



**BUILDING
ON VISION**
UNIVERSITY OF ALBERTA



LONG RANGE DEVELOPMENT PLAN 2002

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EXECUTIVE SUMMARY

The Long Range Development Plan (LRDP) is the planning and development for the next 30 years, guiding physical growth at the four campus sites of the University, North Campus, South Campus, Michener Park and Faculté Saint-Jean.

The LRDP is derived from, and is responsive, to the University's strategic directions and is therefore a flexible document that will need to be amended as substantial alterations are made to the University's guiding directions.

NEED TO ACCOMMODATE GROWTH

The LRDP development concepts, supporting plan elements, initiatives and guidelines anticipate continuing growth in enrolment and research funding at the University over the next thirty years. It is projected that in the intermediate term, student enrolment will reach 37,000 and annual research funding within five years will exceed \$400 million. This growth will require the development of new research, teaching and student support facilities as well as upgrades or replacement of existing structures.

In the long term, growth is projected at a lower rate, with a probable enrolment of 45,000 students by 2031.

DEVELOPMENT DIRECTIONS

The LRDP identifies that growth should occur on University lands.

In the intermediate term, growth will be accommodated primarily by development and redevelopment on North Campus. Development will occur on the three sectors of South Campus, at Michener Park, and at Faculté Saint-Jean campus as priorities evolve.

Over the long term, as North Campus sites become fully developed, growth will be directed to South Campus. It is expected that the City of Edmonton extension of the LRT will precede significant active development of South Campus, and will provide a rapid transit link.

Over the intermediate and long terms, research partners will be sited on the Partner lands; the Faculté growth needs will be addressed at its site; the University Research Station will consolidate its research facilities; and Michener Park will be developed for family student housing and for market uses.

USING THE PLAN

The LRDP is a Board-approved document administered by the President. The University administration will monitor the performance of the LRDP against the University's strategic initiatives and make recommendations for amendment when required.

The University will prepare detailed administrative implementation plans for each sector to address specifics of development and growth under the aegis of the LRDP.



1.0 INTRODUCTION

The Long Range Development Plan (LRDP) for the University of Alberta will provide a planning framework to accommodate and to guide physical development on University lands during the next thirty years.

1.1 WHAT IS A LONG RANGE DEVELOPMENT PLAN?

The LRDP is responsive to the University's Academic Plan, Strategic Research Plan and the Strategic Business Plan. It is, therefore, a flexible document rather than a rigid template (or 'master plan') and it will need amendment when substantial alterations are made in the University's guiding plans.

The LRDP identifies a set of Strategic Planning Principles that should form the basis for achievement of the goals, objectives and strategies expressed in the Academic, Research and the Business Plans. It identifies as well how the University lands and facilities should be developed in response to these plans and it outlines the operational planning initiatives and guidelines that will direct development.

The LRDP is the overall organizing framework for development and is approved by the Board of Governors as the guiding document for physical planning. The University will develop detailed administrative plans for various geographic sectors of the University in conjunction with the timing of development in these sectors.

1.2 WHY IS THE LONG RANGE DEVELOPMENT PLAN NEEDED?

The University has always maintained a sufficient land base to meet its development requirements. However, from time to time, it is necessary to review the ways in which it plans development of those lands. The existing LRDP is over 30 years old, thus past its period of relevance. It is time for a new strategic review of the long range development needs and plan for them.

With growth continuing at the University of Alberta, and approaching new and higher rates of growth, continued facilities growth requires a useful framework within which to deploy its physical assets effectively, efficiently and in a timely manner in response to academic and research priorities.



2.0 BACKGROUND

2.1 VISION

The University of Alberta is committed to becoming indisputably recognized nationally and internationally for its excellence in scholarly teaching, research and community service. The Long Range Development Plan (LRDP) is a 30-year planning framework that will assist in achieving this commitment by guiding the physical development of campuses and facilities of exceptional quality.

The LRDP recognizes the unique characteristics and attributes of our campuses. While encouraging these, the LRDP will consistently promote development that:

- fosters desirable campus life;
- supports teaching and research;
- uses physical and financial resources efficiently and effectively;
- creates, preserves and enhances the significant physical assets of the University;
- values the planning initiatives of its neighbours and partners.

The LRDP encompasses North Campus (the original site of the University), Faculté Saint-Jean, and South Campus (which includes the University Research Station, Partner lands and Academic Sector) and Michener Park.

2.2 PLANNING & DEVELOPMENT HISTORY

The University of Alberta has seen many developmental milestones since its inception. At its beginning, the University had 49 students and 258 acres in what we know now as North Campus. Despite two world wars and the Great Depression, the University continued to grow and expand. Today, the University has over 30,000 full-time-equivalent students and a total land base of more than three hundred and fifty hectares within the City of Edmonton, excluding lands under lease.

The University has always maintained a sufficient land base to meet its development requirements but its planning for growth has been as sporadic as its various spurts of new building activity.

The following major planning and development milestones provide a brief overview.



1906 - Legislation establishes the University of Alberta

1907 - River lot 5 (258 acres) bought for future site of the University of Alberta

1908 - Classes begin at Duggan School with 45 students and 5 faculty



1911 - Classes move to the new Athabasca Hall

1912 - Assiniboia Hall built; Faculty of Law & Dept. of Extension established

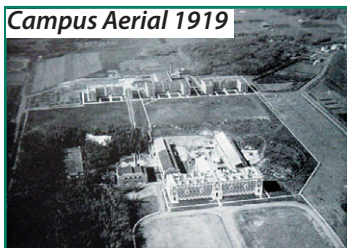
1913 - Faculty of Applied Science established; instruction in Medicine begins

1914 - Department of Pharmacy established



1915 - Arts building, South Lab built; Graduate studies organized; Faculty of Agriculture formed

1916 - School of Accountancy established



Campus Aerial 1919

1917 - School Pharmacy & Sub-Faculty of Dentistry formed

1918 - Department of Household Economics established

1919 - Research Council of Alberta formed

1920 - Dentistry becomes separate school; 379 acres bought for University Farmland

1921 - Dentistry/Pharmacy building built



1922 - Strathcona Hospital acquired to become University of Alberta Hospital

1906 - 1914

In April 1906, Premier Rutherford, introduced a bill in the legislature to establish a Provincial University in Alberta. An Act was passed, and on April 6, 1907, the City of Strathcona was chosen as the site for the new University.

In 1907, the Province purchased River Lot 5 to house the new University. (River Lot 5 consisted of 258 acres, bordered by the North Saskatchewan River to the North, and running south to what is now University Avenue). The lot was purchased from Mrs. Simpson and Mrs. Stokes for \$150,000.00. Shortly after the land was purchased, Henry Marshall Tory was appointed the first president of the University.

Dr. Tory opened the doors to the new University in September 1908 in a temporary location, the Duggan Street School (later to become Queen Alexandra School). Forty-five students were enrolled, including several grade 12 high school students and a number of students from Alberta College. By 1909, a second facility, The Strathcona Collegiate Institute, had been built to house the growing University. This structure was located at what is now 105 Street and 84 Avenue. Finally in 1911, the University was moved to its current location on River Lot 5. By the end of that year, the University had 129 registered students.

The University's Board of Governors accepted the first official plan for the development of the University of Alberta in 1912. This was the Nobbs-Darling Plan (named after the architects who designed it).

The first building to be constructed at the new University site was Alberta College South (now St. Stephens' College). Athabasca Hall was completed in 1912 - 1913. Assiniboia Hall also opened in the same academic year. Additions to these two residence buildings were finished by 1915. By this time, Pembina Hall was also nearing completion. Athabasca and Assiniboia Hall housed residences, a gymnasium, a dining hall, classrooms and offices. The Quad was reasonably-well defined and it functioned as a major organizing element for the University community.

By the end of 1913, the University of Alberta boasted an enrolment of 434 students. It supported the departments of English, Classics, Modern Languages, History, Philosophy, Math, Physics, Chemistry, and Civil and Municipal Engineering. The University also introduced Faculties of Law, Medicine, Applied Sciences, and in 1914, a new Department of Pharmacy.

THE FIRST WORLD WAR (1914 - 1918)

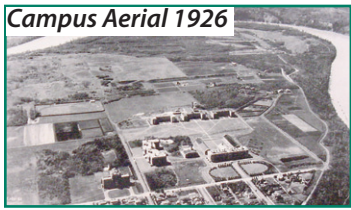
World War One saw the University losing a number of its students to military enlistment. Attendance dropped to 309 in 1916 - 1917. Campus development was restricted to finishing the residences and construction of the "Main Teaching Building, now known as the Arts Building, which snugly housed the University Book store, post office, print shop, common rooms for men and women, laboratory space, library reading rooms, the convocation hall, offices, classrooms, Senate chambers and the Registrar's office.



First Graduating Class - 1912



Faculty - 1913



- 1924 - School of Nursing opens
- 1927 - St. Joseph's College is built on Campus
- 1928 - School of Education established
- 1929 - Education Building built, later renamed Corbett Hall
- 1945 - The University accepts full responsibility for the training of teachers
- 1950 - Rutherford Library South built; Students' Union Building opens
- 1952 - McEachern Cancer Research Lab opens
- 1953 - University Hall built
- 1954 - School of Physical Education, Physiotherapy established
- 1955 - Civil/Electrical Engineering, Newton Research Buildings built
- 1957 - Administration, Agriculture, Greenhouse, Van Vliet Centre West Buildings built
- 1958 - Centre for Subatomic Research built

1918 - 1929

The post-War years saw a surge in development in Edmonton and at the University. Space problems were acute. In the academic year 1919 - 1920, 1,106 students were enrolled. This was a 79% increase in registrations over the previous year, nearly two and half times the pre-War levels, and entirely unexpected. The need for more space was especially critical for the Faculty of Medicine. Yet, the University had a land base that allowed it to respond to this demand for space and it had a Plan to direct development of buildings and green spaces.

By 1920, 379 acres of additional land had been purchased for future development of a University Farm (South Campus).

In 1921, the new Medical Building was officially opened, and in 1922, the Strathcona Hospital was acquired as a teaching hospital, which became known as the University of Alberta Hospital.

Three more buildings were completed in the 1920's. In 1927, St. Joseph's College was opened and a new studio was built for the fledgling radio station, CKUA. In addition, a push for more Alberta-educated teachers saw the completion of the "New Normal School" (now Corbett Hall) in 1929. This relatively-isolated building development was one of the first significant departures from the original campus Plan and it extended the University to the boundary of its original land holding.

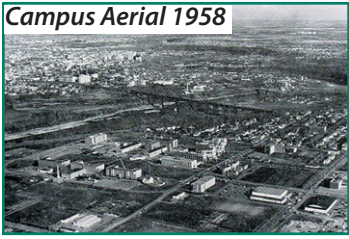
1930 - 1945

There was little campus development through the Great Depression of the 1930's and through the Second World War. The two most significant additions that were made during this time were, first, the acquisition of 200 more acres for the University Farm (and the construction of several new agricultural buildings, including farm cottages for the Farm staff) and, secondly, the University Hospital received a new South wing with 122 new beds, which brought hospital capacity to 375 beds.

1945 - 1960

Following the Second World War, enrolment accelerated and planning began once again to tackle the need for expansion at the University of Alberta. By 1950, building plans that had been developed in the previous five years began to be implemented.

The first phase of the Students' Union building was finished in 1950. This building was remodeled later as a second administration building, now called University Hall. Rutherford Library was completed in 1951 and the new Engineering building was completed in 1953. The Agriculture building of 1954 was the first stage of a building that would eventually accommodate the Biology department and its greenhouses.



- 1960 - Blench Hydraulics Lab, Tory West & V-Wing, Avadh Bhatia Physics Lab built
- 1962 - Industrial Design Studio built; Arts & Science is split into two separate Faculties
- 1963 - Department of Computing Science established
- 1964 - Morrison Structural Lab built
- 1966 - Calgary Campus and Lethbridge Campus become autonomous
- 1967 - Arts workshop, Education South, Human Ecology, Chemical Material and Environmental Engineering and Students' Union buildings built
- 1968 - Clinical Sciences building built
- 1969 - Biological Science building built
- 1970 - Van Vliet Centre East built; The College Saint-Jean is integrated into the University
- 1971 - Central Academic building (CAB) and Law building built
- 1972 - Hub Mall, Humanities, Mechanical Engineering and Medical Sciences buildings built
- 1973 - Chem. Centre East, Education North, Fine Arts, and Rutherford Library North buildings built
- 1975 - Phillips Services building built

The Administration building was completed in 1956, and housed Administration offices, the bookstore and post office. This building provided the initial impression to campus visitors, as it would be the first University building they would see.

1960 - 1969

By 1961, nearly 8,400 students were enrolled full-time at the University of Alberta (Edmonton Campus). Despite the development activities of the previous decade, space problems were again becoming acute. Enrolment was growing rapidly and the size and number of facilities were inadequate to deal with the needs of students and researchers.

As a result, 38 new buildings were developed at the University between 1960 and 1969, significantly reducing the available land base on North Campus. Some of these buildings included the new Biological Sciences building, the Education building, Henry Marshall Tory building, the Nuclear Research Centre, Structural Engineering building, Cameron Library, Lister Hall with its accompanying residence buildings, the Faculty Club, a new Medical building, a Physical Education complex, Engineering building and the Math, Physics and Chemistry complex.

Plans were under way as well for the development of long-range projects including: an agricultural building, a law centre, a humanities centre, a fine arts building, and buildings for commerce, engineering and physical education.

During this period, the Provincial government purchased 640 acres of land and leased it to the University for the Ellerslie Research Station as an experimental animal research station.

In this period of rapid development, it became evident the University needed to update its campus Plan. With the intense recent growth on the original campus site (and every indication that it would continue unabated), a decision was made to expand the campus through a move easternward into the adjacent Garneau area.

In order to provide the University development options, as well as the capability to accommodate an ever-expanding research profile, the Province passed an Act to exempt the University of Alberta from city zoning and bylaws. This effectively allowed the University the right to develop its holdings without the approval or permission of the City of Edmonton.

While the University of Alberta (in Edmonton) was showing major growth, the Calgary campus was developing just as rapidly. Administration of two campuses was an increasingly arduous task and, in April 1966, a new University Act created an autonomous University of Calgary and University of Lethbridge. With three Universities operating in the Province, a new level of competition came into place for research, development and operating dollars.



1979 - Advanced Materials Lab built

1980 - Agriculture/Forestry Centre built



1983 - Materials Management & Universiade Pavilion (Butterdome) built;
The World University Games are held at the University

1984 - Business building built

1985 - Imaging Research Centre built

1988 - Child Care Centre and Heritage Medical Research Centre built



1992 - Extension Centre built

1995 - Timms Centre for the Arts built



1999 - NANUC (National High Field Nuclear Resonance Centre) built

2000 - Computing Science, TELUS Centre Institute for Professional
Development built

1969

In 1969, the University of Alberta commissioned a long-range development plan. One of the main intents of this plan was to determine if the existing campus area could accommodate a growing University. It was concluded that the existing and projected land holdings would accommodate needed expansion to meet a student population of 30,000. It was also believed that enrolment target would be reached as soon as 1975. The Long Range Plan established the objectives and guidelines for development on North Campus to the projected level of growth.

1970 - 2000

The University did not attain a student population of 30,000 until the year 2000. However, facility development continued, and in general it has followed the framework of the 1969 Long Range Development Plan. An amendment to the Plan was prepared in 1989, focusing on the acquired Garneau lands, but little construction has occurred there since then.

The factors that contributed to facilities growth and development in the 30 years after 1970 included continuing research funding growth in the areas of Engineering, Medicine and Science (including Agriculture), enrolment growth (although at a slower rate of growth than projected), extraordinary events such as the World University Games (which resulted in the development of legacy facilities) and private donations which had resulted in new facilities.

2001

We are entering a new phase of growth, again focused largely on the areas of Engineering, Medicine, and the Natural and Agricultural Sciences and, again, we face significant undergraduate and graduate enrolment pressures. As new projects secure funding, particularly in the Faculties of Engineering, Health Sciences, Physical Education and Science, a new long range planning initiative has commenced.

2.3 TRENDS

The Long Range Development Plan has the flexibility to adjust to future trends. What follows are some of the trends that may influence the content and the expected pace of physical development over the life of this Plan.

2.3.1 *TECHNOLOGY*

New information technology has offered improved means of communicating with students as well as a large potential for developing attractive methods of instruction. Four ways technology may influence future planning are:

- through increased use for Distance Education;
- to enhance face-to-face instruction;
- to link on-campus classrooms to in-house instruction;
- to link universities for shared instruction and to share resources such as library collections.

The Academic Plan recognizes, however, that the opportunities created by technology must be balanced by the significant costs of developing, maintaining and upgrading those technologies and in educating academic staff to design and deliver courses using new technical and pedagogical modes.

While the value of Distance Education is unquestionable, particularly in terms of promoting the Provincial Government's 'Campus Alberta' principles of cooperation and collaboration, the University's Academic Plan declared "the majority of the students at the University should have the opportunity to interact face-to-face with faculty and other students".

Many have thought that information technology initiatives would remove the need for extensive development of new instructional facilities. Such technological optimism remains unwarranted. The implication is that there will continue to be a demand for traditional teaching environments as well as an increasing need to accommodate technology for teaching and research purposes.

2.3.2 *INTERDISCIPLINARY RESEARCH*

It is projected that University research will continue to expand across Faculty lines, blurring traditional scholarly domains, and that funding agencies will encourage stronger interdisciplinary initiatives. The types of facilities and development to accommodate interdisciplinary activities will be different from developments of the past including a greater emphasis on information technology systems, flexibility, adaptability, and changing operational and allocation models.

Trends in research also suggest an increase in distance collaboration between centres of excellence that may result in the need for more research space for visiting faculty.

2.3.3 LIFE-LONG LEARNING

The current population is the most educated our society has seen. However, Alberta lags behind the rest of Canada in the participation of its population in post-secondary education. The Government of Alberta has an objective to improve the participation rate and this will increase demand for enrolment at the University.

The demands of the workplace will continue to encourage members of the workforce to supplement their training and skills throughout their working lives. Some of this training will be provided through the University.

In addition, an educated populace can be expected to pursue academic interests for personal intellectual and lifestyle reasons. The University will be one of several venues needed to satisfy this demand.

These trends will generate facilities and faculty growth.

2.3.4 YEAR-ROUND INSTRUCTION

Universities across North America continue to expand teaching on a year-round basis through initiatives such as Co-op programs and practicums. These initiatives are in place at the University of Alberta in Faculties such as Engineering, Education, Nursing, Science and others. They are well established and it seems likely that other academic programmes will find the approach advantageous. If this trend expands across all Faculties, many existing facilities would be more consistently and uniformly utilized and this might reduce the pace of new construction (particularly for classrooms and teaching laboratories).

2.3.5 PARTNERSHIPS

The links between the University and many sectors of the community continue to grow and strengthen. It is expected that facilities that are shared by the University and its research partners will be accommodated on campus and requirements for these facilities may be significantly different than developments of the past. In some instances, the success of the partnerships may depend on accessibility to the general public. Conversely, some research partnerships may require limited public access to ensure the integrity of the research. The issue of research bio-security is an example of this.

2.3.6 RESEARCH FUNDING

Research funding from external granting agencies and from private corporations will continue to grow rapidly at the University in the coming decade. This growth will be both absolute in dollars (plausibly doubling the current figure of \$255 million per annum) and relative to other Canadian Universities. It will occur in all disciplines, yet the largest absolute increases in research funding, personnel and in operational activity will be found in the laboratory-based disciplines and, very probably, in the life science domains in particular. All these researchers and research fields require extensive, up-to-date, and purpose-built facilities.

2.3.7 STUDENT HOUSING

Universities continue to offer more opportunities for student housing to enrich on-campus life experiences and to assist in recruiting graduate and undergraduate students. The University is responding to this trend by increasing its student residence target to 15% of student enrolment being accommodated in on-campus housing of a variety of forms. This will result in the construction of new housing facilities and increased emphasis on student life programming.

2.3.8 HEALTH AND WELLNESS

The social trend for wellness, fitness and improved health suggests that the University should continue to provide recreation and fitness facilities, as well as other leisure facilities for students, faculty and staff. These facilities may be free-standing or incorporated as part of a new development.

2.4 GROWTH ASSUMPTIONS AND PROJECTIONS

Growth at the University will be in response to the directions of the Academic, Research and Strategic Business Plans. According to these Plans, two key factors will affect the University's growth of space. The first is the University's ability to accommodate rapid growth in funding for university-based research. The second is the University's ability to accommodate enrolment growth.

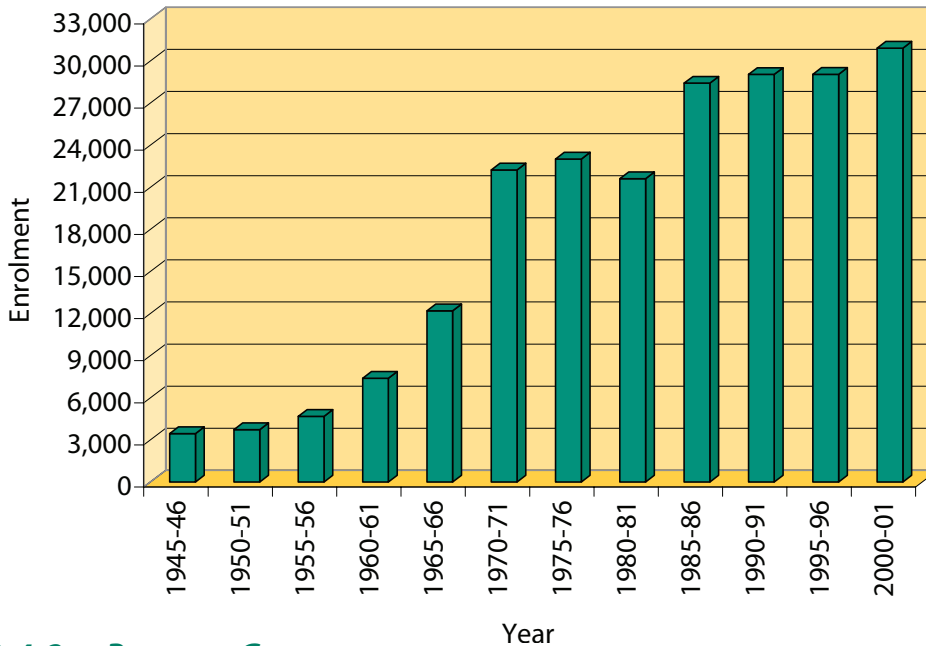
2.4.1 ENROLMENT GROWTH

The University of Alberta's Academic Plan reflects the agreement of the Provincial Government of a projected average annual enrolment growth of 2% for the intermediate term (next eight to twelve years). Graduate students are expected to comprise the largest component of this growth.

In the intermediate term, then, the University of Alberta will have a student population of some 30,000 undergraduate students and 7,000 graduate students for a total of about 37,000 students. This will be 22% greater than the year 2000 enrolment of 30,300. This increase has significant implications for operating resources, availability and use of campus space, as well as for facility construction and renewal.

For the balance of the 30-year timeframe of the LRDP, enrolment growth is assumed to occur at a rate of 1% per year on an average annual basis. This figure may well prove to be too conservative but it provides a reasonable baseline for current planning purposes.

The rate of enrolment growth projected for the next 30 years is similar to the average experienced since 1970.



2.4.2 RESEARCH GROWTH

In recent years, governments have resumed investments in university research and in infrastructure renewal. The University currently receives funding support for infrastructure through the Province of Alberta’s Innovation and Science Programs and through the Canada Foundation for Innovation Programs. In addition, five major initiatives (AHFMR, AHFSER, Alberta Ingenuity Fund, iCORE and the Canada Research Chairs) are providing further means for attracting outstanding faculty.

Currently, research funding is approximately \$255 million. Program funding for research at the University of Alberta is projected to double in the next five years and to continue increasing significantly in the second half of this decade. From 2011 on, the rate of growth of new research funding is projected to decline. This projection may well prove to be too conservative but it provides a reasonable baseline for current planning purposes.

2.4.3 PROJECTED SPACE REQUIREMENTS

The tables below show projected increase in space associated with the enrolment and research projections. Again, the projections for the long term may be conservative.

Projected Space Growth

	Immediate Term	Intermediate Term	Long-Term
New Classrooms	8,000 sq. m.	9,000 sq. m.	17,000 sq. m.
Teaching Labs	9,000 sq. m.	10,000 sq. m.	19,000 sq. m.
Research Space	100,000 sq. m.	100,000 sq. m.	200,000 sq. m.
Faculty & Staff Offices	20,000 sq. m.	21,000 sq. m.	41,000 sq. m.
Library Space	7,000 sq. m.	9,000 sq. m.	16,000 sq. m.
Commons Area	9,000 sq. m.	10,000 sq. m.	19,000 sq. m.
Recreation	8,000 sq. m.	9,000 sq. m.	17,000 sq. m.
Student Services	1,000 sq. m.	1,000 sq. m.	2,000 sq. m.
University Support	30,000 sq. m.	32,000 sq. m.	75,000 sq. m.
Housing to Meet Current Shortfall	600 Units	625 Units	0
Housing for New Student Growth	480 Units	525 Units	1,215 Units

3.0 EXISTING CONDITIONS SUMMARY

To assist future planners in understanding the rationale for many of the Plan concepts and initiatives, a discussion of the existing conditions of physical development at the University is presented for each campus site. Greater detail is included in the Appendices to the LRDP.

The University of Alberta lands considered in the LRDP are shown in Exhibit 1. They comprise 354.19 hectares located as follows:

Campus	Total Land Area
North Campus	89.06 hectares (includes Forest Reserve)
South Campus	241.97 hectares
Faculté Saint-Jean	6.22 hectares
Michener Park	16.94 hectares

3.1 NORTH CAMPUS

3.1.1 LAND HOLDINGS

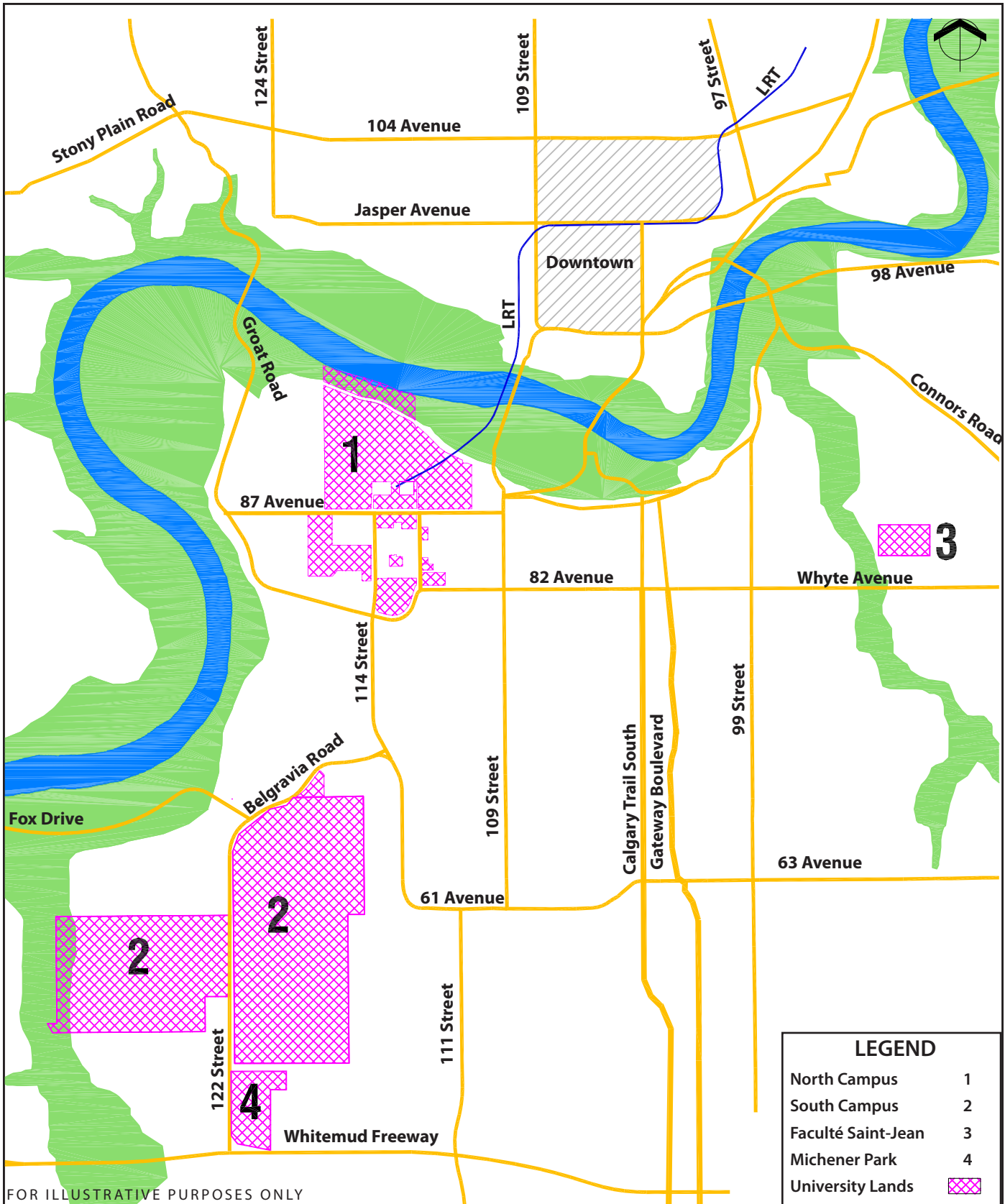
North Campus is situated in the heart of the City of Edmonton, across the North Saskatchewan River from the City's traditional downtown. It accommodates nearly 38,000 students, faculty and staff (Exhibit 2).

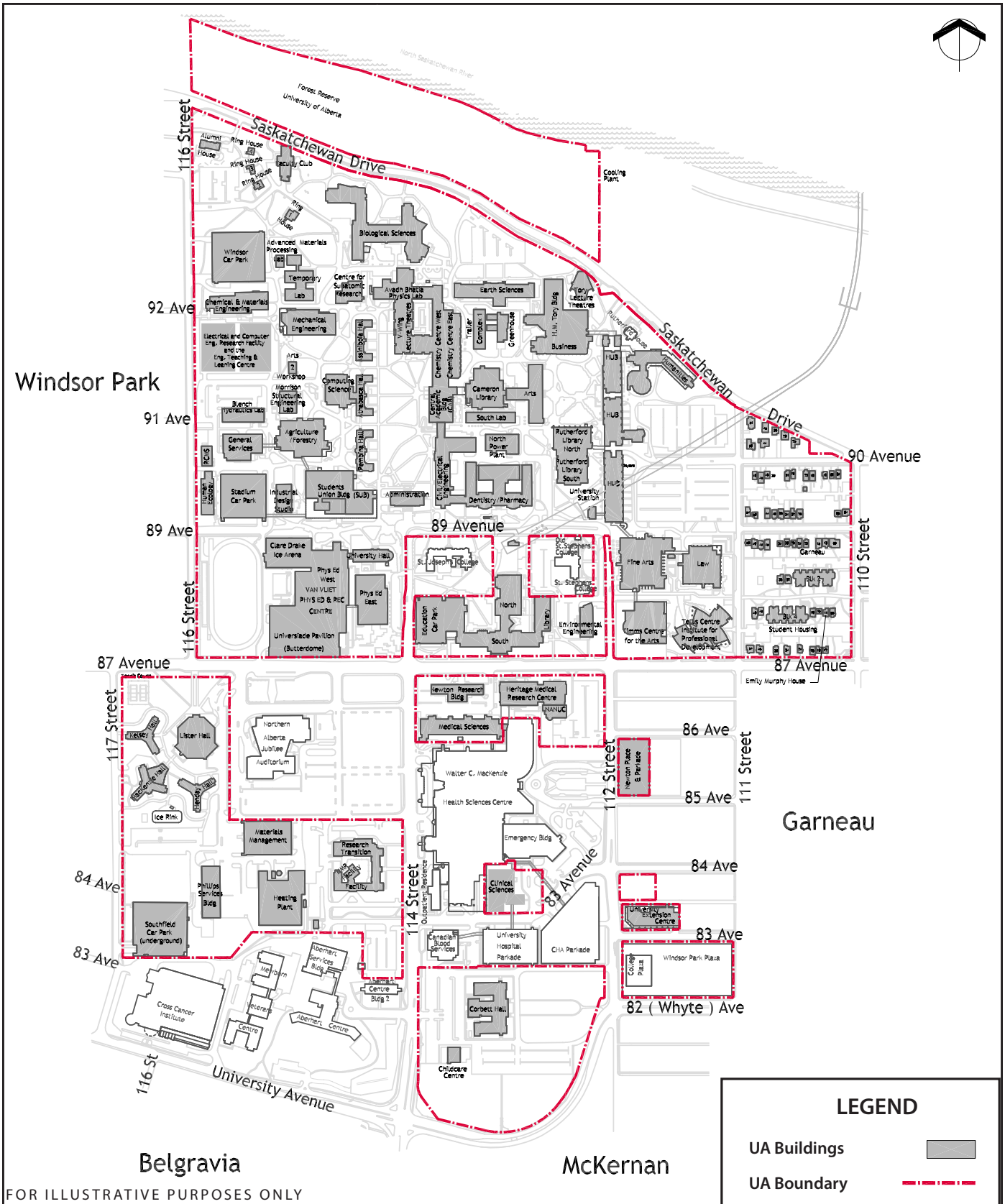
North Campus has a wealth of significant early and contemporary buildings, and it provides many dramatic views of the North Saskatchewan River Valley.

North Campus shares its location with the facilities of other agencies, including the Mackenzie Health Sciences Centre (a major teaching hospital), the Jubilee Auditorium, Canadian Blood Services, the Cross Cancer Institute and Mewburn Veterans Hospital.

Integrated within the campus site are pockets of development owned by others including St. Stephen's College, St. Joseph's College and the Government of Alberta.

The campus shares boundaries with the residential communities of Windsor Park, Garneau, McKernan and Belgravia.





FOR ILLUSTRATIVE PURPOSES ONLY

3.1.2 *AREA BY FUNCTION*

North Campus accommodates all the Faculties of the University except Faculté Saint-Jean. The locations of Faculties are presented in Exhibit 3.

North Campus has 920,465 gross square metres of building space.

North Campus Area By Function

Function	Area (square metres)	% of total
Instruction	88,834	9.7
Research	93,602	10.2
Research & Development	3,174	0.3
Academic Service	186,736	20.3
Student Service	7,804	0.8
Public Service	11,288	1.2
Recreation & Physical Education	21,922	2.4
University Service	39,457	4.3
Commercial	78,088	8.5
Residential	86,024	9.3
Building Support	269,833	29.3
Under Renovation	33,703	3.7
Total	920,465	100.0

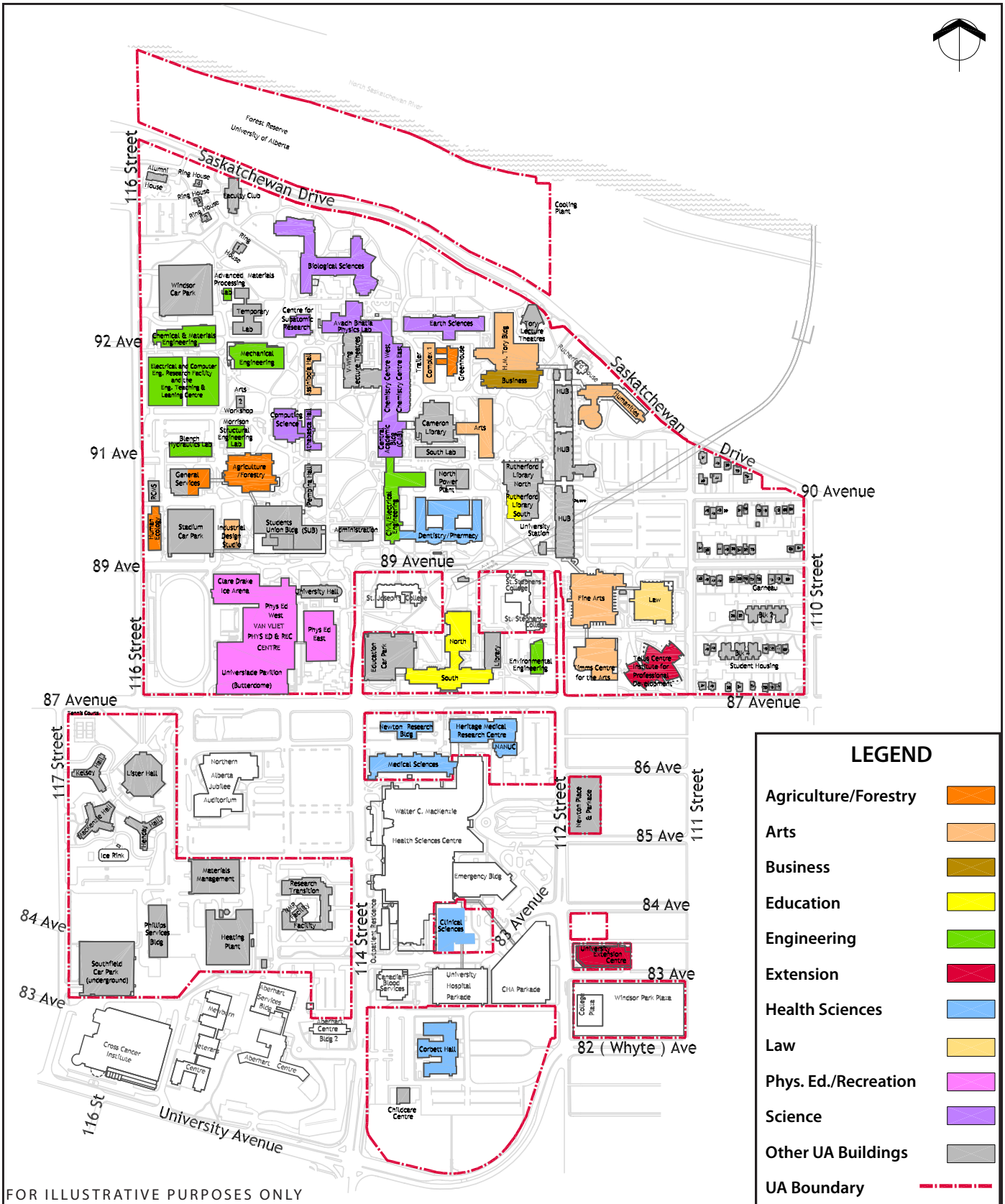
3.1.3 *BUILT FORM*

The campus has a number of building sectors that are well defined by open spaces and campus circulation routes. Some of these are the Engineering Sector (defined by its concentration of buildings), the Quad, Arts, Science, and Medicine. Law and Business are single-building Faculties and are integrated with others to form sectors. The Lister Hall cluster of student housing dominates the southwest sector of this campus. Other housing is dispersed on the campus periphery.

The campus has centrally-located recreation facilities with playing fields distributed on the periphery.

The juxtaposition of building styles from many decades creates an eclectic environment with little attempt to provide any particular aesthetic theme or experience. There is considerable variability in the density of development across the North Campus in terms of site coverage and height. The ratio of overall floor area to site area is 1.15:1.

FACULTY LOCATIONS



FOR ILLUSTRATIVE PURPOSES ONLY

3.1.4 *TRANSPORTATION ACCESS*

The campus is accessible by road and transit from all directions and sectors of the City of Edmonton.

The major road accesses from the north are Groat Road and 109 Street, both of which cross the North Saskatchewan River. University Avenue and 87 Avenue are the major east/west roads. The major access from the south is 114 Street. Another prominent southern access route is 109 Street to 87 Avenue.

The year 2000 average annual daily traffic on these roadways are as follows:

- 114 Street: 43,400 vehicles per day;
- Groat Road: 31,700 vehicles per day;
- 109 Street: 30,800 vehicles per day;
- 82 Avenue: 22,900 vehicles per day;
- 87 Avenue: 16,100 vehicles per day.

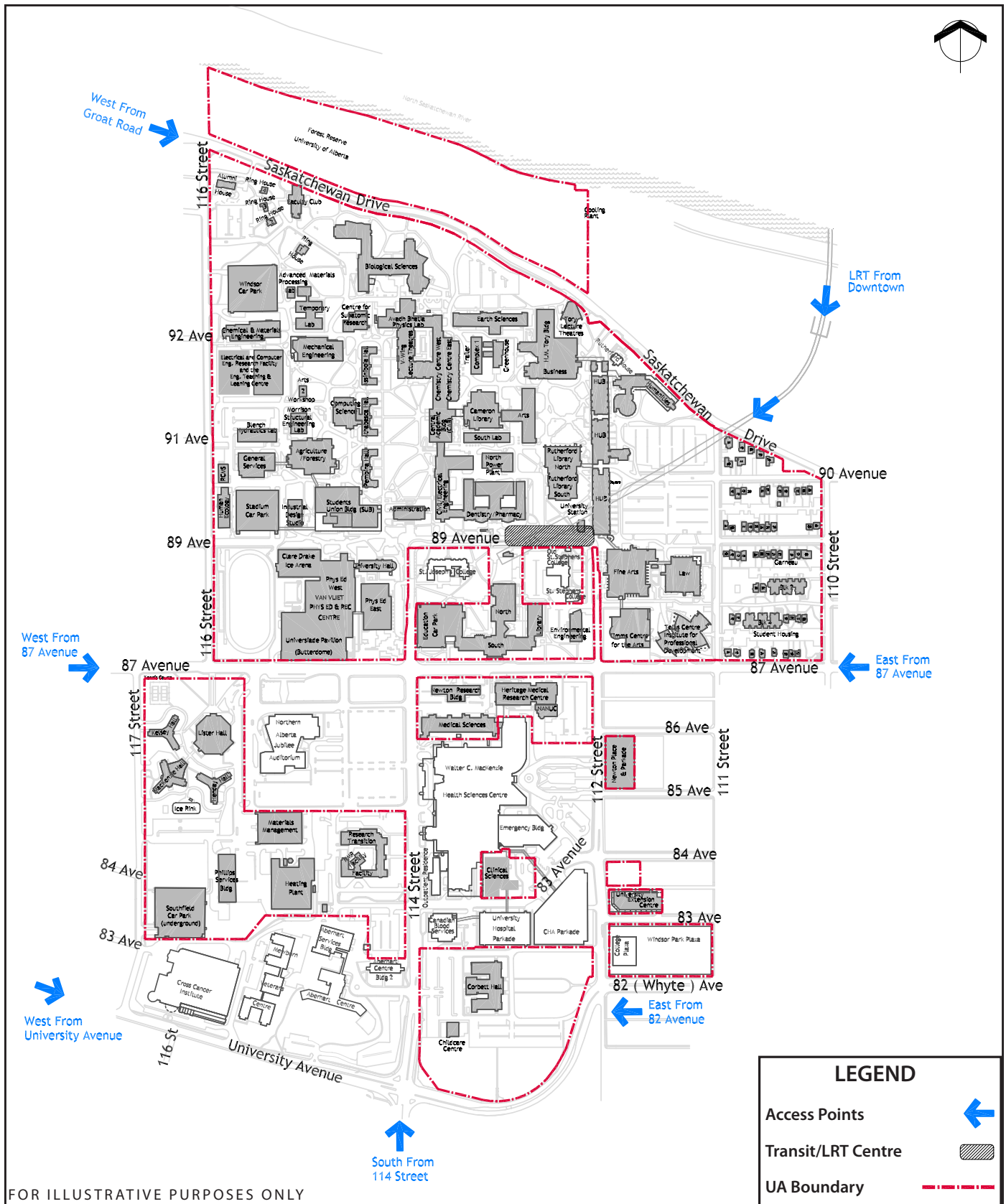
By recognized City standards, the access and egress roads of the whole area are congested in peak hours (see Appendix i, Transportation Existing Conditions).

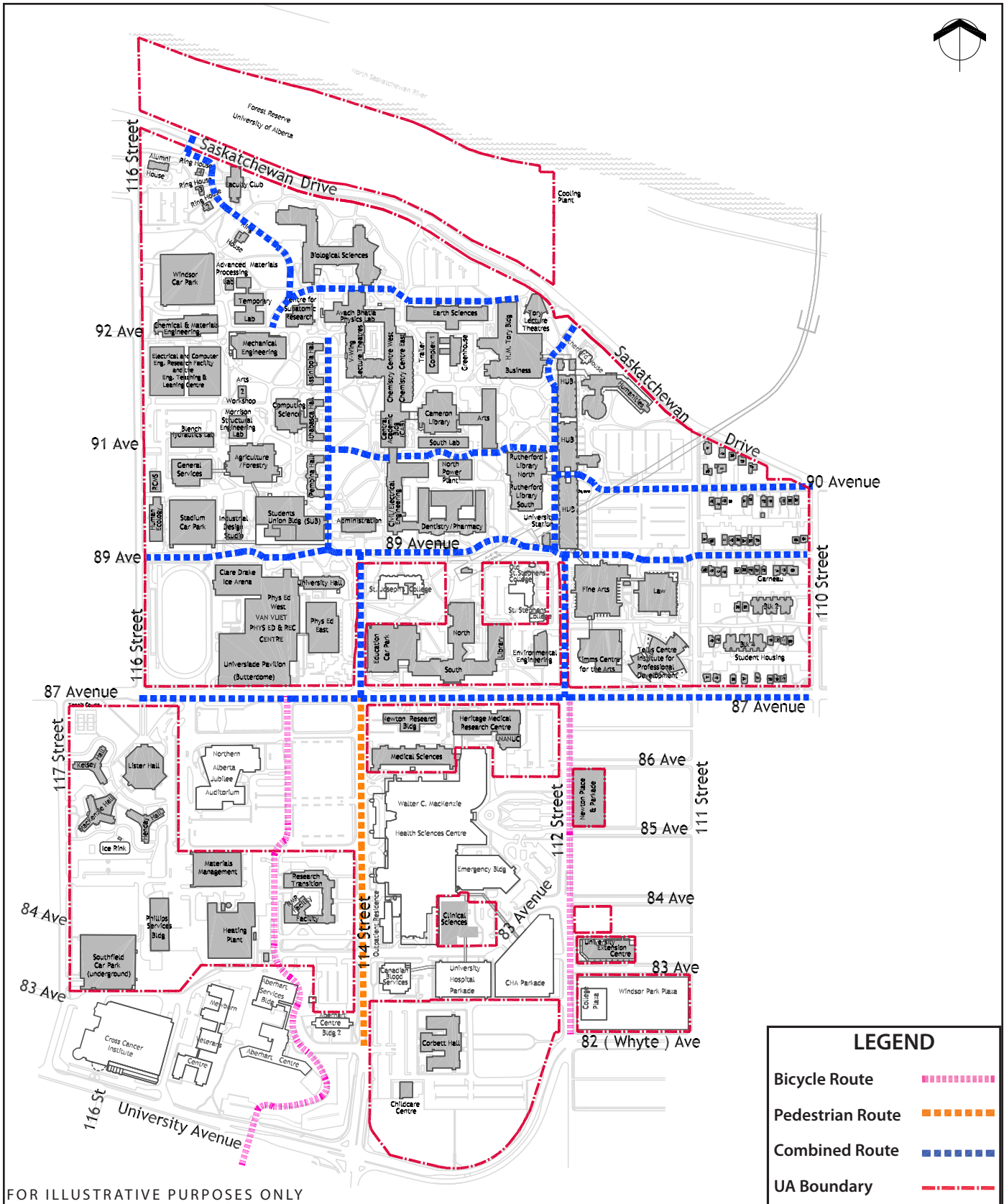
The University is served by LRT from north Edmonton and by bus service from throughout the region. Sixteen transit routes stop at the University Transit Centre, where an LRT station is also located.

The percentage estimates for access by mode to the University are:

	Auto	Transit	Other
Student	32%	49%	19%
Staff	67%	18%	15%

The City has commenced planning of the LRT system extension to south Edmonton with an additional stop on North Campus at the site of the Research Transition Facility.





3.1.5 INTERNAL PEDESTRIAN & BICYCLE CIRCULATION

There are two major roads penetrating campus and they strongly affect pedestrian circulation:

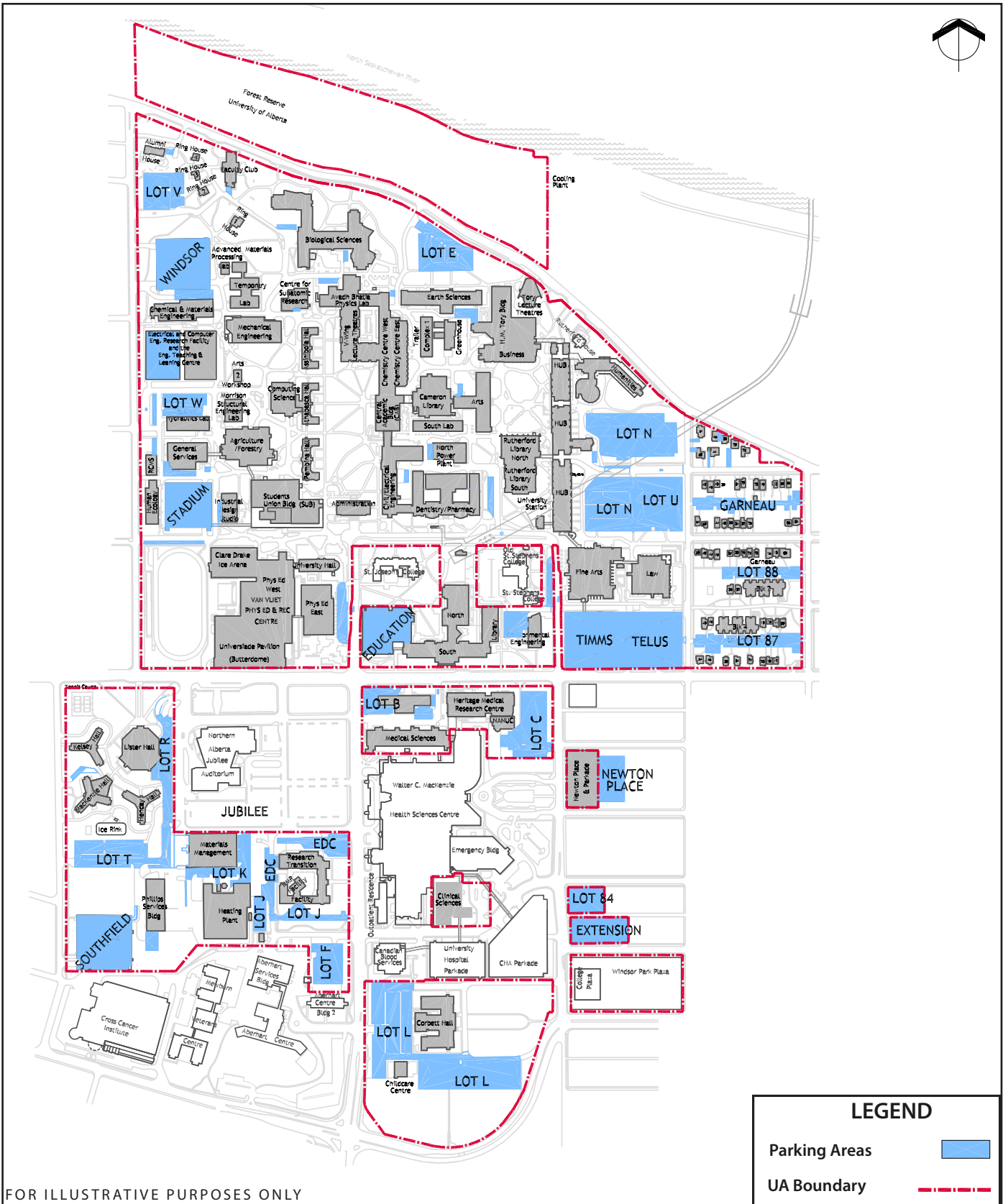
- 87 Avenue separates the students residing in Lister Hall from the majority of University facilities and it separates students from the Health Sciences sector from the rest of campus;
- 114 Street separates Health Sciences researchers and faculty from major concentrations of parking.

The large and unpredictable flows of people crossing these thoroughfares impedes pedestrian and vehicular movements.

East-west internal pedestrian circulation occurs along three spines: 89 Avenue, 87 Avenue and the walkway connecting the two quads. North-south internal circulation occurs along the spine extending from 114 Street to the Biological Sciences building and along a spine extending from 112 Street to the Tory Lecture Hall. A number of internal walkways connect to these spines (although building location often impedes direct access to them). The distances from the extreme edges of campus are approximately 1,600 metres, or a walking time of between 20 to 25 minutes depending on the route and the weather. Current academic scheduling allows merely 10 minutes between classes.

Internal pedways exist in several locations to enable pedestrian movements between buildings. Given the harsh winters in Edmonton, sheltered pedestrian circulation routes are highly desirable.

There are no designated exclusive bicycle routes through campus. Bicycles and skaters share routes with pedestrians and service vehicles. Meanwhile, the campus perimeter is accessible in several directions by designated bicycle routes provided by the City of Edmonton.



3.1.6 *PARKING*

Parking for the University is provided through surface and structured lots with a limited amount of underground parking. The University has 6,705 parking stalls at North Campus and manages an additional 878 stalls at the nearby Jubilee Auditorium broken out as follows:

Facility	Physical Space Capacity	Designation
EDC	76	New lot. Staff Permit Parking.
Education	525	Faculty, Staff and Departmental (100%).
Extension	256	Faculty, Staff, Departmental and Commercial Tenant (100%).
Garneau	92	Tenant Student (100%).
Newton Place	325	Tenant Student (100%).
Southfield	768	Staff Permit (90%). Student (10%).
Stadium	972	Staff (70%) and Student (30%) Permit.
Timms	330	Staff (60%) and Student (40%) Permit.
Windsor	1,088	Staff (60%) and Student (40%) Permit.
Lot B	78	Staff (100%).
Lot C	163	Staff (100%).
Lot E	118	Staff (100%).
Lot F	90	Sub Leased to UAH for UAH Staff.
Lot J	40	Staff (100%).
Lot K	27	Staff (100%).
Lot L	452	Staff (50%) and Student (50%).
Lot M	460	Staff (95%) and Student (5%)
Lot R	70	Staff (100%).
Lot T	152	Tenant Student (100%).
Lot U	224	Staff (25%) and Student (75%).
Lot V	108	Faculty Club Use.
Lot W	79	Staff (80%) and Student (40%).
Lot 84	45	General Overflow for Extension Centre.
Lot 87	100	Tenant Student (100%).
Lot 88	67	Tenant Student (100%).
Lot 02	10	Faculté Saint-Jean Staff (100%) (not shown)
Totals	6,715	
Jubilee	878	Staff (60%) and Student (40%) (not considered in the University totals)

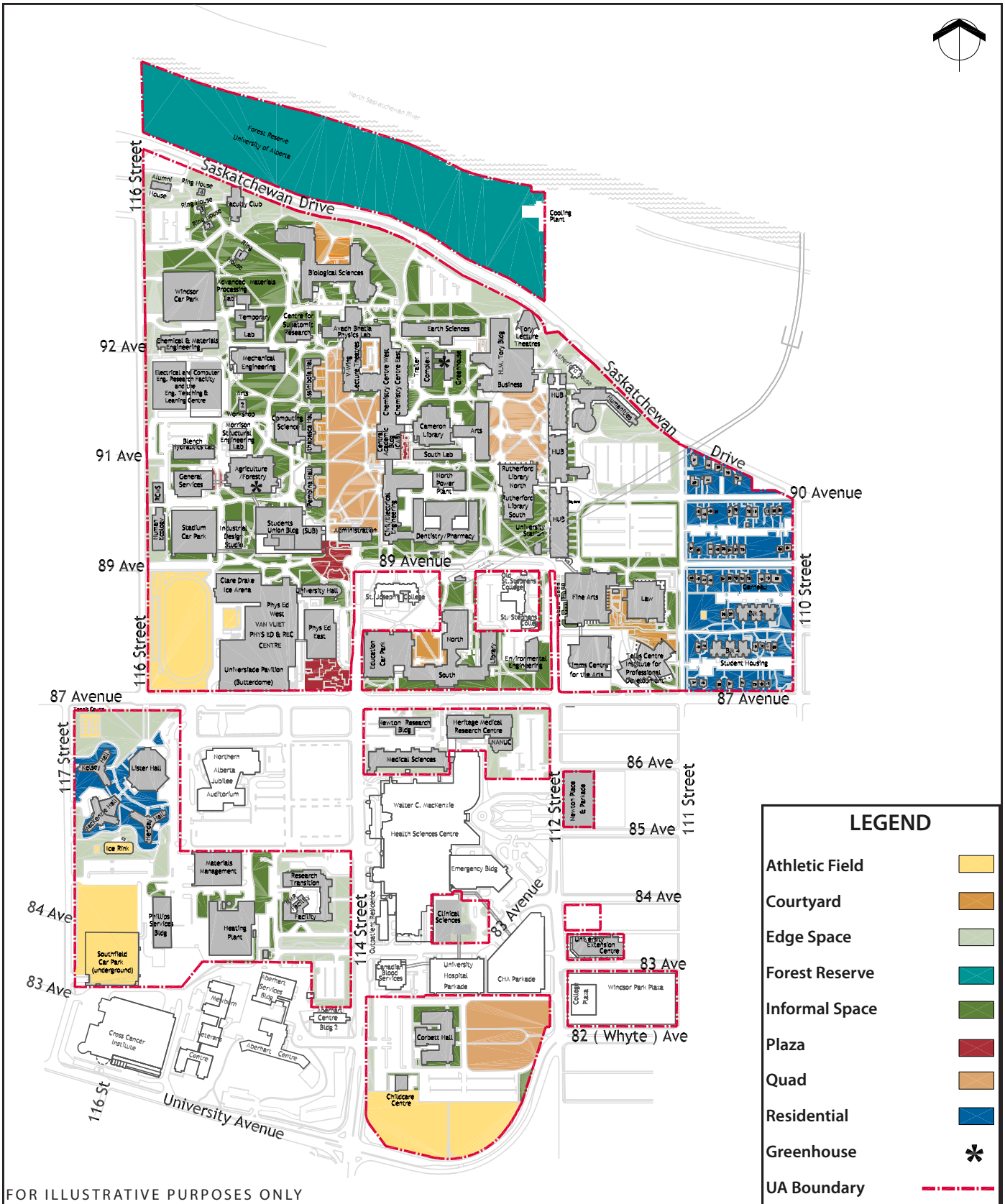
For the past 30 years, the planning guideline of one stall per four students has been appropriate although, more recently, demand has exceeded supply. The relatively low cost of parking may be a contributing factor for this increase in demand.

Statistics are kept in detail for North Campus and indicate that:

- surface parking lots have the highest use: for example, Lot U (HUB) has the highest turnover per stall (2.5 times per day), followed by the Jubilee lot (2.1) and Lot E (Science) (1.9);
- of the structured parking facilities, Education Carpark is most heavily used with a turnover rate of 1.9. Timms parkade is the least used with a turnover of 1.0;
- the highest demand for parking is for the lots of lowest cost;
- more parking permits are purchased by faculty and staff than students, a ratio of approximately 2:1.

A number of metered parking stalls are also provided at various locations on and around campus. Parking restrictions are in place in some adjacent communities to deter casual parking by University students, staff, faculty and visitors.

OPEN SPACE AND RECREATION FIELDS



3.1.7 OPEN GREEN SPACE & RECREATION FIELDS

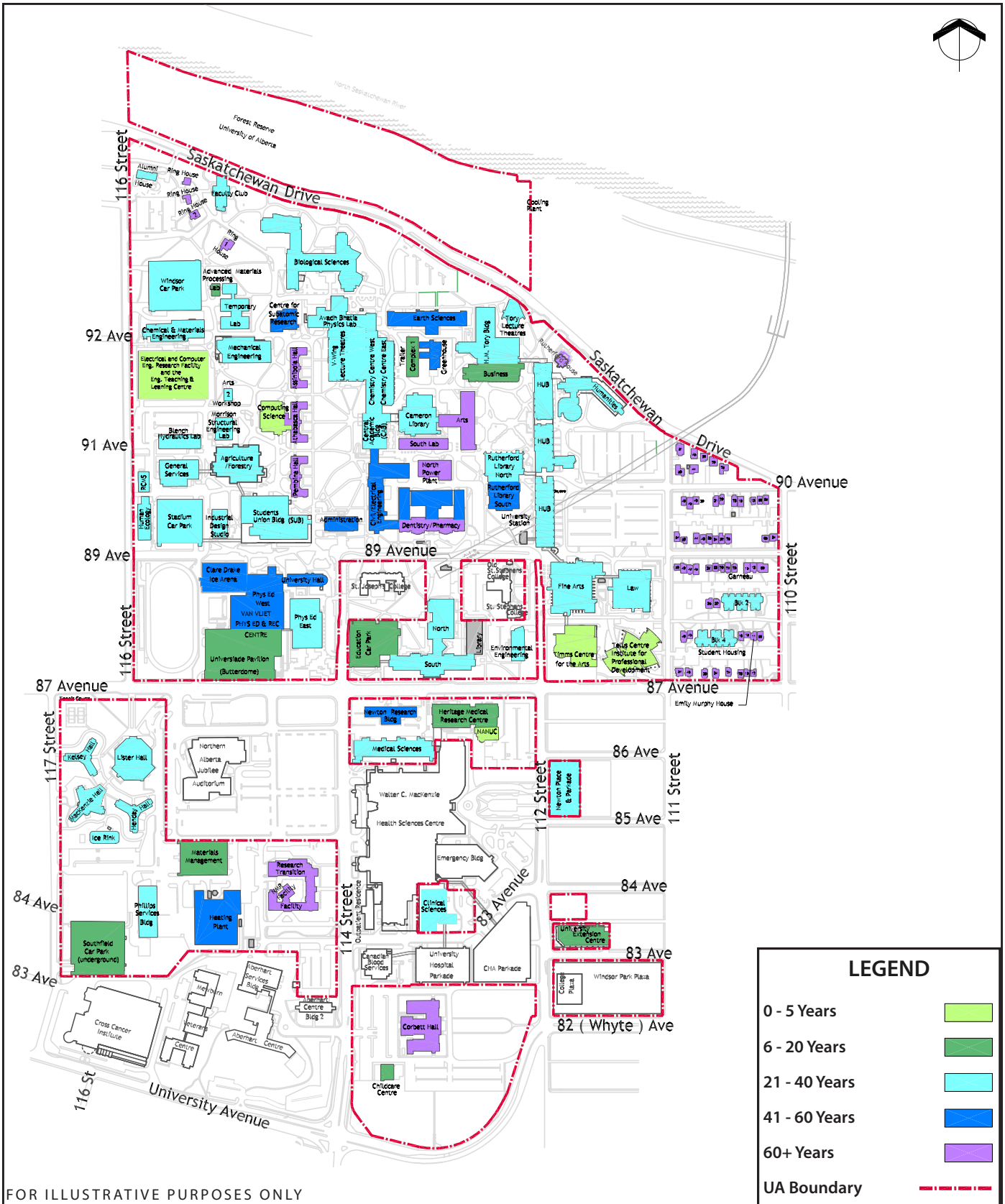
The principal green spaces are found in the Central and Arts Quads. Other significant green areas include smaller plazas and courtyards and the Forestry Reserve on the slope of the river valley. The following is a distribution of open green space by type:

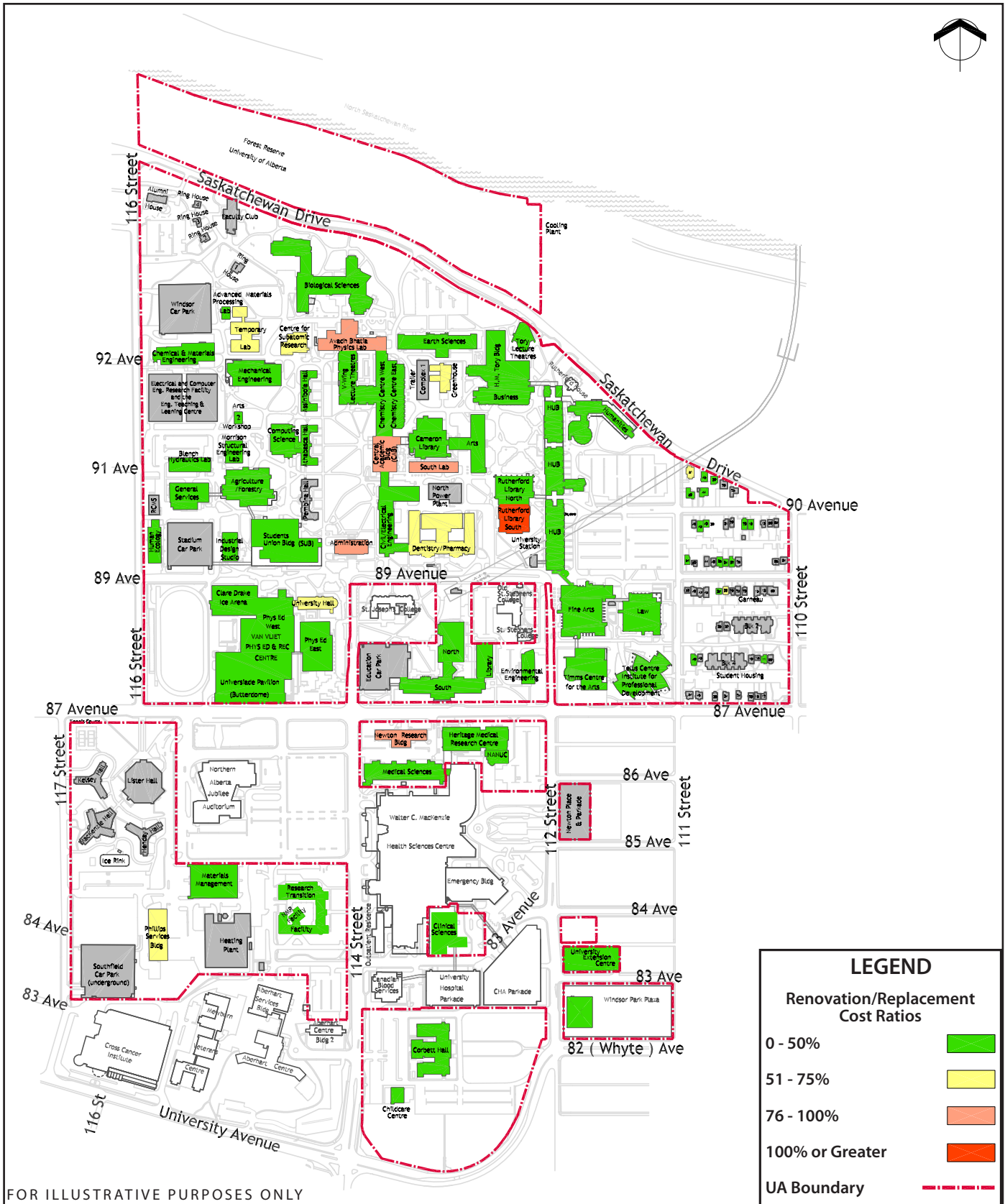
Type	Area	Comments
Natural Landscape	8.16 ha	Forestry Reserve
Quad	2.76 ha	
Plaza	0.36 ha	
Courtyard	0.70 ha	
Garden	1.60 ha	
Edge	3.81 ha	Boulevards
Residential Yards	5.30 ha	
Walkways	0.59 ha	
Informal/Incidental	11.65 ha	Incidental/part of building site
Recreation Field	5.40 ha	Located on periphery of campus
Total	40.99 ha	

Accessible, usable open green space on North Campus is limited. (An assessment of open green space is presented in Appendix ii).

3.1.8 BUILDINGS BY AGE

A mix of building styles from nine decades, or almost 100 years, creates an eclectic aesthetic environment. Some would be considered heritage buildings by provincial standards, although no criteria to assess buildings for this purpose have been developed by the University.

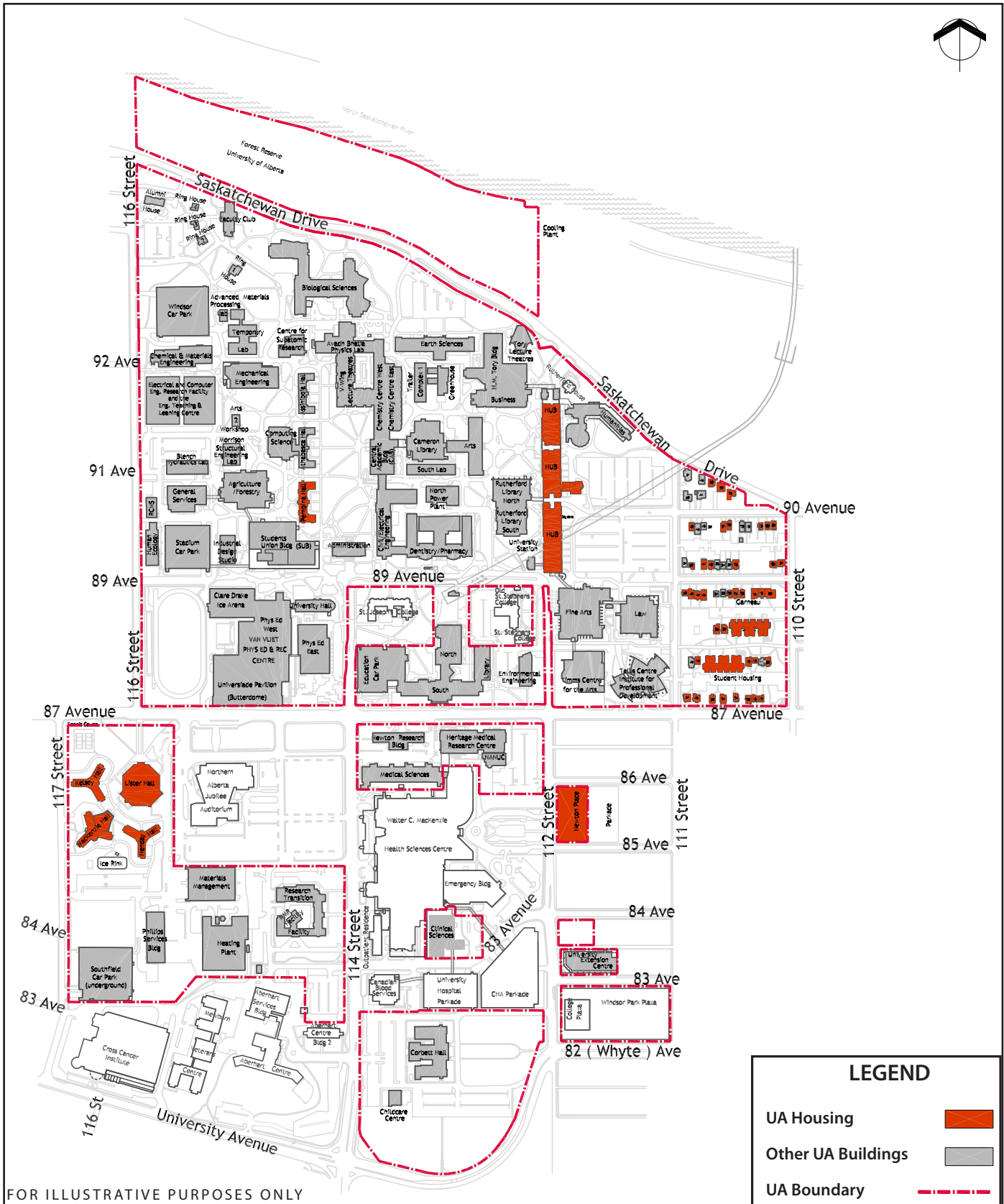




FOR ILLUSTRATIVE PURPOSES ONLY

3.1.9 FACILITIES CONDITION INDEX

A campus wide review of building conditions was commissioned by the Provincial Government's Alberta Infrastructure ministry throughout 2001 (Appendix iii). The investigation of each building resulted in the assignment of a facility condition index (the percent value of renovation cost divided by the cost of replacement, presuming the same use). General standards recommend careful and detailed review of those facilities scoring over 50% deploying additional criteria that may determine value to the University in the long term. Criteria such as functional effectiveness, heritage value, value to the aesthetic environment or University experience are considered in the decision to retain or replace the facility. A number of buildings require substantial upgrades, in excess of 50% of replacement cost, if their present uses are to be continued.



FOR ILLUSTRATIVE PURPOSES ONLY

3.1.10 STUDENT HOUSING

The University offers a total of 3,382 residential units, or for 11% of the student population. Of this total, 2,899 beds are located on North Campus distributed as follows:

- Lister Hall 1,155 units;
- Garneau 400 units;
- Pembina Hall 135 units;
- Newton Place 361 units;
- HUB 848 units.

The Canadian Association of University Business Officers suggests universities should offer accommodation for at least 15% of their students. The University has accepted this guideline and presently lacks 1,160 units. The University currently has a large waiting list for student housing because the inventory is insufficient to satisfy the demand. Planning is underway to increase housing stock to the 15% target level.

3.1.11 UTILIZATION OF FACILITIES

A space utilization study (see Appendix iv) concludes that the University of Alberta uses its space effectively when compared with its peer universities. It also suggests the North Campus should provide more research space and more student housing units.

The University of Alberta currently has approximately 26,000 classroom seats and a total classroom area of approximately 34,450 assignable square metres. Teaching laboratories occupy 34,300 assignable square metres.

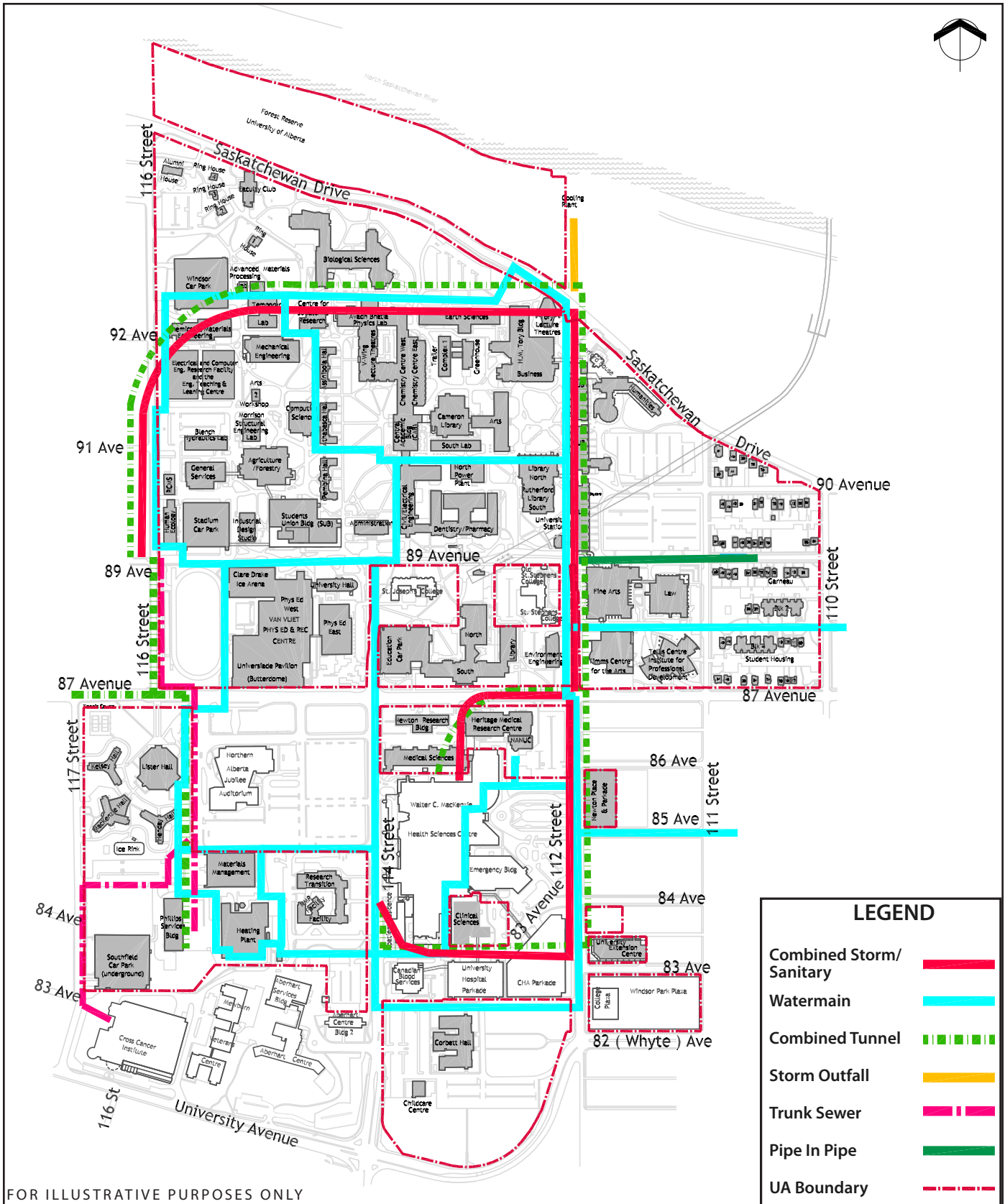
The total research area is 91,000 assignable square metres.

The current inventory of office space at the University totals approximately 104,500 assignable square metres.

The Library system houses nearly 6 million holdings in a stack space of 20,400 square metres. The libraries also provide 9,995 formal study spaces (or nearly one space for every three students).

Commons areas typically include lounges, casual meeting spaces and assembly areas. The total Common space is 5,380 assignable square metres (about 0.17 square metres per full-time equivalent student).

Recreation and Physical Education space on North Campus is 21,293 assignable square metres (or 0.72 square metres per full time equivalent student).



3.1.12 UTILITIES & SITE SERVICES

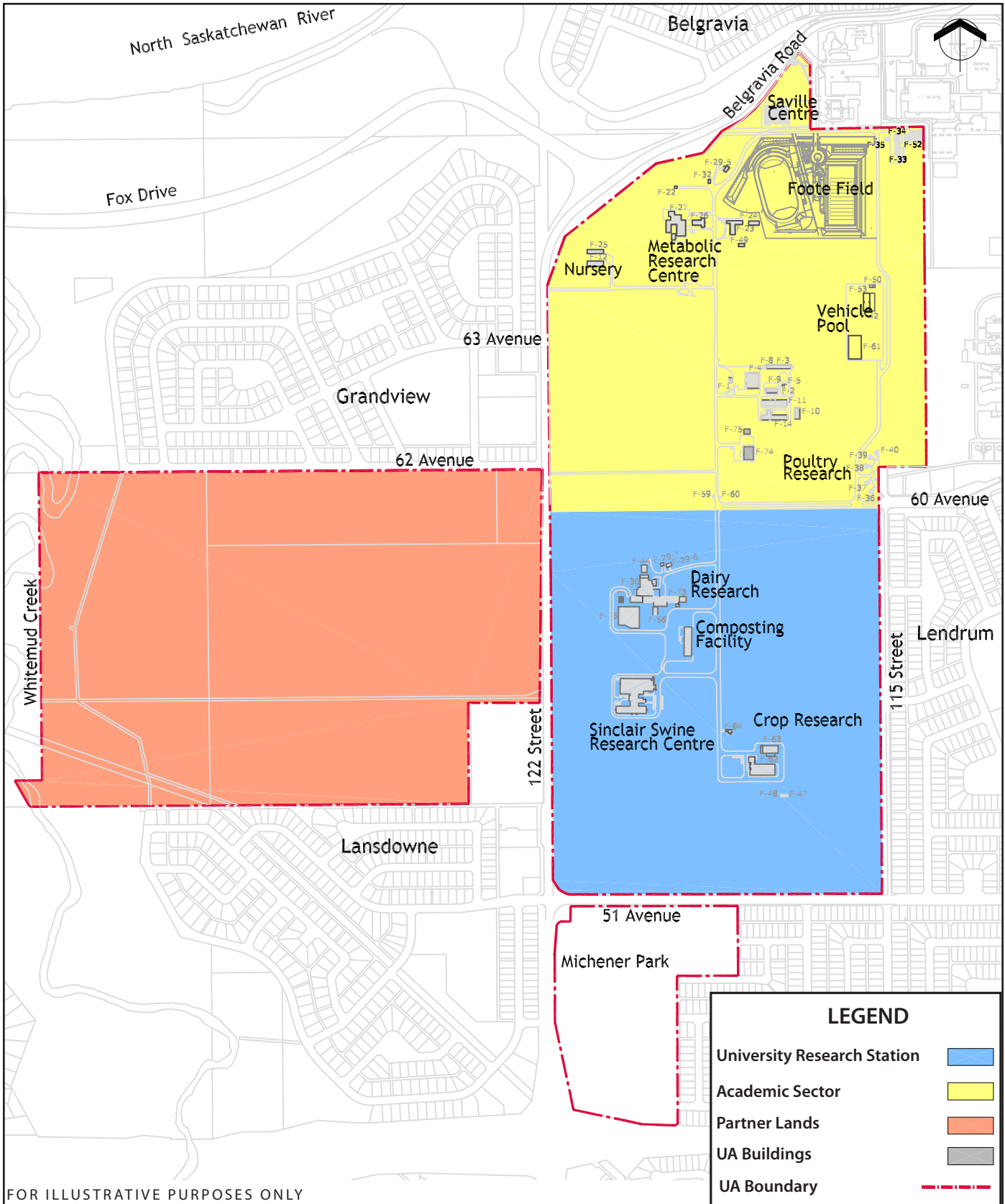
The University's integrated central energy plant serves North Campus, providing water, gas, co-generation power and steam. The existing heating plant is approaching capacity and planning is underway to provide a new boiler and stack to increase capacity.

Planning is also underway to expand chiller capacity and power feed and distribution systems.

Almost all campus buildings are connected to the energy plant by underground service corridors (utilidors). In addition to accommodating the heat, cooling and electrical services, they accommodate the fiber optic and communication linkages for the campus.

Water, sanitary and storm sewer services are available across campus. These are City services with available capacity (see Appendix v).

There is insufficient deep sewer capacity in the southwest area of the North Campus and expansion to capacity is being planned.



3.2 SOUTH CAMPUS

3.2.1 *LAND HOLDINGS*

The South Campus is made up of lands currently in use as the University Research Station, comprising 241.97 ha. In 2000, the Board of Governors of the University approved a land use concept that creates three development sectors: the academic, University Research Station and partner lands. This approved land use concept will guide the changes over time to the existing land use pattern for South Campus (see Appendix x).

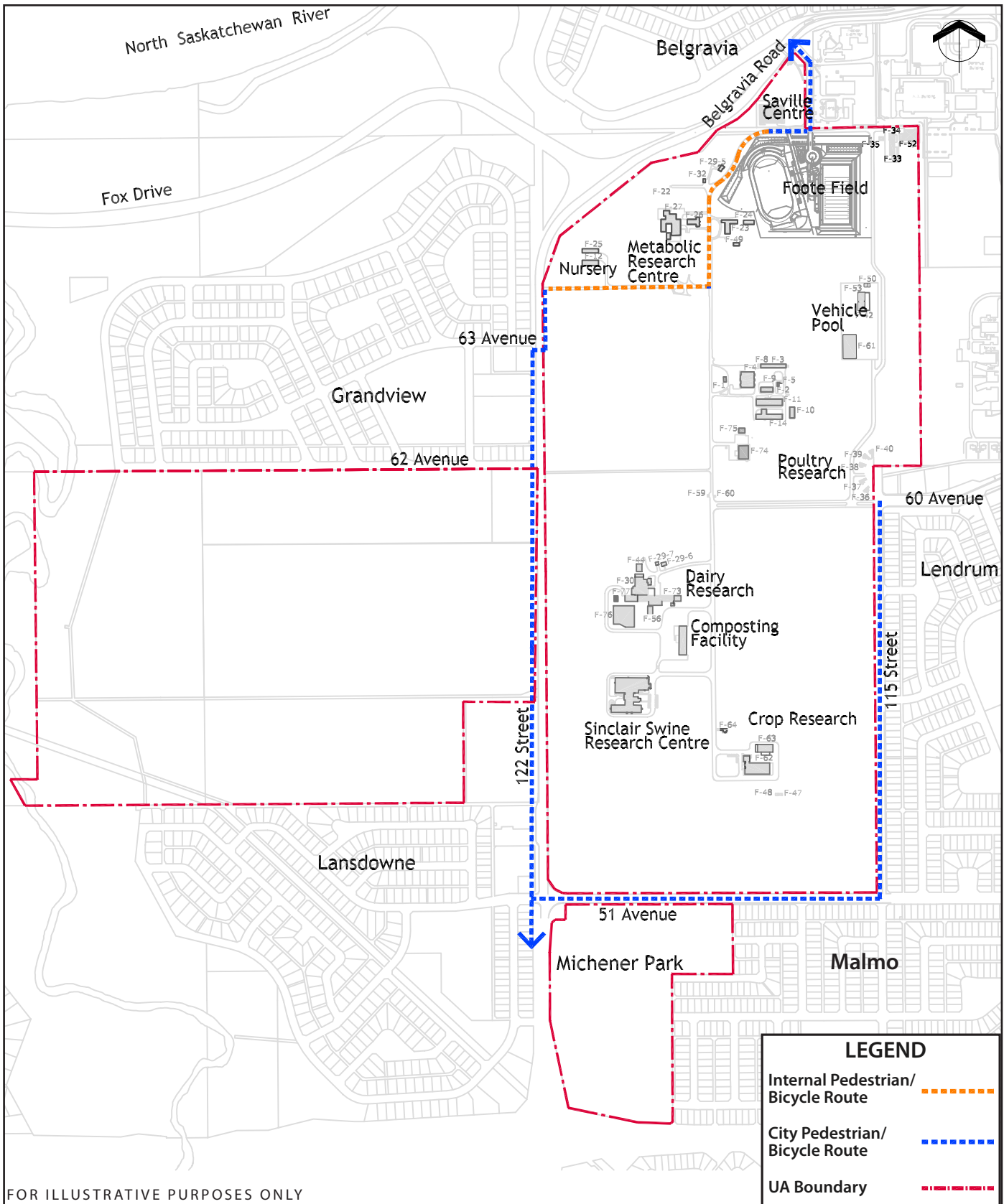
The lands are located approximately three kilometres south of North Campus. Lands and facilities controlled by the Province of Alberta bound the site on the north and northeast. To the west, Whitemud Creek ravine and the residential communities of Lansdowne and Grandview bound the lands. To the south is Michener Park, a University residential area.

The primary occupants of the South Campus lands at present are the facilities associated with the operations of the University Research Station. These include crop, swine, poultry, cattle and sheep research.

Secondary occupants of these lands are the Foote Field facility and the Saville Centre, located at the north end of the South Campus.

The University's vehicle pool facility is located in the northeast portion of these lands.

Until recently, the University operated a greenhouse and nursery facility at South Campus.



FOR ILLUSTRATIVE PURPOSES ONLY

3.2.2 AREA BY FUNCTION

The Research Station accommodates nearly 44,000 square metres of development, 40,000 square metres related to agriculture research; 2,100 square metres in the Foote Field complex; and 900 square metres for the Vehicle Pool and other University support services. The remaining 1,000 square metres provide other support services.

3.2.3 BUILT FORM

Development on South Campus is low-rise and in a mix of styles ranging in character from traditional farm structures to prefabricated buildings to contemporary institutional.

3.2.4 TRANSPORTATION ACCESS

South Campus is easily accessible from the west by Fox Drive and from the south by 122 Street and 51 Avenue. The major intra-city freeway, Whitemud Drive, is located within 400 metres of South Campus.

Access from the east is limited to 60 Avenue. Access from the north is by way of Belgravia Road which experiences major congestion in the peak periods.

The connecting road between North and South Campus is 114 Street, a congested four lane thoroughfare.

South Campus is currently served by public transit along 122 Street, 60 Avenue, 51 Avenue and Belgravia Road. Across provincial lands to the east, there is transit service along 113 Street.

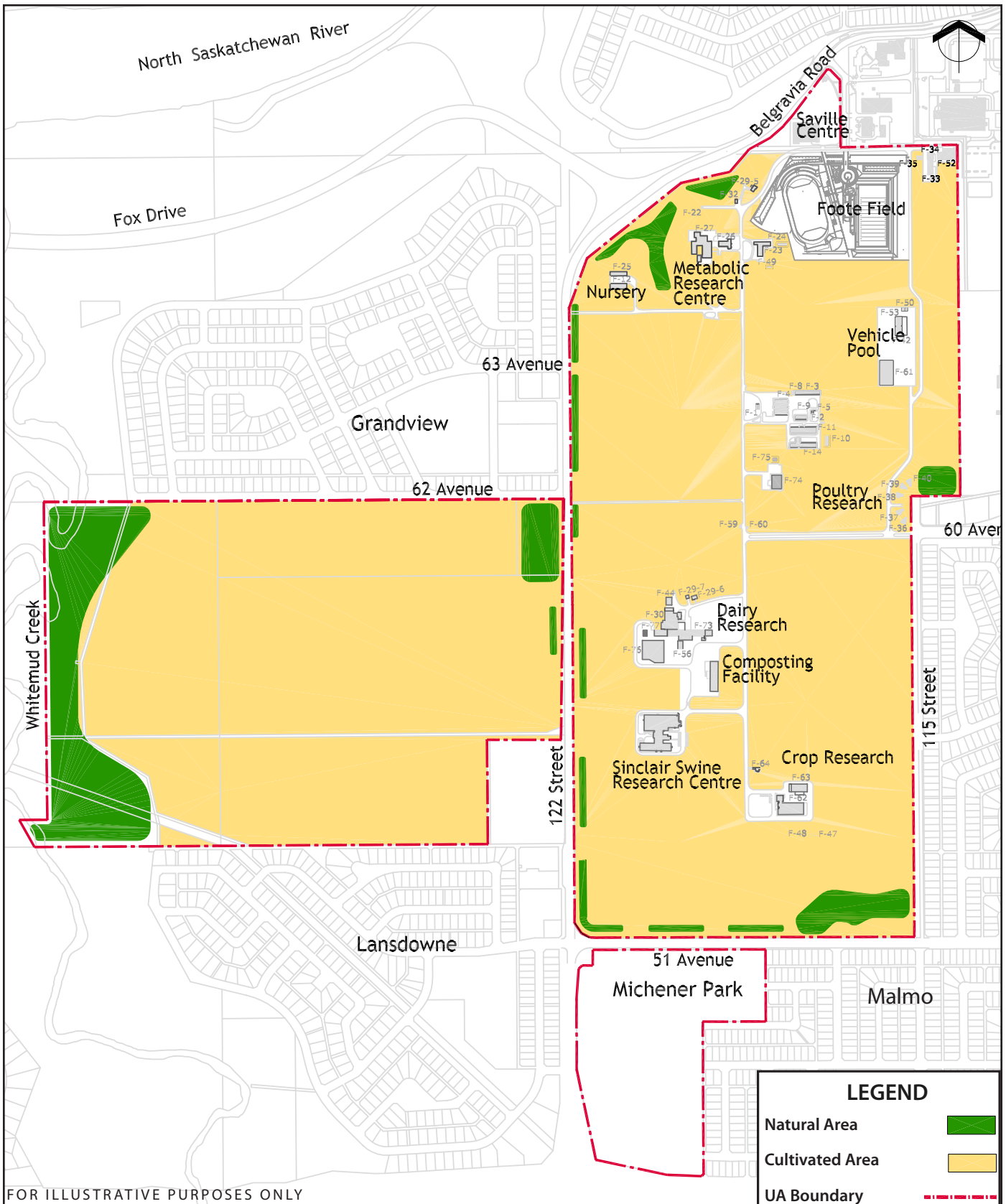
Currently, direct access into South Campus is limited. Public vehicle access is restricted to Foote Field off Belgravia Road. There are several formal and informal access points for pedestrians and bicycles.

The Research Station lands are accessed from 60 Avenue and served by two north-south internal roads.

3.2.5 INTERNAL PEDESTRIAN & BICYCLE CIRCULATION

The perimeter of South Campus is served by City sidewalks and bikeways. A designated City bike trail enters South Campus at 122 Street and 63 Avenue and exits by the Saville Centre.

The internal roads on South Campus are used by pedestrians (some with dogs) and by cyclists; this can cause conflicts with the animal and crop research occurring there. The general public often ignores internal roads altogether, which jeopardizes research activities.



3.2.6 *PARKING*

Some public parking at South Campus is provided at the Foote Field entrance and at the Saville Centre, with a capacity of approximately 180 stalls. It is sufficient for daily activities and at small events but it cannot accommodate parking demands at larger events.

3.2.7 *OPEN GREEN SPACE & RECREATION FIELDS*

The majority of lands are currently in agricultural use. A number of natural areas are on the lands.

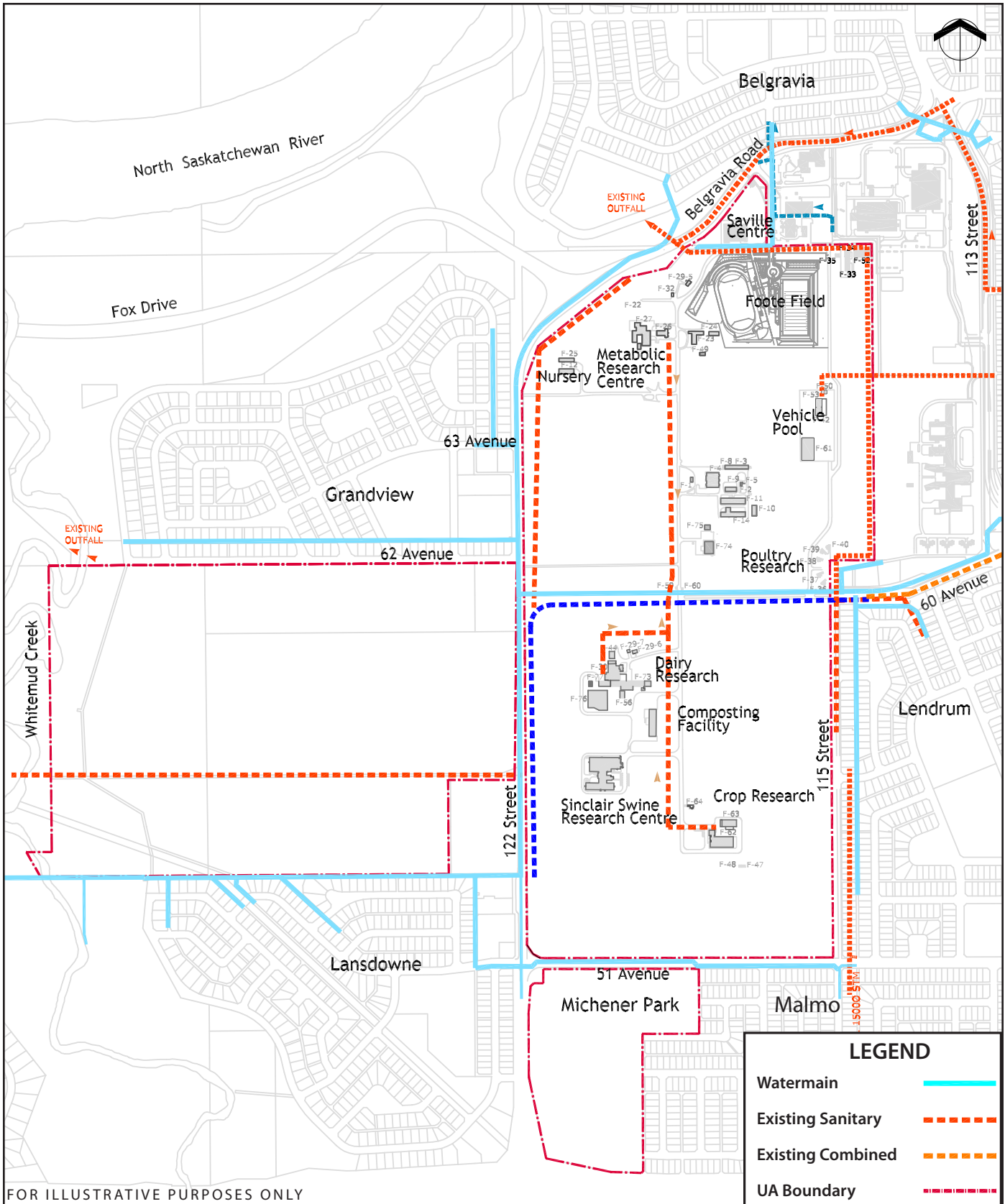
The Foote Field complex and recreation fields comprise approximately seven hectares.

3.2.8 *BUILDINGS BY AGE*

Most of the buildings on site are more than 20 years old and a program of replacement/renovation has started. Newer facilities include those for Swine Research, Foote Field, part of Metabolic Research, Composting and Poultry Research. A number of the older facilities are likely to be demolished in the life of this Plan.

3.2.9 *UTILIZATION OF FACILITIES*

The University Research Station is currently under significant bio-security pressure from competing site uses and from adjacent land uses. Public access onto the Station is increasing the risk of biological contamination. A history of easy public access makes implementation of bio-security measures unpopular. As a result, use of these lands for a broad range of modern agricultural research is becoming increasingly difficult.

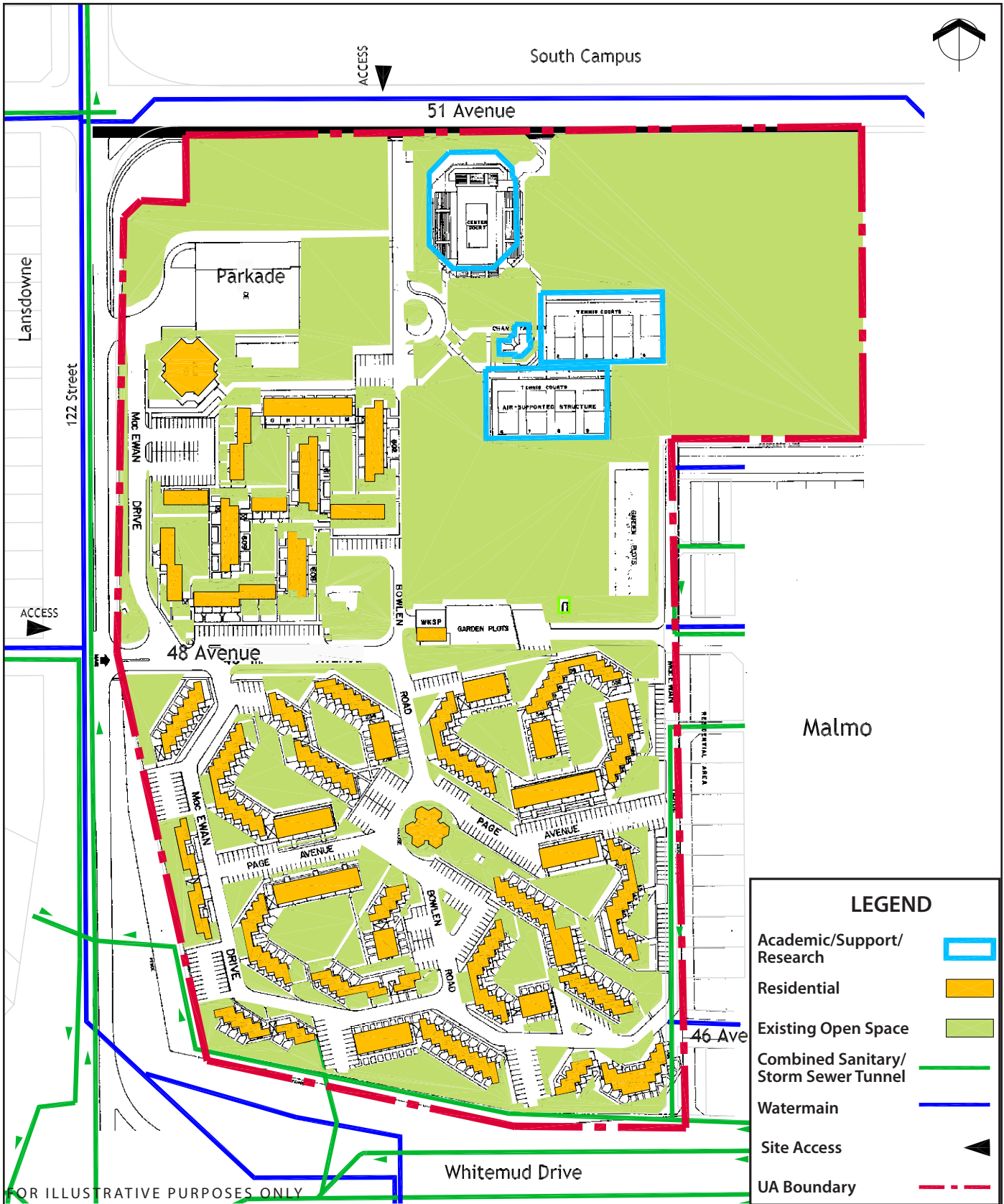


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3.2.10 UTILITIES & SITE SERVICES

South Campus has access to all services required for development (see Appendix v). Capacity exists in the City's water system and in the storm sewer system if on-site storage is provided to allow controlled discharge in off-peak conditions.

A sanitary trunk sewer crosses the South Campus and sewer connections are also available on adjacent streets. There are capacity constraints downstream in the sanitary system that the City of Edmonton is planning to remedy. These constraints are not specific to the University lands. When the University is prepared to develop, the City will assess levies (as it will on any developers) to assist in removing those constraints.



3.3 MICHENER PARK

The Michener Park site is situated directly south of South Campus. The 16.94 ha site accommodates 383 student family housing units, the University Tennis Centre, and a high-rise apartment on lease to a private operator. Approximately four hectares of land are undeveloped.

The site is flanked on the east by the residential community of Malmo, on the north by 51 Avenue (South Campus), on the west by 122 Street and the residential community of Lansdowne, and, slightly further to the south, by Whitemud Drive.

3.3.1 AREA BY FUNCTION

Michener Park residences and support functions total 41,200 square metres. The Tennis Centre includes 2,350 square metres.

3.3.2 BUILT FORM

Michener Park accommodates 383 residential units (one privately operated) in high rises, and ground-oriented configurations (townhouses and maisonettes). The majority of these units are over 30 years old.

The tennis facility includes an inflated structure, surface courts and change facilities in a portable unit. The Tennis Centre is moving to the Saville Centre in the near future.

3.3.3 TRANSPORTATION ACCESS

Access to the residential area is from 122 Street. Access to the Tennis Centre is from 51 Avenue. Transit operates on both roads.

3.3.4 INTERNAL PEDESTRIAN & BICYCLE CIRCULATION

Michener Park is flanked by City sidewalks and bikeways. Internal pedestrian and bicycle circulation follows the roadway serving the housing development.

3.3.5 PARKING

There is a two-storey parking structure on site. Individual residential units are provided with on-site parking. Parking is available for Tennis Centre users.

3.3.6 OPEN GREEN SPACE & RECREATION FIELDS

The Tennis Centre offers membership to the general public as well as being used for University instruction and recreation programs. The vacant lands to the east accommodate non-structured recreation uses.

Courtyards are incorporated in the residential area for use by residents and include playgrounds for children.

3.3.7 UTILIZATION OF FACILITIES

Except for units being renovated, the residences are fully occupied and demand exceeds supply.

The Tennis Centre is heavily used and the facilities are inadequate and old, with the structures well beyond their life expectancy. Safety concerns are beginning to arise.

3.3.8 UTILITIES & SITE SERVICES

The same conditions exist for Michener Park as for South Campus. All utilities are available from adjacent streets.

3.4 FACULTÉ SAINT-JEAN

The University of Alberta acquired the 6.22 ha site and buildings of the Faculté in 1976, although the Faculté was integrated with the University in 1970. The campus is located in the Bonnie Doon neighbourhood bounded by 91 Street on the east, 84 Avenue on the south, Mill Creek ravine on the west, and 86 Avenue on the north.

It is the base for almost 500 francophone and bilingual students, faculty and staff.

3.4.1 AREAS BY FUNCTION

The campus has 19,704 square metres of development. The principal facilities as presented in Exhibit 17 are:

- Academic Building 9,880 sq. m.
- Pavillon Daridon 224 sq. m.
- Centre Saint-Jean 4,150 sq. m.
- Residence 4,080 sq. m.
- Support 1,370 sq. m.

3.4.2 BUILT FORM

Two of the existing buildings are original structures from the 1911 development. A number of additions occurred in the same style until 1957. In the 1990's, major renovations occurred and a minor addition was built. In 2000, a new residence was opened.

The general character of development is historic in its motif. Development is no more than three stories in height and all buildings are linked except the old church.

3.4.3 TRANSPORTATION ACCESS

The primary vehicular access to the campus is 91 Street. Transit operates on this Street. A University shuttle service operates between the University and the Faculté.

3.4.4 INTERNAL PEDESTRIAN & BICYCLE CIRCULATION

The campus is served by City sidewalks and bicycle paths. The campus pedestrian circulation is all internal.

3.4.5 PARKING

On-site parking is severely limited (only ten stalls exist). Faculté students, faculty and staff use adjacent residential streets for parking. Nearby residents would prefer the Faculté accommodate parking on its own site.

3.4.6 OPEN GREEN SPACE & RECREATION FIELDS

The key green spaces and open spaces include the front courtyard facing 91 Street and the internal quadrangle.

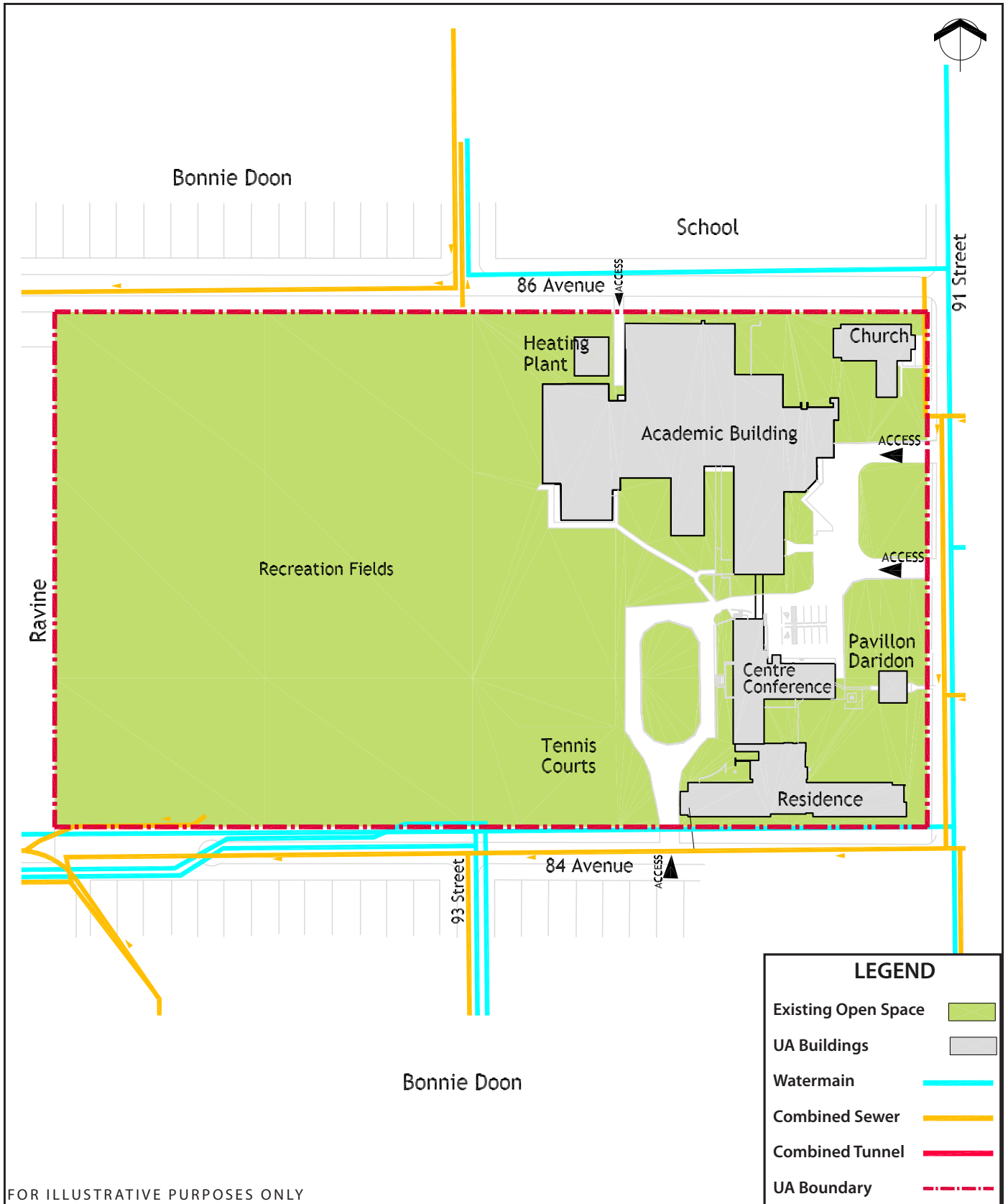
Faculté and students from North Campus use the recreation fields west of the development. They are also available for community use.

3.4.7 UTILIZATION OF FACILITIES

The facilities are fully utilized. There is a demand for updated science labs and additional student residence units. The old church is obsolete and will be demolished.

3.4.8 UTILITIES & SITE SERVICES

Services are located in adjacent streets and they can accommodate a limited amount of expanded development.



4.0 ISSUES CONSIDERED

Physical expansion of the University over the next thirty years will need to address significant issues that have been identified through the Plan's consultation process. These issues can be grouped in the following categories:

- growth pressure;
- transportation;
- utilities and infrastructure;
- facilities and land use;
- social and cultural environment;
- adjacent communities;
- implementation.

A brief discussion of the issues will better explain the intent of the Long Range Development Plan. Issues resolution or mitigation forms the basis for the Plan Elements discussed in Section 7.0

4.1 GROWTH PRESSURE

It is the mandate of the University to accommodate growth in student enrolments and in scholarly activity. The projected average growth rate in enrolment of two percent per annum for the next ten years is a mean number accepted by the Provincial Government and the University. This growth in student numbers, the increasing growth in research activity and its external funding, and the growth of the faculty and staff complement, will mean additional facilities are needed at the University. The current facilities are nearly at full capacity and a building programme is already underway to meet existing demand and to replace obsolete facilities.

4.2 TRANSPORTATION

CONGESTION

The road networks around North Campus are congested during peak travel periods. This is due in part to the traffic generated by the University as well as the proximity of the University to nearby traffic generators such as the Mackenzie Health Sciences Centre. Both North and South Campus lie along the major traffic corridors for vehicles coming to and from the downtown, particularly from southwest Edmonton, a rapidly-growing sector of the metropolitan area.

Future development at North Campus to accommodate more students and more research will increase trips to North Campus. The Health Sciences Centre is expanding, and this will also increase congestion on access roads. As the population in southwest Edmonton continues to grow, and downtown continues to revitalize, through-trips on adjacent campus roads will also continue to increase.

Roads around South Campus will also become more heavily traveled due to the University expansion there.

The City does not plan to increase road capacity. If private vehicle travel remains the mode of choice, serious access issues are going to arise. The City is committed to expanding LRT southward and to improving transit in general in an effort to reduce cars on the roads.

PARKING

The demand for parking is high at all sites and growth of the University will generate further demand.

TRANSIT

All campus sites are served by bus transit and North Campus is served as well by LRT. The desire of the University and the City is to extend the LRT to the South Campus by 2010 thereby enabling direct, quick transit access between the sites.

If LRT access is not available by this time, a regular bus service between the sites will be required to provide an alternative to driving.

ALTERNATE MODES OF TRAVEL

A significant portion of the University population either walks or bicycles to and from the campuses. It will be important to enhance these opportunities.

ON-CAMPUS CIRCULATION

North Campus circulation patterns for service vehicles, pedestrians and bicycles result in several points of conflict that require attention. These include:

- T-gates limit and constrain volumes and flows at key locations;
- pedestrian/vehicle conflicts at internal crossings;
- conflicts between pedestrians and bicycles on shared paths;
- conflicts between skateboarders and pedestrians;
- landscape deterioration because of pedestrian desire lines for travel.

Way-finding is difficult in some areas of the University, particularly North Campus, and better clarity is required for more efficient movement of people and materiel. Difficulties are due to:

- lack of clearly marked accesses to building entrances, loading areas;
- obvious paths and desire lines blocked by buildings;
- inadequate directional signage and/or lack of campus map;
- lack of interior signing of internal routes;
- lack of parking close to destinations.

4.3 UTILITIES & INFRASTRUCTURE

CENTRAL INTEGRATED ENERGY PLANT

The central integrated energy plant on North Campus is nearing its capacity. Upgrades and additions which will cost about \$30 million are required to meet immediate growth needs. On completion, the upgrades and additions will accommodate a growth in facilities consistent with having 36,000 students on North Campus. A further growth in facilities beyond this level would exceed capacity and then a major expansion of the plant or alternative approaches to the heating and cooling of facilities will be required.

Other campus sites rely currently on individual building systems and do not benefit from the operating cost economies associated with a central plant. The cost of constructing such a plant is prohibitive unless a significant mass of development is achieved at the other campus sites.

MUNICIPAL SERVICES

Future development can be connected to adjacent municipal services (water, sanitary and storm) at all campuses. Some near-term system constraints on South Campus require that storm water be retained on-site in storm water management facilities and discharged in the off-peak. The City's sanitary treatment facility is nearing capacity and the City is currently planning to expand this facility. The University, like others developing in south Edmonton, will likely be required to pay a per hectare levy as it develops South Campus to help offset the cost of the expansion.

4.4 FACILITIES & LAND USE

CONDITION OF FACILITIES

The Provincial Government commissioned a physical assessment of University buildings and determined that for 11 buildings, the costs of upgrading them were 50% or more of the complete replacement cost. Many of these buildings need system upgrades. If their conditions cannot be improved, buildings will continue to age and deteriorate. Functional evaluations have not been undertaken yet. However, it is fairly certain that some buildings have reached functional obsolescence. Without significant funding and major improvement, growth and research success will be hampered.

HERITAGE BUILDINGS & SITES

There are a number of significant heritage buildings and sites at the University that are worthy of preservation. There are no criteria in place formally to identify and integrate these facilities and sites into a planning context.

ACADEMIC SECTORS

The concept of academic sectors was outlined in the 1969 LRDP. All the campuses have since evolved formal and informal academic and research districts or sectors as Faculties strive to focus new development near the facilities supporting their activities. This form of sector accommodation is of value to the Faculties and to the University. Planning for future growth needs to recognize the importance of these relationships as long as the Faculties remain clearly defined. Trade-offs and mitigation measures may be required to accommodate them.

OPEN SPACE & GREEN SPACE

North Campus has too few structured, significant open and green leisure spaces. Those that do exist (such as the quads, the proposed Celebration Plaza and the atrium between the Business and Tory buildings) are popular and heavily used. They are also major organizing elements on this campus.

Faculté Saint-Jean maintains structured green space that is integral to campus life. Michener Park also integrates community green space for use of its residents.

Building developments continue to erode the opportunities to maintain and create new open and green spaces.

DEVELOPMENT DENSITY

Some sectors of the North Campus are much more built up than others yet, taken as a whole, North Campus is not often perceived as being too dense because of the preservation of such open spaces as the University and Arts Quads. With additional development on North Campus, it may become increasingly difficult to maintain a livable campus environment. Careful attention to the balance of open space and built space clearly will need to be maintained. Density will increase on North Campus nonetheless, but planned management of development can sustain an experience of a livable community and retain compatibility with adjacent land uses.

The density at South Campus (and Michener Park) should be of a scale that is compatible with the surrounding suburban development to allay concerns of over-development of these lands.

Faculté Saint-Jean development is in scale with its surrounding neighbours and should continue to be so.

COMPATIBILITY OF USES

Stakeholders on-campus and off-campus are concerned that redevelopment and new development may not be compatible with existing uses on or adjacent to campus sites. For example, there are bio-security conflicts at the University Research Station as a result of the unrestricted access to the Station. On North Campus, there is the potential of development encroaching on significant open areas and affecting their viability.

The importance of the compatibility of uses within a site cannot be overstated. Facilities need to be planned and developed without negatively affecting others.

EFFICIENT LAND & FACILITY USE

The University's lands, buildings and open spaces are limited assets. Poor planning and management of these assets may result in inefficient use of these assets. The LRDP should be used as the framework to optimize the use of the lands and facilities under its stewardship.

For example, on North Campus, where the demand for space is high, low-rise or land-extensive development is not an efficient use of the land asset. Buildings designated as obsolete from a functional standpoint are also not being used efficiently. Efficient use of assets on North Campus can occur in a positive, balanced manner without creating an environment that is too dense in fact or in experience.

CLIMATE

Under current academic programming practice, most students attend the University when the climate is harshest. Previous planning recommended a totally internalized, linked environment. In practice, this created some serious barriers for way-finding and integration of continued expansion and development. There is a need to plan with climate and environmental factors in mind as well as cleanly defined way-finding.

4.5 SOCIAL & CULTURAL ISSUES

ACADEMIC UNITY

Recognizing that the University will grow, and that the North Campus has a limited capacity to accommodate growth, there are faculty and student concerns about how a North Campus – South Campus development will operate successfully, and about which academic, research or service units might move to the South Campus and with what effects. Timing of South Campus development is also an issue.

AESTHETICS & MEMORABLE PLACES

There are concerns that more North Campus development will change the aesthetics of the campus and the felt experience that currently exists. More development may threaten the viability of some of the memorable buildings and sites unless they are preserved through planning.

ACCOMMODATING CAMPUS LIFE & COMMUNITY

The University is not only a locus for teaching and research, it is a home to thousands and an important social and cultural center for tens of thousands. There is a concern expressed by students that campus life and community support services will lag behind development of academic space. In particular, there may be a shortage of:

- student housing (waiting lists already exist);
- outdoor and indoor social, leisure and activity space;
- recreation facilities and fields.

The planning framework needs to accommodate these types of development.

SAFETY & SECURITY

Growth and development often is accompanied by a perception that safety and security are being compromised. Safety and security are very important values and they can be achieved and enhanced by prudent planning.

UNIVERSAL ACCESS

Universal Access guidelines are used by the University in its planning and design activities and will continue to be an important consideration in future development.

CREATING A DOWNTOWN CAMPUS

There is a belief by some members of the Edmonton community that the University should focus its growth initiatives on downtown Edmonton to stimulate redevelopment of the City core.

The University has been in the past, and will remain, open to viable facility opportunities to accommodate growth. All opportunities are measured by their ability to strengthen research, teaching or student life in a cost-effective way.

The concerns about locating facilities downtown include:

- buildings being planned in the intermediate term are partnered, multi-disciplinary and/or require close proximity to existing research or student services;
- the University requires contiguous lands to build an integrated campus, comprising research, teaching and student clusters. An integrated campus environment provides students with an enriched learning experience as well as support structure for their development as well-rounded individuals. Downtown land is rarely available in large contiguous parcels;
- downtown land is costly to accumulate and hold vacant while construction is phased over a 30 year period;
- there are cost disadvantages being downtown including:

- ◆ fluctuations in the cost of land/leases and utility costs;
 - ◆ paying rent, utilities and property tax, none of which are required on University owned land;
 - ◆ the cost of retrofitting existing office and retail buildings for teaching and research use.
- student leaders report that a downtown location is not desired by students.

During the course of preparing the LRDP, data has been collected that support the University's concerns related to development opportunities and costs of a downtown location.

4.6 NEIGHBOURING COMMUNITIES

PUBLIC CONSULTATION & TRUST

Adjacent residential communities feel that the University has not consulted with them about the effects in their communities of physical development.

LAND USE COMPATIBILITY, PROPERTY VALUES & AESTHETICS

Adjacent residential communities are concerned that University development, especially in the perimeter areas, will be insensitive to possible negative effects of height, massing, scale, noise, traffic congestion and impact on property values.

CHANGE

In the South Campus area, where the University Research Station lands have been in agriculture use for many years, the idea of converting University land into more intense development is a significant change for adjacent communities.

The idea of restricting the community access to University lands for casual recreation use on South Campus is also a significant change to some.

DISRUPTION TO EXISTING COMMUNITIES

Unless properly managed, University development may increase pedestrian and vehicle traffic in adjacent communities, indirectly encourage densification and result in other negative effects. Conversely, development has the potential to rejuvenate local retail, schools and cultural and recreational centres.

UNIVERSITY DEVELOPMENT ON NEIGHBOURING LANDS

Neighbouring groups have expressed a concern that the University may develop plans on lands not owned by, or not in control of the University.

It would be inappropriate for the University to plan lands not under its control. The LRDP framework is for the four campus sites identified.

4.7 IMPLEMENTATION

AVAILABILITY OF FUNDING & TIMING OF DEVELOPMENT

The availability of facilities to accommodate research growth and increased enrolment may lag. Most of the University's development of research and teaching facilities is funded through government sources. The availability of funding will determine the timing and scale of development. This will place additional pressures upon facilities already at capacity.

Student housing and parking development are funded by the University itself and the timing of development of these types of facilities will depend on the capability of the University to proceed with financing, and to assess appropriate rental rates.

DEPENDENCY ON LRT TO SOUTH CAMPUS

LRT service to South Campus will move people easily between North and South Campus. It may reduce road congestion along 114 Street and possibly Belgravia Road. The City is anticipating extension of the LRT to South Campus in the 2006 - 2010 period, and major development at South Campus is not expected before the end of that period. If LRT is not in place at that time, City or University bus service may be required to accommodate movement of faculty, students and staff between campuses.

WHO GETS TO MOVE TO SOUTH CAMPUS & WHEN?

This is an issue of strategic implementation that is beyond the scope of the Long Range Development Plan. The University has consultive GFC, and Board mandated governance and processes in place that will address this issue at the appropriate time.

5.0 LONG RANGE DEVELOPMENT STRATEGIC PLANNING PRINCIPLES

Strategic planning principles are the foundations of the Long Range Development Plan. These have been derived from the directions made in the University's Strategic Business Plan, Academic Plan and Strategic Research Plan. The LRDP has translated the directives of these three guiding Plans into a series of physical planning principles which are, therefore, consistent with the stated priorities and directives of the University.

The prime direction of the University's Strategic Business Plan is to maintain the University as one of Canada's finest teaching and research universities through an integrated commitment to teaching, research and community service. The Strategic Business Plan identifies institution-wide goals and sets out a strategic direction for the University to achieve these goals. One of the directions identifies the need to accommodate facilities renewal and expansion.

The Academic Plan identifies the importance of planning for facilities and development to achieve its recommendations for student and faculty recruitment and retention, for course delivery methods, for University capacity, internationalization, research partnerships and for the rapid growth in research activities generally.

The Strategic Research Plan identifies seven core objectives that directly and indirectly require the development of facilities to achieve them.

The LRDP's nine strategic planning principles and their supporting strategic directions provide the terrain upon which to make decisions about specific development initiatives and facilities, while best ensuring attractive, functional and efficient campuses that will accommodate the research, teaching and campus life needs of the University.

"The University of Alberta... indisputable recognized, in teaching, research, and community service, nationally and internationally, as one of Canada's finest universities, and amongst a handful of the world's best."

Roderick D. Fraser, PhD
President

5.1 STRATEGIC PLANNING PRINCIPLES & DIRECTIONS

STRATEGIC PLANNING PRINCIPLE #1:

The Long Range Development Plan will reflect the University's indisputably-recognized role in Edmonton and Alberta as a major economic partner, in Canada as an academic and research leader, and internationally as a center of vision and achievement.

The Long Range Development Plan enables the development of land and facilities to achieve the University's vision. It identifies and accommodates the physical elements required to support teaching, research, campus community life and University partnerships. The following strategic directions provide the direction required:

- **Strategic Direction 1.1:** Create a campus plan that enables the development of facilities and a campus environment that supports indisputably-recognized research, teaching and community service.
- **Strategic Direction 1.2:** Plan and develop indisputably-recognized facilities.



STRATEGIC PLANNING PRINCIPLE #2:

The physical assets and facilities of the University will be responsive to the strategic, academic and research goals of the University.

The Long Range Development Plan identifies development and redevelopment opportunities and associated guidelines to allow development to proceed confidently and efficiently. As goals change in the Strategic Business Plan, the Academic Plan or the Strategic Research Plan, the Long Range Development Plan will be updated to reflect new or modified goals. The following strategic directions support this principle:

- **Strategic Direction 2.1:** Identify and preserve opportunities to develop land and buildings to meet the long-term visions and goals of the University while responding to the short-term realities of the University's daily operations.
- **Strategic Direction 2.2:** Develop, acquire and maintain physical assets and facilities to achieve the University's goals.



STRATEGIC PLANNING PRINCIPLE #3:

Each University Campus, or sector of each campus, will evolve its own character, identity and diversity within the University's overall culture.

The North Campus will continue as the primary hub for most Faculties and will thrive in its urban setting. Faculté Saint-Jean will grow as a separate francophone Campus with its vital ties with the surrounding francophone community. South Campus will develop with a physical form less dense than the North Campus and over time it will have a physical presence compatible with the surrounding low-density neighbours.

The Long Range Development Plan allows development choices in order to accommodate growth and provides a general framework for each campus site to create complete teaching and research communities. It allows a diversity of built form to accommodate a choice of amenities, activities and experiences considered desirable by students, faculty and staff.

This diversity allows the flexibility required to pursue several goals of the University's Strategic Plans. The following are strategic directions in support of this principle:

- **Strategic Direction 3.1:** Accommodate a mix of academic, research, housing and support uses on each campus of the integrated University to enhance activities and experiences considered to make a livable campus for students, faculty and staff.
- **Strategic Direction 3.2:** The development needs of the University as a whole should not be compromised by the real or perceived needs of any individual development.
- **Strategic Direction 3.3:** Each campus, or sector within should be allowed to function as a community with distinct identity and character within the overall University structure.
- **Strategic Direction 3.4:** Planning to accommodate growth should consider the planning activities of adjacent neighbours.



STRATEGIC PLANNING PRINCIPLE #4:

Academic and research communities will be fostered throughout the University's campuses/sectors.

Development to foster teaching and research may take many forms. The Long Range Development Plan identifies sites at all campuses that are suitable for placing a range of teaching and research facilities and the support facilities that enable the evolution of campus communities.

The areas of specialty identified in the Strategic Research Plan will be able to be accommodated at several sites. The teaching that is linked to this research will also be accommodated. Strategic directions include:

- **Strategic Direction 4.1:** The University should commit to the concept of multiple yet integrated campus sites.
- **Strategic Direction 4.2:** The University's lands and facilities should serve the academic, research and support needs of the University. Development and acquisition should occur if required to achieve these needs.
- **Strategic Direction 4.3:** A mix of academic, research and support uses should be provided on each component campus site of the University.

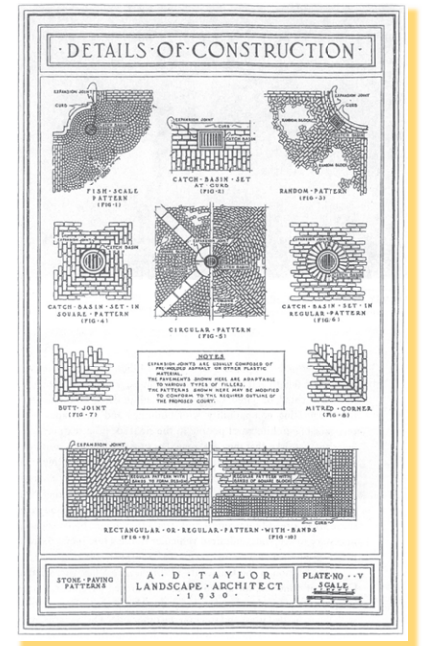


STRATEGIC PLANNING PRINCIPLE #5:

The University will encourage and promote the precepts of smart growth and sustainability.

Through its initiatives and development guidelines, the Long Range Development Plan recognizes the importance of smart growth and sustainability. The Plan outlines how the University's physical assets will be developed to their optimum potential. Initiatives of the Plan promote operating and maintaining development and facilities in an efficient and effective manner. The following strategic directions guide the Plan in this regard:

- **Strategic Direction 5.1:** The University should use its physical assets to their optimum potential. Facilities and land should be developed, operated and maintained in an efficient and effective manner.
- **Strategic Direction 5.2:** The University should respect its natural as well as built environment and should expand its facilities within a holistic approach to development.
- **Strategic Direction 5.3:** Facilities should be designed with an eye to sustainable materials, practices and operations.



STRATEGIC PLANNING PRINCIPLE #6:

The University will be a welcoming, attractive, memorable, accessible and safe community.

Many campus plans, including the Long Range Development Plan, strive to achieve a livable campus community. A physical campus that is welcoming, memorable, attractive, accessible and safe is an asset in recruiting and retaining faculty, staff, students and alumni. Such a place evokes a sense of belonging and of community that is important in making a life decision. The following strategic directions support this principle:

- **Strategic Direction 6.1:** Open space should be treated as an equal partner to built space. A balance between open space and building should be achieved and maintained to create a welcoming and attractive campus environment.
- **Strategic Direction 6.2:** A cohesive hierarchy of open spaces by function should be identified, developed and maintained.
- **Strategic Direction 6.3:** Architectural and landscape elements that evoke the sense of history and continuity should be retained where practical.
- **Strategic Direction 6.4:** Architectural and urban design expression on campus should be encouraged to enhance the University's aesthetic appeal and sense of place.
- **Strategic Direction 6.5:** Planning and design of the campuses and of facilities should recognize and respond to climatic conditions.
- **Strategic Direction 6.6:** Planning and design of the campuses and of facilities should recognize and respond to safety considerations.
- **Strategic Direction 6.7:** Planning and design of the campuses and of facilities should recognize and respond to accessibility considerations - to and from the University, on campus and within buildings.

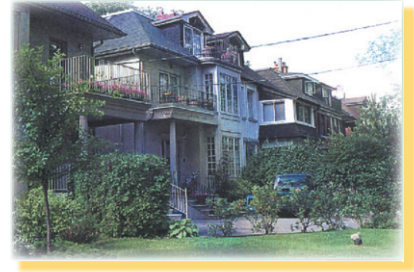


STRATEGIC PLANNING PRINCIPLE #7:

The University recognizes its partnership with the greater Edmonton community, to the benefit of students, faculty and staff.

An important component of the University’s Vision is its commitment to community service. The Long Range Development Plan provides opportunities to integrate the University’s activities with the Edmonton community. These opportunities include accommodating joint-use facilities, integrating City trails and bikeways with the University circulation systems, and collaborating on transit and transportation planning initiatives. Guiding directions include:

- **Strategic Direction 7.1:** Opportunities should be identified to accommodate a diversity of development, regardless of its ownership, if it is beneficial to the University community.
- **Strategic Direction 7.2:** Opportunities should be identified for integrating the University with external communities.

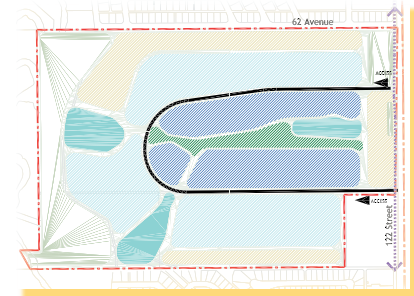


STRATEGIC PLANNING PRINCIPLE #8:

The University will accommodate mutually beneficial collaborative partnerships that assist in achieving strategic, academic and research goals.

The University’s strategic plans anticipate an increasing collaboration with partners. The physical requirements of these collaborations are accommodated in the Long Range Development Plan and are reflected in the following strategic directions:

- **Strategic Direction 8.1:** Internal and external partnerships should be developed to achieve the University’s strategic, academic and research goals. Physical sites and facilities should be identified and developed to nurture the development of strategic partnerships.
- **Strategic Direction 8.2:** Mixed use should be encouraged on each campus including ventures between the University and its non-University research partners. The principles, initiatives, and guidelines of the Plan will apply to these partners.
- **Strategic Direction 8.3:** Sites should be identified to accommodate University research partners.



STRATEGIC PLANNING PRINCIPLE #9:

The Long Range Development Plan will be reviewed and updated periodically to reflect the University's strategic goals and directions.

The University reviews its Strategic Business Plan, Academic Plan and Strategic Research Plan regularly. The Long Range Development Plan will be reviewed as required and modified to remain responsive to the University's strategic initiatives. This is reflected in the following strategic directions:

- **Strategic Direction 9.1:** The Long Range Development Plan needs the flexibility to adjust to future trends and therefore should be reviewed periodically and updated.
- **Strategic Direction 9.2:** Reviews and updates of the Long Range Development Plan should be carried out in a consultative manner with internal and external communities.



6.0 CAMPUS DEVELOPMENT CONCEPTS

6.1 NORTH CAMPUS

The long-term Concept Plan for North Campus is presented as Exhibit 18.

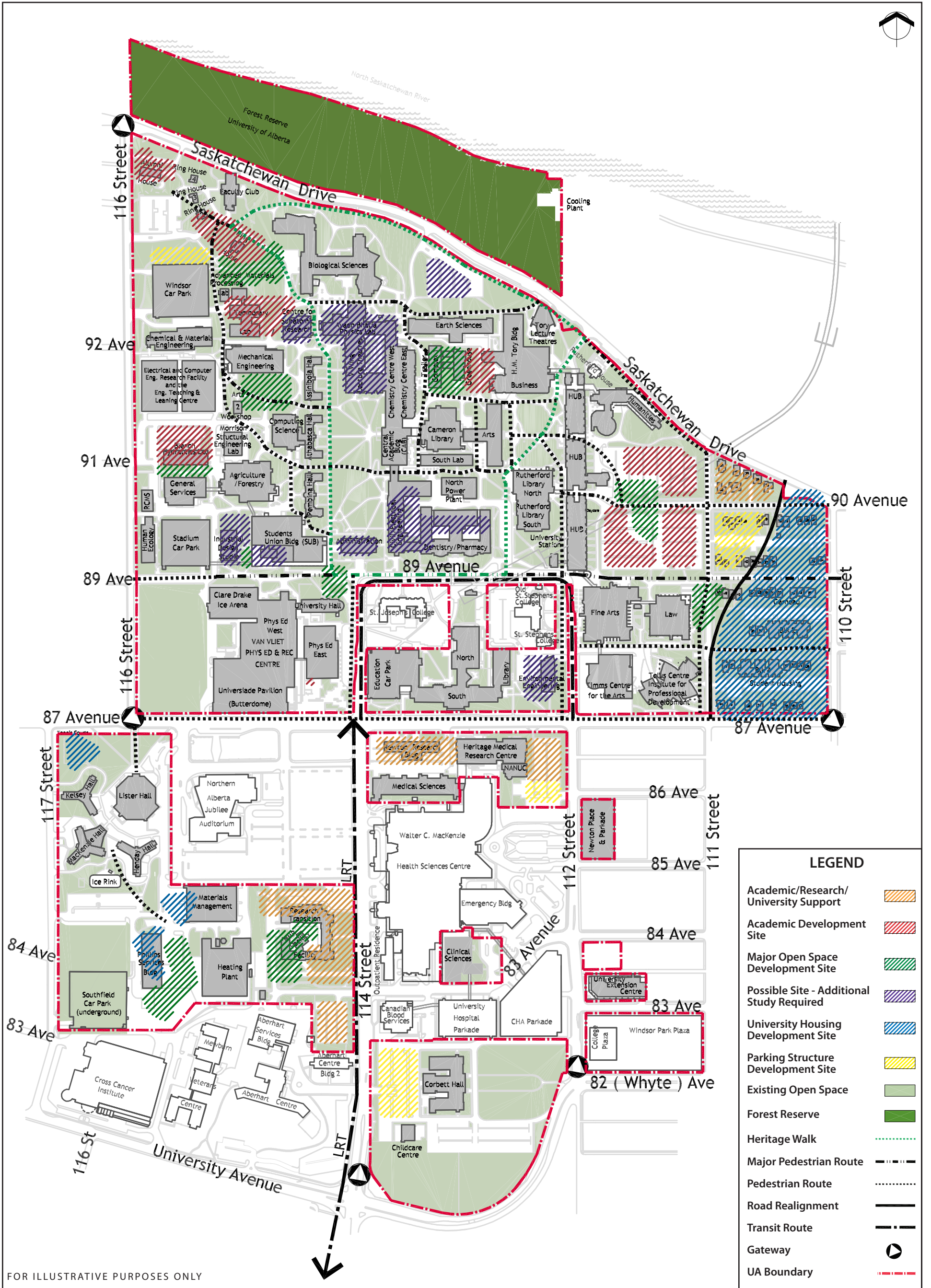
North Campus is, and will continue to be, the urban campus site of the University of Alberta. This will create one of the densest campuses in Canada and capable of accommodating around 37,000 students.

North Campus will be the primary main campus of the University for the next 30 years. It will be the hub for Faculties and for the majority of the facilities.

North Campus is projected to accommodate:

- between 150,000 - 200,000 square metres of additional research and support space;
- between 150,000 - 200,000 square metres of additional teaching and support space;
- between 1,200 - 2,000 additional student residence units.

Sector plans will be developed to assist in guiding development.



6.1.1 LAND USE PATTERNS

6.1.1.1 Sectors

The primary academic sectors that have evolved will be retained and grown to the extent that lands or facilities are available to meet their needs.

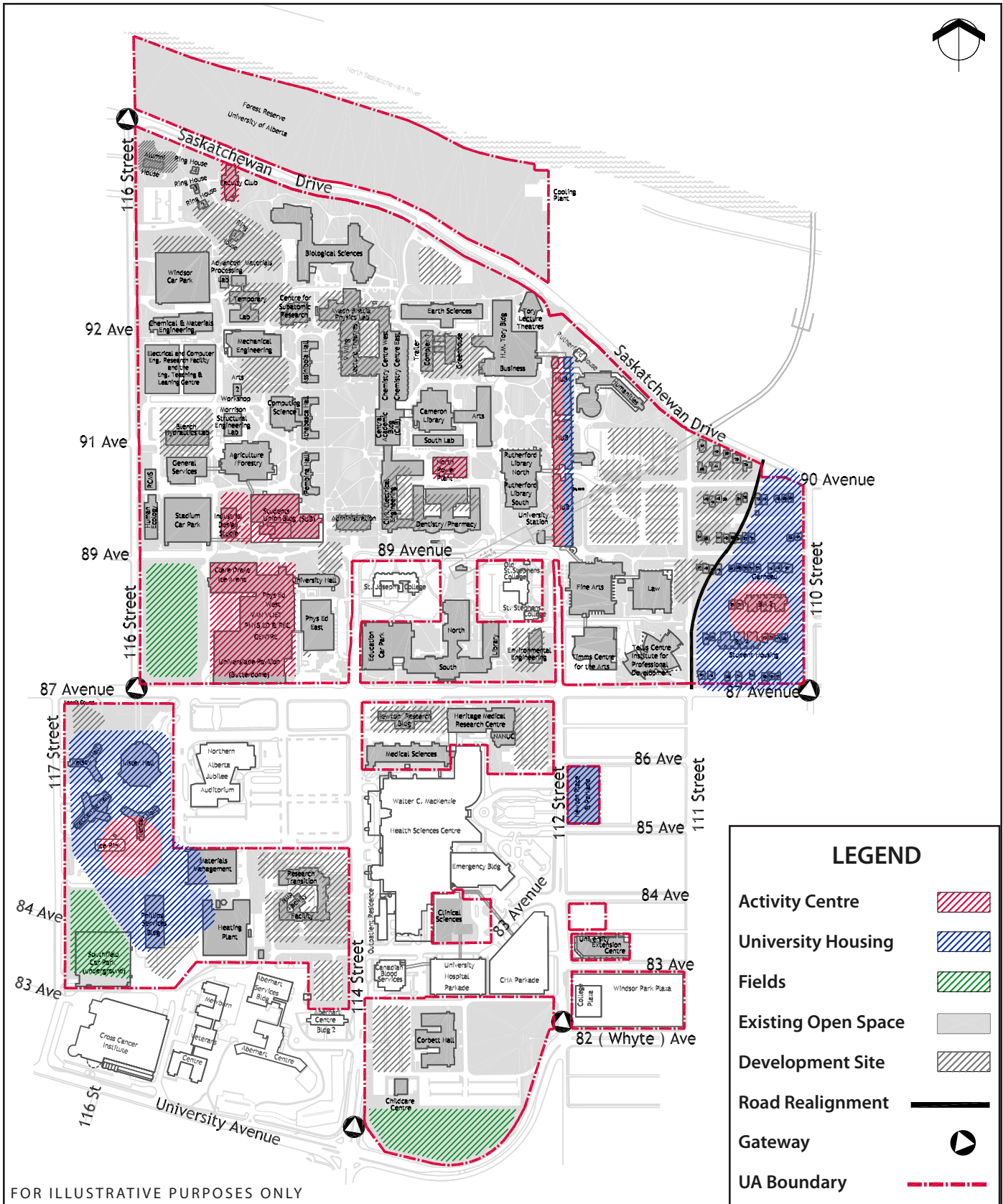
6.1.1.2 Development Sites

Sites for development are identified on North Campus to allow for compatible intermediate-term and long-term growth of the Faculties currently located there. In the intermediate-term, most new development will occur on lands in the northeast sector, on sites along 114 and 116 Streets, and along 87 Avenue. Intermediate-term projects include:

- Health Research Innovation Facility;
- Student Residence (to improve access for 1st year students);
- Natural Resources Engineering Facility;
- Interdisciplinary Science Building;
- National Institute of Nanotechnology (in partnership with the Province and NRC);
- Heart and Stroke Research Centre;
- Parkade Expansion;
- Health Sciences Learning Centre (in partnership with Capital Health);

Over the longer term, selective in-fill may occur as identified.

New Faculties and new partnership initiatives should be directed to South Campus.



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6.1.1.3 Campus Life & Housing

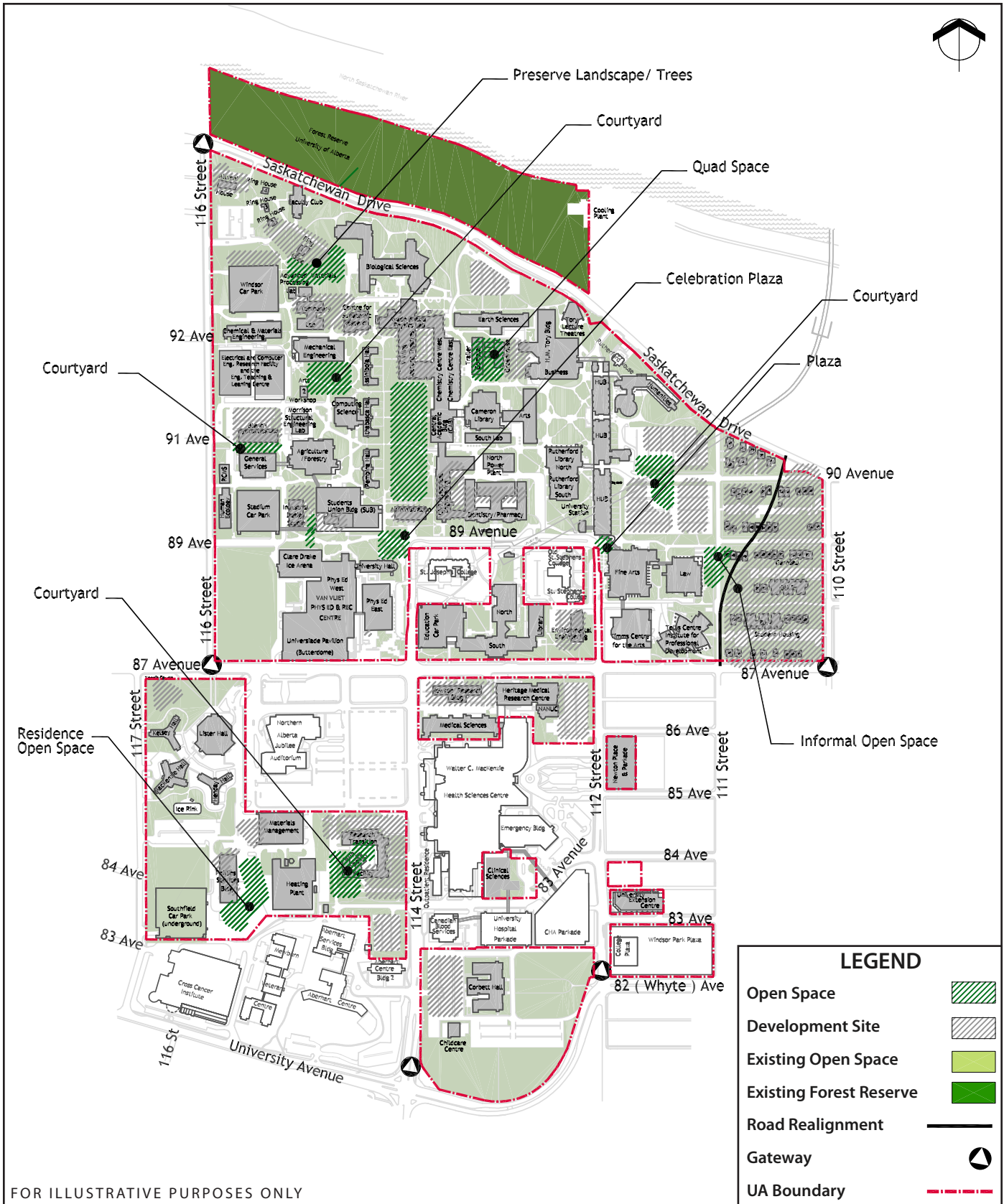
Campus life opportunities will be accommodated and expanded including student housing, recreation and leisure and student services

Housing will be accommodated primarily in two sectors, Lister Hall and East Garneau. Other housing opportunities may be allowed in other areas of campus.

Housing that incorporates student life, recreation and leisure facilities will be encouraged.

The commercial and retail functions that support urban campus life will also be encouraged on campus. Major activity nodes including the SUB, HUB and residential clusters are locations well-suited for these functions.

More recreational facilities will be required for 37,000 students than can be accommodated on North Campus. The shortfall must be developed on South Campus to keep pace with increasing enrolment.



6.1.1.4 Open Space System

Existing significant open spaces will be retained and reinforced whenever possible. New open spaces will be developed to balance the effects of increased density, and to improve liveability and sense of community on this campus. New open spaces are to be included in all development and redevelopment of sites throughout North Campus. Open spaces are to be planned with each building project.

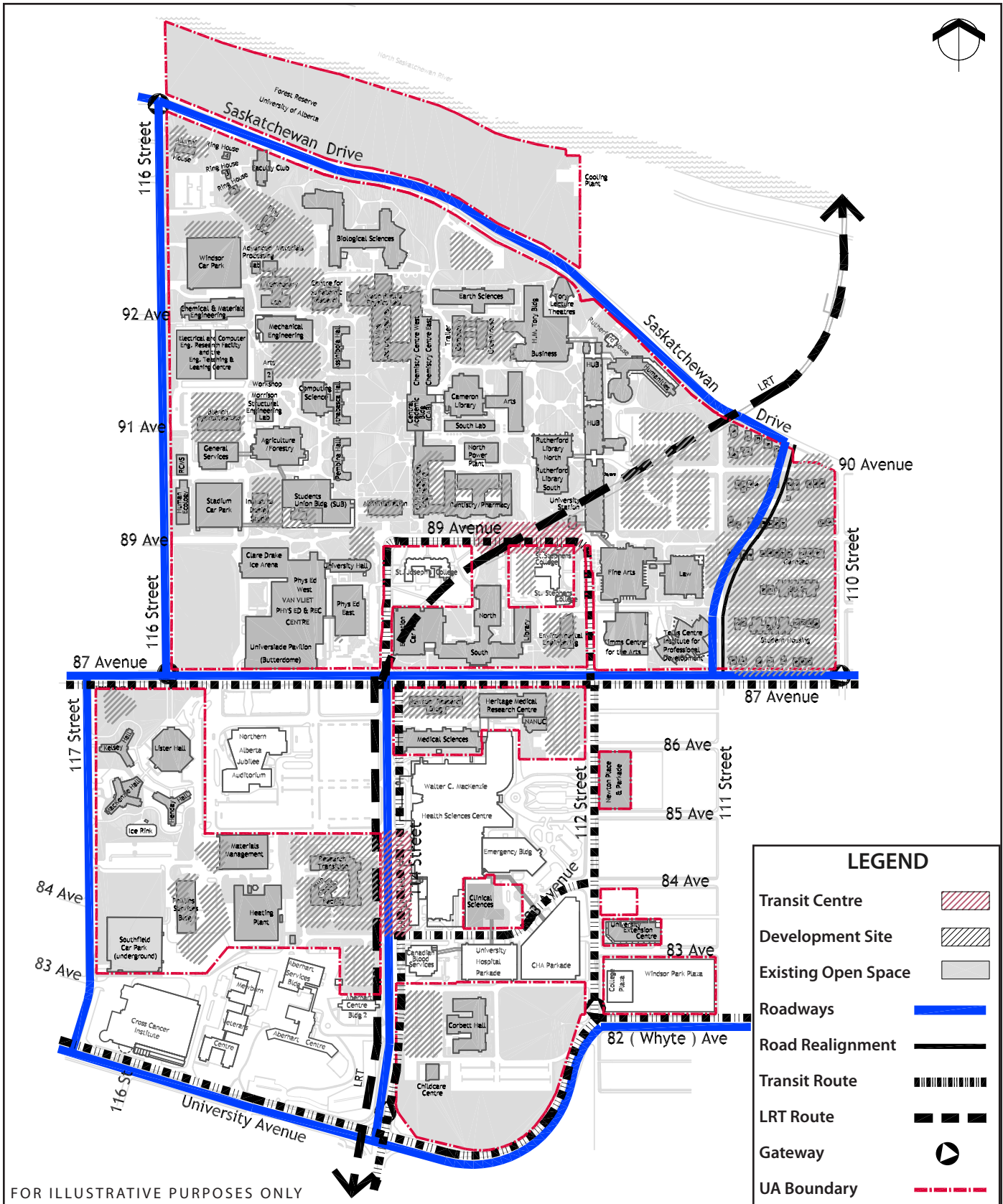
Natural environments such as found in the Forestry Reserve will be preserved as will landscaped sites and elements identified as significant by the University.

6.1.1.5 Heritage Considerations

Existing significant buildings will continue to be conserved where practical to maintain the historical and architectural character of this Campus. A protocol to identify heritage buildings and sites will be developed by the University. Emily Murphy House is a provincially designated historic site and will be preserved as such.

A Heritage Walk is proposed that will allow pedestrians and cyclists to follow an interpretive walk of some of the University's oldest buildings and sites. The Heritage Walk will be part of the campus circulation system.

Space that is obsolete and non-functional will be redeveloped over time to achieve and support the University's objectives.



6.1.2 TRANSPORTATION SYSTEMS

Travel demand will be addressed through Travel Demand Management initiatives including car-pooling, increased transit use and others.

An extension of the LRT southward will continue underground and then surface some 50 metres south of 87 Avenue along 114 Street. Expansion southward will continue along 114 Street. 89 Avenue will continue its role as the bus transit centre.

The primary automobile access routes to North Campus are 87 Avenue, Saskatchewan Drive, 116 Street and 111 Street, University Avenue and 114 Street. Any improvements to these routes will be planned in consultation with the City Transportation Department.

A realignment and bi-directionality of 111 Street are proposed to better separate University traffic from residential traffic in Garneau.

Private automobiles access should be restricted to the periphery of campus.

6.1.3 SERVICE VEHICLE ROUTING

Service vehicle routing will be generally maintained and redeveloped as required to serve the needs of new buildings and to minimize on-site conflicts with pedestrians and bicycles.

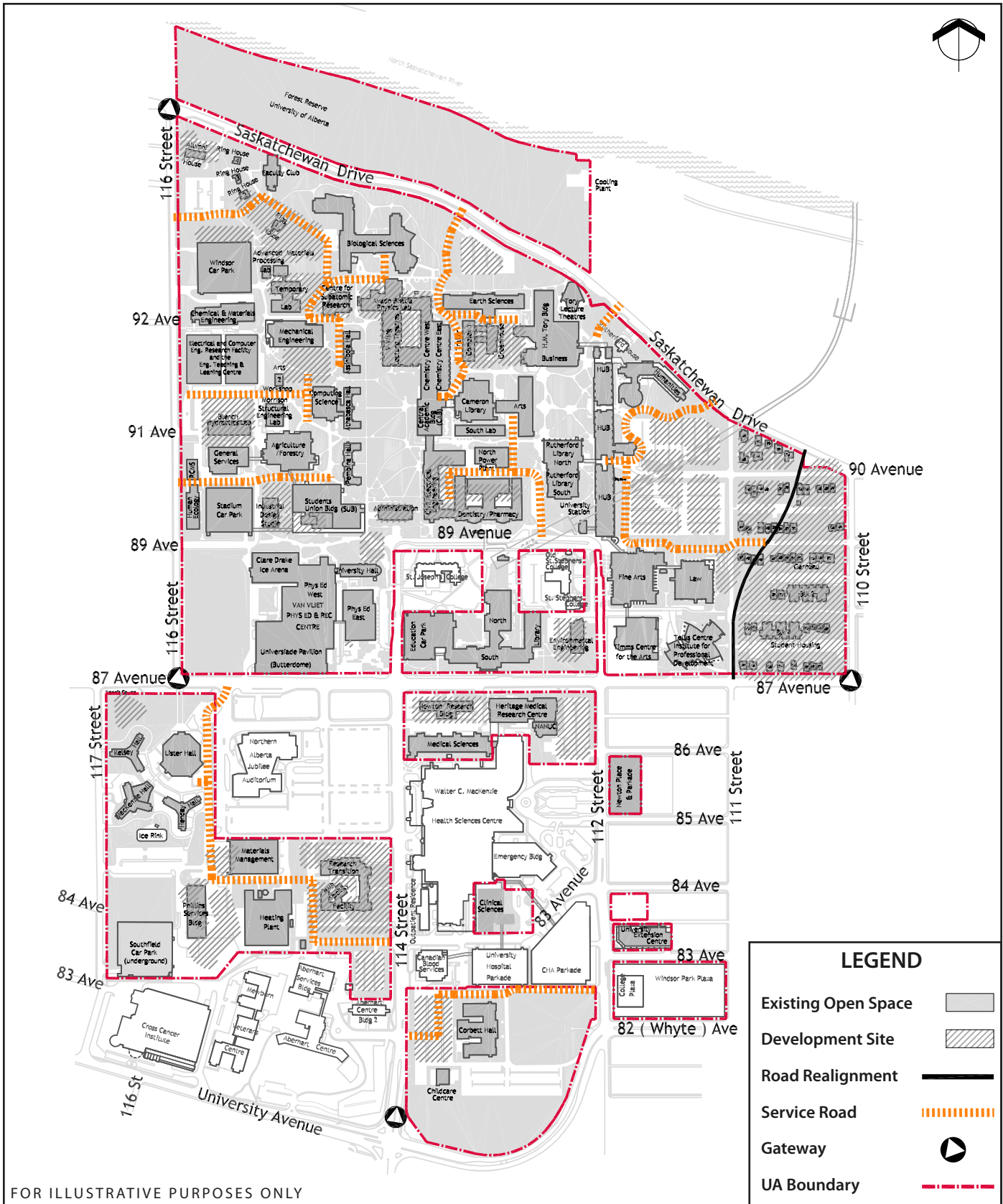
6.1.4 PEDESTRIAN AND BICYCLE CIRCULATION

Pedestrian and bicycling routes will be enhanced through and to campus. Existing pedestrian spines will be reinforced and extended and a hierarchy of pedestrian walkways will be developed over time to improve circulation and way-finding.

89 Avenue will continue to be the major east-west pedestrian linkage between 116 Street and 110 Street. It requires further design and upgrade to achieve this role. The north-south spines will be defined to University Avenue in the south (e.g. along 114 Street), and Saskatchewan Drive on the north.

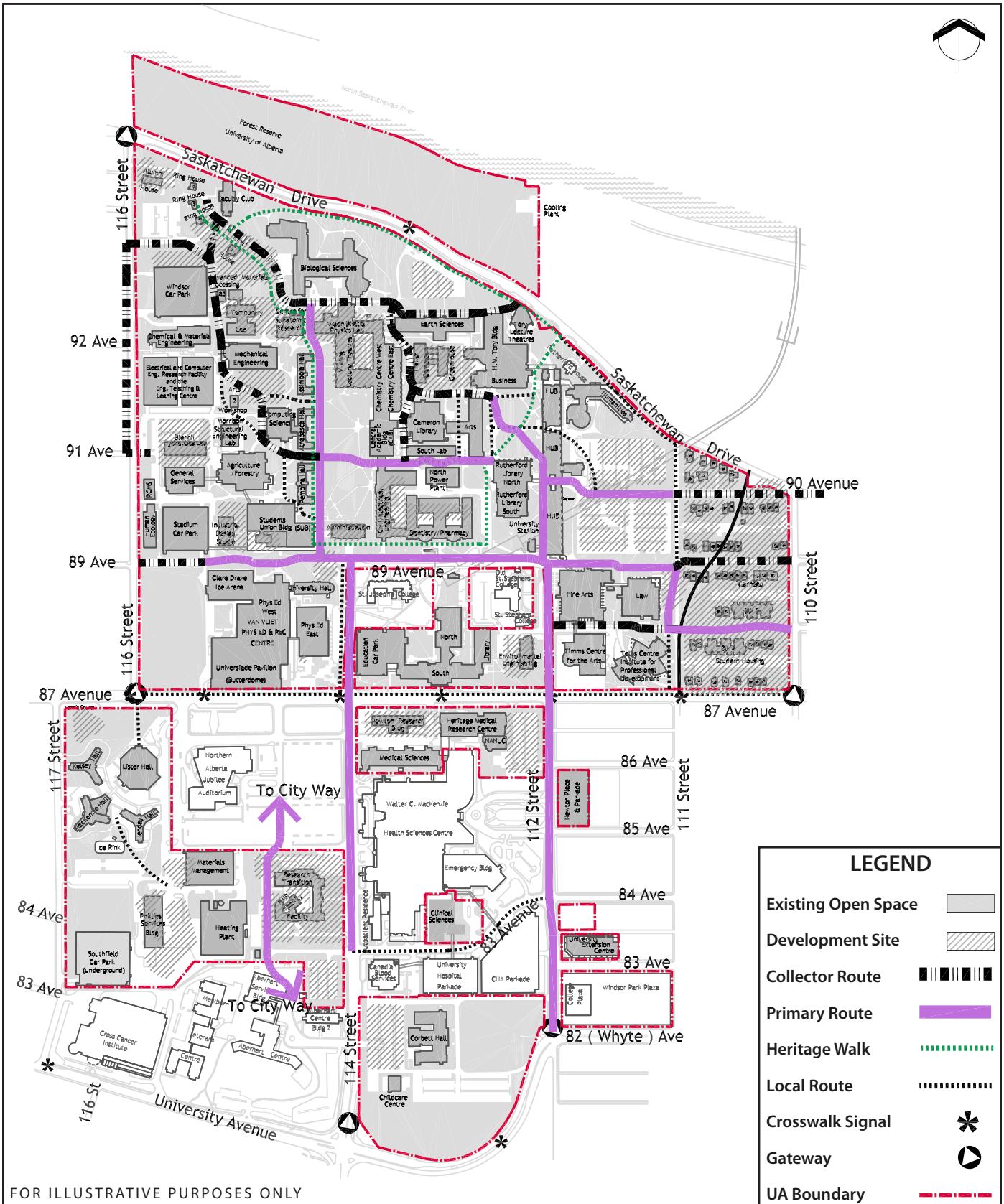
The development of pedways will be encouraged in order to connect buildings and to provide safe passage over busy streets.

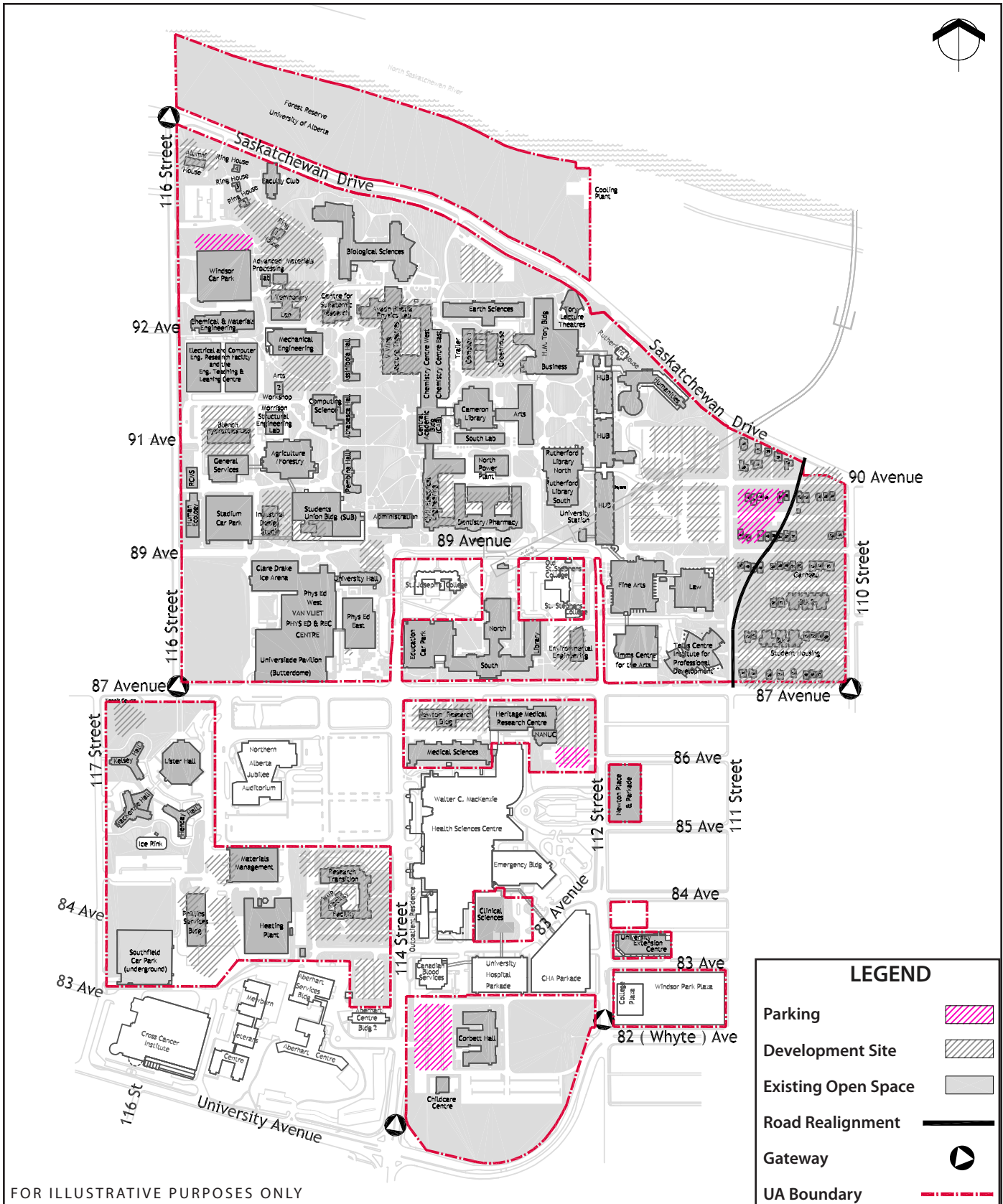
As with the pedestrian walkways, bicycle paths will be developed on an hierarchical basis to accommodate through-campus cyclists, as well as intra-campus circulation.



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PEDESTRIAN & BICYCLE CIRCULATION





6.1.5 PARKING

On-campus parking will be developed in balance with need.

Opportunities to accommodate parking include: expansion of existing structures such as Windsor parkade; construction of new structures in the north-east portion of campus and in the vicinity of Corbett Hall; joint venture developments with neighbours such as the Capital Health Authority and the Province of Alberta.

6.1.6 COMMUNITY LINKAGES

North Campus will be linked to community pedestrian and bicycle systems and therefore to the regional systems as well, e.g., the river valley system.

6.1.7 GATEWAYS

The major entrances to North Campus will be developed as gateways to identify entrance to the campus and to provide information to help orient those arriving at the campus. Gateways will be developed at:

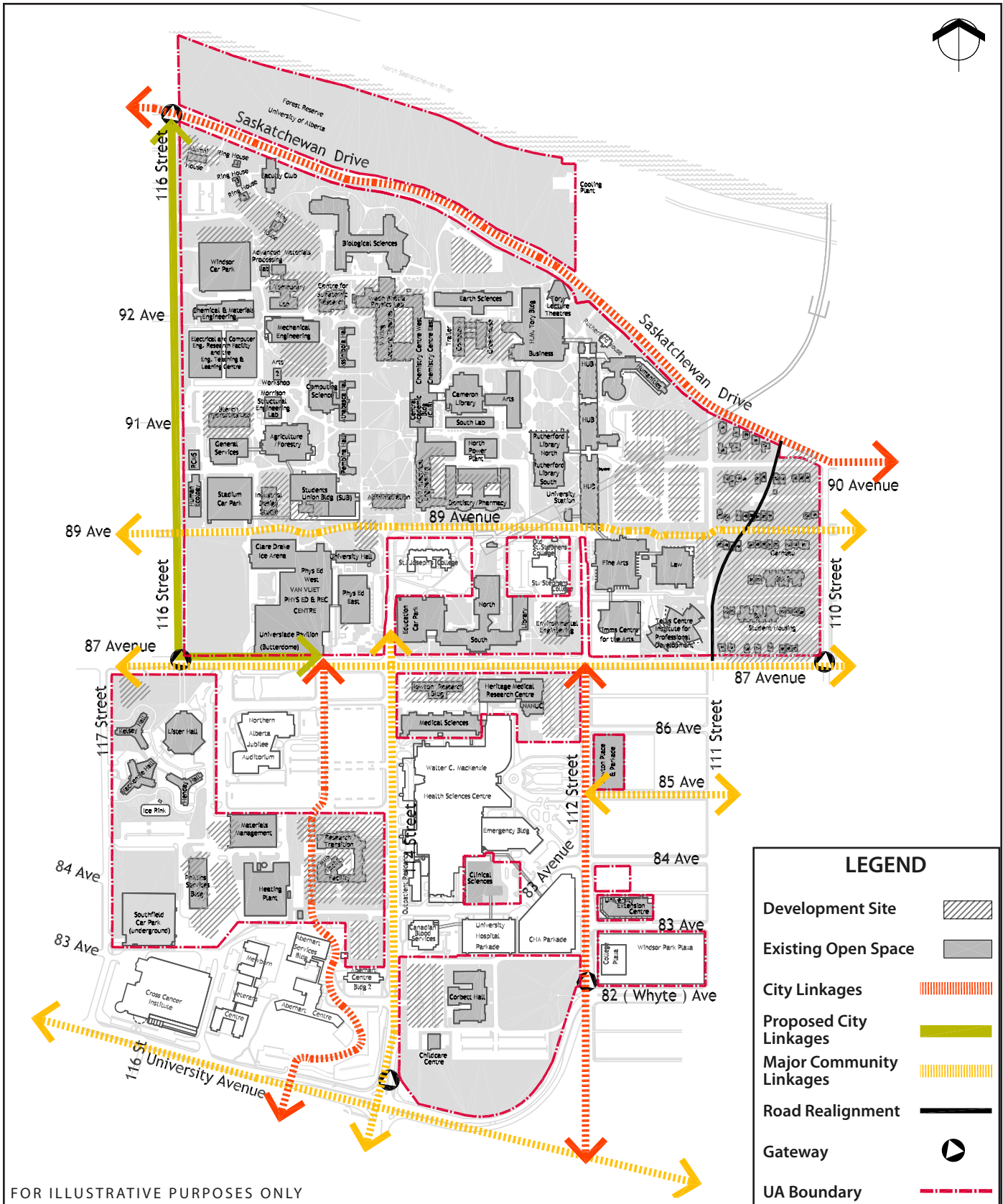
- Emily Murphy Road and 116 Street;
- 87 Avenue and 117 Street;
- 87 Avenue and 110 Street;
- 114 Street and University Avenue (exists);
- 112 Street and 82 Avenue.

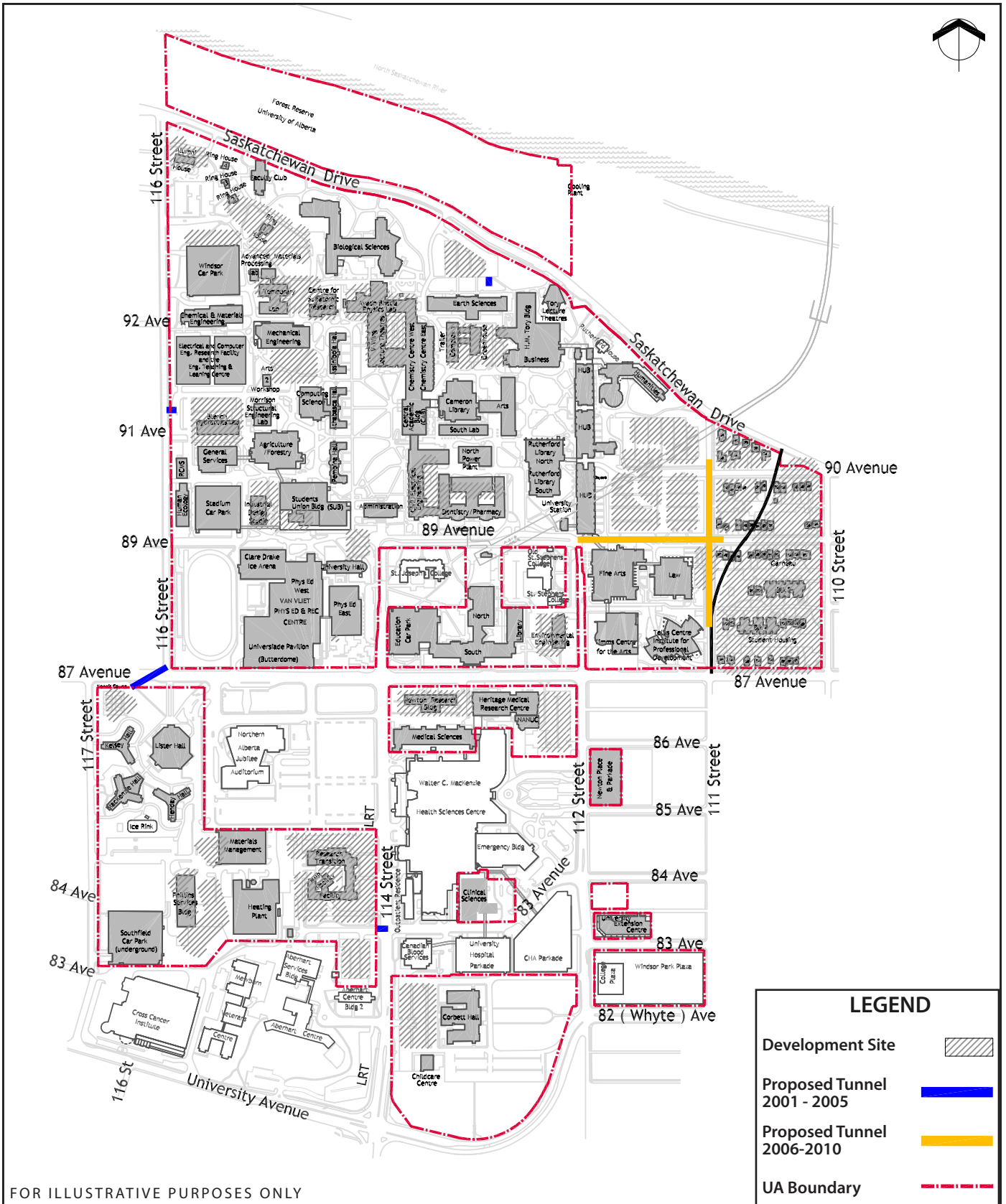
Each gateway will be designed in a manner compatible with its surroundings. Probable locations will be determined at the sector plan level.

6.1.8 UTILITIES

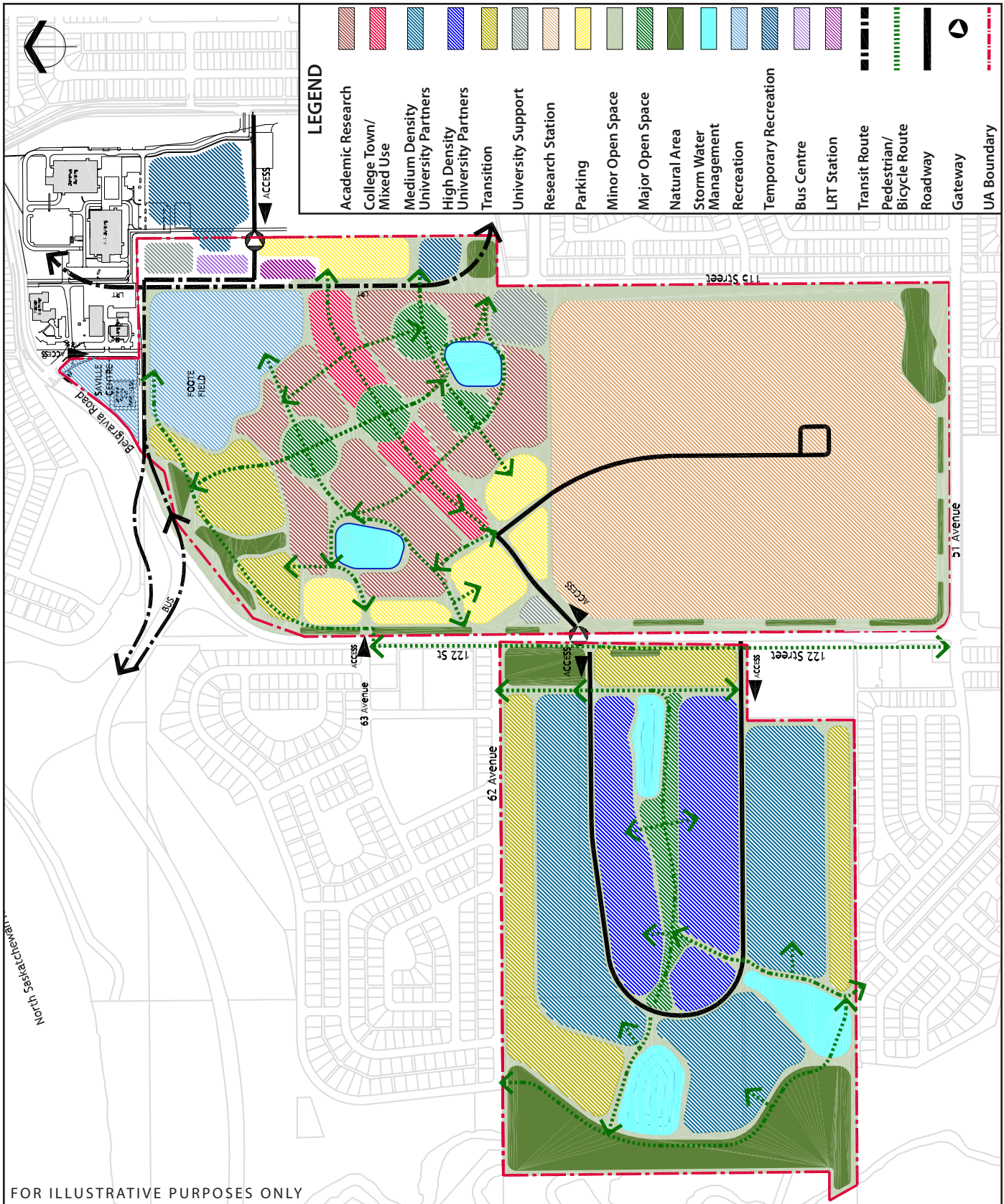
The integrated energy plant will be upgraded as development warrants to a growth ceiling of 37,000 students.

Services to development sites will be extended by way of the underground utility tunnels (utilidors).





FOR ILLUSTRATIVE PURPOSES ONLY



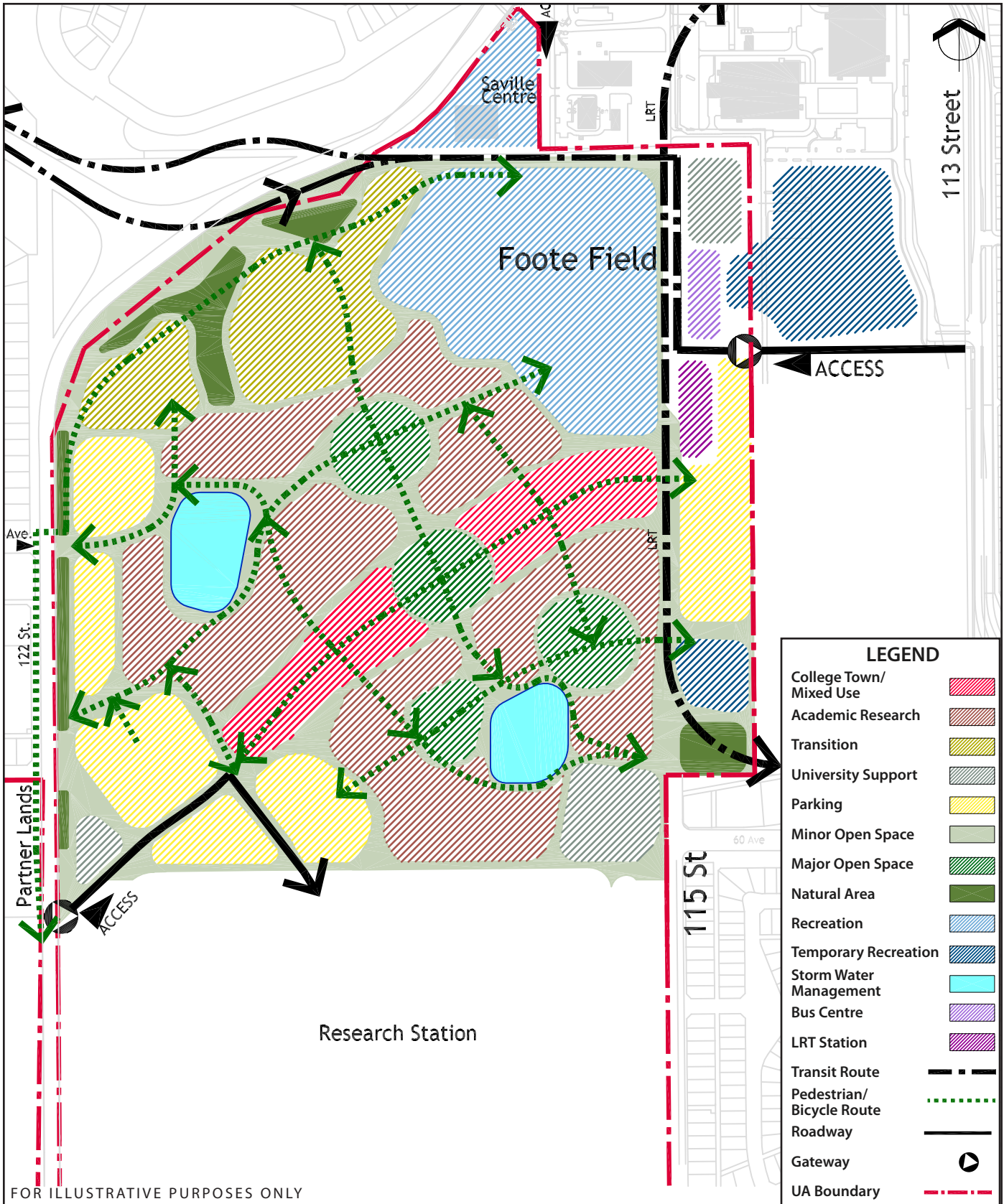
6.2 SOUTH CAMPUS

South Campus will be the lower density, suburban character academic campus of the University of Alberta for the next thirty years. Over time, it may accommodate Faculties and other activities from North Campus, as well as new Faculties and new areas of teaching, research and development.

South Campus is planned in a manner consistent with the February 2001 direction from the University Board of Governors, whereby three sectors will be developed over time:

South Campus Sector	Size in hectares
Academic Sector	Approximately 75 ha
University Research Station	Approximately 74 ha
Partner Lands	Approximately 94 ha

Architectural guidelines will encourage a diversity of quality, signature architecture. Significant green spaces will be created as an amenity to those on-site and in the adjacent communities. Development will be graduated from a lower density at the edges of campus to higher density in the centre.



6.2.1 ACADEMIC SECTOR

The physical character of the academic/research sector of South Campus will contrast that of North Campus: it will be park-like; development will be lower in density in order to be compatible with its suburban surroundings; and although accessible by urban roads and transit, it will be pedestrian-oriented.

This site has the capability of accommodating up to 20,000 students. Over the next 30 years, between 8,000 and 12,000 students are projected, resulting in an estimated need of:

- between 200,000 - 300,000 square metres of new research space;
- between 200,000 - 300,000 square metres of new teaching and University support space;
- between 1,200 - 1,800 students residence units.

South Campus may grow initially as a specialty campus and home of Centres of Excellence and Achievement and independent Faculties. Because of its suburban character, land extensive uses will readily fit in.

The academic/research sector of South Campus, with its contrasting physical character, its evolved reputation, its modern facilities, and its easy access may become the University's location of choice.

6.2.1.1 Land Use Pattern

The land use pattern follows five fundamental strategies:

- Faculty-specific sectors will be accommodated to the extent practical;
- a higher density Main Street will be developed connecting the proposed LRT station in the north east of the site with the west gateway (see Exhibit 29). The Main Street will integrate a mix of uses including teaching and research space, student residences, University support services and campus commercial and retail;
- lower density, land-extensive uses will be located toward the periphery of the site to reduce the perceived impact on surrounding neighbours;
- the Campus will be pedestrian-oriented with distributed formal points of access from vehicles with sufficient parking on the periphery;
- creation of a services sector with direct vehicle access. In the near-term, the snow dump and vehicle pool will remain in their existing locations;
- a transition zone in this sector has been identified for the purpose of accommodating lower density academic, research and support buildings and/or recreation fields.



Development will occur with consideration to suitable land use transitions and adjacent uses as determined at the sector plan level of detail.

A full range of services, programs and facilities will be developed and sited consistent with the suburban nature of the campus.

It is important to note that change will occur over a long period of time. Transitional systems will need to be created to allow for new and existing facilities in adjacencies and juxtapositions. These issues will be resolved through the creation of sector plans.

6.2.1.2 Open Space

The open space system on this site will comprise formal and informal elements including quads, plazas, gardens and walkways to provide opportunities for formal, casual and leisure outdoor activities. Storm water management facilities will also be incorporated into the network of open space. Through development guidelines, the siting of buildings will be such that significant open space will be part of each development.

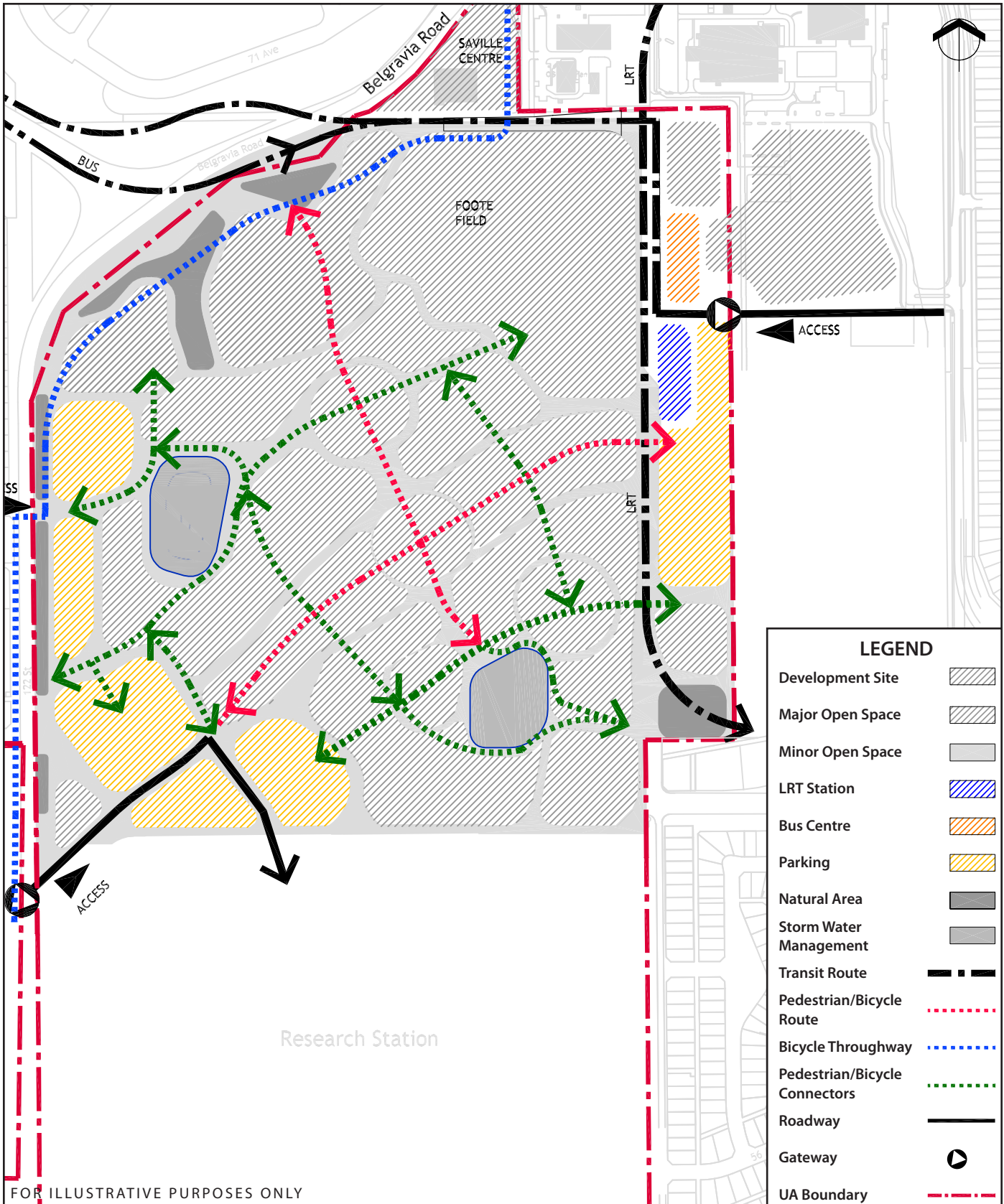
Natural environments such as those found presently along the northwest edge of the site will be preserved.

Recreation fields and facilities will be developed to serve the needs of all campus sites including any shortfalls that may occur due to lack of space for these facilities at other sites.

6.2.1.3 Heritage Buildings and Existing Research Facilities

An assessment of potential heritage buildings will be carried out and a preservation plan will be developed as required.

The University of Alberta is committed to enhancing agriculture research, and will not eliminate or arbitrarily move existing research facilities. If for some currently unforeseen reason it were absolutely necessary to do so, the University would replace, at its new location, with equal value, the research facility. Such activity would occur only through extensive consultation with external partner organizations, faculty and researchers utilizing such facilities.



6.2.1.4 Transportation

Road access to campus will be from 122 Street, Belgravia Road, 113 Street and 60 Avenue. Over the 30-year horizon of the Plan, some alterations to the road network will be required to accommodate growth at South Campus, as well as City development in south Edmonton. These are to be determined in consultation with the City Transportation Department.

Automobile access will be restricted to the periphery of the site. Parking facilities will be available at these four access points.

Service vehicle routes will be designed to minimize on-site conflicts with pedestrians and bicycles.

LRT and bus transit routing will be finalized in consultation with the City Transportation Department. South Campus will accommodate a LRT station and a transit transfer centre accommodating up to 12 buses.

6.1.2.5 Parking

Parking should be accommodated on-site through a combination of surface and structured parking facilities located at the entrances to the campus. Initially, parking will be designed as surface lots. As development progresses and land is required, parking will be designed in structured facilities.

For the long term, the opportunity exists to create a park-and-ride lot at the LRT station that would allow many of those with a North Campus destination to take the LRT from South Campus and avoid traffic congestion on 114 Street and Belgravia Road.

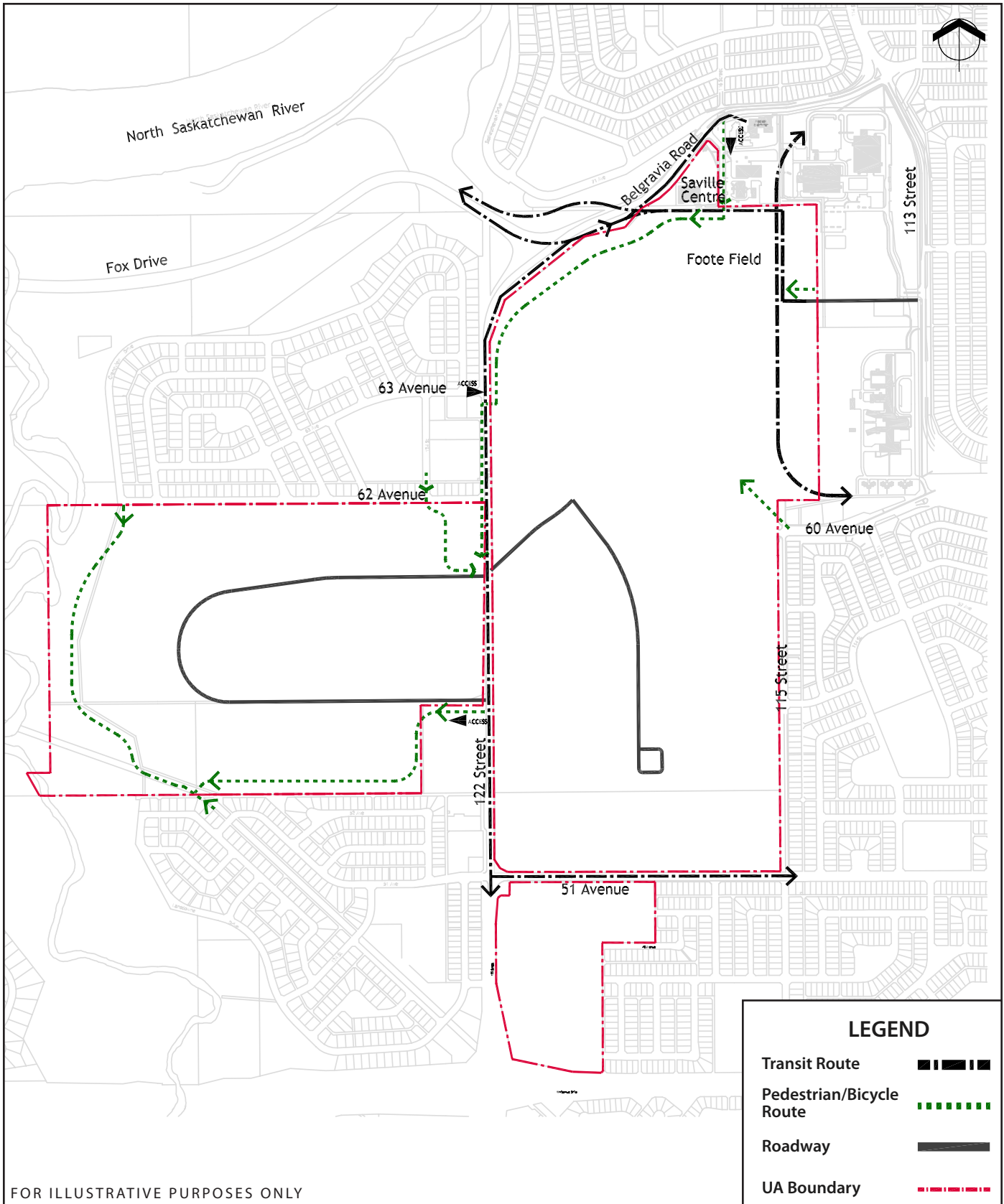
6.1.2.6 Pedestrian & Bicycle Circulation

The campus Main Street will be the major intra-campus spine for pedestrian and bicycle traffic.

A hierarchy of pedestrian and bike-ways will be incorporated into the development to allow direct access between facilities on campus.

Indoor pedways will be encouraged as buildings are developed. Outdoor circulation will be developed to shelter pedestrians through the use of landscape and other techniques.

A City bicycle route will be accommodated on the periphery of the site for through-travelers.



6.1.2.7 Community Linkages

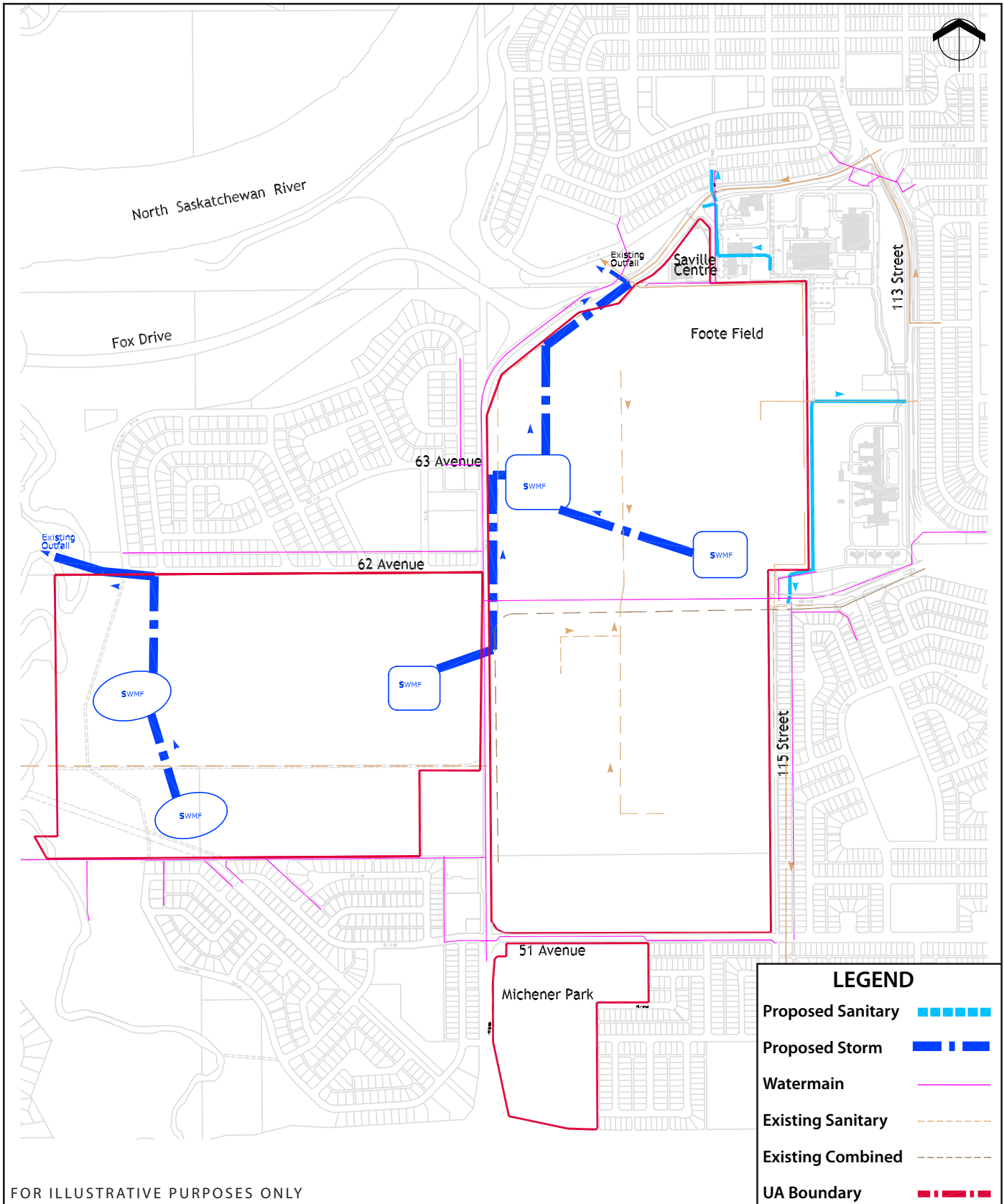
This campus site will be linked to community pedestrian and bicycle systems and therefore to the regional systems as well, e.g., to the river valley system.

Pedestrian, bicycle and transit linkages will be available to the Partner lands and North Campus.

6.2.1.8 Gateways

The major entrances to South Campus will be developed as gateways to identify entrance to the campus and to provide information to help orient those arriving at the campus. Gateways will be developed at:

- 122 Street south of 60 Avenue at the entrance to the academic sector and Partner lands;
- 122 Street and 63 Avenue;
- Belgravia Road at the Saville Centre;
- 113 Street campus entrance.

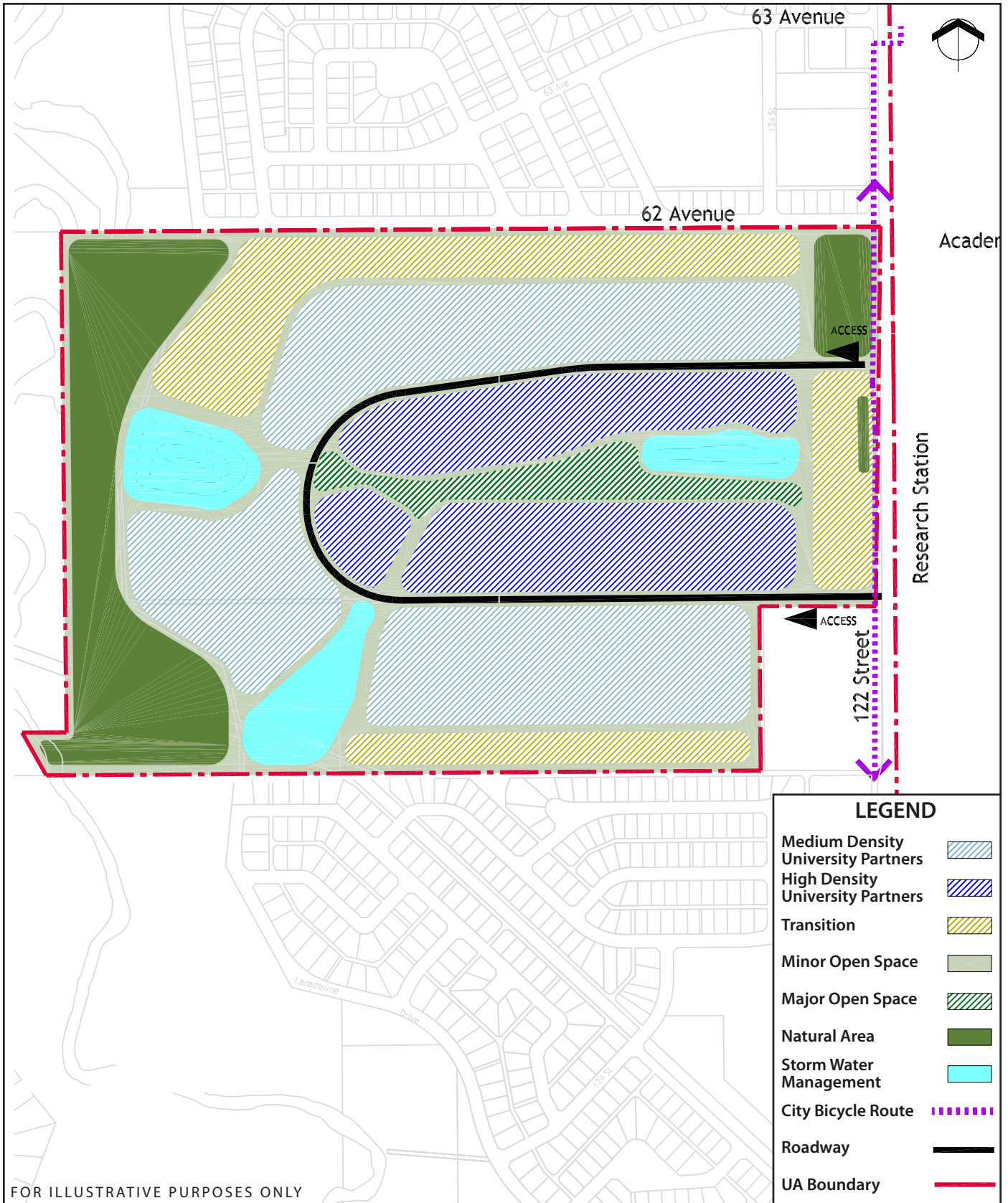


6.2.1.9 Utilities

The campus will access municipal services that are on, or are adjacent to, the site.

On-site storm water management is required and 2 - 3 hectare wet and/or dry ponds will be developed as warranted. Candidate locations for these ponds are illustrated. The ponds should be integrated with the campus open space system as amenity and wildlife areas.

Further study should be undertaken to assess the financial feasibility of a central integrated energy plant for South Campus.



6.2.2 PARTNER LANDS

The Partner lands will allow architecturally controlled, prestige development, attractive to partners who not only wish to be associated with the University, but also want a quality address that reflects their corporate image. A Partner is defined as an independent firm, or research transition firm, or a joint research venture with an outside agency, or a joint venture among Faculties with a close affinity to University research and development.

6.2.2.1 Land Use Pattern

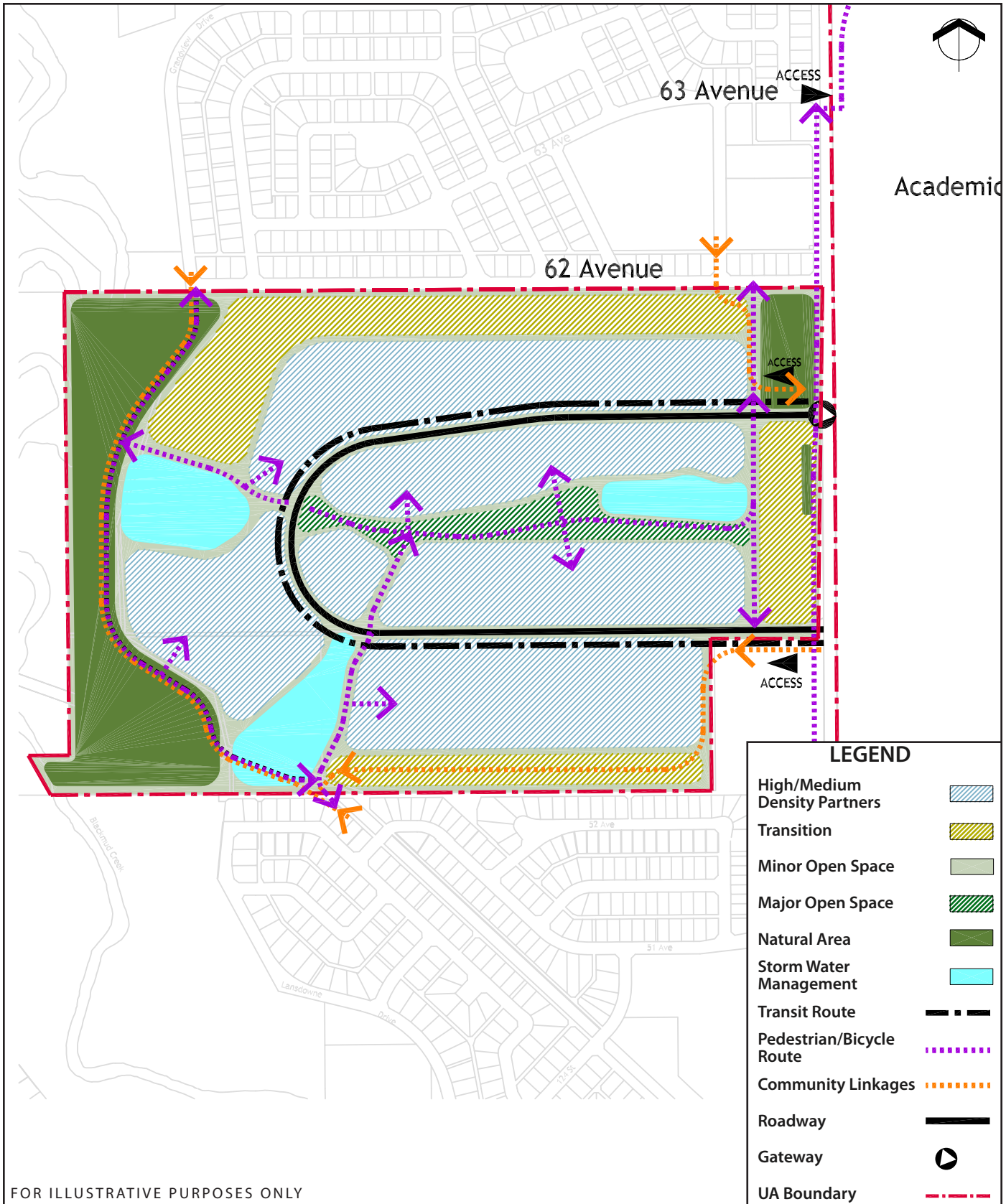
The land use pattern of the Partner lands takes into consideration the residential development bordering the lands on the north and south, the environmental character of the western boundary, and the opportunity for access afforded by 122 Street, the eastern boundary.

The development character of the Partner lands will be suburban. The higher density development will occur on internal lands with lower density development occurring toward the edges of the site.

These lands have the capability of accommodating up to 400,000 square metres of development.

A transition zone will be maintained from the adjacent residential lands, from 122 Street and from the Whitemud Creek ravine. No research facilities will encroach into the transition zone. The transition zone may be used in the long term to accommodate other compatible development to both Partner lands and neighbouring communities such as, recreation facilities, walkways, bikeways or be left in its natural state.

Setbacks from the top of bank will be established based on geo-technical studies.



6.2.2.2 Open Space

The open space system will be made up of natural and developed open space.

Open space will be defined on the periphery of the Partner lands as well as internally between building sites. Open space may be passive or may accommodate walkways, bikeways and recreation facilities.

The storm water management system will be connected to the open space system.

6.2.2.3 Transportation

Vehicular access to the Partner lands will be limited to 122 Street. The site will be serviced by a loop road that will carry auto, service vehicle and transit traffic.

An on-site pedestrian and bicycle circulation system will be provided, connecting to adjacent neighbourhoods and to the academic research sector east of 122 Street.

6.2.2.4 Parking

Parking will be included with each site to accommodate the development's parking requirements.

6.2.2.5 Community Linkages

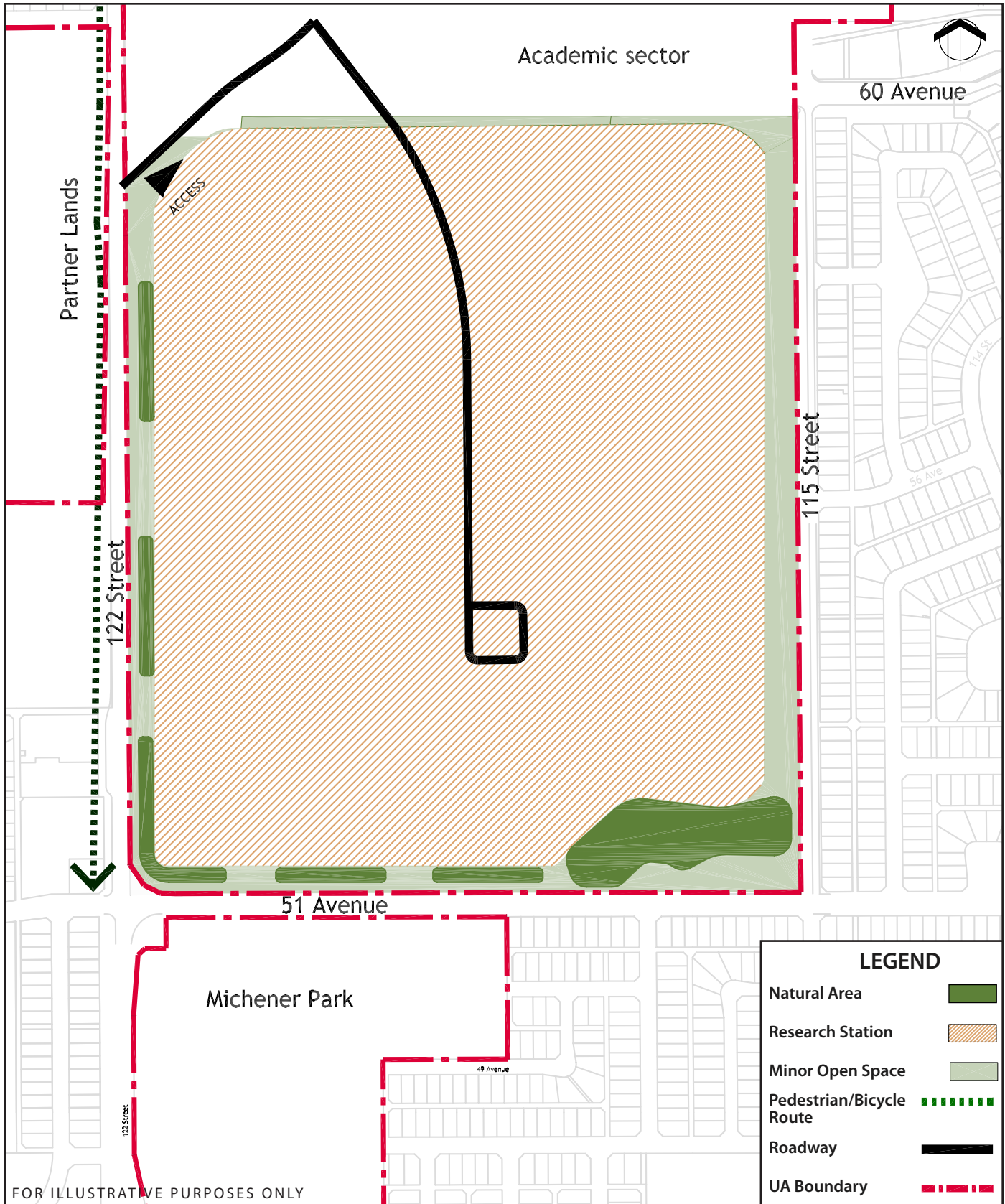
This campus site will be linked to community pedestrian and bicycle systems and therefore to the regional systems as well, e.g., to the river valley system.

6.2.2.6 Utilities

The Partner lands will access municipal services that are found adjacent to the site.

On-site storm water management will be required and 2 - 3 hectare wet and/or dry ponds will be developed as warranted.

Pedestrian, bicycle and transit linkages will be available to the South Campus academic sector and North Campus.



6.2.3 UNIVERSITY RESEARCH STATION

For the foreseeable future, these lands will continue to be used and developed to support the research initiatives of the University of Alberta.

6.2.3.1 Land Use Patterns

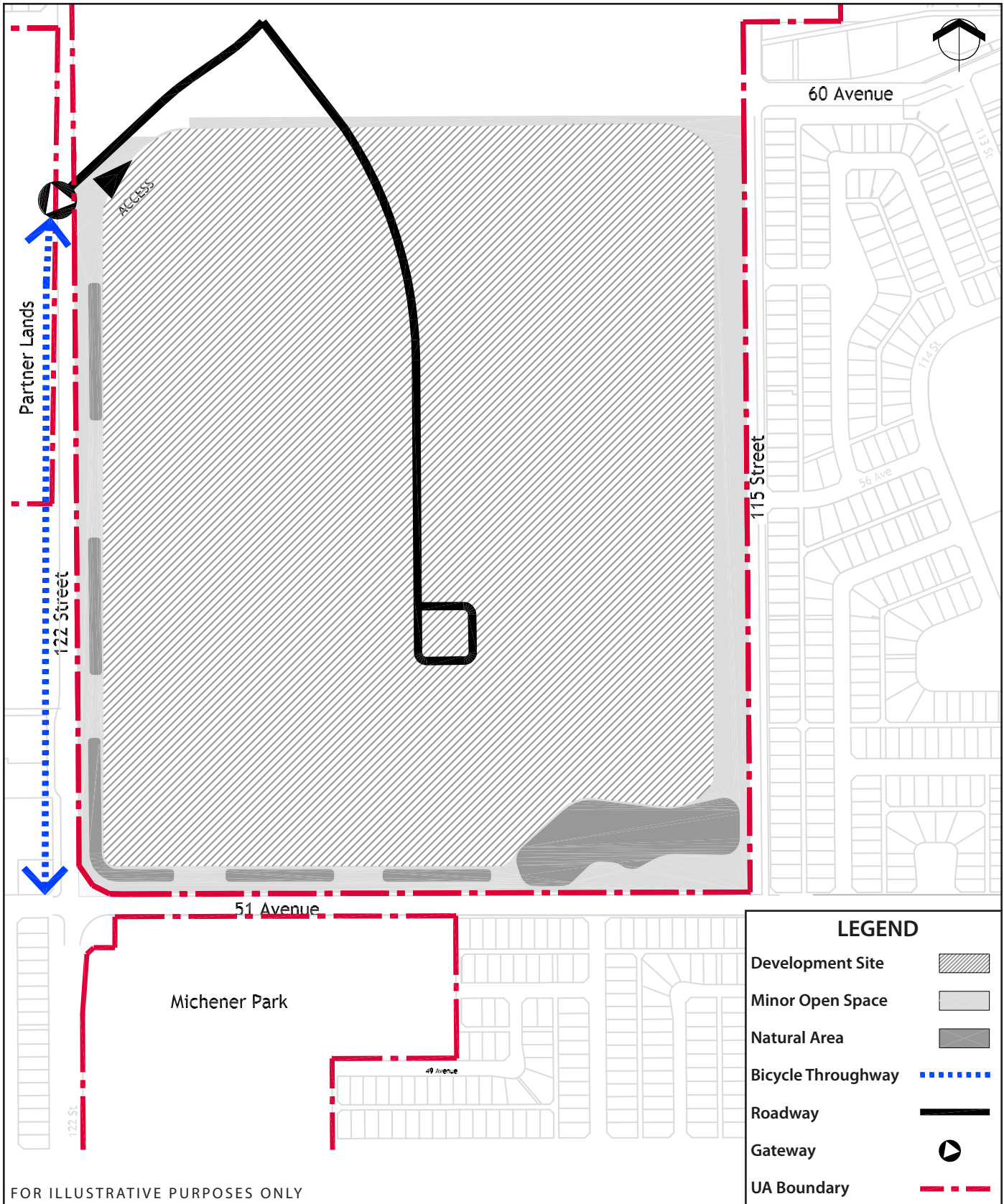
Current Research Station facilities will be consolidated over time in the new University Research Station sector.

The focus of research may continue in the area of biological life sciences that may include research related to livestock, crop, food processing and other similar research domains.

Research staff housing may be needed on site.

6.2.3.2 Open Space

Building sites will be developed as required. Open space and easy sight lines will be integral elements in achieving the required bio-security on site.



6.2.3.3 Transportation

Access to the Research Station will be restricted. The primary vehicle access will be from 122 Street. A secondary access is possible from 60 Avenue, shared with access to the service sector of South Campus.

Pedestrian and bicycle ways will only be considered on the periphery of the site between public roads and the site security fence.

6.2.3.4 Parking

Parking for research staff and service vehicles will be provided at each building site in accordance with the needs of the building.

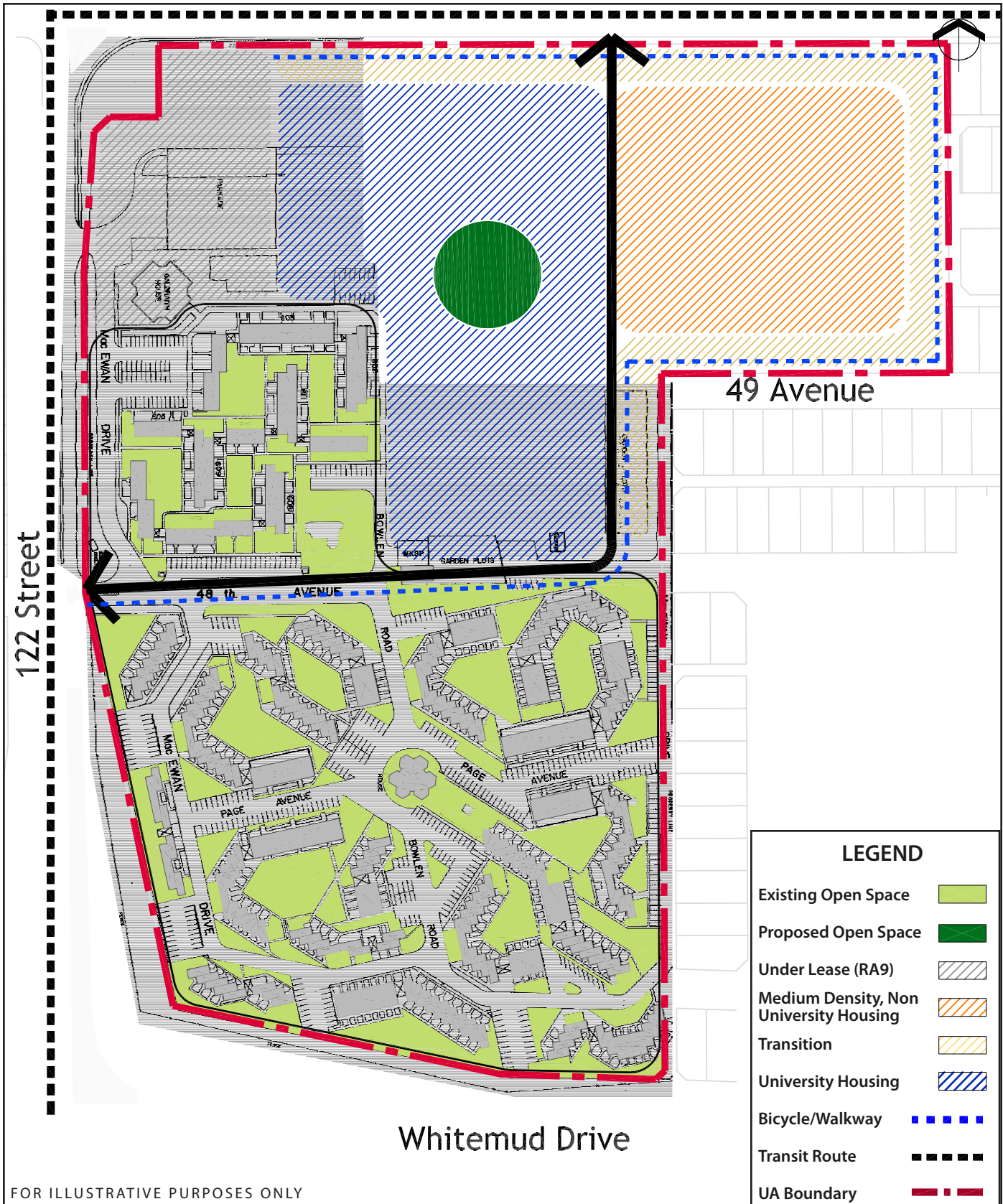
6.2.3.5 Community Linkages

This site will be linked to community pedestrian and bicycle systems on its periphery only. Access to the Research Station will be restricted to authorized personnel for bio-security reasons and perimeter fencing and gates will be installed.

6.2.3.6 Utilities

Development of Research Station lands will access municipal services that are found adjacent to the site.

On-site storm water management is required and will be developed as warranted.



6.3 MICHENER PARK

Michener Park will continue into the future as a major family student-housing site for the University and as a contributor to the vitality of its surrounding communities.

6.3.1 LAND USE PATTERN

The site concept recognizes four development zones at Michener Park.

The existing student housing zone in Michener Park may be subject to improvement and redevelopment if studies show this is warranted. The general density and location of housing will be maintained.

As the Tennis Centre moves to South Campus, the vacated lands will be reserved as a zone for future student housing and student support uses such as day care, community centre and others.

Lands east of the current Tennis Centre, if they are in excess of University needs, may be considered for interim development that could include special needs housing for seniors, lifestyle housing or commercial development.

Development will occur at a scale that is compatible with surrounding uses. Transition techniques and criteria will be identified at the sector plan level including building setbacks, berms, connecting walkways and others.

The site of the existing Galbraith House is a fourth zone. These lands are held by private operators under long-term leases and may be redeveloped in accordance with those leases. Development provisions follow the RA9 zoning category in the City of Edmonton Zoning Bylaw.

6.3.2 OPEN SPACE

The existing student residence has structured green space that will be maintained in similar balance in the future. Students and their families use this space for active and passive recreation activities.

This concept will be maintained for the remaining zones in Michener Park.

A transition zone will be created between Michener Park and the adjacent Malmö residential community. Pedestrian and bike paths should be considered in this transition zone.

6.3.3 TRANSPORTATION

Automobile access to Michener Park will continue from 51 Avenue and 122 Street.

An internal continuous loop road should be developed to provide access between the student residence zones for residents, service vehicles and emergency vehicles. It should accommodate pedestrian and bicycle movements.

Transit service should not penetrate the site but be limited to 122 Street and 51 Avenue.

6.3.4 PARKING

Parking for Michener Park should be accommodated on site through a combination of surface and structured parking facilities.

6.3.5 COMMUNITY LINKAGES

Michener Park should be linked to community pedestrian and bicycle systems and therefore to the regional systems as well, e.g., to the river valley system.

Pedestrian and bicycle linkages will be available to the academic and research lands and North Campus.

6.3.6 GATEWAY

A gateway will not be necessary at this site. Entry signs and site signage and mapping should be provided to assist in orientation through the residential development.

6.3.7 UTILITIES

Service connections to accommodate development are available in adjacent streets.

6.4 FACULTÉ SAINT-JEAN

This campus has become physically, socially and culturally integrated with its surrounding community and will continue to be so over the life of the LRDP.

Facilities on this campus will continue to provide a broad spectrum of support for academic and research initiatives and campus life including student residences and recreational opportunities.

6.4.1 LAND USE PATTERN

Development to accommodate growth will follow the pattern established on site. Residential development will occur along the south boundary. Research and teaching space will occur along the north and west of the existing teaching facility.

Future growth will occur in a manner consistent with existing development: it will be low in scale; attached to the existing buildings; of a compatible architectural style; and integrating available green space.

6.4.2 OPEN SPACE

Existing open space will be maintained. The concept of the internal quad will be strengthened with future development.

The recreation and athletic fields will be maintained as required to meet the needs of students on site and of the University as a whole.

6.4.3 HERITAGE

The heritage elements of the Faculté will be preserved. New development will be undertaken in a complementary architectural style.

6.4.4 TRANSPORTATION

Automobile access to Faculté Saint-Jean will be from 91 Street, 84 Avenue and 86 Avenue.

Public transit service to the Faculté will be provided from 91 Street.

Except for service vehicles and emergency vehicles, automobile access will be restricted to the periphery of the campus.

6.4.5 PARKING

Off-street parking will be developed off 86 Avenue.

6.4.6 COMMUNITY LINKAGES

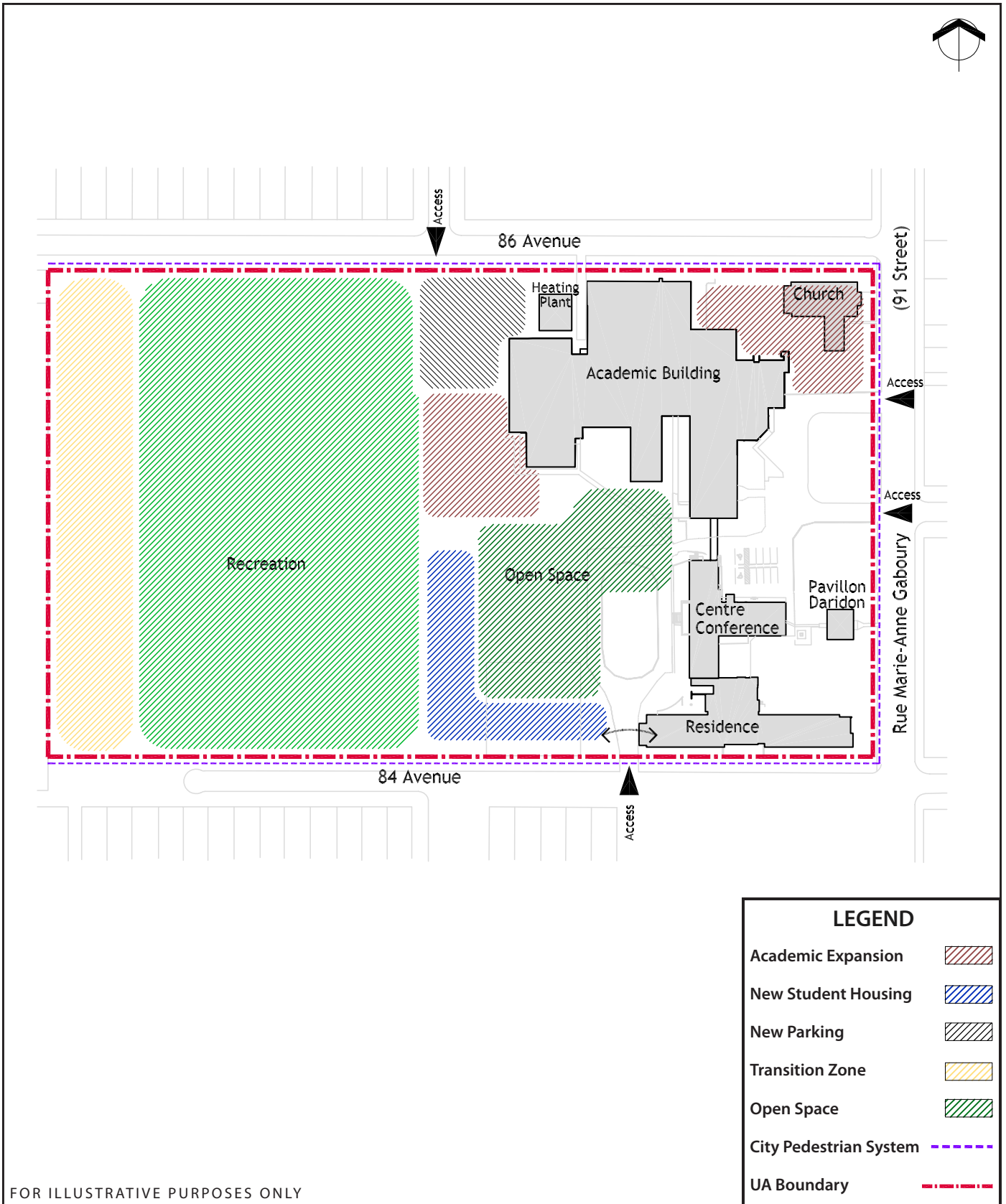
Faculté Saint-Jean will be linked to community pedestrian and bicycle systems and therefore to the regional systems as well.

6.4.7 GATEWAY

This campus has developed a strong gateway feature that will be maintained.

6.4.8 UTILITIES

Service connections to accommodate development are available in adjacent streets.



7.0 LONG RANGE DEVELOPMENT PLAN ELEMENTS, INITIATIVES & GUIDELINES

The Concept Plans for each campus (see Section 6) reflect the Strategic Planning Principles (see Section 5). Within each illustrative Concept Plan are physical systems and elements that require supervision and management. This Section offers system-specific initiatives and guidelines appropriate to those systems. These are applicable to all campus sites.

7.1 TRANSPORTATION - VEHICLES & TRANSIT

All campuses of the University are accessible by automobile and transit. As most students will not live on campus and they will, therefore, commute. It is important that the University work with the City to optimize opportunities of access for students, faculty, staff and visitors.

7.1.1 - TRAVEL DEMAND MANAGEMENT

Travel Demand Management (TDM) initiatives should be developed and implemented to reduce automobile traffic generated by the University and thereby to improve access.

Initiatives: The University should work with the City to develop a Travel Demand Management Plan in order to:

1. Encourage transit usage by promoting LRT, by promoting improved bus transit services in corridors serving the University, and by providing park-and-ride facilities at South Campus;
2. Encourage more efficient car passenger usage by developing and promoting a car pool programme (this could include ride-matching information, parking charge relief and more convenient parking for car poolers);
3. Discourage single-occupant vehicle travel by controlling development of parking in balance with need, and by raising parking rates;
4. Encourage walk/bicycle modes and support improvements to streets surrounding the campus sites that better accommodate pedestrians, cyclists and transit;
5. Develop student housing on campus as planned and thereby reduce travel demand.

Guidelines: In conjunction with the City, the University should establish targets to reduce traffic and thereby increase accessibility to the University. Suggested targets over the life of the LRDP include:

- a 20% reduction in single-occupant vehicle trips to the University;
- a 10% increase in transit use for trips to the University;
- a 10% participation rate in car pooling.

7.1.2 - TRANSIT ROUTING & TRANSPORTATION PLANNING

The University should work with the City to plan transit routing and to assist in long-term transportation planning in a mutually-beneficial manner.

Initiatives: The University should provide information for the trip origins of student, staff and faculty, on a regular basis, to City transit planners to assist them in determining the viability of new transit routes.

The City and University should devise strategies on increasing transit use; these could include special fares, transit shelters and promotions such as a “no fares zone” between the North and South campus sites.

The University should provide the City with enrolment projections and capital plan information so the City can keep their transportation system planning models current.

The University and City should co-operate on transportation planning matters in the vicinity of each campus site.

Guidelines: Information should be exchanged annually.

7.1.3 - 114 STREET CORRIDOR

The 114 Street corridor should be planned as a major connector between North and South Campus for pedestrians, bicycles, transit and vehicles.

Initiatives: The University should initiate discussions with the City and neighbouring communities to establish 114 Street as a “University Boulevard” by way of Statutory Plan. The Statutory Plan would detail the types of transportation systems to be accommodated, any related urban design upgrades, and other details.

Guidelines: The “University Boulevard” concept should be developed and implemented in conjunction with South Campus development and the extension of the LRT.

7.1.4 - ACCESS ON PERIPHERAL ROADS

Private vehicle access should be restricted to roads at the periphery of campus sites and to parking lots at all sites except the Partner lands and Michener Park. Service traffic, emergency vehicles, special-needs travel and public transit will be permitted on the interior of sites.

Initiatives: Peripheral roads will be clearly marked for through traffic.

Service roads will be clearly marked.

Parking opportunities will be provided at points where roads penetrate the campus sites.

Guidelines: None apply.

7.2 PARKING

The University is commuter-oriented and will continue to be so. It has been the practice of the University to provide parking for its faculty, staff, students and visitors that is affordable, reasonably close to their destination and safe and secure.

The need to accommodate growth, particularly on North Campus, will result in the loss of surface parking lots. Parking facilities will be built to accommodate growth and to replace parking lost to development.

7.2.1 - ON-SITE PARKING

On-site parking should be provided at all campus sites.

Initiatives: The University should review, on a regular basis, its demand for parking against its supply.

By means of such reviews, the University should implement the appropriate measures, for instance, changing TDM targets, constructing new parking facilities (temporary or permanent), redesignating lot usage as per demand (staff, student, visitor), acquiring additional parking capacity or adjusting parking rates.

Park-and-ride facilities on other campus sites should be considered in order to supplement any parking shortfalls, e.g. parking at South Campus LRT station for North Campus demand.

Guidelines: The overall parking guideline of the University should be maintained at a ratio of one stall per four students (this includes all non-resident parking and visitors). Parking distribution may vary by campus site.

Each proposed development should identify in its plan the means to accommodate its necessary parking complement. This could include parking as part of the development or funding to develop/expand other University parking.

7.2.2 – PARKING ON PERIPHERY

Parking should be provided on the periphery of campus sites.

Initiatives: The University should limit internal parking sites to those requiring Universal Access, or to those requiring short-term (less than two hours) convenience at locations such as libraries.

Guidelines: Parking facilities in excess of 15 stalls should be located on the periphery of each campus site except on the Partner lands and Michener Park where all parking will be accommodated within the individual development sites.

Convenience parking should be clearly identified and metered.

7.2.3 - AT-GRADE & SURFACE

Parking facilities should be at-grade unless land is unavailable to accommodate surface parking, in which case structured parking should be developed.

Guidelines: Surface parking lots should be replaced with structured parking as surface lots are redeveloped on North Campus.

Surface parking should be developed on South Campus, Michener Park and Faculté Saint-Jean.

7.2.4 - AESTHETICALLY DESIGNED PARKING FACILITIES

Parking facility design should be aesthetically compatible with its adjacent surroundings.

Initiative: Sector plans should identify development criteria for parking facilities.

Guidelines: To be determined by the sector plans.

7.2.5 - UNIVERSAL ACCESS, SAFETY & SECURITY

Parking should be designed to accommodate Universal Access requirements and designed with concern for safety and security issues.

Initiatives: The University should require provisions of Universal Access guidelines be applied in parking facility design.

The University should develop safety and security guidelines for parkade design.

Guidelines: Universal Access guidelines should be made available to designers.

The Association of Crime Prevention Through Environmental Design (CPTED) and the City of Edmonton have guidelines available as models for a University parking design guideline to achieve safety and security.

7.3 BICYCLE ACCESS & CIRCULATION

The City of Edmonton maintains a comprehensive plan for bicycle routes that includes the campus sites of the University of Alberta. The Long Range Development Plan recognizes the importance of accommodating bicycles as a viable means of traveling to and from the University and as a mode for intra-campus circulation.

7.3.1 - BICYCLE CONNECTIONS TO CITY NETWORK

The University should develop bicycle access points that connect to the City network.

Initiative: The University and City should co-ordinate planning activities for bicycle-ways in conjunction with the TDM planning activities.

Guidelines: Where University and City bike paths meet, an appropriate transition of path dimensions and path materials should occur.

7.3.2 - BICYCLES AS AN ACCEPTABLE TRANSPORTATION MODE

Bicycles should be recognized as an acceptable transportation mode to and on campus.

Initiative: North and South Campus should develop an on-campus hierarchy of bike paths, which will include:

- collector routes that serve as major cross-campus bicycle routes;
- local, low-speed and low-volume multi-use paths shared by pedestrians, skaters and others.

Guidelines: Collector routes should be signed as multi-use routes and have minimum widths based on their anticipated volume.

Local routes will be sized to accommodate anticipated volumes.

7.3.3 - BICYCLE PARKING

Bicycle parking should be provided at all campus buildings.

Initiative: Bicycle parking sites should be identified and constructed as part of all new developments and all redevelopment.

Guidelines: Bicycle parking should be provided on a basis of 75 per 1,000 students. Bicycle parking provided should be expanded beyond this ratio if warranted by demand or to achieve the TDM objectives.

7.4 PEDESTRIAN ACCESS & CIRCULATION

The overwhelming majority of travel movements on campus are by pedestrians. Pedestrian access to and on campus should be accommodated in a safe and attractive manner.

7.4.1 - SAFE, ATTRACTIVE & WEATHER-PROTECTED PEDESTRIAN MOVEMENT

Pedestrian movements on campus should be safe, attractive and protected from the weather to the extent practical.

Initiatives: Above-grade pedestrian connections or sheltered arcades between buildings should be considered in all development projects.

Future buildings should be planned and designed to allow pedestrians to pass through them, wherever practicable.

Landscape should be designed to protect walkways from strong winds and inclement weather.

Grade-separated (above-grade) pedestrian crossings should be reviewed for consideration over 114 Street and 87 Avenue.

“Safe walk” routes should be identified as preferred after-dark routes.

Activities and social spaces should be accommodated along walkways as pedestrian amenities.

Guidelines: For reasons of safety, walks should be well-lit. They should not be obscured with poorly-designed landscaping.

Well placed, visible, emergency phones should be provided.

Distances between buildings should be minimized and wind-sheltered to the extent practical.

7.4.2 - EFFICIENT PEDESTRIAN NETWORK

The University requires a network of efficient, direct, pedestrian connections between groupings of buildings accommodating academic, research, support and complementary uses at each site.

Initiatives: A hierarchy of pedestrian walkways should be developed as follows:

- primary pedestrian spines that direct pedestrians across campus;

- secondary collector campus walkways between major facilities such as LRT stations, transit terminals and parking lots that will direct pedestrians to pedestrian spines;
- local walkways for pedestrian movements between buildings and campus sites.

Guidelines: A way-finding system should be developed to improve pedestrian circulation.

Universal Access guidelines should be applied to develop and to redevelop walkways.

Signage, mapping and urban design techniques should be used to distinguish walkways and to direct movements.

7.4.3 - LINKAGES TO CITY SYSTEMS

Major pedestrian systems on campus should be linked to City pedestrian systems.

Initiatives: Development information should be exchanged between the City and University to enable co-ordination of pedestrian systems including the controlled crossings of City streets.

Guidelines: All controlled-crossings should be developed following Universal Access guidelines.

7.5 LAND USE PATTERNS

All land under the Long Range Development Plan is to be used for the ultimate benefit of the University in accordance with its scholarly mission.

7.5.1 - EFFICIENT DEVELOPMENT

The University should be efficient in developing and in using its lands.

Initiatives: In the built environment, undeveloped spaces and under-utilized spaces between existing buildings should be evaluated as sites for new academic, research and support facilities and as open activity space.

In the built environment and under-utilized buildings should be evaluated as sites for new academic, research and support facilities and as open activity space.

In unbuilt environments generally, developments that are compact in their use of land and infrastructure should be encouraged, including those that have land-extensive requirements.

Development proposals should be comprehensively planned.

Guidelines: Density on North Campus should not exceed 1.5 FAR.

Density on all sectors of South Campus should not exceed 1.0 FAR.

Density on Michener Park should not exceed 1.3 FAR.

Density at Faculté Saint-Jean should not exceed 1.0 FAR.

Development proposals should describe all components of the project including site size, building characteristics, staff student/faculty numbers, parking provisions, and others. Proposals should also identify how the proposal fits within the LRDP and sector plan and how it will link to surrounding systems and networks.

7.5.2 - ORDERLY & CONTIGUOUS GROWTH

Growth should occur on each campus site in an orderly and contiguous manner.

Initiatives: Development of the North Campus lands should follow the incremental extension of utility corridors.

In the academic sector of South Campus, development should occur incrementally westward from the proposed LRT station, southward from Foote Field, and incrementally eastward from 122 Street.

In the Partner lands, development should occur incrementally westward from 122 Street where municipal services are available.

In Michener Park, development should proceed from 51 Avenue where municipal services are available.

In the University Research Station, development should occur in response to funded research initiatives relative to the land available.

Guidelines: Development sequencing should be strongly influenced by the cost of servicing the development site and the ability to use the services effectively and efficiently.

7.5.3 - PRESERVE SIGNIFICANT NATURAL AREAS

Significant natural areas on University lands should be preserved where practical.

Initiatives: A study of natural sites should be undertaken to determine their viability in light of future development. If they are determined to be significant and sustainable, guidelines for development adjacent to the site should be prepared and administered.

Guidelines: Standard industry practices should be followed.

Preservation guidelines should be identified in sector plans.

7.5.4 - IMPROVE HUMAN & NATURAL ENVIRONMENTS

Physical development should improve human and natural environments on campus.

Initiatives: Environmental studies should be applied when required to assess environmental impacts of development. Such studies will include wind, sun, snow and light pollution studies and any others thought necessary.

Development should provide mitigative solutions to micro-climatic problems.

Development guidelines should be prepared for each sector plan that identify:

- aesthetics, and urban design;
- built form, height and landscape parameters;
- daylight and sun exposure;
- views and vistas;
- sensitivity to natural habitat;
- lighting of buildings, sites and streets in terms of aesthetics, security and environmental enhancement.

Designers should prepare a report that addresses these identified guidelines to the satisfaction of the University.

Guidelines: Standard industry practices should be followed for the environmental studies.

7.5.5 - ACCOMMODATING SECTORS

The concept of preserving and creating Faculty-specific and research sectors should be accommodated to the extent practical.

Initiatives: Sector plans should be prepared for North Campus, to identify potential development sites and development guidelines that will address Faculty expansion and preserve sectors. Elements of relevant existing plans (including the 89 Avenue Plan, the East Garneau Plan and the Engineering sector open space plan) should be incorporated or support the sector plans.

Sector plans for South Campus should be prepared as candidates locating at South Campus are identified. The Physical Education and Recreation zone should be preserved through a sector plan. University Research Station development should be formalized through a sector plan. The Partner lands should have a sector

plan in place to guide development and for use in marketing these lands to existing and potential University research partners.

A sector plan for Michener Park should be prepared to guide the development of vacating and vacant lands.

A sector plan for Faculté Saint-Jean should be prepared based on an update of the existing Master Plan for the campus.

Guidelines: Sector plans guidelines should include:

- capacity of the sector for additional development;
- potential development sites;
- acceptable uses;
- open space elements;
- transportation system linkages including pedestrian, bicycle, transit, external and internal roads;
- urban design;
- way-finding;
- building heights, massing, setbacks and other development considerations;
- transition provisions.

7.5.6 - STUDENT HOUSING

Student housing should be accommodated at each site and serve the broad spectrum of demands of the University community.

Initiatives: On North Campus, student housing should be provided in the vicinity of Lister Hall and in East Garneau. In East Garneau, opportunities to integrate housing sites with academic/research sites should be encouraged.

On South Campus, student housing sites should be integrated with academic/research sites along a “Main Street”.

Michener Park should hold a portion of land in reserve for additional student family housing.

Future student housing at Faculté Saint-Jean should be connected to existing development.

Related support space should be developed in conjunction with student housing including retail and service uses, parking, recreation, student life, leisure, food services and usable open space.

Guidelines: The University should provide student housing for a minimum of 15 percent of its students.

Housing should be developed with street relationships. This creates a positive level of activity at-grade and encourages public supervision of public space.

Related support space should be planned with each residential development.

7.5.7 - RETAIL & COMMERCIAL SERVICES & FACILITIES

Retail and commercial services and facilities should be accommodated to serve students, faculty and staff at each campus site.

Initiatives: In view of access problems and limitation on space on North Campus, retail and commercial services should be directed to existing retail cores at SUB, HUB and on the campus periphery.

On South Campus, retail should be directed to Main Street, proximate to the LRT station and along 122 Street.

At Michener Park, retail should be considered along 51 Avenue.

Guidelines: Retail uses should be accommodated that serve the convenience needs of the University and its surrounding neighbours.

Development should be complementary with its surroundings.

7.5.8 - UNIVERSITY SUPPORT SERVICES

Student, staff, faculty and University central support services should be accommodated at each campus site.

Initiatives: Development zones for each campus should have the capability to accommodate the necessary support services required for the future.

Student, faculty and staff services should be encouraged to locate centrally at each campus and to be integrated with academic research and student housing sites.

University services, including uses such as Materials Management, Vehicle Pool and Shops may be relocated over time to a University Service Zone on South Campus.

Guidelines: Services should be planned and developed in line with demand and cost considerations.

7.5.9 - RECREATION FACILITIES & FIELDS

Students, faculty and staff should have access to recreation facilities and fields at North, South and Faculté Saint-Jean campus sites.

Initiatives: The University should retain an inventory of recreation fields and facilities that provide a range of opportunities to maintain and improve physical health.

Fields and facilities should be developed at each campus, thereby maximizing access by students.

Facilities should range from local facilities associated with a student residence to University-level facilities such as Foote Field.

Each new facility should include a recreational component as part of its plan. This could take the form of an internal activity area, an outside recreation space or a contribution to a sector recreation development.

In planning and developing recreational facilities, the needs of the surrounding community should be considered. The University should continue its policies of program and facilities accessibility.

Guidelines: A bench-marking study should be undertaken with the Faculty of Physical Education and Recreation that establishes guidelines for the provision of recreation facilities. These guidelines should be used to plan and develop long-term campus recreation requirements.

Recreation fields should be provided on the basis of 0.4 hectares per 1,000 students.

7.5.10 - RESEARCH PARTNERS

Research partners will be accommodated on Partner lands and within certain parameters at the University Research Station. A research partner is defined as an independent firm, or research transition firm, or joint venture with an outside agency, or a joint venture among Faculties with a close affinity to University research and development.

Initiatives: Lands should be developed as required to accommodate research partners.

Lands will be retained within University ownership and management.

A research transition facility should be developed on the Partner lands to replace the current North Campus facility that will be redeveloped for other uses.

Guidelines: Urban design and development guidelines should be prepared as part of the detailed sector planning of the Partner lands. The guidelines should address such criteria as:

- architectural theme;
- height and massing;
- siting;
- building materials;
- landscape requirements;
- permitted uses;
- parking requirements;
- signage;
- building setbacks, yards and other related regulations.

7.5.11 - INTERIM USES

Interim land uses should be permitted to occur on lands that are not as yet required for their long-term use.

Initiatives: Lands that can benefit the University through interim development should be allowed to do so if the terms of the interim use are defined and accepted by the University and the interim user. The interim use must be compatible with existing adjacent uses.

Research facilities currently on South Campus and located in the academic/research sector will continue to operate in their location until these lands are required for development. As these lands are required, these research facilities (assuming continuing activity) will be consolidated to the University Research Station.

Guidelines: Guidelines for interim uses should be developed on a case-by-case basis.

7.6 FACILITIES & BUILT FORM

The architectural quality of buildings on campus is often used as a measure of campus aesthetics, interest, pride, vitality and the livability of campus as a whole.

The functionality of buildings is as important as architectural quality.

7.6.1 - SPACE UTILIZATION

The University should continue to improve overall space utilization and space efficiency while decreasing deferred maintenance costs.

Initiatives: The University should focus on rationalizing its space needs to make more efficient use of existing space.

Built space that is not functional, obsolete or too costly to be renovated and operated should be deleted from the University's inventory after a thorough analysis of its capability to meet the University's needs.

Funds for maintenance and redevelopment of facilities should be derived, reserved and allocated through existing University structures and processes.

Guidelines: The University should develop and implement criteria to measure how effectively and efficiently space is being used. Operating cost criteria should be developed to evaluate building operating efficiency.

The University should prepare and follow guidelines for maintenance, redevelopment and development of its facilities.

7.6.2 - DEVELOPMENT COMPATIBILITY & SECTOR PLANS

Design and development of facilities should be carried out in ways that are compatible with the immediate surroundings.

Initiatives: Sector plans should be used as guidelines for development. The sector plans should be derived from the background documentation of the Long Range Development Plan.

Guidelines: Sector plans should provide guidance to future development and redevelopment regarding:

- available development sites;
- development guidelines including height, massing, site coverage, setback and other related criteria that outline the historic, physical, academic, social and culture character of the sector;
- pedestrian and bicycle system considerations;
- open space considerations;
- land use compatibility, adjacency and transition issues.

7.6.3 - HIGH QUALITY ARCHITECTURE & URBAN DESIGN

The University should promote and expect a high quality of architecture and urban design on all its campus sites.

Initiatives: Development and redevelopment design proposals should be carried out in the context and provisions of campus sector plans.

Design proposals should identify clearly the benefits of the design with respect to improving the livability and architectural character of the sector and on the campus generally.

Design proposals should include a usable and attractive open space element that contributes to the quality of the development.

Development and redevelopment should address issues and solutions for sustainable design.

Guidelines: As defined in the sector plans.

Design proposals should include the development's positive relationship to existing development and open spaces in terms of scale, proportion and materials.

7.6.4 - IMPROVE HUMAN & NATURAL ENVIRONMENT

Physical development should improve human and natural environments on campus. (Complementary to Policy 7.5.4)

Initiatives: Environmental studies should be applied when required to assess environmental impacts of building development including wind, sun, snow and light pollution studies and others determined to be necessary.

Guidelines: Standard industry practices should be followed.

Development should provide solutions to micro-climatic problems.

7.6.5 - ARCHITECTURAL EXPRESSIONS

Architectural expression and quality in the design of new facilities should be encouraged within the parameters of on-campus architectural compatibility, sustainability criteria, capital and operating cost criteria and functionality.

Initiatives: The University should develop campus building design guidelines, that may include:

- types of materials and building systems that should be considered based on life-cycle costing and sustainability;
- building performance targets for operating costs;
- common campus urban design elements that may be reflected in the development.

Guidelines: Guidelines should be developed by the University and be updated periodically.

7.7 HERITAGE BUILDINGS & SITES

Historic buildings, sites and landscapes are elements that evoke the memories of place and community for students, faculty and staff and for the citizenry as a whole. The University has a number of historically and architecturally significant sites that are worthy of preservation.

7.7.1 - IDENTIFY, CONSERVE, PRESERVE HERITAGE SITES

The University should identify, conserve and preserve heritage sites.

Initiatives: The University should develop criteria to assess and establish heritage buildings and sites.

A heritage preservation plan should be developed with the necessary capital budget to implement the plan.

The Heritage Walk should be integrated with the pedestrian system and be used to guide new students, alumni and visitors on a tour of the University's heritage as identified through facilities and landscapes.

Guidelines: The University should develop heritage assessment guidelines.

An interpretive plan for the Heritage Walk and sites should be developed including messaging, signage and urban design treatment.

7.8 OPEN SPACE & LANDSCAPE RESOURCES

Open space and green space are considered to be integral elements of livable communities such as a campus. Open space should be treated as an equal partner to built space.

The University's developed campuses have various networks of open space that serve as organizing elements, amenities and activity areas. A similar network of open space is required to guide development of South Campus lands.

7.8.1 - OPEN SPACE AS A DEVELOPMENT FOCUS

Open spaces should function as foci for campus development. They should assist in organizing the patterns of growth and redevelopment activities.

Initiatives: A hierarchical network of open spaces should be used to create development foci and a visually-appealing and connected open space system. The categories of open spaces include:

- plazas - major and minor gathering places where people meet and activities occur; these are often located at the confluence of major walkways and entrances to campus and are generally considered communal places belonging to the campus as a whole;
- quadrangles and courtyards - formal designed spaces that function as a “central park” for groupings of buildings; these are generally identified with the predominant functions in the grouping of buildings, e.g., Arts Quad;
- gardens - formal green spaces that are developed adjacent to buildings; these are characterized by formal planting and are used for passive activities;
- incidental open space - open space and green space associated with walkways, bikeways, roads, storm water management facilities; these spaces may be landscaped or naturalized;
- internal open space - formal open spaces in buildings that serve as gathering places and amenity areas in response to our harsh winter climate;
- recreation space - land set aside for formal and informal recreation and sports;
- natural areas.

Pedestrian and bicycle circulation routes should be used to link the open spaces and, thereby, to provide the connecting elements to the network. Open-space planning and design should be coordinated with the planning of the circulation system at each campus.

Natural areas should be linked to the open-space network and not left as isolated pockets.

Plazas and quadrangles should be considered as year-round open spaces that accommodate year-round activities.

Guidelines: Open spaces should be designed to accommodate a variety of functions and activities. Landscape materials appropriate to the activity should be used.

Open space should be used as an aid in way-finding on campus sites.

Maintenance costs should be a consideration in designing open areas.

The future target for open space at each campus, excluding natural areas and recreation space, should be no less than 30% of the area at each campus site.

7.8.2 - OPEN SPACE IN DEVELOPMENT PROJECTS

All new facilities being planned and designed should include, as part of their development, appropriate outdoor and/or indoor open space that improves the human and physical environment on campus.

Initiatives: Landscape/open space plans should be prepared and submitted by the facility designer with each development project.

A portion of a development site may be reserved or deferred for future use as open space as part of a larger element in the open space hierarchy.

A development project may assign funds toward creation of a larger element in the open space hierarchy in lieu of developing open space integral to the project.

Guidelines: On North Campus maximum individual site coverage by buildings should not exceed 50%.

On South Campus, Faculté Saint-Jean and Michener Park, maximum individual site coverage should not exceed 30%.

Open space opportunities and targets are identified in sector plans.

Open space planning and design should consider and respond to general climate and micro-climate conditions including orientation to the sun, prevailing winds and other conditions thought to be appropriate.

7.8.3 - PUBLIC ACCESS TO RIVER VALLEY SYSTEM

Campus development will preserve public access and vista opportunities to the river valley system.

Initiatives: Pedestrian and bicycle access will be provided and maintained to the North Saskatchewan River valley, Whitemud Creek and Mill Creek ravines.

Top of bank walks and vista points will be maintained or developed as they may connect to the City system.

Guidelines: Development will be setback from the tops-of-bank as determined by geotechnical studies.

Vista studies should be carried out to reserve sites for viewpoints or natural area plazas.

7.9 GATEWAYS & WAY-FINDING

The first physical impressions of the University are at the access points on the periphery of campus. At these gateway points, it is important to orient those arriving at the campus and to create a strong, positive impression of arrival.

Once on campus, it is important to be able to direct movements in an efficient and direct manner.

7.9.1 - CAMPUS ENTRANCES AS GATEWAY

Campus entrances should be developed as gateways to each campus site.

Initiatives: A consistent gateway design concept should be developed and implemented for each campus site. The design concepts should reflect the urban design character of each campus.

Guidelines: A gateway should:

- identify arrival/departure through visible signage;
- create an image and identity through the use of urban design elements including landscaping, lighting and campus symbolism;
- orient and provide directions through the use of static maps, automated signage or other means of conveying information to help people toward their destination.

7.9.2 - SIGNAGE & URBAN DESIGN AIDS

Signage and urban design elements should be used to support the on-campus circulation system by efficiently directing people to their destinations.

Initiatives: A consistent design and theme for campus-wide signage should be used to assist in directing people through campus.

Urban design elements such as banners, street furniture, walkway and building materials may be used to orient people on campus and assist in directing them to their destinations.

Guidelines: Directional signage may be passive or electronic and should be located at gateways, pedestrian intersections and at plazas and other gathering points.

Building signage should be of a consistent design character.

Urban design themes for sectors should be developed to assist in orientation. As an example, the use of different textures and colours of paving could signify the transition from one part of campus to another, such as from Arts to Science.

Open spaces and gathering areas should be located to assist in orientation. Providing memorable names to these areas, e.g. Celebration Plaza, Arts Quad, Heritage Walk, will aid way-finding.

7.10 INFRASTRUCTURE

The University operates an integrated energy plant for North Campus. Buildings and lands at the other campus sites operate with decentralized systems. The University obtains water, sanitary and storm water sewer services from the City of Edmonton. The University manages its own information and communication transmission system.

7.10.1 - DEVELOPMENT & INFRASTRUCTURE CAPACITY

Future development should be compatible with the physical constraints imposed by the energy plant, utility corridor system, sanitary system, storm drainage system and utilities such as water and gas.

Initiatives: The planned upgrades and expansions to the central energy plant should be implemented to allow further development on North Campus.

The deep sewer expansion for the south portion of North Campus should be undertaken to accommodate development in that area.

The underground utility tunnels should be extended incrementally into East Garneau to service new buildings as they are required.

Development of sanitary, storm water, water and other utilities at all campus sites should be staged incrementally to minimize servicing costs. Over-sizing of utilities should be considered if it is cost-effective to do so.

Consultation with the City Transportation Department should occur to secure the access opportunity to extend University communications infrastructure from North Campus to South Campus in the LRT right-of-way.

Guidelines: Development of infrastructure should comply with the relevant governing guidelines and standards.

7.10.2 - MINIMIZE UTILITY OPERATING COSTS

Utilities operating costs should be minimized.

Initiatives: The design and construction activities for building projects should consider the long-term operating requirements and costs of the building systems proposed. Value analysis and value engineering activities should be included in the design stage of every development project.

Operating protocols that include a focus on energy conservation and sustainability should continue to be developed and followed.

Energy and utilities use audits should be carried out periodically for all University facilities and improvements made as required.

All alternatives for providing service infrastructure to South Campus and opportunities to develop a central energy plant for South campus should be pursued.

Guidelines: Industry guidelines on operating guidelines and protocols exist.

7.10.3 - UTILITIES & ENVIRONMENTAL IMPACTS

Environmental impacts associated with production, acquisition and distribution of campus utilities should be minimized.

Initiatives: Upgrades to existing systems should occur as required to mitigate impacts.

New systems should be designed to minimize impacts.

Guidelines: Industry guidelines should be followed.

7.10.4 - EXPANSION COST EFFICIENCY & EFFECTIVENESS

Expansion of utilities to serve development should be carried out in an efficient and cost-effective manner.

Initiatives: Development of sanitary, storm water, water and other utilities at all campus sites should be staged incrementally to minimize servicing costs. Over-sizing of utilities should be considered if it is cost-effective to do so.

Guidelines: To be determined as part of the design stage for each development project.

7.11 ENVIRONMENTAL CONSIDERATIONS

The University lands include sites abutting the City's river valley system that are environmentally unique and being managed in accordance with the City's policies.

The broad-based research activities of the University raise concerns with nearby residents about their possible impacts on the environment.

The University is committed to sustainable development and operations of its facilities and lands.

7.11.1 - ENVIRONMENTAL BEST PRACTICES

Development of University lands should be carried out in accordance with recognized best practices including those concerning environmental matters.

Initiatives: Development of University lands should take into account the Federal and Provincial regulations related to environmental impact assessment and mitigation. The regulations of the City of Edmonton and, in particular, the provisions of the River Valley by-law should be considered.

Guidelines: Federal, Provincial and City guidelines.

7.11.2 - ENVIRONMENTAL COMPATIBILITY

Research facilities should be developed on lands that are appropriate for the research activities being carried out at the University.

Initiatives: Research facilities at all campus sites should be developed under the appropriate Federal, Provincial and industry guidelines that govern this type of research activity.

Guidelines: Federal, Provincial and industry guidelines.

7.11.3 - DEVELOPMENT & SUSTAINABILITY

Land and facilities should be developed to be sustainable and responsive to the environment.

Initiatives: Presented in Sections 7.1, 7.5, 7.6, 7.10.

Guidelines: Presented in Sections 7.1, 7.5, 7.6, 7.10.

7.12 EDGE CONDITIONS & NEIGHBOURING LANDS

With its multiple sites, the University shares its boundaries with a diverse range of neighbours.

The challenges of this situation are two-fold: first, there is a commitment by the University to community service and, therefore, a need to make the campuses accessible and part of the community context; and, secondly, there is a recognized impact on the communities associated with the University's physical and operating presence.

7.12.1 - CONSIDER PLANNING ACTIVITIES OF NEIGHBOURS

Planning to accommodate growth at the University should consider the planning activities of adjacent neighbour groups.

Initiatives: A consultation process should be continued to allow the University and adjacent neighbours to exchange planning information.

The diverse interests of the neighbours should be recognized through different types of consultation structures. For example, the interests of the Capital Health Authority are likely to be different than those of nearby residents.

Guidelines: Guidelines for consultation with neighbours are in place and should be updated periodically.

7.12.2 - DEVELOPMENT TRANSITION

Transition provisions between University projects and neighbouring land uses should be developed in general on a sector basis and in detail on an individual development basis.

Initiatives: The University should develop sector plans that identify development criteria for each sector as well as the general transition provisions between University and neighbouring land uses.

Guidelines: Relevant considerations include height and massing of development, setbacks, landscape treatment, building orientation, travel movements, types of use, functionality, and the proportion of open space in the sector.

7.13 IMPLEMENTATION, ADMINISTRATION & MONITORING THE PLAN

The Plan is a general framework to assist the Board in decision-making related to development of University lands and facilities.

The responsibility for the Long Range Development Plan should be with the President who should delegate the administration and monitoring of the Plan to the Office of the Vice-President (Facilities and Operations).

To respond effectively to changes in the academic and research strategies of the University, the LRDP may need to be amended from time to time.

7.13.1 - LRDP AS GUIDING DOCUMENT

The Board of Governors should adopt the LRDP as the guiding document for physical planning and development at the University. It should approve amendments as they are required.

Initiatives: The Office of the Vice-President (Facilities and Operations) should monitor the performance of the LRDP against the University's strategic initiatives and make recommendations for amendment as required.

The Board should receive a regular report on the performance of the LRDP and on the conformance of the LRDP to academic, research and business strategies.

Guidelines: An update report should be provided regularly.

7.13.2 – ACCESS TO LRDP

The LRDP should be accessible to all members of the University, adjacent communities, the City of Edmonton and the general public.

Initiatives: The approved LRDP should be posted on the University web site and be directed to all Deans and Directors at the University as a guiding document for planning.

City and Provincial Departments with an interest in the University's development plans should be provided with access to a current LRDP.

Guidelines: None applicable.

7.13.3 - PLANNING WITHIN LRDP FRAMEWORK

Any planning and development of land, facilities or infrastructure at the University should be carried out within the LRDP framework.

Initiatives: The proponents of development projects should, as part of their submissions, identify how their proposals comply with the LRDP. Where there is non-compliance, proposals should be modified. Over time, should consistent areas of non-compliance re-occur, the University should consider amendment of the LRDP.

The LRDP principles, concepts, initiatives and guidelines should apply at each campus site, and for all joint ventures and third-party developments.

Guidelines: The University may prepare sector plans at each campus as administrative guidelines to assist proponents in complying with the LRDP and integrating their projects with the campus. Sector plans and other administrative guidelines should not need to be approved by the Board. No project proposal should proceed beyond the planning stage if it does not comply with the LRDP.

7.13.4 - AMENDING THE PLAN

The LRDP should be regularly reviewed and updated. The amendment of the LRDP should include a consultative process.

Initiatives: A process for review and amendment should be proposed by University administration and be accepted by the Board.

Guidelines: The LRDP should be reviewed and updated every five years with an extensive review every ten years.

The nature of the amendment should determine the type and breadth of the consultative process.

7.13.5 - IMPLEMENTATION PRIORITIES & STRATEGIES

The implementation priorities and strategies of the Long Range Development Plan framework should be detailed through sector implementation plans.

Initiatives: Implementation priorities and strategies should be developed with the active participation of senior administration and key stakeholders.

Implementation priorities and strategies should be incorporated in sector plans. Sector plans are the mechanisms to direct and to manage detailed planning and development activities.

Guidelines: The general structure and content of sector plans are in Section 7.5.5.

8.0 ACKNOWLEDGEMENTS AND CONSULTATION

The preparation of the LRDP involved the enthusiastic and knowledgeable participation of many individuals who require acknowledgement for their contributions.

The consultation process was far reaching both within the University and in the external community. While we tried to be inclusive, we apologize to any group inadvertently omitted.

8.1 ACKNOWLEDGEMENTS

The LRDP was prepared by IBI Group under the direction of the LRDP Working Group, with valuable input from the LRDP Steering Committee and the Board Task Force for the LRDP.

Members of the LRDP Working Group included:

- Elizabeth Dechert, Chair and Director, CSPS
- Art Quinney, Associate Vice-President (Academic)
- Bill McBlain, Associate Vice-President (Research)
- Jim Mitchell, Associate Vice-President (Finance and Administration), Chief Facilities Officer
- Julian Martin, Chair of LRDP Steering Committee

Members of the LRDP Steering Committee included:

- Julian Martin, Chair and representative of FDC,
- Elizabeth Dechert, Director, CSPS
- Jennifer Fisk, Executive Assistant to Vice President (External Affairs)
- Mike Mahon, Deans' Council representative
- Bill McBlain, Associate Vice-President (Research)
- Ove Minsos, Board of Governors representative
- Jim Mitchell, Associate Vice-President (Finance and Administration), Chief Facilities Officer
- Lynn Penrod, APC and FDC representative
- Art Quinney, Associate Vice-President (Academic)
- Christopher Samuel, President, Students' Union
- Greg Taylor, Chairs' Council representative
- Kristina Urbanczyk, Support Staff representative
- Brad Wuetherick, President, Graduate Students' Association

Resource support to the Steering Committee included:

- Allan Mah, Director of Real Estate and Parking Services
- Craig Moore, Acting Director of Real Estate and Parking Services
- Doug Dawson, Director, Capital Programs
- Philip Stack, Director, Resource Planning

Members of the Board of Governors Task Force for the LRDP included:

- Brian Heidecker
- Ralph Young
- Dianne Storey

Technical support to the LRDP was provided by:

- Carl Betke, Director, Strategic Analysis
- David Bruch, Director, Housing and Food Services
- Agnelo daSilva, Director, Utilities
- Emily Rowan, Public Relations Associate, Office of Public Affairs
- Colleen Warren, Administrative Assistant, CSPS
- Neil Taylor, Agriculture, Forestry and Home Economics
- John Barry, Physical Education and Recreation
- Registrar's Office
- Human Resources

The IBI Group consulting team was headed by Mike Pankiw, supported by:

- Cathryn Chopko Beck, land use planning and urban design
- Gary Andrishak, land use planning and urban design
- Andy McNally, transportation planning
- Peter Moore, utilities and municipal services
- David Kraatz, facilities
- Peter Lambur, land use planning and facilities
- Leslie McWeeny, research
- Amie Lewis, graphic design and co-ordination
- Wes Hayes, graphics and research assistant

Peter Milne of RMC Resources Management Consultants (Alberta) Ltd. prepared the utilization assessment of existing facilities.

8.2 CONSULTATION

During the preparation of the LRDP, public consultation and dialogue occurred at many levels.

In order to discuss various plan concepts and plan elements, focus groups for stakeholders were organized and convened for the University and external residential communities. The University focus groups included representatives from:

- faculty
- staff
- undergraduate students
- graduate students
- Alumni.

The community focus groups included representatives from the following neighbour groups:

- Belgravia
- Bonnie Doon
- Garneau
- Grandview
- Lansdowne
- Lendrum
- Malmo
- McKernan
- Parkallen
- Tevie Miller School/Alberta School for the Deaf
- Windsor Park

A number of organizations, agencies and government departments were consulted to varying degrees ranging from information meetings to critical reviews of technical documents. These included:

- University of Alberta agricultural research partners/stakeholders
- Alberta Cancer Board
- Alberta Community Development
- Alberta Infrastructure
- Alberta Learning
- Alberta Research Council
- Canadian Blood Services
- Capital Care Group
- Capital Health Authority
- City of Edmonton Departments of Transportation, Asset Management and Public Works, and Planning and Development
- Economic Development Edmonton

Presentations were also made to the Edmonton Region Caucus, City Council and senior managers of the City of Edmonton.

