

# 4

# CAMPUS PLAN FRAMEWORKS





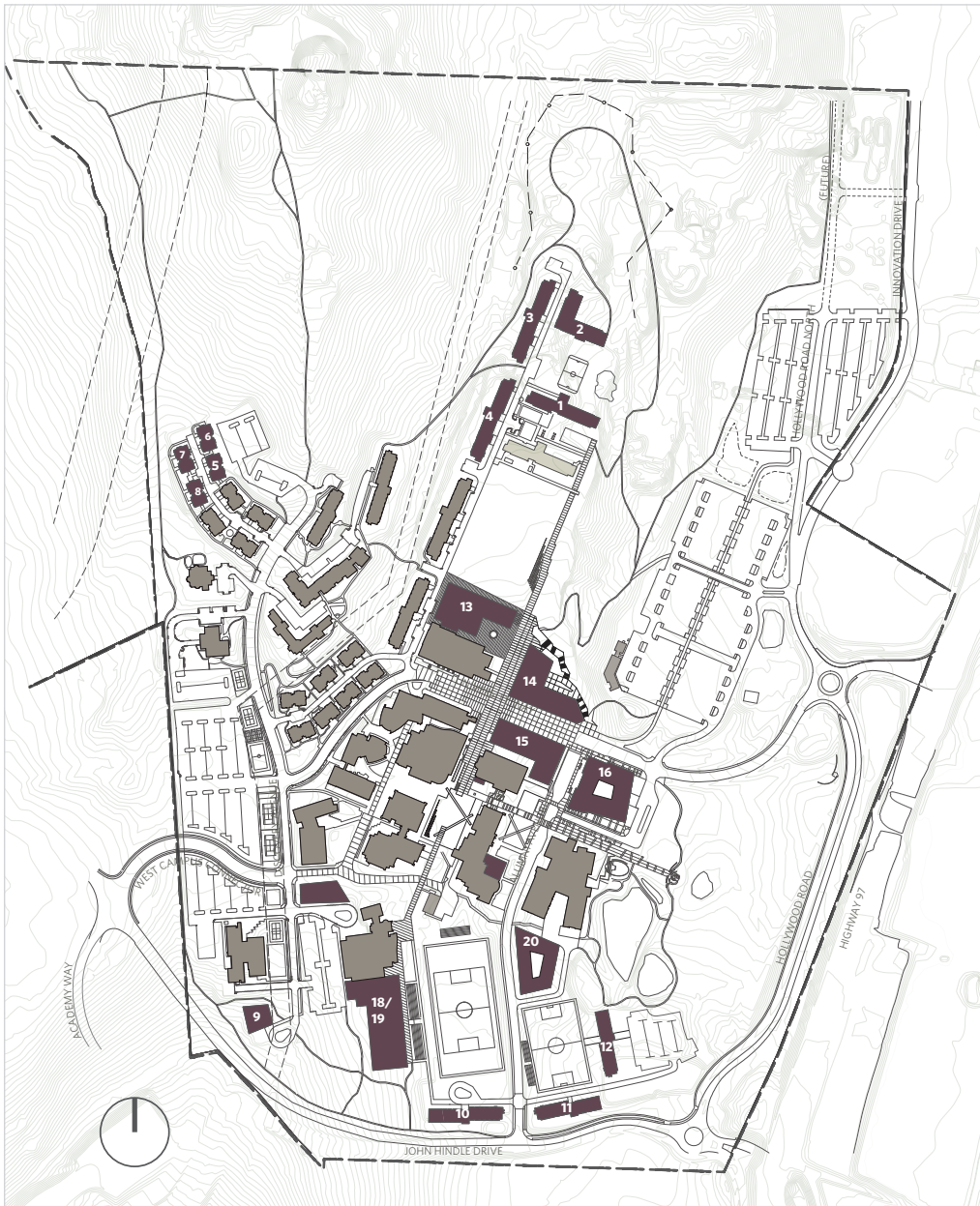
Reichwald Health Sciences Centre

## 4.1 BUILDINGS AND LAND USE

The Campus Plan identifies areas and sites to accommodate a potential doubling of academic and residential capacity over the next 20 years. Each new development provides a strategic opportunity to reinforce the Campus Vision and enhance the experiences, health and well-being of the campus population. Future academic and residential buildings will be sited and designed according to section 5, General Guidelines and *UBC Okanagan Design Guidelines*. Table 2 and the accompanying plan describe the estimated gross building area of each new future building.

TABLE 2 CAMPUS PLAN NEW BUILDING SITES

BUILDING ID	BUILDING USE	HEIGHT (# STOREYS)	GROSS FOOTPRINT (M <sup>2</sup> )	GROSS AREA (M <sup>2</sup> )
1	Residential	6	1,318	7,908
2	Residential	6	1,525	9,150
3	Residential	6	1,525	9,150
4	Residential	6	1,318	7,908
5	Residential	4	473	1,419
6	Residential	4	473	1,419
7	Residential	4	473	1,419
8	Residential	4	473	1,419
9	Residential	10	807	8,070
10	Residential	6	1,318	7,908
11	Residential	4	1,318	5,272
12	Residential	4	1,318	5,272
13	Academic	4	3,195	12,780
14	Academic	4	3,311	13,244
15	Academic	4	2,938	11,752
16	Academic	4	3,074	12,296
17	Academic	4	1,159	4,636
18/19	Academic	4	5,182	19,488
20	Academic	4	2,554	11,096
Total New Academic			21,413	85,292
Total New Residential			12,339	66,314



- 1 PURPOSE AND VISION
- 2 CAMPUS CONTEXT
- 3 PLACES
- 4 CAMPUS PLAN FRAMEWORKS
- 5 DESIGN STRATEGIES AND GUIDELINES
- 6 IMPLEMENTATION

LEGEND

- Existing Buildings
- Proposed New Building Capacity

FIGURE 19 KEY PLAN TO NEW BUILDINGS

## 4.2

### ACADEMIC RESEARCH AND PARTNERSHIPS

*The Campus Plan* recognizes the University's academic mission as paramount and accommodates growth and renewal for future teaching, learning and research facilities. As of 2015, the total academic gross area is about 72,000m<sup>2</sup>. To meet future potential need, *The Campus Plan* provides an additional 85,292m<sup>2</sup> of academic space within the campus core. To optimize flexibility and foster linkages between allied faculties and disciplines, academic building floor plates are sized to allow for a range of class and lab sizes, with good access to natural light.



Fipke Centre for Innovative Research



Residences along International Mews

Smaller research and incubation spaces should be encouraged within new buildings in the core, capitalizing on proximity to other academic uses and groups, while larger concentrations of research activity could be encouraged in the future Research/Innovation Precinct, described in more detail in section 3.11.

## 4.3 RESIDENTIAL

The provision of on-campus residences is an important part of student recruitment and in building a vibrant and sustainable campus. *The Campus Plan* provides additional capacity in a variety of housing types in the northern and southern portions of campus:

- Existing dorm-style residences along International Mews are extended northward to frame Purcell Courts, with building orientation modified to accommodate slopes and optimize solar orientation for energy efficiency.
- Three-storey townhouses are added to the existing hilltown neighbourhood.
- New student housing capacity is identified around the existing Nonis Field and around the new playfield east of Alumni Avenue to strengthen the vibrancy of this recreational hub and offer different options for student housing.
- A 10-storey residential building is located to the southwest, which could provide an opportunity for upper-year students or staff and faculty housing if needed.

The current (2015) campus provides a total of 1,676 beds; an additional 275 beds provided by Skeena, anticipated in 2016, will bring the total to 1,951 beds. *The Campus Plan* provides additional housing capacity of approximately 2,200 additional beds. Should further capacity be needed within the plan’s build-out horizon, a number of strategies should be explored to meet this demand, including:

- Redevelop the existing daycare site for residential redevelopment, when there is sufficient need for family-style housing, with an expanded child care facility.
- Develop mixed-use projects on academic building sites or as an integral part of the Research/Innovation Precinct.
- Increase the number of building storeys (subject to height limits being revised and required approvals secured from Transport Canada).
- Identify “swing” sites that could be either academic or residential depending on the need.

## 4.4 LANDSCAPES AND PUBLIC REALM

Campus open spaces are planned to provide a variety of opportunities for socialization, recreation and integration with academic life. These open spaces range from active sports fields and walking and cycling trails to intensely active streetscapes with an urban character and courtyards and open lawn with a timeless campus appeal. The unique landscape setting of campus provides an opportunity to integrate outdoor teaching and learning spaces, Campus as a Living Lab projects, knowledge walks, and interpretative landscapes to improve academic use of these areas.

- 1 PURPOSE AND VISION
- 2 CAMPUS CONTEXT
- 3 PLACES
- 4 CAMPUS PLAN FRAMEWORKS
- 5 DESIGN STRATEGIES AND GUIDELINES
- 6 IMPLEMENTATION



FIGURE 20 KEY PLAN TO LANDSCAPES AND PUBLIC REALM



Outdoor room



Seating steps

LEGEND

- Plazas and Ceremonial Spaces
- Gathering / Event Spaces
- Open Lawn and Sports



The Commons



Central Courtyard



Variety of eating options

Recognizing that the phasing of public realm development may be linked to fundraising, the goal is to integrate major adjoining landscape elements as part of each capital building project to achieve integrated design and economies of scale.

## 4.5 RECREATION

To enhance the vibrancy of the campus and promote the health and well-being of its users, *The Campus Plan* provides a range of indoor and outdoor recreational opportunities. *The Campus Plan's* stakeholder consultation identified the need for an expanded and more varied recreation focus, to support both formal athletics programming and the year-round enjoyment of informal sports and leisure activities across campus. These include:

- gymnasium expansion
- outdoor recreation activities (tennis, volleyball, badminton) along the FortisBC gas line right-of-way
- skate park, ball hockey, table tennis and Frisbee golf in the northern part of campus
- potential temporary outdoor skating rink within the redesigned Central Courtyard
- expanded walking network through pedestrianized core and expanded network of existing paths and trails

The desire for an indoor pool to be included in *The Campus Plan* was expressed through public consultation. Like other campuses of similar size, this type of facility is typically provided as a regional amenity within a reasonable distance of the university, and shared among the broader community. The campus will promote access to regional aquatic facilities, such as Kelowna Family Y's 8-lane 25-metre pool in Rutland, which is about 5 kilometres away and accessible by transit.

## 4.6 AMENITIES AND PROGRAMMING

A welcoming, safe and animated campus encourages people to linger, socialize and develop lasting relationships. To this end, amenities and services will be concentrated within the campus core, in the Central Courtyard, along University Way "Main Street," at the Transit Exchange, and in new and expanded buildings such as the Teaching and Learning Centre expansion of the Library. The intent is to create a cohesive campus core and strengthen the sense of community.

A greater variety in food services with an emphasis on independent local retailers, including cafés, a pub and a small grocer, should be provided in the ground floors of buildings along University Way. More convenience-type retail and food services would be more appropriate for buildings facing onto the Transit Exchange.

Each residential neighbourhood will be designed in response to the unique needs and preferences of residents and supported by surrounding services such as common and social spaces, collegia, strategically placed ancillary retail, bike facilities, and outdoor recreation.

- 1 PURPOSE AND VISION
- 2 CAMPUS CONTEXT
- 3 PLACES
- 4 CAMPUS PLAN FRAMEWORKS
- 5 DESIGN STRATEGIES AND GUIDELINES
- 6 IMPLEMENTATION



FIGURE 21 KEY PLAN TO AMENITIES AND PROGRAMMING



Community harvest table

LEGEND

- Walking / Cycling Trails
- Eating and Socializing
- Informal Learning and Studying
- Experiencing Nature
- Enjoying the Winter
- Entertainment
- Special Events and Celebration
- Ceremony
- Recreation

## 4.7 CIRCULATION AND TRANSPORTATION

### Road Network

The internal road network is primarily made up of University Way, Discovery Avenue and Alumni Avenue. All of these are two-way roads with one travel lane in each direction. The campus is also bordered by two municipal arterial roads—John Hindle Drive to the south and Hollywood Road North to the east.

A number of new road connections identified in the City of Kelowna's *20-Year Servicing Plan & Financing Strategy* will create different mobility patterns, to which *The Campus Plan* responds.

John Hindle Drive will be extended to provide a municipal road connection between Glenmore Road and Highway 97 through the West Campus lands. It is expected to have two travel lanes (one per direction, with future expansion capacity for two lanes in each direction), left-turn lanes at intersections, and a multi-use pathway running along the south side. Completion is expected by 2017. A new, two-lane campus access road will connect the west edge of campus to this arterial, tying in at the intersection of Discovery Avenue and Knowledge Lane. The location of this connection strategically maximizes flexibility for potential future growth of the University to the west.

The City's plan also highlights two new connections from Sexsmith Road that will improve access from the south: one via an extension of Academy Way and the other via an extension of Hollywood Road North from the south roundabout.

An existing municipal road reserve for the future extension of Hollywood Road North to Airport Way is preserved, allowing for future access through the future Research/Innovation Precinct to the north of campus and beyond. Development of this road will be coordinated with future construction of an overpass at Airport Way, anticipated to be needed by 2025.

The existing access points to campus from Highway 97 at University Way, Airport Way and the John Hindle Drive flyover are important to retain as key points of access to the campus from the north and south.

In the longer term, *The Campus Plan* also preserves an existing municipal road reserve for the future extension of Country Club Drive in the Quail Ridge neighbourhood southwards to the west boundary of the Main Campus. There is the potential to extend this municipal road further west to John Hindle Drive and the Glenmore Valley through the West Campus lands. The alignment of this road would be subject to further discussion and agreements with the City.



## Transit

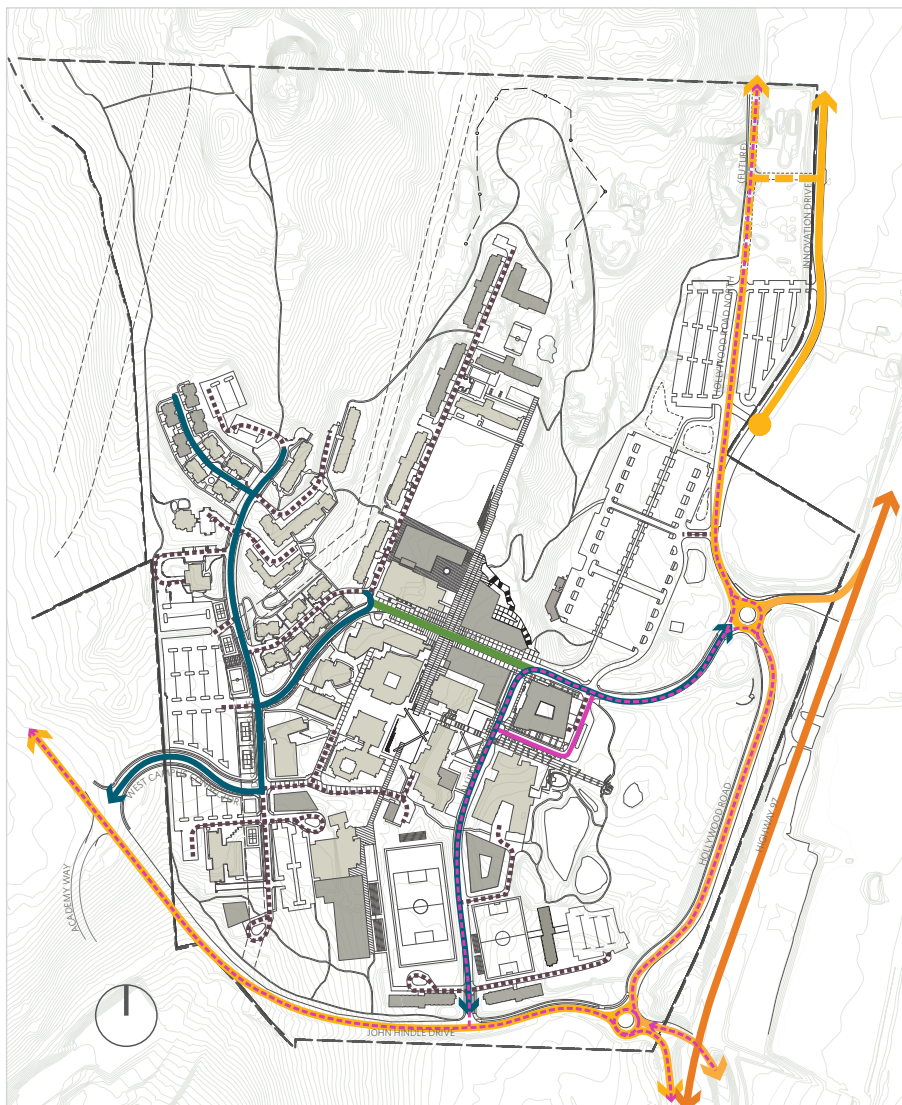
Transit will continue to access the campus from the south and east, from Alumni Avenue and University Way, respectively. With the John Hindle Drive extension, transit will be able to access the campus from the west. The proposed improvements to the Transit Exchange allow for operational flexibility by using the perimeter of the current Parking Lot E (future building site).

Over the much longer term, beyond *The Campus Plan's* 20-year time horizon, the Transit Exchange could be relocated to the western edge of the Main Campus boundary.

## Walking and Cycling

All internal campus roads are pedestrian and bike friendly with sidewalks, pathways, bike lanes, or shared use travel lanes. *The Campus Plan* provides a number of opportunities to improve access to the campus and to connect with the City of Kelowna trail network. This includes the addition of trails leading to

- 1 PURPOSE AND VISION
- 2 CAMPUS CONTEXT
- 3 PLACES
- 4 CAMPUS PLAN FRAMEWORKS
- 5 DESIGN STRATEGIES AND GUIDELINES
- 6 IMPLEMENTATION



LEGEND

- Highway 97
- City of Kelowna
- UBC Local Road
- Service / Parking Access
- Pedestrian / Bike Only
- Transit

FIGURE 22 CAMPUS ROADS

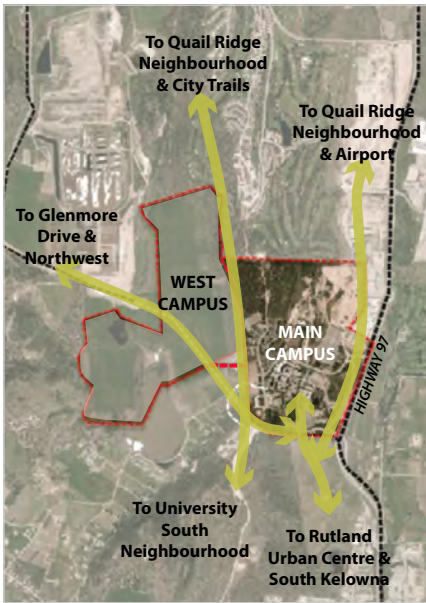


Residence bike racks

Quail Ridge, where many UBC employees and students reside. UBC will work with developments in the area and the City to move these initiatives forward.

When completed, the Highway 97 alternative bike route, the John Hindle Drive multi-use pathway, the Academy Way multi-use pathway, and Rails with Trails will significantly improve cycling access to UBC. Opportunities to provide improved cycling access to and from Academy Way and the Glenmore Valley area, such as along the GEID flume trail, will continue to be explored.

As the future cycling routes and connections to campus are completed, the cycling facilities on campus roads will be improved to meet the new travel patterns and to create a consistent and attractive network of bike facilities.



Regional Trail Connections

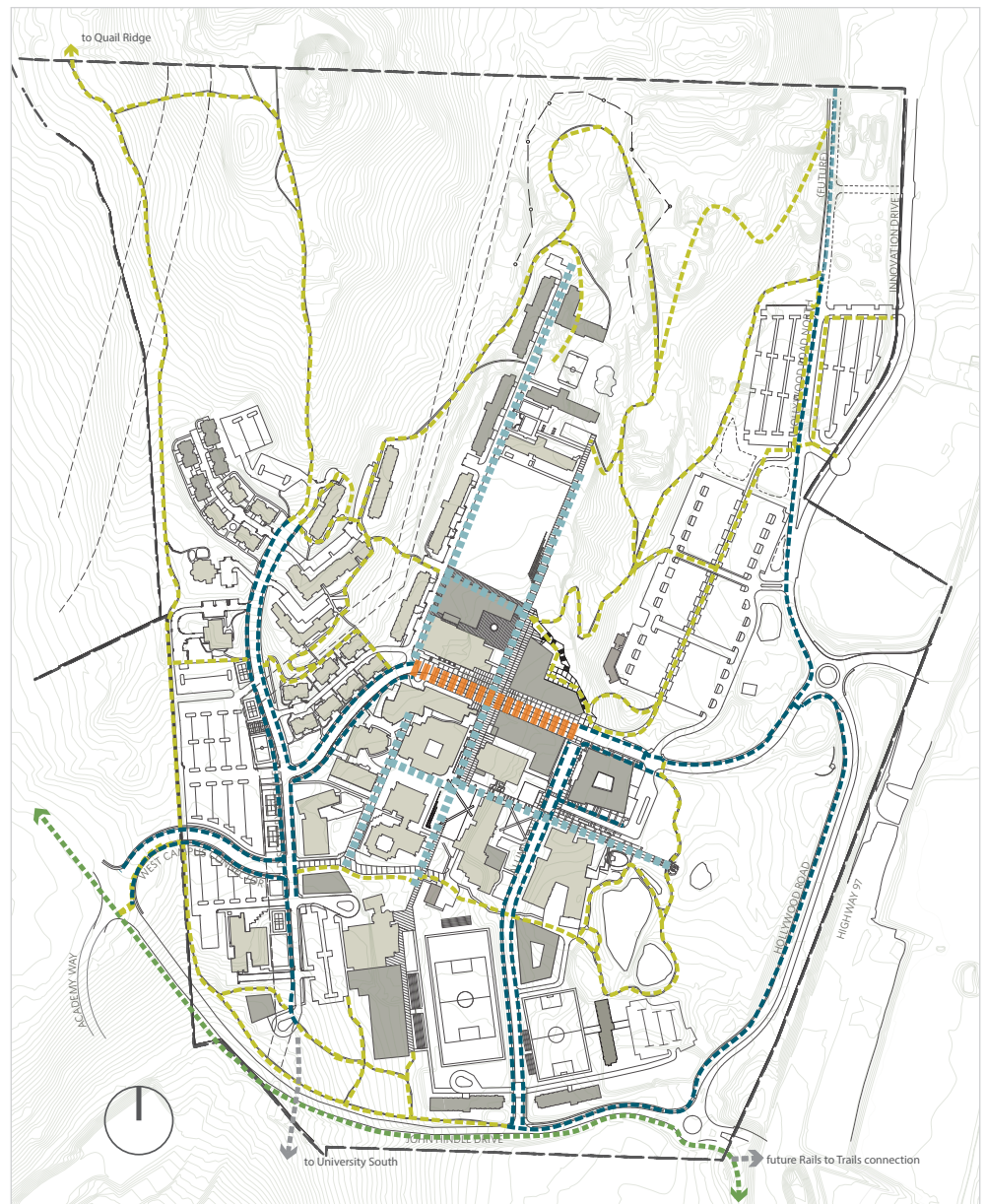


FIGURE 23 WALKING AND CYCLING

## 4.8 PARKING (SURFACE PARKING, PARKING STRUCTURES, ACCESSIBLE PARKING)

The Campus Plan deliberately locates most vehicle parking at access points and the periphery of campus to reinforce priority for pedestrians within the campus core. As of 2015, the campus accommodates approximately 2,700 parking spaces. Based on an increase in transit mode share, an addition of 1,300 spaces are needed to support campus growth over the long term. Through the development of the Transportation Plan, the University will work with regional partners to identify measures to manage parking supply in tandem with demand management and other strategies to minimize the impact of parking on the campus.

- 1 PURPOSE AND VISION
- 2 CAMPUS CONTEXT
- 3 PLACES
- 4 CAMPUS PLAN FRAMEWORKS
- 5 DESIGN STRATEGIES AND GUIDELINES
- 6 IMPLEMENTATION



FIGURE 24 PARKING

LEGEND

- Existing Surface Parking
- Proposed Surface Parking
- Future Structured Parking
- Short Term Parking / Kiss and Ride



Existing parking displaced through new building sites will be replaced with other surface lots north of Parking Lot H and east of Alumni Avenue. The development of these lots will need to reconcile existing underground utilities and geothermal infrastructure in these areas. As the campus develops, space is identified for future parking structures at the edges of the campus core, such as within the current parking lots H or K.

The extent and timing to replace surface lots and parking structures will be identified in a future Transportation Plan, which will take into account market demand, demand-side management and ongoing monitoring. This plan will also identify routes and centrally accessible parking for persons with disabilities, as well as temporary loading locations for heavy loads or equipment.

## 4.9 WHOLE SYSTEMS INFRASTRUCTURE – STORMWATER AND ECOLOGY

*The Campus Plan* supports a whole systems approach to infrastructure, which is intended to guide campus development in a manner that is responsive and resilient to current and future conditions. Grounded in an acknowledgment of the interactions and synergies among systems (water, air, ecology, waste, energy), *The Campus Plan* generally addresses two core components of the whole systems principle: ecology and stormwater. A more comprehensive blueprint and implementation framework for addressing the whole systems principle will be further realized in the companion plan, *UBC Okanagan: Whole Systems Approach to Campus Infrastructure*, to be completed subsequent to *The Campus Plan*.

Informed by the unique relationship of the campus to the surrounding landscape and ecological systems, *The Campus Plan* concentrates growth along the central bench to support walkability, preservation of natural areas, and efficient servicing. Areas of landscape adjacent to the core such as the grasslands, Ponderosa Pine Woodland, and disturbed slopes east of the Commons will be enhanced and restored to optimize ecological function and social health and well-being for campus users, consistent with the University’s Wildland Fire Management Plan. Connecting these adjacent areas are fingers of natural landscape, which penetrate the core to increase habitat connectivity, support infiltration of stormwater and offer human comfort through shade and access to nature.

Development outside the campus core with parking lots, playing fields, and other facilities will increase fragmentation of existing natural areas and compromise ecological function. Accordingly, these areas should be designed to optimize natural system health through measures such as low impact stormwater infrastructure, increased tree canopy, indigenous planting, and the creation of contiguous corridors for habitat. Larger and better connected patches of habitat are more important for biodiversity than smaller, fragmented patches.

- 1 PURPOSE AND VISION
- 2 CAMPUS CONTEXT
- 3 PLACES
- 4 CAMPUS PLAN FRAMEWORKS
- 5 DESIGN STRATEGIES AND GUIDELINES
- 6 IMPLEMENTATION

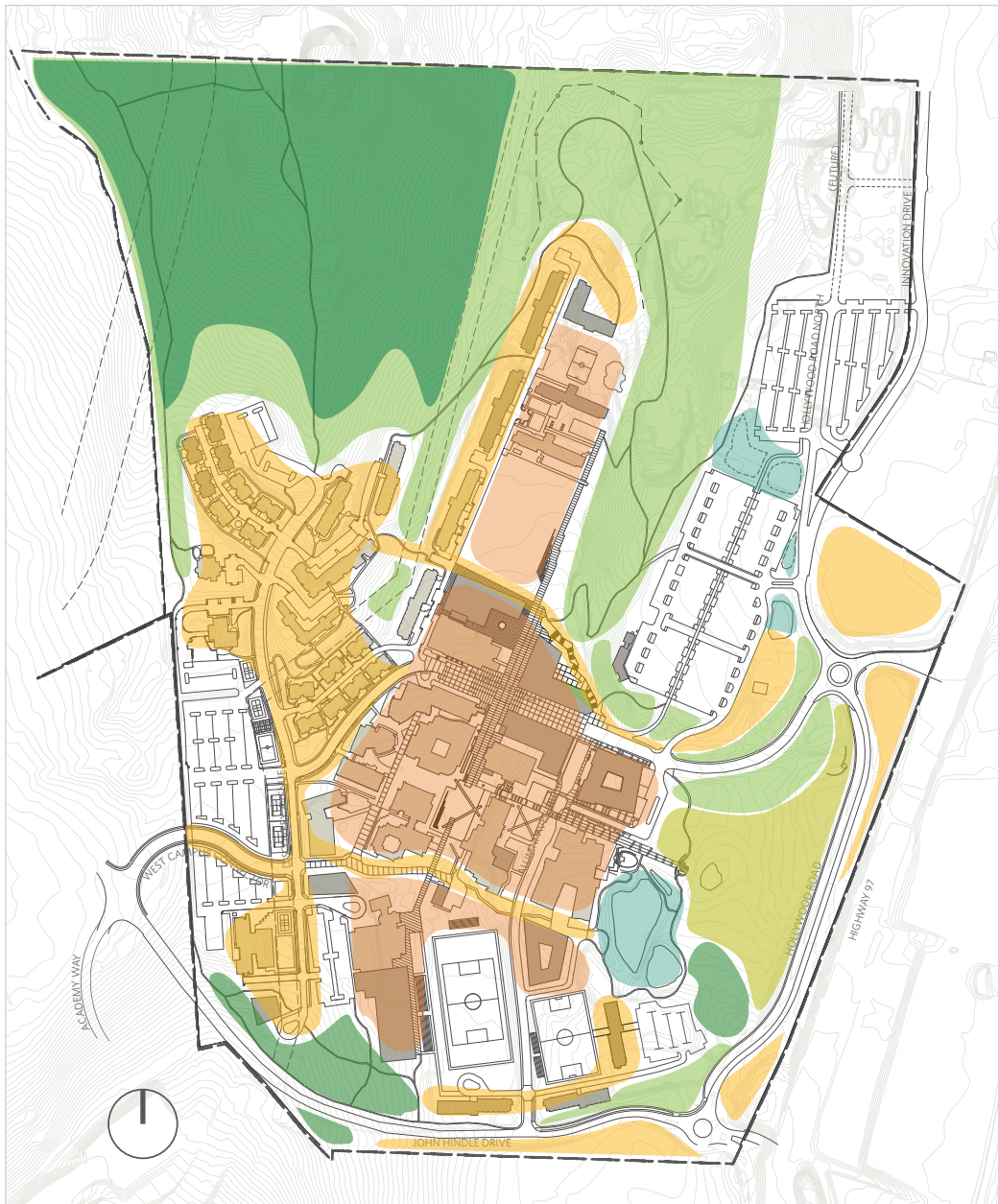


FIGURE 25 ECOLOGY

LEGEND

- Woodland Areas to Protect and Manage
- Woodland Areas to Restore and Enhance
- Okanagan Landscape to Enhance and Manage
- Opportunity for Wetland
- Okanagan Landscape Character
- Okanagan Landscape Character Blended with Manicured Landscapes