance and maintain Sector edge continuity, accent and rhythm
 - Qualities and forms that reflect the character of the Sector.
 - Plant materials that are hardy, provide seasonal variation, and where practical, are edible.
 - Plant materials that enhance visual experiences and establish clear sight lines for motorists and pedestrians.
 - Plant materials that promote the development of a safe, sustainable, and manageable environment based on maintenance efficiency and costeffectiveness.

 Planting design that creates a safe and secure environment for pedestrians by following the guidelines of Crime Prevention Through Environmental Design (CPTED).

Tree Plantings

- Design tree plantings in linear and continuous blocks parallel to key Sector pathways, creating strong allées and formal edge character where identified.
- Conserve, preserve and enhance existing boulevard tree species. Species selection should consider the Sector, District and nature of existing tree plantings within the area, their seasonal variation, and the desired visual experience and sight lines.
- Complete allée and edge character sections within the Sector and each District in coordination with any future proposed roadway rehabilitation work or building development.
- Tree inventory and interpretive program should be established to identify unique and exotic species.
- Trees should be set back the following minimum distance from the components listed below (minimum distance in metres, measured from the centre of the tree trunk):
 - Shallow underground utilities 1.5
 - Deep underground utilities (sanitary sewer, storm sewer and water mains) 1.8
 - Underground power cable 1.0
 - Surface power hardware 3.5
 - Light poles 3.5
 - Fire hydrants 3.5
 - Stop signs 3.5
 - Yield signs 3.5
 - Other signs 2.0
 - Transit zones 3.5
 - Private property boundary 3.0
 - Edge of driveway 1.5
 - Edge of sidewalk 0.5

Note: Tree planting within easements to be reviewed and approved by the University - SPPI.

Shrub/Flower Plantings

- Utilize tree/shrub/perennial (including grasses) and annual plantings prudently in open space areas to enhance gateway, node, pathway, edge, landmark, and District development. All proposed shrub beds should be carefully assessed with respect to their operations/ maintenance implications and the way in which the shrub bed detracts from, or adds to, the aesthetics, form and function of the space.
- To determine if they should be rejuvenated/ enlarged or decreased/removed, etc., existing shrub beds should be assessed as to their physical condition, operations/maintenance implications, and the way in which the shrub bed detracts from, or adds to, the aesthetics, form and function of the space.
- In key, highly visible gathering areas, consideration should be given to creating intensely planted, colourful and detailed "garden" spaces that contrast with the relatively simpler plantings of trees, shrubs and turfgrass that predominate on Campus.

Natural Areas

OBJECTIVE:

Conserve, preserve, and enhance the diversity of all natural areas and the mature characteristics of the Campus or Sector.

Screening

OBJECTIVE:

Provide fencing, screens or other artistic treatments, in combination with plantings, adjacent to open surface parking lots, service areas and similar land uses, to reduce the visual impact and enhance edge development within the Sector.

GUIDELINE:

 Where necessary, utilize fencing, screens or other artistic/ interpretive treatments, in combination with plantings, to provide a consistent, permanent, and aesthetic interface between the development and adjacent land uses.

Public Art

OBJECTIVE:

To coordinate, through the Department of Museums and Collections Services, the development, integration and promotion of public art within each Sector, raising the profile and livability of the Sector and its distinct Districts.

GUIDELINES:

- Adhere to policy, guidelines and best practices regarding the acquisition, use and maintenance of art as approved by the University and associated organizations.
- Ensure all public art acquisitions are coordinated and approved through the University of Alberta Art Acquisitions Committee.
- Ensure coordination and communication related to the integration of works of art within Sectors involves Museums and Collections Services, the Sector community and is in alignment with Campus Open Space Master Plan being developed concurrently.
- Public art can be incorporated into various Sector areas, such as:
 - Node and pathway areas
 - Campus boundary
 - Pedestrian bridge structures
 - Building walls
 - Signing
 - Lighting
 - Public streetscape features (e.g. benches, waste receptacles, bus shelters, newsstands, tree grates, kiosks, etc.).

Signage

OBJECTIVE:

Create a hierarchy of signing that:

- Reduces unnecessary signing within the Sector.
- Improves orientation, clarity, and safety, as well as vehicular and pedestrian movement.
- Combines a format for directional and traffic signing.
- Explores new signing technology to improve signing clarity and Sector aesthetics.

GUIDELINE:

- Utilize banner poles, pedway structures, fences and screens, street blade signing, streetscape features and amenities (e.g. kiosks, benches, waste receptacles, bicycle racks, tree grates/guards, etc.) and public art within the Sector to improve orientation, clarity, as well as District consolidation and definition.
- Implement a common signing nomenclature for the Sector that enhances way-finding and identifies University buildings and key pathways, nodes and open space.
- Utilize signage as a means to reflect history at the Campus and neighbourhood communities that celebrate achievement.

Lighting

OBJECTIVES:

- Utilize existing street lighting within the Sector to maintain traffic safety and enhance theme and character development.
- Introduce pedestrian-scale lighting.
- Utilize the "Guidelines for Design and Installation of Street, Sidewalk, and Area Lighting at the University of Alberta" in the assessment and implementation of lighting on Campus.

GUIDELINE:

 Assess and implement lighting based on the function of the area being developed or enhanced. Refer to classifications and details listed in the University lighting guidelines.

- Refer to City of Edmonton's lighting design and layout for city street within the University of Alberta, that has been developed with the University of Alberta.
- Refer to Section 3 of the University's lighting guidelines for power feeds and controls.
- Refer to Section 4 of the University's lighting guidelines for design element requirements.
- All lighting design should encourage the reduction/ mitigation of light pollution through the use of sustainable and downward focused equipment.
- Variances in lighting design (e.g. decorative lighting) in specialized districts or pathways must be assessed and approved by the University of Alberta.

Street Amenities

OBJECTIVE:

Implement a common streetscape language for the Sector through the development of a 'Streetscape Furnishings Program', possibly incorporating a Public Art Program.

GUIDELINE:

- Prepare and implement a 'Streetscape Furnishings Program' for the North Campus for each Sector and assess and coordinate the program with those areas that have a current furnishing program. Key furnishing components should include:
 - Kiosks
 - Benches
 - Waste receptacles
 - Bus shelters & transit stops/stations
 - Campus/ emergency telephone stations
 - Telephone booths
 - Parking meters
 - Newspaper boxes
 - Bicycle racks
 - Tree grates & guards
 - Drinking fountain

Architectural and Open Space **OBJECTIVES:**

- The Sector Plans for North Campus have identified Site Specific Development Guidelines for select existing and proposed building development within each Sector. The Site Specific Development Guidelines clearly identify the limitations in the building footprint area, site area, setbacks, and Zones of Responsibility for each site. These guidelines are to be the template used in assessing any future development or redevelopment within the Sector and the maximum area for site coverage.
- The Sector Plans have identified guidelines for each proposed District within the Sector. The District guidelines clearly identify the development limitations and Zone of Responsibility for each site. These guidelines are to be the template used in assessing any future development within the Sector and the maximum site coverage area.

GUIDELINES:

- All new development should be architecturally integrated into the Sector, respecting and addressing the surrounding pathway networks and existing buildings.
- Unless specifically noted in the Sector Specific
 Development Guidelines, the massing of all buildings should adhere to the following principles:
 - To create a comfortable pedestrian environment along the pathway right-of-way.
 - Massing needs to consider reducing microclimatic impacts and provide an appropriate scale and visual relationship between the building and the pathway.
 - Upper storeys should enhance and complement the surrounding skyline through their articulation and massing. Unique architectural/ sculptural forms, as well as various materials and lighting, should be utilized to screen HVAC and other building systems/services.

- Materials and detailing should be articulated to distinguish upper storeys from the lower storeys.
- Encourage harmonious variety in building form and heights, massing, and siting to create visual interest consistent with the building envelopes specified.
- Develop architectural landmarks that:
 - Correspond with the specific character of the Sector (e.g., academic, residential, student services, etc.),
 - Provide an aesthetic edge condition, and
 - Provide major focal points and create areas of activity.
- Building entrances should:
 - Be clearly visible to create a sense of occupancy, activity and gathering to the street or greenway/open space, and should be accessible.
 - Be highlighted and defined through the use of architectural and streetscape devices (e.g. lighting, benches, planting, etc.).
 - Be visible, safe and inviting.
 - Incorporate canopies, arcades, colonnades, awnings, pergolas, porticos, etc. to create a comfortable pedestrian environment in any season.
- Building corners should address and enhance Pathway and Node intersection development.
- The ground level should be designed to create the feeling of extending the outdoors indoor, and vice versa.
- Ensure that vehicle entrances and exits, as well as on-site traffic and pedestrian routes, are located and designed in a manner that provides a clearly defined, safe, and efficient circulation pattern for traffic movements.
- Key building development features should include:
 - The integration of existing mature trees with new tree plantings.

- A seamless transition between pathways and building edge that promotes gathering and activity.
- Pedestrian scaled lighting (e.g. building or street-based).
- Banners and integrated signing.
- Kiosks, directories and way-finding devices.
- Integrated furnishings approach (e.g. benches, waste receptacles, telephone booths, newspaper boxes, bicycle racks, tree grates/guards, Campus/ emergency telephone stations, etc.).
- Public art.
- All pathways should provide safe, secure, strong links between adjacent façades, preserving existing mature trees (if feasible) and incorporating additional tree and shrub plantings, public gathering areas, site furnishings, way-finding/ interpretive signage, Campus/ emergency telephone stations and public art areas.
- Bicycle storage should be accommodated at each building. The location of bicycle racks should be in a safe and secure location, without conflicting with movement around key building entrances. Bicycle storage should be aesthetic, practical and integrated with the architecture of the building.

Sustainability

OBJECTIVE:

Design and develop both buildings and sites in an environmentally responsible manner that incorporates 'green' technology in conjunction with the University Design and Construction Guidelines. Sustainability, safety, security, manageability, and universal design are all key development requirements in the design and development of buildings and sites.

GUIDELINES:

Set performance targets in the following areas:

Energy (energy use, energy source, clean energy transport)

- Water (water use, water filtration, ground water recharge, human waste)
- Landscape (integrated pest management (IPM), green space, native plantings and wildlife habitat
- Materials (materials that are: recycled, efficient, salvaged, local, durable and low maintenance)
- Waste (recycling and composting facilities)
- Construction Practices (construction waste, re-use of topsoil, vegetation and watercourse protection)
- Economic Performance (Life-Cycle Assessment, Capital Cost Accounting)

Energy

 Consider the use of passive and active renewable energy sources (e.g. solar heat and light, wind, and air resource).

Water

- Naturalized stormwater management facilities
 - Introduce aquatic vegetation
 - Designed ecosystems
- Water Conservation Plan & Audit
 - Conserve water during construction development and operational phases
 - Rainwater collection systems
 - Use of drought resistant plants (Xeriscaping)
 - Grey water systems

Landscape

- Protect or enhance the site's ecological integrity and biodiversity
- Ensure protection of site ecosystem
- Reduce or eliminate disturbance to water system

Materials and Waste

- Reduce disposal of waste materials to landfill
- Use composting facilities
- In new construction, look to use sustainable products
- Look to salvage and re-use materials for homes being removed and incorporate into new construction

Fconomic Performance

- Balance cost of retention of current asset against rebuilding "in-kind"
- Create a livable attractive community whose value is captured in both proximity and function (minimize vacancy through demand)
- Look at balanced approach to consider social, environmental and economic costs

Construction Practices

- Prevent erosion during construction
- Minimize the disposal of construction waste
- Protect and conserve topsoil

Parking & Servicing

OBJECTIVE:

Establish a Goods and Service Network that consolidates operations, reduces impact on the pedestrian environment and the integrity of Pathways and open space, and creates a shared service strategy for future building development.

GUIDELINES:

- All loading/maneuvering areas should be:
 - Screened with landscaping or shall be fully enclosed in a manner compatible with the character of the development and should not be visible from adjacent streets or buildings.
 - Sited such that all materials handling can be efficiently managed.
 - Designed such that turning vehicles do not interfere with traffic on adjacent circulation routes.
 - Designed with adequate area to accommodate all anticipated vehicle types.
- Trash collection, open storage, outdoor service, vehicular service and loading/maneuvering areas which are visible from an adjoining site or public roadway should have screen planting. The location, size and height of the planting should be maintained to provide effective screening.

Appendix C: Sector Implementation

The Sector Plan is an administrative document to be used as one of several documents that provide direction in planning and developing a capital project.

The Sector Plan is used in conjunction with:

- University of Alberta Long Range Development Plan (LRDP)
- University space standards
- University of Alberta Design and Construction Standards and Guidelines
- Utilities Master Plans
- Drainage Master Plans
- Historically significant buildings inventory of the University
- City of Edmonton plans and initiatives (where applicable)

SECTOR PLAN ADMINISTRATION

The Sector Plan is administered through the portfolio of the Vice President, Facilities and Operations (F & 0). It is the responsibility of F & 0 to make all proponents of capital projects occurring on University lands aware of the existence of Sector Plans as well as all other documentation that guides the planning and development of capital projects. The Sector Plan will be periodically updated as conditions warrant.

SECTOR PLAN INTERPRETATION

The University Architect is responsible for providing interpretation of the guidelines when asked by the proponent or the proponent's representative. Sector Plan guidelines may be interpreted or relaxed to provide design and development flexibility to a capital project when required, as long as the interpretation or relaxation benefits the quality of the development and the University without negatively affecting the Sector Plan.

The University Architect will review all capital project planning and design submissions with regard to their conformance to the Sector Plan and other planning documentation prior to making a recommendation on the submission to the Facilities Development Committee (FDC) of the University for final approval.

SECTOR PLAN DISTRIBUTION AND ACCESS

Sector Plans and the Compliance Checklist area available through the F & O website (www.facilities. ualberta.ca/en/Planning Project Delivery).

Appendix D: Reference Material

RELATED DOCUMENTS

- Comprehensive Institutional Plan
- Long Range Development Plan (2002)
- Dare to Discover
- Dare to Deliver (2011-2015)
- The Image of the City, Kevin Lynch, MIT Press, 1988 (19th Printing)

CONSULTATION ACTIVITIES

Currently the U of A meets with the communities of South Campus through the South Campus Consultation Group (SCCG) which was created through an MOU with the University and the South Campus Neighbourhood Collation (SCNC) in May 2012. It was through the SCCG that a small sub-committee of community representatives from Malmo Plains, Lendrum and Lansdowne communities was formed to work with the Michener Park Residents Association and the U of A on the Sector 15 & 16 Plan. This sub-committee attended

all focus groups and helped to plan the engagement timeline. The following is a list of the engagement events that took place for the Sector 15 & 16 Plan.

- June 5, 2013 Focus Group meeting 1
- June 20, 2013 Public Open House1
- August 7, 2013 Focus Group meeting 2
- September 17, 2013 Public Open House2
- November 12, 2013 Focus Group meeting 3
- November 14, 2013 Public Open House 3
- January 23, 2014 Focus Group meeting 4
- February 19, 2014 Focus Group meeting 5
- March 25, 2014 Public Open House 4
- May 2, 2014 SCCG Sub-Committee lead will receive copy of final Sector 15 & 16 documentation and asked to provide final comments by May 12, 2014.