# BYLAW 3582

## University Village Local Area Plan Bylaw

WHEREAS the North Cowichan Official Community Plan envisions that Council will create local area plans to refine permitted uses, servicing requirements, development patterns and densities;

NOW THEREFORE, the Council of the Corporation of the District of North Cowichan enacts as follows:

1 ***The schedule attached to and forming part of this bylaw is hereby established as the University Village Local Area Plan.***

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READ a first time on June 3, 2015
READ a second time on June 25, 2015
READ a third time on June 25, 2015
ADOPTED on July 15, 2015

CORPORATE OFFICER

PRESIDING MEMBER

SCHEDULE

# MUNICIPALITY OF NORTH COWICHAN / CITY OF DUNCAN
# UNIVERSITY VILLAGE SUSTAINABLE LOCAL AREA PLAN

**FINAL DRAFT**
May 2015

FCM FEDERATION OF CANADIAN MUNICIPALITIES FÉDÉRATION CANADIENNE DES MUNICIPALITÉS
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BC hydro powersmart

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MUNICIPALITY OF NORTH Cowichan

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# Context & Vision

# 01 INTRODUCTION

## 1.1. What is a Local Area Plan?

A Local Area Plan is a land use planning and urban design tool that guides physical development of private and public lands and public works. The Local Area Plan takes direction from the Official Community Plan (OCP) and other supporting documents, and provides a finer level of planning and design more relevant at a community and neighbourhood scale.

Current legislation under the ***Local Government Act*** (LGA) and Community Charter does not prescribe what a LAP should contain. However, basic elements considered in this LAP include the following:

- Land use
- Land development proposals
- Urban design and built form, including scale and massing
- Public open space, community linkages and environmentally sensitive areas
- Transportation (including pedestrians and cyclists)
- Servicing, including water, sewer and stormwater
- Climate change mitigation and adaptation
- Energy conservation and renewable energy generation
- Aging population and future demographics
- New services and housing forms

## 1.2. Purpose of the LAP

The purpose of the University Village Sustainable Local Area Plan (LAP) is to provide a detailed policy framework and implementation strategy. This area has been identified as part of one of three growth centres within the Municipality of North Cowichan's (MNC's) OCP, plus the area within the City of Duncan, which is classified as medium to high residential and mixed use commercial or commercial. In addition to this, the Climate Action and Energy Plan (CAEP) for MNC recognized the opportunities to deliver energy savings and GHG reductions, through new higher density housing forms and low carbon energy and servicing solutions. The Plan, adjacent to the Duncan downtown core, includes the area between Canada Avenue and Jubilee Street, which are on the fringe of the Duncan Downtown Business Improvement Area (DBIA) and the Downtown Development Permit Area (DPA). This plan is intended to enhance and compliment Duncan planning initiatives.

The Plan is future-oriented and illustrates how the area is to be developed over a long period through a series of public and private sector initiatives. It is intended that the Plan will be developed over a 30 year time frame, although regular monitoring will take place during this period, as outlined in Section 7.

The main elements that the University Village Sustainable LAP addresses are:

- A vision for the area to guide its development and improvement
- Translation of strategic policies from the OCP to the local area level
- Establishment of a design and land use framework to achieve a vision and proposed urban structure
- Identification of key pedestrian and bike linkages through the Plan area
- Creation of a linked system of high quality public spaces, enabling a greater supply of community parks
- Provision of a clear design approach for new development, which will guide decision makers including Council and Municipal administration on Rezoning and Development Permit applications
- Provision of a basis on which development proposals will be evaluated

## 1.3. Interpretation of the Plan

Unless otherwise specified within the Plan, the boundaries and locations of any symbols or areas shown on a Figure are approximate only and shall be interpreted as such. They are not intended to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries, such as property lines and utility rights-of-way.

Unless otherwise specified within the Plan, where actual quantities or numerical standards are contained within the Figure, these quantities or standards shall be interpreted as conceptual only and will be determined at the detailed design stage.

Interpretation of policy language is addressed under Section 5.

## 1.4. Structure of the LAP

The LAP begins by demonstrating how the plan relates to existing municipal policies. Section 2 provides an analysis of the existing community conditions within University Village. This is a summary from the more detailed review provided in the separate Baseline Review document. A number of supporting maps illustrate the key issues identified during the analysis stage. Section 4 of the LAP sets out the land use objectives for the plan and provides a concept master plan for how the neighbourhood might look in 30 years' time. Section 5 of the LAP sets out objectives and policies concerning:

- Land Use
- Built Form
- Public Realm

A series of Policy Areas have been identified with specific objectives and policies. These are as follows:

- Canada Avenue Transit Oriented Development Corridor
- Cowichan Place
- James Street/York Road Urban Corridor
- Alderlea Commons
- Highway Commercial
- Low Rise Residential Neighbourhoods
- Chesterfield Area Residential Neighbourhoods
- Lands north of Beverly Street
- Somenos Marsh

Section 6 of the LAP provides a Regulating Plan, which provides the framework for implementing the vision and concept.

The policies and guidelines within the Plan are supplemented with two and three-dimensional concepts, illustrations and photographs to provide a clear visual representation of the ideas set forward in the LAP. A common understanding of the Plan will result in more effective and timely implementation.

## 1.5. Acknowledgements

The Plan has been prepared by Stantec Consulting Ltd. with input from the Municipality of North Cowichan, the City of Duncan, the LAP Stakeholder Advisory Group, external stakeholders, Ministry of Transport and Infrastructure with funding support form BC Hydro and the Federation of Canadian Municipalities (FCM).

The Municipality of North Cowichan and the City of Duncan wish to thank the community at large for their ongoing input and comments during the preparation of this Plan.



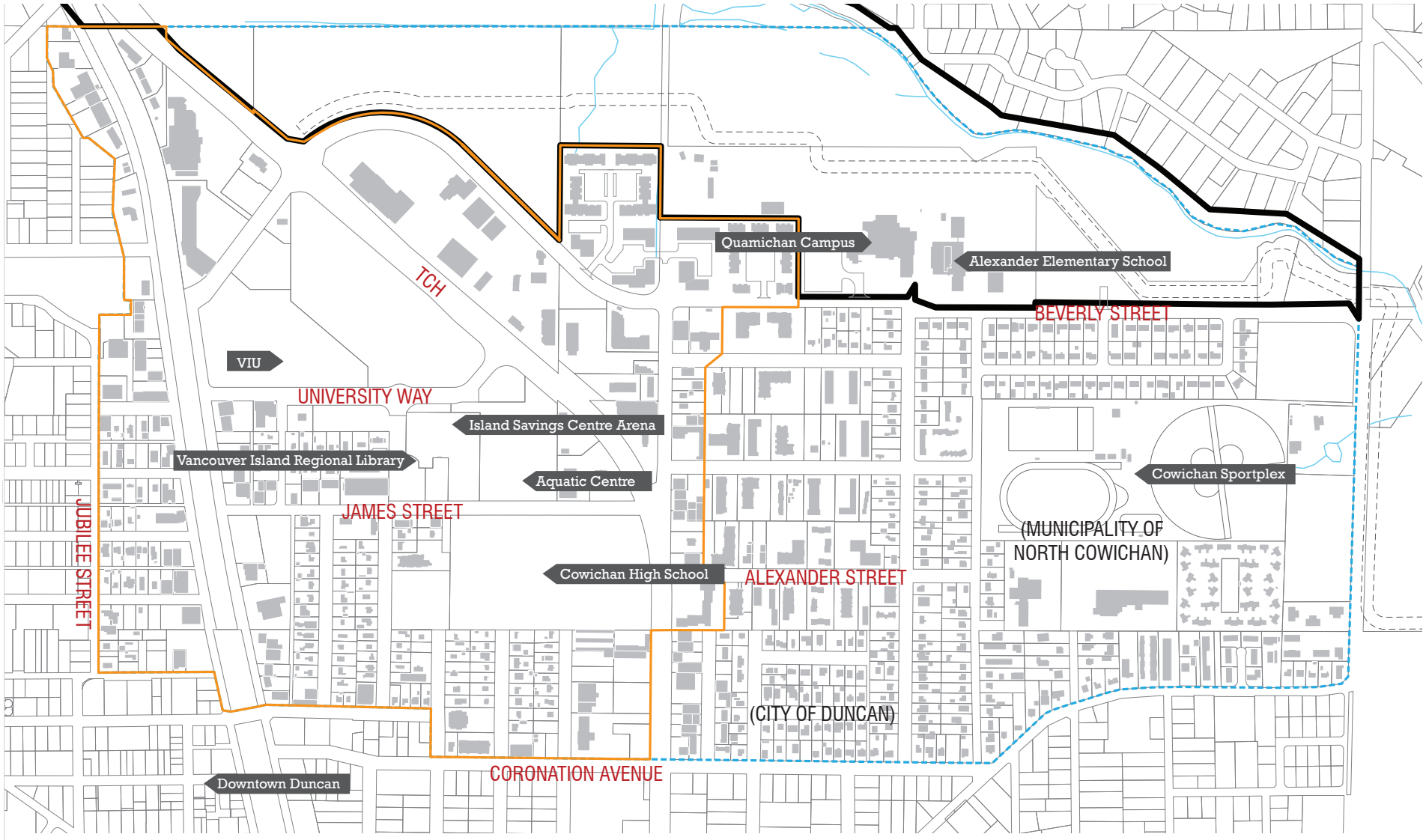
The preparation of this plan was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accepts no responsibility for them.

## 1.6. Disclaimer

University Village Sustainable LAP is a long-range planning document that promotes a vision for the area and puts in place policies and guidelines that help to achieve that vision over time.

The policies and guidelines in the LAP are not to be interpreted as an approval for a use on a specific site as the policies do not address site specific issues, bylaws or conditions for each site within the Plan area. Taking this into consideration, it should be noted that no representation is made herein that any particular site is suitable for a particular purpose, as the site conditions or limitations (including environmental contamination or remediation) must be assessed on a case-by-case basis as part of an application for subdivision, land use or development permit approval.

Figure 1: Plan Area and Focus Area Boundaries



## 1.7. The Plan Area

The Plan area is comprised of two jurisdictions, the City of Duncan (the City) and the Municipality of North Cowichan (MNC). The Trans-Canada Highway (TCH) provides convenient north-south vehicular access but divides the Plan area in an east-west direction.

### 1.7.1. Plan Area

For the purpose of the LAP, a wider Plan area (marked with blue dashes in Figure 1) has been identified. This includes land up to Lakes Road in the east, Coronation Avenue in the south, Jubilee Street in the west and Beverly Street in the north.

### 1.7.2. Focus Area

The western portion of the Plan area is identified in the Municipality of North Cowichan Official Community Plan (OCP) as a "Mixed Use Commercial Core" and part of the "south end growth centre", while the City of Duncan OCP includes its land as "Mixed Use Commercial" and downtown DPA (outlined in orange in Figure 1 and referred to as the Focus Area). This includes land up to York Road and Beverly Street east of the highway and Jubilee Street and Coronation Avenue on the west of the highway. Since the Focus Area is anticipated to accommodate the majority of future growth within the University Village neighbourhood, the proposed master plan visionary concept and regulating plan has only been prepared for this area.

While the policies and recommendations in the LAP primarily relate to the Focus Area, the wider Plan area still forms part of the overall LAP. General policies that apply to the entire Plan area have been included in Section 5.

## 1.8. Trans-Canada Highway Corridor Management Plan

The LAP was prepared in parallel to a separate transportation study for the TCH, under the direction of the Ministry of Transportation and Infrastructure (MOTI). This report identified conceptual roadwork designs for the TCH between Beverly Street and Boys Road. Due to a key part of the corridor running through the LAP study area between Beverly Street and Trunk Road; it was essential to integrate the transportation components into the proposed vision and concept for the LAP.

## 1.9. How the Plan Relates to other Municipal Policies

A detailed review of relevant MNC and City of Duncan plans has been provided in the separate **Baseline Review report** to ensure that the University Village Sustainable LAP aligns with these documents or, where it doesn't, that there is a strong planning and development rationale provided to justify amending these overarching strategic policy plans.

This section provides a broad overview of the relevant documents and the implications of the policies in relation to the LAP.

### 1.9.1. The Municipality of North Cowichan Official Community Plan (2011) and the City of Duncan Official Community Plan (2007)

OCPs are the overarching planning documents that set out the community vision and values that will guide decision-making about the future direction of each municipality. They also provide clarity for residents, businesses and institutions on the primary goals, objectives, and supporting policies that help the municipality to meet its goals.

MNC's OCP is built on 5 Goals:

- Preserve our Rural Setting
- Guard our Environment
- Adjust to Climate Change
- Encourage Economic Opportunities
- Build Strong Communities

The City's OCP has the following goals:

- Managed Growth
- A Thriving Economy and Business Community
- Responsible Stewardship of the Environment
- Strong Community Connections
- A Safe, Healthy Community
- A Well-Serviced Community

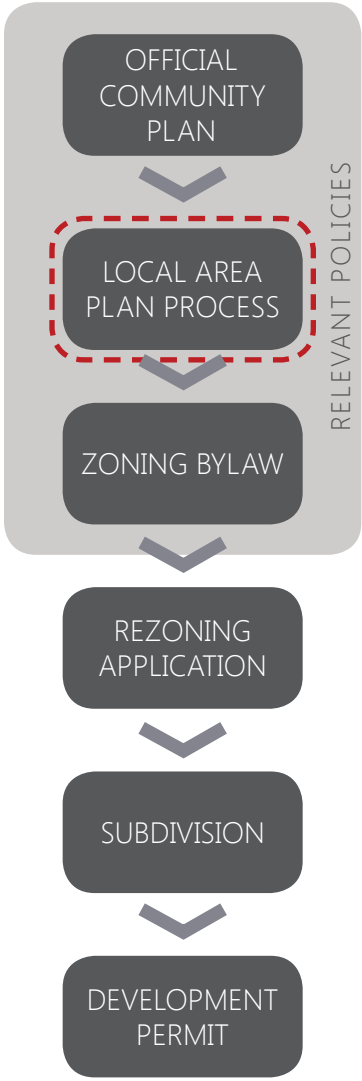



Figure 2: Planning Framework Hierarchy

Key OCP Themes affecting the LAP

- Creating compact built forms
- Providing a diverse housing choice
- Ensuring a thriving economy
- Responsible stewardship of the environment
- Efficient use of infrastructure
- Encouraging green and innovative building technologies
- Balancing growth and sustainability
- Promoting active transportation
- Climate Action Plan
- Energy Use Reduction

### 1.9.2. The Municipality of North Cowichan Climate Action Energy Plan (2013) and the City of Duncan Integrated Community Sustainability Plan (2013)

MNC's Climate Action Energy Plan (CAEP) was prepared with funding support from BC Hydro to address issues in relation to climate change and energy consumption. The CAEP inventories the community's existing energy use and GHG emissions and identifies future trends in energy use, based on population trends, land use, technology and other factors. It also identifies opportunities to reduce energy consumption and emissions through policy and other mechanisms.

The Integrated Community Sustainability Plan (ICSP) prepared by the City of Duncan, represents an overarching sustainability plan that will guide all other lower level policies and regulations. Among the top priorities identified in the Plan include the following;

- Creating a carbon neutral community
- Creating a healthy, active community with a strong sense of connectedness
- Protected natural resources and adequate local food sources and clean water for future generations
- An affordable community with a strong and diverse economy

### 1.9.3. Meeting the Official Community Plan and Sustainability Goals in the University Village Sustainable LAP

To meet the objectives of the MNC's and the City's OCPs, the University Village Sustainable LAP has responded to the following issues:

- Developing a future land use framework that will support walking, cycling and transit.
- Directing growth to appropriate areas within the plan area of the LAP that can support neighbourhood and economic vitality by building and diversifying urban activities in a sustainable way.
- Creating development concepts that contribute to the reduction of GHG emissions and energy consumption and opportunities for greater energy efficiencies and generation of renewable energy.
- Developing policies to support green and innovative building technologies and identify implementation tools to monitor progress.
- Reinforcing the character, quality and stability of the neighbourhood and not competing with Duncans' downtown.
- Use best practice in infrastructure and servicing solutions to meet conservation and waste management goals

## 1.10. Status of the LAP

This LAP is a long-range (30 years) policy document intended to guide the City of Duncan and MNC, developers, local businesses, and residents in making sustainable, responsible, and accountable decisions with respect to land use, development and public improvements within the University Village neighbourhood.

The University Village Sustainable LAP is not a static document, but will evolve and adapt to changing circumstances in order to accommodate new trends and to promote innovative initiatives. It also addresses the ongoing administration, monitoring, and implementation of the LAP objectives and policies.

***INSERT ADOPTION STATEMENT HERE.***

# 02 CONTEXT

A comprehensive "baseline review" report has been completed as a separate report. This details the existing situation in the Plan area as it currently stands, and identifies issues affecting the production of the LAP. This section provides a brief overview of the key findings from that report.

## 2.1. Regional Context

University Village is situated almost equidistance between Victoria and Nanaimo. The close proximity to major shopping centres in the region and the TCH connector result in it being a major regional retail hub for the Cowichan Valley, including Cowichan Commons, Beverly Corners, Duncan Mall, Duncan Plaza and downtown Duncan. Vancouver Island University (VIU), the Aquatic Centre, Island Savings Centre and Cowichan High School also contribute to establishing the area as a regional destination.

The Plan area falls within two municipal jurisdictions, the Municipality of North Cowichan and the City of Duncan.

## 2.2. Demographic Context

The total population for the LAP focus area stands at 480, with many of the residences being comprised of single detached dwellings south of James Street and occasional multi-family dwellings. The remainder of the Plan area contains a greater proportion of multi-family dwellings focused around Lewis, Dingwall Alexander Streets and Coronation Avenue. The total population of the Plan area is 2,440.

The Plan area is demographically and culturally diverse. Residents are younger than the MNC as a whole with an average age of 38. The average household income is approximately $33,000 lower than the provincial average of $77,378. In terms of ethnicity, 1 in 4 residents identified themselves as First Nations or Metis and over 50% of the households are single family (female) led.

## 2.3. Redevelopment Context

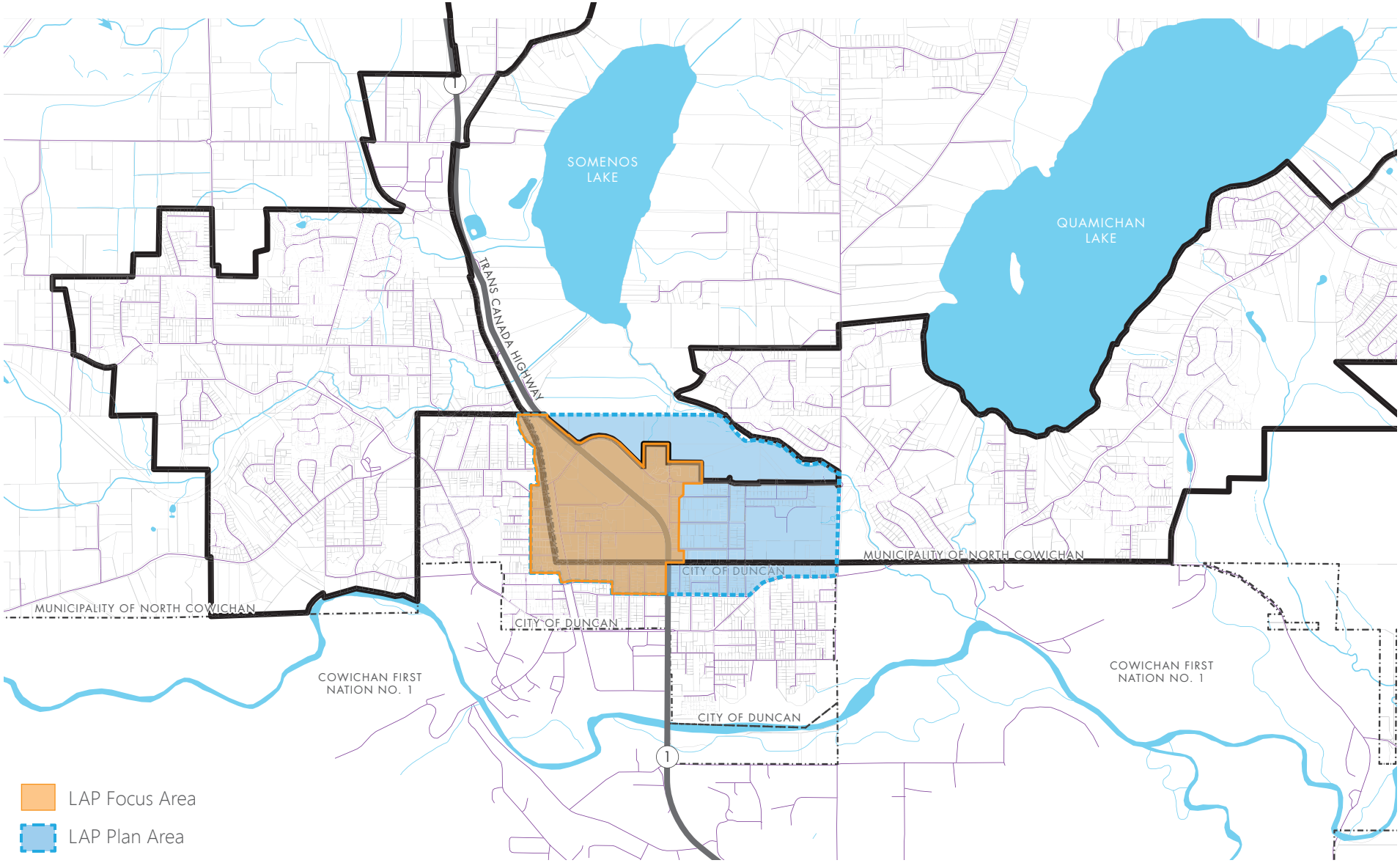
A Memorandum of Understanding between the City and MNC was prepared in 2007 stating the need for a master planning exercise to provide a broad overview on site planning for Cowichan Place and the undeveloped High School lands within the University Village area. Recent development pressures in the area, the importance of the Cowichan Place area as a regional service centre, and the Municipality's and City's desire to encourage sustainable development have also highlighted the need for a LAP, which fleshes out the detail of the strategic policies in the OCP.

## 2.4. Key Issues and Opportunities

During the analysis of the Plan area and the surrounding context, a number of development opportunities emerged. Key opportunities identified include:

- Transform James Street as a "main" street for the neighbourhood, linking it with York Road and Canada Avenue/Duncan Street
- Allow for pedestrian-oriented intensification along James Street
- Plan for future intensification of Canada Avenue as a main transit route
- Allow for infill redevelopment of underutilized lots between Garden Street and St. Julien Street
- Expand the provision of public greenspace
- Provide for cycling traffic off the TCH
- Provide safer crossings for pedestrians and cyclists across the TCH
- Explore opportunities for district energy and renewable energy generation
- Improve internal road network connections
- Remediate brownfield sites
- Create major community gateway features at the Silver Bridge across the Cowichan River, and near Beverly Street and the TCH

Figure 3: Regional Context



## 2.5. Urban Structure

The key issues and opportunities outlined previously have informed the vision and concept for the LAP. However, any concept development should always begin with a fundamental understanding of what makes a good place. There are many elements that contribute to "placemaking", including land use, built form (buildings and structures), natural features and how well places are connected. These elements combine in different layers to make up the physical environment and are referred to as the "urban structure". Urban structure is comprised of three components:

a) **Space** is the underlying topography, the natural features and landscape of an area. Space influences the look and character of a neighbourhood, the parks and open spaces and the land uses that surround it.

b) **Connectivity** is the system of roads, sidewalks, cycling lanes and pathways as well as the transportation infrastructure and services they accommodate.

c) **Built form** is the range of building types, as defined by their physical scale, mass, orientation and height, within an area (refer to Figure 4).

The urban structure provides the foundation for the detailed design and planning of each component. Urban structure components provide a framework to guide and influence the development of individual buildings, spaces or infrastructure.

Proposed Urban Structure illustrates the framework for the Plan (refer to Figure 5).

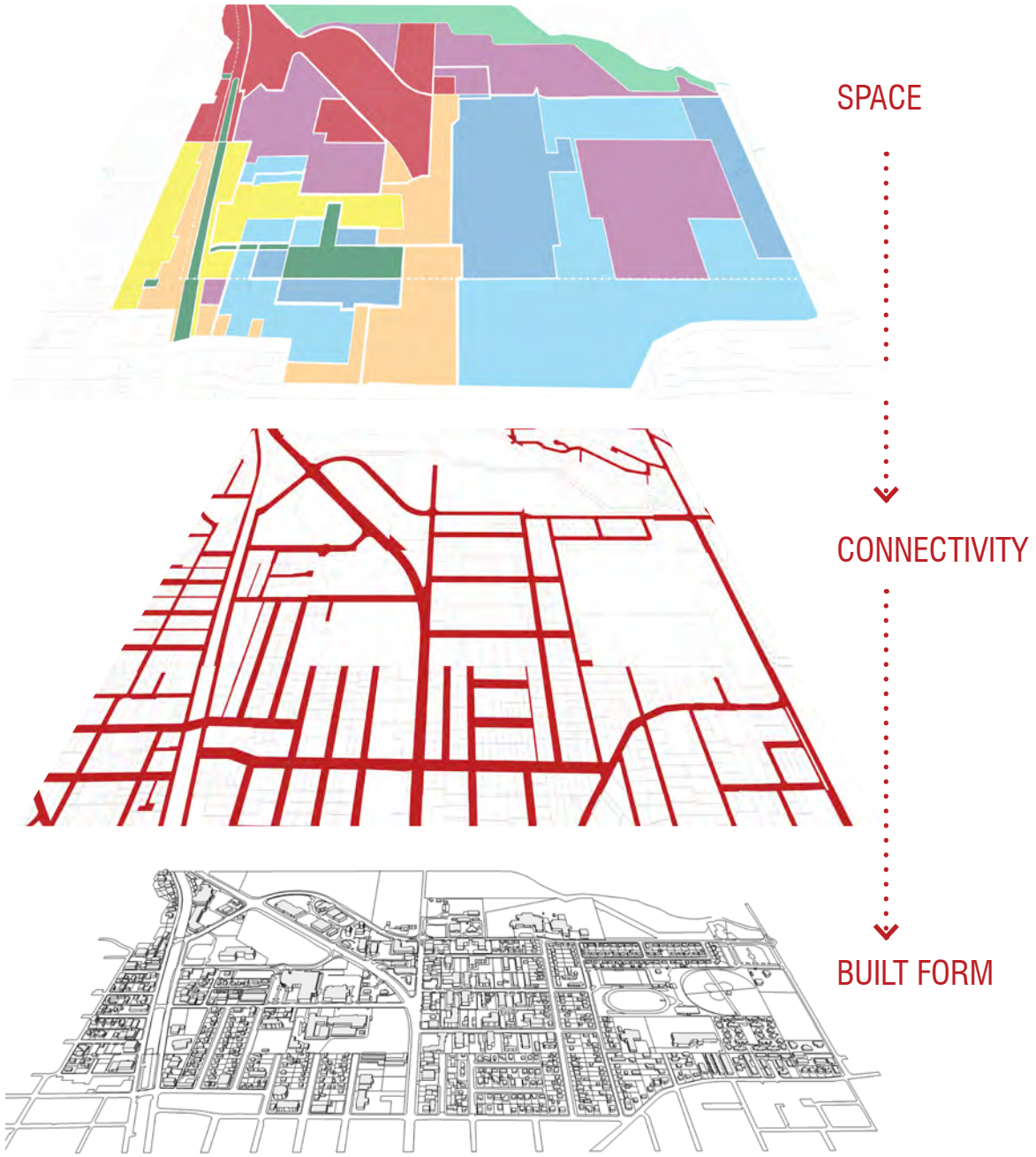
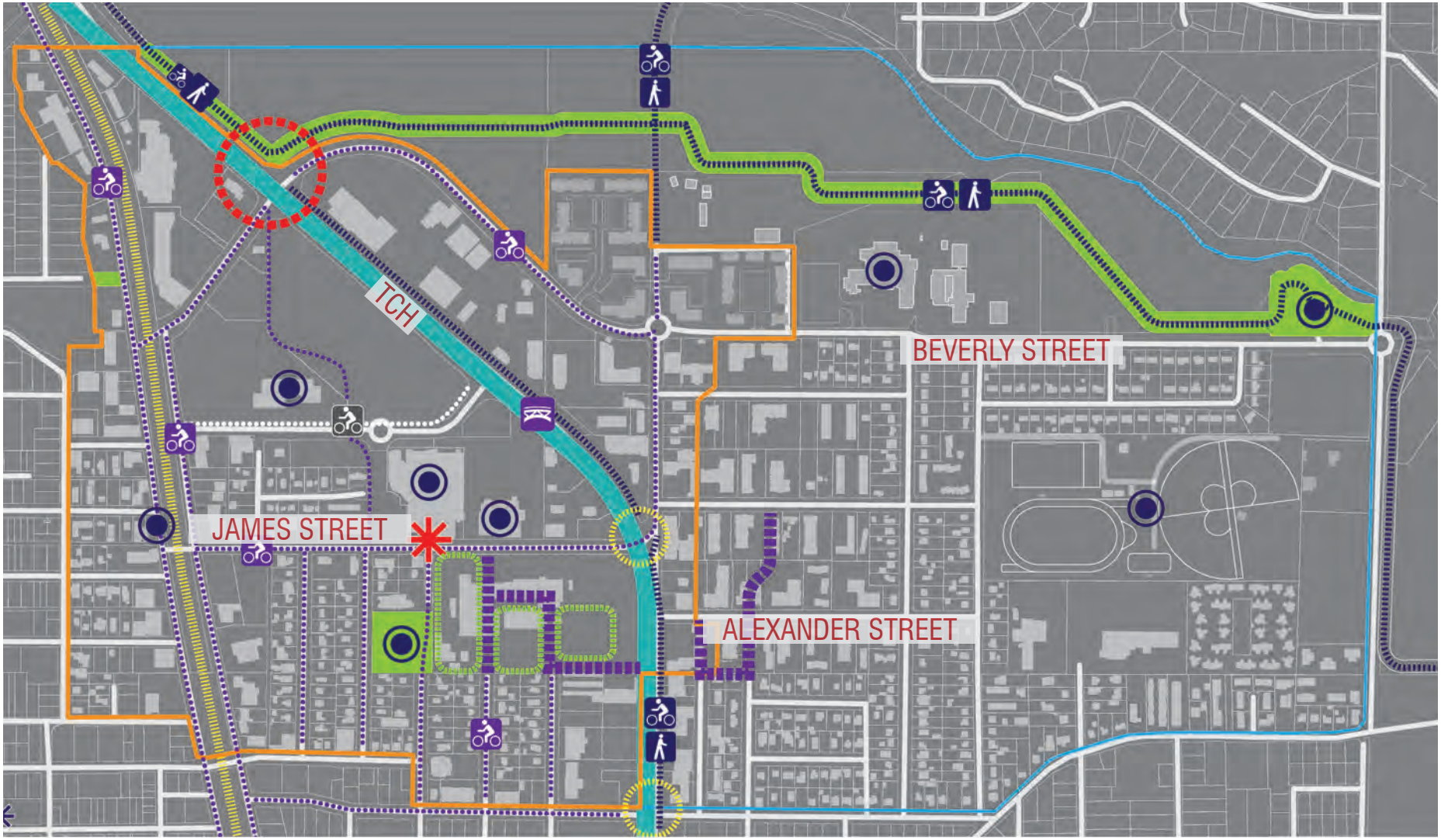



Figure 4: Urban Structure Components




Mixed Use Commercial Core

LAP Plan Area

Existing Urban Structure Components

Trans-Canada Highway

Local Road

Node/ Destination

Existing Bike Lane

Local Park

LAP Core

Proposed Urban Structure Components

Proposed Multi-Use Path

Proposed Bike Lane

Proposed Connection

Gateway Enhancement

Intersection Upgrade

Proposed Park

Figure 5: Proposed Urban Structure

# 03 VISION AND GUIDING PRINCIPLES

## 3.1. A Vision for the Future

An overall vision is important in terms of setting aspirations, and providing direction on how the University Village neighbourhood will redevelop in the future.

The Vision Statement opposite has been drafted from themes drawn from the visioning exercises held with the Stakeholder Advisory Group.

To achieve this vision, the priorities of the LAP will be as follows:

- Protection and enhancement of the functional natural environment as an amenity for all
- Maximum efficiency of land uses within the current established growth centre
- Sustainable and resilient infrastructure
- Greater certainty for future investment through clear and transparent planning guidance and incentives
- Improving and sustaining opportunities for education, culture, recreation and employment

> *"AN **INCLUSIVE** COMMUNITY THAT PROVIDES OPPORTUNITIES FOR A **GOOD QUALITY OF LIFE** REFLECTIVE OF A HEALTHY AND SAFE ENVIRONMENT. IT WILL PROVIDE **AFFORDABLE HOUSING** AND **ALTERNATIVE MODES** OF TRANSPORT WITH GOOD **ACCESS** TO THE NATURAL ENVIRONMENT. **RECREATION, EDUCATION, EMPLOYMENT** AND **SERVICES** WILL CONTRIBUTE TO A BALANCED COMMUNITY."*

## 3.2. Guiding Principles and Goals

The overarching guiding principles were created based on the emerging themes that arose from various community engagement sessions undertaken as part of the development of the Plan. The following set of eight principles were established to guide the development of strategies, proposals and design guidelines, and provide the high level goals that will help to realize the vision.

Table 1: Guiding Principles and Goals

| | THEME | GUIDING PRINCIPLE | GOAL |
|---|---|---|---|
|  | Land Use | Support a diverse community | Achieve an appropriate mix of uses – with a residential focus (through a wide choice of homes) with enhanced neighbourhood commercial facilities |
|  | Heritage | Protect and preserve existing historic neighbourhood character | Incorporate existing historic structures into future planning and densification of neighbourhoods |
|  | Natural Environment | Protect, restore, preserve and enhance natural environmental assets and ecological values | Improve stewardship through education, actions, policies and tools to protect and enhance biodiversity and all natural systems recognizing the natural history of the area |
|  | Built Environment | Creating a distinctive and meaningful environment | Promote compact, pedestrian focused development and reduce auto-oriented uses |
|  | Recreation, Amenities, Tourism and Community Health | Create memorable, functional, safe and vibrant private and public spaces with access to adequate health and social services | Create an attractive, safe and high quality public realm that is accessible and appropriate for people of all abilities, ages and cultural backgrounds |
|  | Connectivity and Transportation | Improve connectivity and linkages across the neighbourhood | Promote complete streets throughout the area to improve connectivity, mobility and accessibility for all users and modes of transportation |
|  | Education | Foster and encourage learning | Celebrate and enhance educational programs available to residents and accentuate VIU's model sustainable campus through promotional opportunities that may arise |
|  | Sustainable Infrastructure | Create services that promote sustainability and efficient use of natural resources | Promote sustainable design and green infrastructure that reduces energy consumption through the project life cycle, maximizes opportunities for the use of innovative construction technologies, and promotes renewable energy sources and energy conservation techniques as a means of reducing Greenhouse Gas emissions (GHGs) |

# 04 PLAN CONCEPT

## 4.1. Development of the Focus Area Concept

The Visionary Concept has been prepared after careful consideration of the issues outlined in the supporting Baseline Report and has been influenced by comments received from the Stakeholder Advisory Group and the general public. A number of policies are outlined in the following section that will guide future development in the Plan area to help deliver the vision and concept. Figure 6 shows the Illustrative 30 Year Concept Plan for the Plan area.

It should be noted that the Visionary Concept is a long-term aspiration for the Plan area. How and when sites come forward for redevelopment is entirely dependent on the landowner and their desire to redevelop, as well as the need for relevant land use and development permit approvals from each Municipality.

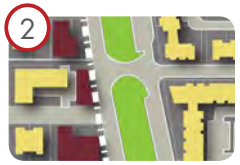
Further detailed work will be necessary to implement the streetscape and park improvements as indicated in Section 7 of the Plan.

## 4.2. Focus Area Concept Overview

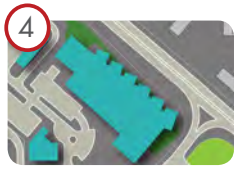
The concept for the Focus Area identifies sites for intensification, highlights community improvements and ultimately represents one way of achieving the vision. It utilizes opportunities that exist today such as the potential for achieving higher density along James Street, the expansion of Kinsmen Park and establishing Canada Avenue as a primary transit corridor.

The Visionary Concept for the Focus Area includes the following features:

1. 
Infill redevelopment west of Canada Avenue

2. 
Canada Avenue redeveloped as "transit-oriented development"

3. 
New University sub-campus with integrated stormwater treatment

4. 
Relocated Cowichan Secondary School adjacent to the University

5. 
Existing Institutional/ Community Facilities

6. 
James Street as the neighbourhood "main street"

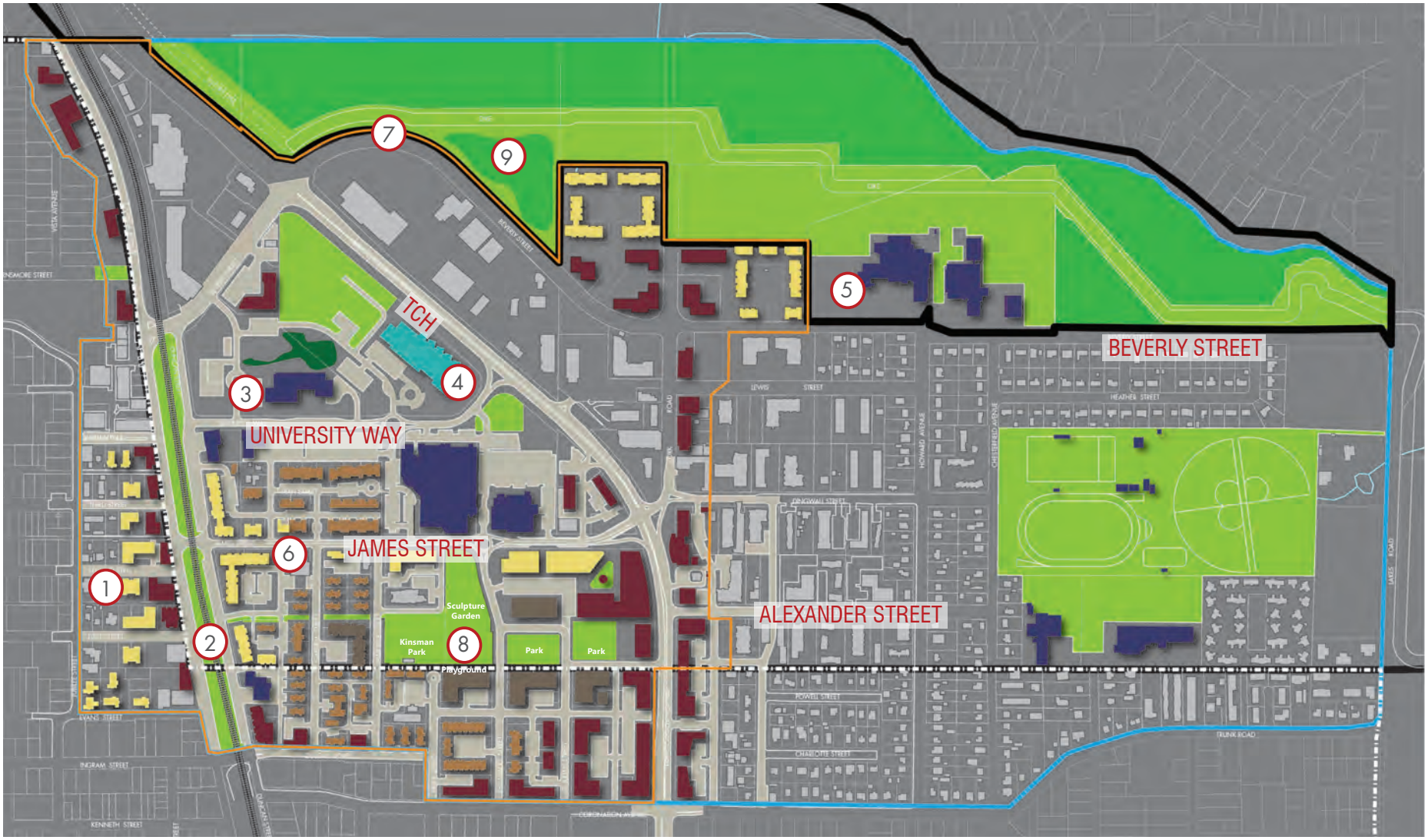
7. 

Multi-use pathway (3m) along the dike with green vegetated buffer

8. 
Central green space expanding east from Kinsmen Park

9. 
Constructed wetland treatment area and associated community facilities associated with the Somenos marsh management plan area

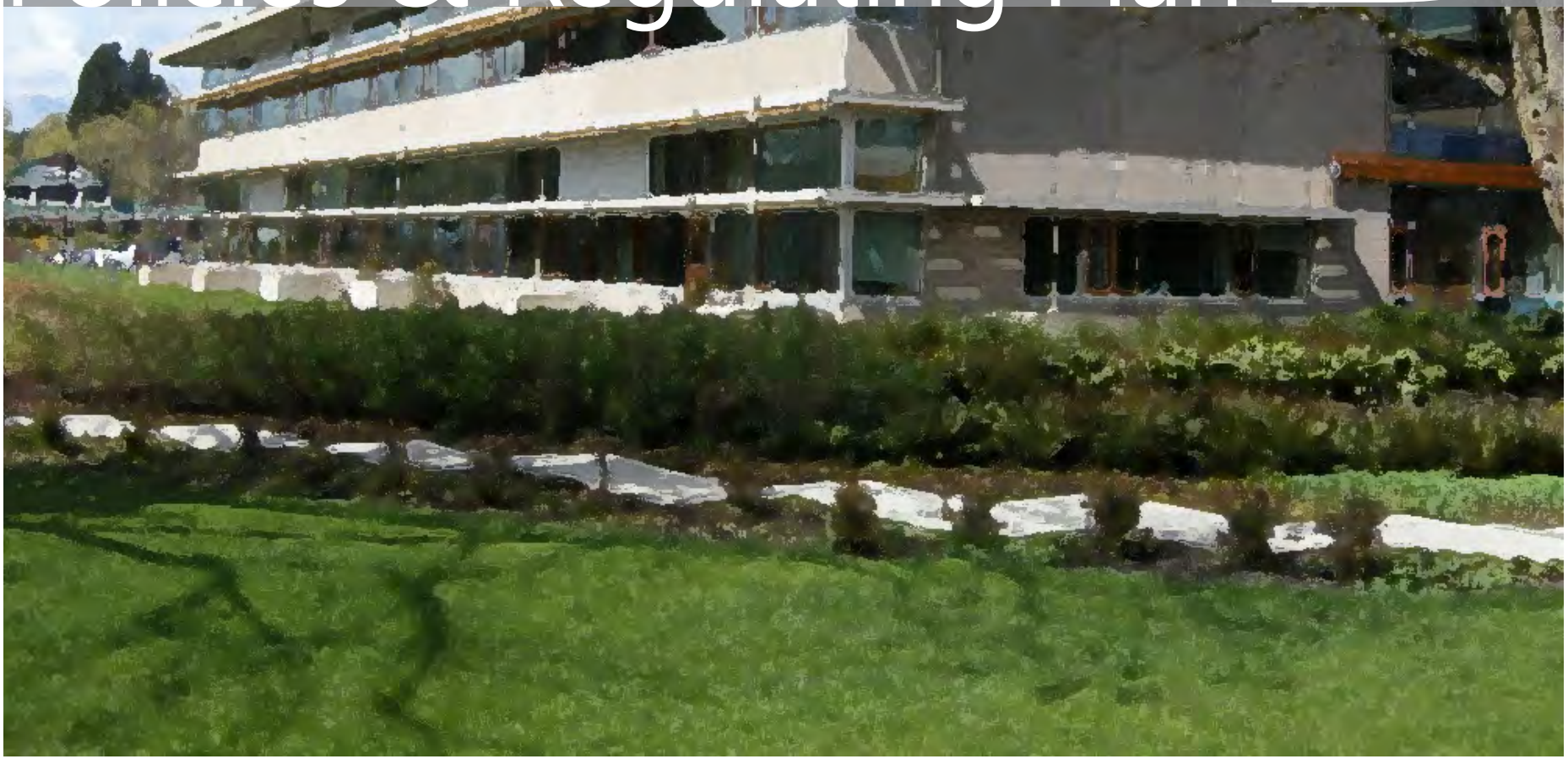
Figure 6: Illustrative 30-year Concept Plan




- Mixed Use Commercial Core
- LAP Plan Area
- Municipal Boundary
- MNC Urban Containment Boundary
- Multi-Family (mid-rise up to 5 storeys)
- Multi-Family (low-rise up to 3 storeys)
- Mixed Use Residential
- Mixed Use Commercial
- Institutional/Community Facility
- Existing Institutional/Community Facility
- Green Space/Park
- Constructed Treatment Wetland
- Somenos Marsh/Agriculture

# B

# Policies & Regulating Plan



# 05 POLICIES

## 5.1. Interpretation of language

Where a descriptive section accompanies a policy, it is provided for information purposes only to enhance the understanding of the policy.

Where "**shall**" is used in a policy, the policy is considered mandatory. Nevertheless, where quantities or numerical standards are contained within mandatory policies, such quantities or standards may be varied at the discretion of the approving authority, so long as the intent of the policy is still achieved and the variation is necessary to address unique circumstances that would otherwise render compliance impractical or impossible.

Where "**should**" is used in a policy, the intent is that the policy is strongly encouraged, but can be varied where unique or unforeseen circumstances provide for courses of action that would satisfy the general intent of the policy.

Where a policy requires submission of studies, analysis, or other information, the Municipality shall determine the exact requirements and timing of the studies, analysis, or information.

## 5.2. General Policies

General land use policies for the entire University Village Sustainable LAP are described below within several distinct components:

- Community Amenity Contributions
- Brownfield Development
- Land Use
- Public Realm
- Built Form and Site Design

## 5.3. Community Amenity Contributions

To ensure that both private developments and the community benefit from increased densities and are not adversely affected by the impact on capital costs associated with growth, amenity contributions are expected at the Zoning Amendment Stage.

The following policies have been established to streamline amenity negotiations and define additional land use and/or density that can be achieved in exchange for specific contributions.

**General Policies (GP1)**

a) The provision of semi-public open spaces, mews, and plazas shall be considered an amenity, only where a legal arrangement has been established on title to preserve public access.

b) The provision of parkland beyond the statutory requirement during subdivision shall be considered an amenity, but only for developable land (i.e., not ESA Land)

c) The provision of public art within plazas, squares, streetscapes and bicycle networks shall be considered an acceptable component of an amenities package, with a binding agreement that includes provisions to ensure the long-term maintenance or replacement of the artwork.

d) Where the provision of public access and open space negatively affect the density provisions of a private development site, the Municipality should consider increasing the permitted density on the remainder of the site.

e) To facilitate parkland acquisition as illustrated in the plan, the Municipality should consider land swap, density bonuses and other incentives for development sites within the University Village Plan Area where parkland dedications result in diminished property rights.

f) Parks, trails and greenways provided beyond statutory requirements shall only be considered amenities where the following criteria have been met:

   i) Park designs and tender drawings have been prepared by a registered landscape architect at the cost of the developer;

   ii) The developer has agreed to provide bonding for all aspects of park construction, including but not limited to: irrigation systems, grading and drainage systems, growing medium, planting, pathways, and site furnishings;

   iii) The developer agrees to enter into a two (2) year maintenance agreement with the Municipality from the time of substantial completion, as determined by the Municipality.

g) Crime Prevention through Environmental Design (CPTED) principles shall be considered in all parks and open space development.

h) The provision of functional constructed treatment wetlands for stormwater runoff, quality improvements and provision of natural habitat shall be supported.

## 5.4. Potential Contaminated Land

Contaminated or "brownfield" sites are defined by the National Round Table on the Environment and the Economy as "abandoned, vacant, derelict or underutilized commercial or industrial properties where past actions have resulted in actual or perceived contamination and where there is an active potential for redevelopment". Within the Plan area, there are several sites that are currently known to meet this criteria.

The redevelopment of brownfield sites allows for the re-use of idle or underutilized land for a higher and better use and can help to stimulate area revitalization while protecting human health, safety and the environment. Brownfield sites can have significant redevelopment potential but can be complicated by the actual or perceived presence of hazardous substances, which can result in additional costs and liability for the land owners or interested investors and developers. Each brownfield project presents unique challenges and the successful redevelopment of these sites requires the support of various levels of government, a wide range of stakeholders and the community.

Existing brownfield sites within the Plan area

**Contaminated Land Policies (CL1)**

a) To support landowners and the community in returning these sites to a more productive use and provide economic, social and environmental benefits to stakeholders, the Municipality should consider additional measures to improve the redevelopment potential of these sites such as:

   i) Consideration of additional land uses

   ii) Increasing allowable height and/or density

b) The Municipality should support landowners in pursuing federal, provincial and municipal, redevelopment programs if available.

c) Interim land uses should be considered for brownfield sites that cannot be redeveloped immediately for financial or other reasons. In this circumstance, the Municipality should consider interim land uses that are socially beneficial to the community such as community gardens, parks, community gathering locations, dog parks, neighbourhood signage, art installations and mobile food retail facilities (e.g. food trucks and kiosks for summer market) or temporary commercial uses. The interim land use should not increase risks to human health and the environment nor impede the future vision for the Plan area.

## 5.5. Land Use

The University Village land use framework seeks to maintain and enhance the unique character and functional relationships of each neighbourhood focus area. An overall consistency of identity is perceived for the broader study area in order to create a vibrant village atmosphere with active neighbourhood nodes.

Higher density neighbourhood nodes have been located along the TCH corridor, James / York Street neighbourhood, and the transit oriented neighbourhood flanking the rail corridor along Duncan Avenue and Canada Avenue. Side streets that extend into and through these dense urban neighbourhoods are key to the connectivity of the plan area and increasing pedestrian and vehicular access between the Plan area and surrounding neighbourhoods.

There is a clear lack of parks and open spaces within the study area at present. A number of park acquisition sites have been identified within the plan framework with the end goal of realizing a true open space focused development pattern.

**Land Use Policies (LU1)**

a) All Zoning Amendment applications shall be consistent with the building typologies of the Regulating Plan and policies of the University Village Plan, and applicable Municipal OCP policies;

b) All Zoning Amendment applications and Development Permit applications are to be consistent with the applicable Section 5 policies of this plan and Development Permit Area Guidelines contained within the relevant Municipal OCP Bylaw;

c) Municipal Parks, trails, and greenway acquisitions as well as semi-public / public open spaces, plazas and squares as generally shown on, Figure 6: Illustrative 30-year Concept Plan, and Regulating Plan are to be secured for public access through the development application process with the total area, size and design being generally consistent with this plan.

d) Compatible and sensitive infill development, renovation, and rehabilitation are encouraged to ensure the continued renewal and vitality of the community.

e) Unless otherwise specified, new auto-oriented uses including car dealerships, automobile service centres, drive through businesses and service stations are prohibited.

f) New neighbourhood commercial and mixed uses shall be prioritized along James Street, York Road and Duncan Street/Canada Avenue.

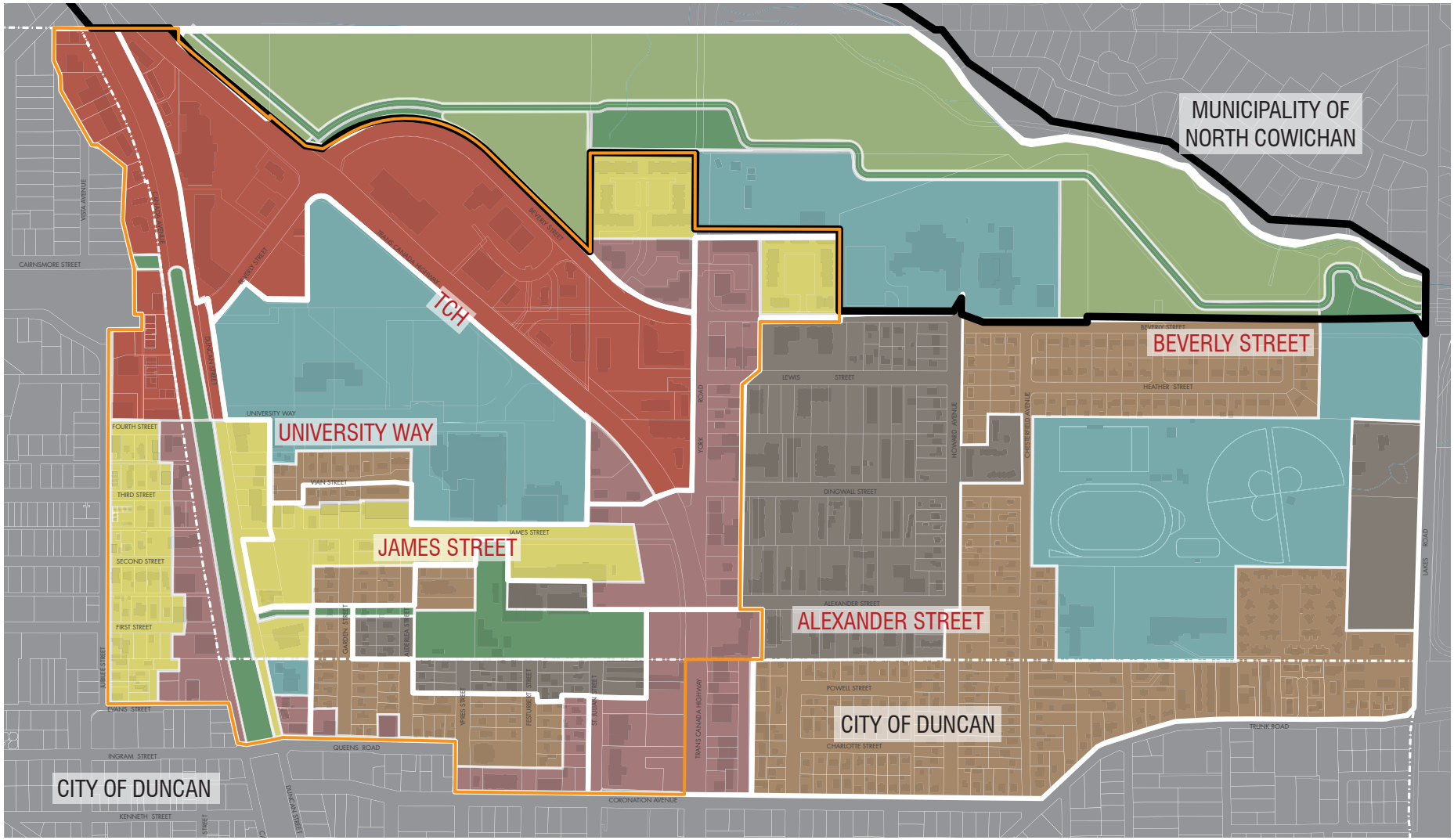
g) Retail commercial development should facilitate long term adaptability to a variety of commercial uses.

h) Live work units are encouraged throughout the Plan area, with priority being given to locations along James Street, Duncan Street and Canada Avenue.

i) The Municipality and City of Duncan has indicated that existing infrastructure may be inadequate to service some developments contemplated by the LAP. It is the developers responsibility to evaluate required utilities and to provide the necessary upgrades resulting from an application to develop. The Municipality have infrastructure improvement programs which will replace and upgrade infrastructure according to Capital plans, budgets and Council approval. The timing of improvements is subject to change. Despite the foregoing, the Municipality will support latecomer or excess capacity agreements where applicable through legislation.

j) Coordinate Land Use and Zoning applications with proposed short, medium and long term TCH improvements outlined in the Trans Canada Highway Corridor Management Plan: Boys Road to Beverly Street 2014.

Figure 7: Proposed General Land Use





Examples of public institutional facilities within the Plan area

### 5.5.1. Institutional/Community Facilities

The preservation of institutional designations is a key component of the plan. Future site repurposing, such as Cowichan High School, offer a long-term opportunity for additional higher learning campuses and civic amenity developments within the Focus area. Existing land use designations shall be retained and new development proposals will be required to provide significant park amenity contributions with an open space campus development approach. Typical institutional development includes the following:

- University Campus
- Trade school
- Public health care facility
- Civic library
- Civic Centre
- Conference Centre
- Public and private institutions
- Recreational facilities within a building
- Emergency services

**Institutional / Community Facilities Policies (ICF1)**

a) Institutional land use designations should be maintained for the term of this plan.

b) Commercial and residential uses are not permitted within this land use designation except in circumstances where such uses are clearly accessory and integral to the viability of the public use (such as a coffee kiosk in a dog park) or student housing.

c) The redevelopment or expansion of institutional sites shall incorporate publicly accessible open spaces within the context of a campus master plan.

d) Encourage the School District and VIU to submit expansion plans for formal consultation with the Municipality.

### 5.5.2. Parks, Greenways & Open Space

This designation applies to corridors and areas of land that provide continuous multi-modal trails, that link existing parks, public use lands, environmentally sensitive lands, wetlands and other green spaces, including recreational trails, within the plan area. This land use designation also applies to the acquisition of additional parks, playgrounds and open spaces. This includes nature parks, community parks and neighbourhood parks.

**Parks and Greenways / Open Space Policies (PG1)**

a) Municipal park, trail, and greenway locations and layouts identified in this plan are schematic in nature with interconnectivity as the core objective. The specific location and design of these facilitates shall be reviewed on a project-by-project basis by Municipal parks and planning staff.

b) Municipal park, trail, and greenway acquisition sites identified in this plan shall be obtained as negotiated amenities through the Zoning Amendment process.

c) Designs should demonstrate the preservation of natural site features and the enhancement of view corridors to open areas and viewscapes.

d) Programmatic elements for active and passive uses for new and redeveloped parks shall be designed based on public input from adjacent residents and landowners.

e) Shrubs, grasses and groundcover plantings shall be plant species native to the eastern Vancouver Island and/or drought tolerant ornamental species that mimic endemic flora.

f) Materials required for new park construction should be durable and low maintenance.

g) As off-roadway trail and greenway systems develop over time, a series of walking, jogging loops are expected to be realized, at which time way finding signage will be provided to illustrate the length and layout of these active recreation amenities.

h) Multi-purpose community gardens, stormwater management and green infrastructure will be supported.

Parks and greenways should provide opportunities for active and passive recreation

Well designed public realm helps to animate a space and provides a place to gather

## 5.6. Public Realm

The Public Realm includes all spaces that are accessible to the public regardless of the tenure of the lands. Civic open spaces may include Municipal parks, greenways, waterways, public squares, and plazas. Municipal roadways, lanes, trails and pathways are a key component in the connectivity of the overall functioning of public realm systems. Semi-public plazas, squares and open spaces extend the capacity of the public realm in creating spaces for social interaction that are accessible and inclusive. A holistic, safe and functional system of interwoven public, semi-public and publicly accessible private exterior spaces will result in a depth of experience and unified design approach for the area.

A unified design typology seeks to achieve a unique image for the public realm. A catalogue of design criteria for streetscapes and streetscape elements (lighting, trees, wayfinding and interpretive signage, traffic calming, pedestrian zone, vehicle zone, parking, etc.) has been developed to aid proposed public and private sector development in creating a distinctive landscape fabric. The public realm can be organized into several distinct components:

- 5.7. Streetscapes
- 5.8. Semi Public / Public Open Spaces, Plazas and Squares

## 5.7. Streetscapes

Streets are not only places for the functional movement of people, cars, and goods. These spaces are where we interact with the built environment as we move along business frontages, through neighbourhoods and access and egress the interior spaces of the built environment. Great streets are iconic in our memories when they are unique to the authentic form and character of a community.

The following general policies seek to add depth to the experience of a purely functional transportation corridor by improving the multipurpose function of public spaces that are responsive to adjacent land uses and interwoven with private and semi-private open spaces.

The streetscape should offer a range of experiences from tree shade to social gathering/ interaction areas. The University Village Plan organizes streetscapes under four functional zones:

- 5.7.1. Private Interface Zone
- 5.7.2. Pedestrian Zone
- 5.7.3. Parking Zone
- 5.7.4. Transportation Zone

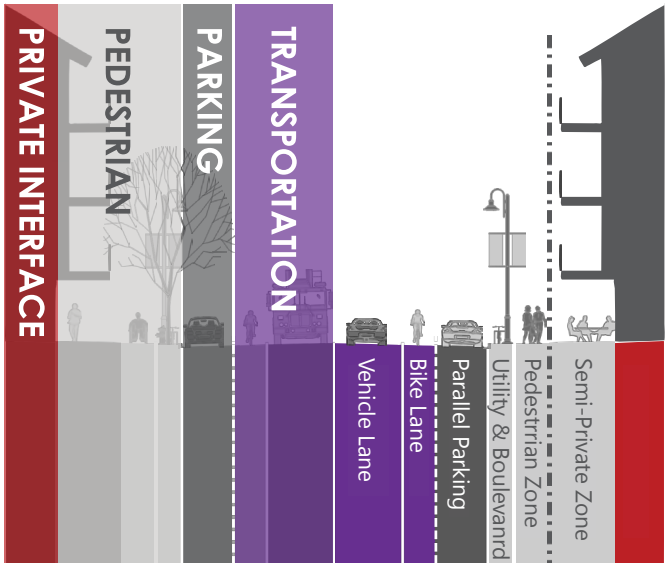



Figure 8: Street Zones

Not to scale

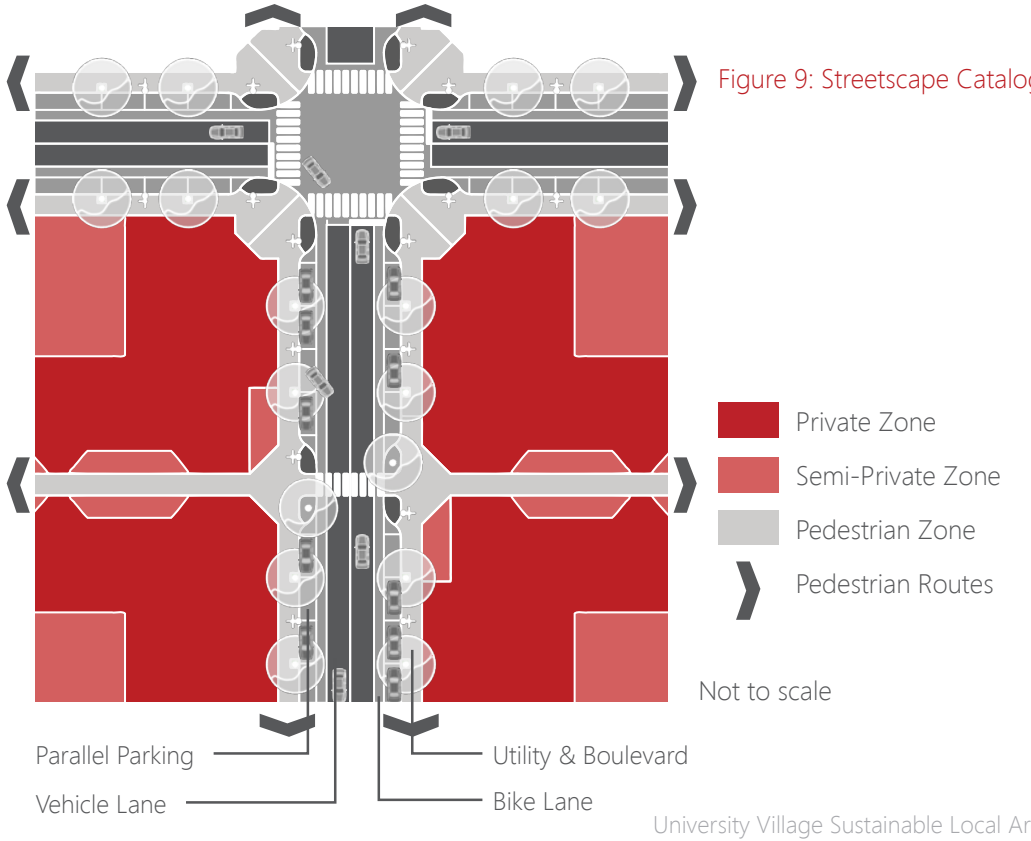



Figure 9: Streetscape Catalogue

Not to scale

In order to realize the vision of the LAP with the creation of a pedestrian-oriented environment, certain streets may need to be reconfigured to allow for safer movement of pedestrians and cyclists. This could require land acquisition in certain locations, to allow for wider sidewalks, bike lanes and planting strips. Any right-of-way widening on residential streets should not result in increased vehicle lanes.

The neighbourhoods identified in Table 2: Street Palette Options and Table 3: Streetscape Catalogue Matrix, correspond to Figure 14, on page 49, and provide guidelines on the streetscape elements appropriate for each location in the Plan area.

Table 2: Street Palette Options

| POLICY AREA/ NEIGHBOURHOOD | GENERAL USE TYPOLOGY | AVAILABLE PARKING OPTIONS | POTENTIAL RIGHT OF WAY/ ACQUISITION REQUIREMENT | GENERAL ROAD FUNCTIONAL CLASSIFICATION | PREFERRED ROW | PREFERRED STREET PALETTE |
|---|---|---|---|---|---|---|
| PA1 – Canada Avenue/Duncan Street (Transit Orientated Development) | Commercial/ Commercial Mixed Use/Mixed Use – Residential | Parallel Parking/ Angle Parking | 4 M | Arterial (Canada Avenue)<br>Collector (Duncan Street) | 20 M | Canada Avenue – (Assuming Future One Way SB)<br>2 lanes X 3.7 M/1 x 1.5 M Bike Lane/ 1x 2.7 m parking lane/2.5m sidewalk/Landscape -Utility Zone 3.0 M<br><br>Duncan Street – (Assuming One Way NB)<br>2 lanes X 3.7 M/1 x 1.5 M Bike Lane/ 1x 2.7 m parking lane/2.5m sidewalk/ Landscape-Utility Zone 3.0 M |
| PA-2 Cowichan Place (Campus) | Public Institutional/ Multi-Family Low Rise | Parallel Parking/ Angle Parking | Varies 1.0 M – 2.0 M | Collector (University Way)/Local | 15.0 M – 22.0 M | Local Roads: 2 lanes X 3.5 M/ 2 x 1.5 M Bike Lanes/ 1x 2.7 m parking lane/2.0m sidewalk |
| PA-3 James Street/ York Road | Commercial/ Commercial Mixed Use/Mixed Use – Residential | Parallel Parking/ Angle Parking/ Parking at Rear | Varies 1.5 M – 3.5 M | Local (James Street/ Local) | 22.0 M | 2 lanes X 3.7 M/2 x 1.5 M Bike Lane/ 1x 2.7 m parking lane/2.5m sidewalk/Landscape -Utility Zone 3.0 M |
| PA-4 Alderlea Commons | Multi-Family Low Rise/ Multi-Family Mid Rise | Parallel Parking/ Angle Parking | Varies 1.5 M – 2.0 M | Local | 20 .0 M | Local Roads: 2 lanes X 3.5 M/ 2 x 1.5 M Bike Lanes/ 1x 2.7 m parking lane/2.0m sidewalk |

| POLICY AREA/ NEIGHBOURHOOD | GENERAL USE TYPOLOGY | AVAILABLE PARKING OPTIONS | POTENTIAL RIGHT OF WAY/ ACQUISITION REQUIREMENT | GENERAL ROAD FUNCTIONAL CLASSIFICATION | PREFERRED ROW | PREFERRED STREET PALETTE |
|---|---|---|---|---|---|---|
| PA-5 Highway Commercial | Commercial/ Commercial Mixed Use | Parking at Rear/ Front - Angle Parking Only | Varies 1.5 M -2.0 M | Highway | 30.0 M | 2 Lanes ( NB+SB) X 3.3 M – 4.3 M. Lanes + Turning Lanes/1 x 4M Multi Use Path – (Eastside) 1.0 M Landscape or Utility Zone/ 1.0 – 2.6 M Median or Boulevard/ 1.5 M sidewalk (Westside)/ 2M-3M Landscape Buffer to Property Lines (W+E) |
| PA-6 Low Rise Neighbourhoods | Multi-Family Low Rise/ Commercial Mixed Use | Parallel Parking/ Angle Parking/ Parking at Rear | NA | Collector( Coronation Avenue)/ Local | 20.0 M | Collector: 2 Lanes X 3.7 M / 2 X 1.5M Bike Lanes/ 1.0 m Landscape or Utility Zone/1.5-2M Sidewalk<br>Local Roads: 2 lanes X 3.5 M/ 2 x 1.5 M Bike Lanes/ 1x 2.7 m parking lane/2.0m sidewalk |
| PA-7 Chesterfield Avenue Residential Neighbourhoods | Multi-Family Low Rise/ Multi-Family Mid Rise/ Single Family Dwelling/ | Parallel Parking/ Angle Parking/ Parking at Rear | NA | Arterial ( Beverly Street and Trunk Road)/ Collector( Coronation Avenue)/ Local | 20.0 M | Arterial Local Roads: 2 lanes X 3.5 M/ 2 x 1.5 M Bike Lanes/ 1x 2.7 m parking lane/2.0m sidewalk |
| PA-8 North of Beverly Street | Public Institutional (Quamichan and Alexander Schools) / Commercial Mixed Use/Mixed Use Residential | Parallel Parking/ Angle Parking/ Parking at Rear | NA | Arterial Local Roads | 20.0 M | Arterial Local Roads: 2 lanes X 3.5 M/ 2 x 1.5 M Bike Lanes/ 1x 2.7 m parking lane/2.0m sidewalk |
| PA-9 Somenos Marsh/Dike | Recreational Changes Subject To Council Review | Parallel Parking/ Angle Parking | NA | Local | 15.0 M | Local Roads: 2 lanes X 3.5 M/ 2 x 1.5 M Bike Lanes/ 1x 2.7 m parking lane/2.0m sidewalk |

Table 3: Streetscape Catalogue Matrix

| Catalogue Items: | | BENCH | TRASH RECEPTACLE | STREET LIGHT POLE | BANNERS | HANGING BASKETS | WAYFINDING SIGNAGE | CULTURAL HISTORY SIGNAGE | PUBLIC ART | BICYCLE RACK | TURF BOULEVARD | CURB BULGE PLANTINGS | MARKED BICYCLE LANE | DESIGNATED BIKE ROUTE | MID BLOCK CROSSING | PERVIOUS PARKING LANE | BOULEVARD RAIN GARDENS | STREET TREES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | STREET FURNISHINGS | | | | | | | | | STREET ELEMENTS | | | | | | | |
| Canada Avenue Transit Oriented Development | PA-1 | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Cowichan Place (Institutional Campuses) | PA-2 | ✓ | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| James Street / York Road Urban Corridor | PA-3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Alderlea Commons | PA-4 | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| Highway Commercial | PA-5 | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ |
| Low-Rise Residential Neighbourhoods | PA-6 | | | ✓ | | | ✓ | | ✓ | | ✓ | | | ✓ | | | | ✓ |
| Chesterfield Avenue Residential Neighbourhoods | PA-7 | | | ✓ | | | ✓ | | ✓ | | ✓ | | | ✓ | | | | ✓ |
| North of Beverly Street | PA-8 | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Somenos Marsh | PA-9 | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | | | |

✓ Requirement

### 5.7.1. Private Interface Zone

This zone is key to the seamless integration of experience between public street spaces and semi-public spaces such as ground level building entries, residential and commercial patios, plazas and squares, mews, and 'the front stoop'. Creating a unified design approach to these spaces will act to expand the perception of what is civic space.

Articulated building footprints and setback variations allow for the marketing and promotion of businesses. The interface zone acts to extend the pedestrian experience outward from the street. A variety of semi-public spaces adjacent to the street provide additional depth to the character of the public realm.

There are many opportunities to soften the hard edges of private and public property, which are expanded upon under the policy headings below.

- 5.7.1.1. Mews
- 5.7.1.2. Commercial Plazas, Patios and Squares
- 5.7.1.3. Ground Oriented Units


Street cafes and outdoor seating provide animation to a space


Example of Mews development

### 5.7.1.1. Mews

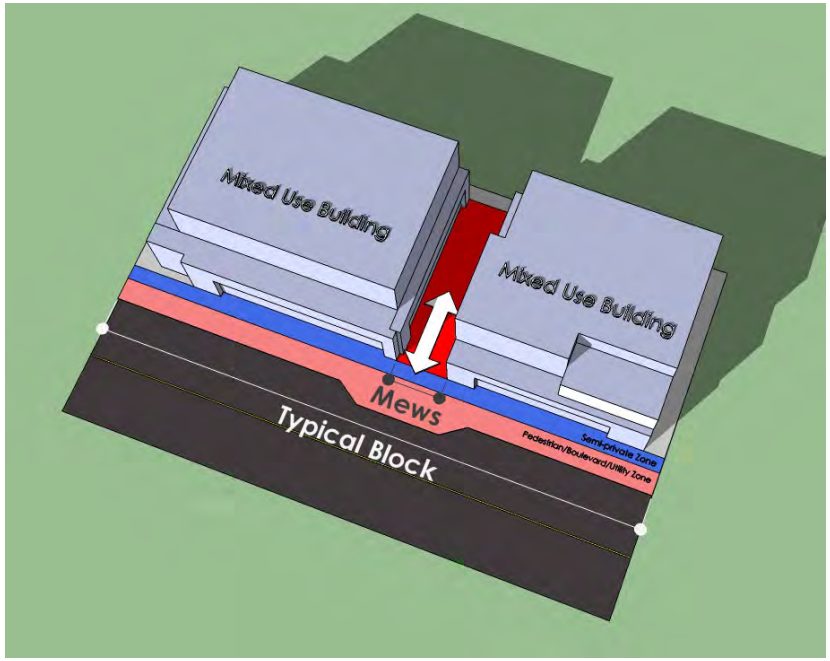
Mews are essentially extensions of the public realm that allow pedestrians to filter through and between civic blocks free from the noise and busy clamor of active roadways. A more passive experience can be realized in these spaces, which also allow for expanded business frontages and connections to interior semi private open space.

**Mews Policies (M1)**

a) Mews should be provided to break up large monolithic buildings that span the length of a civic block.

b) All developments that span a length greater than half of a civic block shall incorporate a mews to break up building mass along the street frontage.

c) Mews shall be designed with similar detailing materials and elements to the adjacent streetscape in order to create a unified public realm experience.



### 5.7.1.2. Commercial Patios, Plazas, and Squares

Semi-public commercial spaces adjacent to streetscapes provide another level of transition through the public realm while relating directly to the activity and function of the street. In certain locations, these spaces will add to the experience of the street by creating additional opportunities for social interaction and providing refuge areas along the pedestrian zone.

**Commercial Patios, Plazas and Squares Policies (PL1)**

a) Patio space should be located along James Street/York Road street frontage for all commercial buildings where appropriate.

b) Plazas should be provided at the intersection of streets and laneways to provide light penetration, opportunities for public art, and expanded social space.

c) Commercial Patios, plazas, and squares should be designed with similar detailing materials and elements to the adjacent streetscape in order to create a unified public realm experience.

d) Commercial Patios, plazas, and squares shall face the street.

e) Commercial Patios, plazas, and squares should provide barrier free access for all users.

f) Although the Municipality will consider patios and plazas across the Plan area, ideal locations are suggested in the following neighbourhoods given the likelihood of greater pedestrian activity and foot traffic:

   i) Canada Avenue

   ii) Duncan Street

   iii) James Street

   iv) York Road

Plaza spaces can vary in size and provide another form of gathering space in the public realm

Ground-oriented suites provide active surveillance onto the street

### 5.7.1.3. Ground Oriented Units

Ground level and first storey residential live/work units provide an added layer of passive monitoring and behavioural control to the public realm. Residents provide a presence within the public realm and take ownership of adjacent public spaces adding to the safety and vitality of urban neighbourhoods.

**Ground Oriented Unit Policies (GOU1)**

a) Access to each multi-family residential unit should be at ground level for all buildings under three storeys.

b) Where grade differences are encountered beyond slopes exceeding 3.5%, connecting ground level to adjacent shared or individual stairs should be considered.

c) Ground floor residential units should have a patio space with direct access to the adjacent sidewalk.

d) Residential balconies should be provided for all units above the ground floor facing the street and any adjoining public open spaces.

### 5.7.2. Pedestrian Zone

The pedestrian zone should include sufficient space for pedestrians to move through and along civic blocks near storefronts. The remaining space between the sidewalk and the on-street parking zone should be treated as flexible space for outdoor cafes, interpretive displays, plantings, and street furniture.

Areas that are addressed under the pedestrian zone include the following:

- 5.7.2.1. Improved Sidewalks
- 5.7.2.2. Street Furnishings Strip
- 5.7.2.3. Boulevard

#### 5.7.2.1. Improved Sidewalks

**Improved Sidewalks Policies (IS1)**

a) Sidewalks should be 2.5 metres wide on both sides of the street, where feasible.

b) The pedestrian zone shall provide uninterrupted barrier free access for all users, with a minimum clear travel width of 1.2 m to allow for wheelchair movements.

c) Tactile paving should be provided at intersections and crosswalks for pedestrians with visual challenges.

d) Sidewalk curb bulges should be designed to minimize the crossing distance at crosswalks and intersections, while at the same time respecting the turning radius of fire trucks, transit buses and other vehicles where required.

Bulb-outs at key intersections provide a safer crossing for pedestrians

Tactile paving warns the visually impaired of crossings

Wide sidewalk with barrier free movement

Utility boxes can also include public art

Bicycle facilities should be integrated into the streetscape while allowing for barrier free movement along the street


Lighting can incorporate art and signage

### 5.7.2.2. Street Furnishings Strip

**Street Furnishings Strip Policies (SF1)**

a) Overhead utilities should be under-grounded at the time of the sidewalk replacement along James Street/York Road.

b) The location of utility boxes should be carefully coordinated with paving and other streetscape elements.

c) Street lighting shall be designed to improve street comfort at night. All fixtures shall be shielded or full cut-off with no up-lighting to preserve night sky viewing.

d) New street lighting with decorative poles should be completed at the time of the streetscape improvements.

e) Street light poles shall be selected that allow for the deployment of wireless technology, banners, hanging flower baskets, outlets for seasonal lighting, and drip irrigation lines.

f) Light poles and fixtures should reflect the heritage of the area.

g) New way finding signage should be integrated into the street lighting and site furniture systems.

h) Benches positioned along the curb line shall orient users toward business marketing and window displays rather than onto an unpleasant parked vehicle zone and heavy travel lanes.

Refer to Table 3: Streetscape Catalogue Matrix.

### 5.7.2.3. Boulevard

**Boulevard Policies (B1)**

a) Shrubs, grasses and groundcover plantings shall be plant species native to the eastern Vancouver Island and/or drought tolerant ornamental species that mimic endemic flora.

b) New tree plantings shall be selected to provide a high canopy over the street, while remaining above commercial displays and signage (at maturity).

c) Large full canopy tree species shall be installed along the boulevard or within curb bulges where sufficient soil volumes and tree canopies can be accommodated.

d) Columnar and small ornamental trees should be installed within narrow boulevards where soil volumes are insufficient for full canopy trees.

e) A variety of street trees should be planted; tree species shall be selected to establish the landscape character for a given street.

f) The Municipality should consider leasing extended boulevard space to adjacent restaurants and cafes to increase activity at the street level.

g) Where there is sufficient width and area within boulevards and proposed curb bulges rain gardens should be considered as an alternative to conventional turf strips and planters. The rain garden would be normally dry and would serve as an ideal demonstration / interpretive site for the display of native plants and plant ecosystems.

h) Shy space with a minimum width of 0.5m shall be provided along the curb line to allow for the unimpeded motion of car doors opened from adjacent parking areas.


Native planting and stormwater management features can be incorporated into corner bulb outs

### 5.7.3. Parking Zone

On street parking is proposed to support business activity on adjacent property. In the context of travel speed reductions the addition of on-street parking also contributes to a lower overall travel speed. At the same time on-street parking can provide a measure of safety by creating a buffer between travel lanes and the pedestrian zone.

**Parking Zone Policies (PZ1)**

a) Parallel parking or, a combination of parallel parking and angle parking, should be incorporated into all streetscapes to alleviate the need for extensive off-street parking.

b) Parking stalls and lanes shall be surfaced with textured concrete or concrete unit pavers, particularly along James Street/York Road.

c) Parking stalls and lanes should be surfaced with a pervious paving treatment where infiltration techniques are feasible.

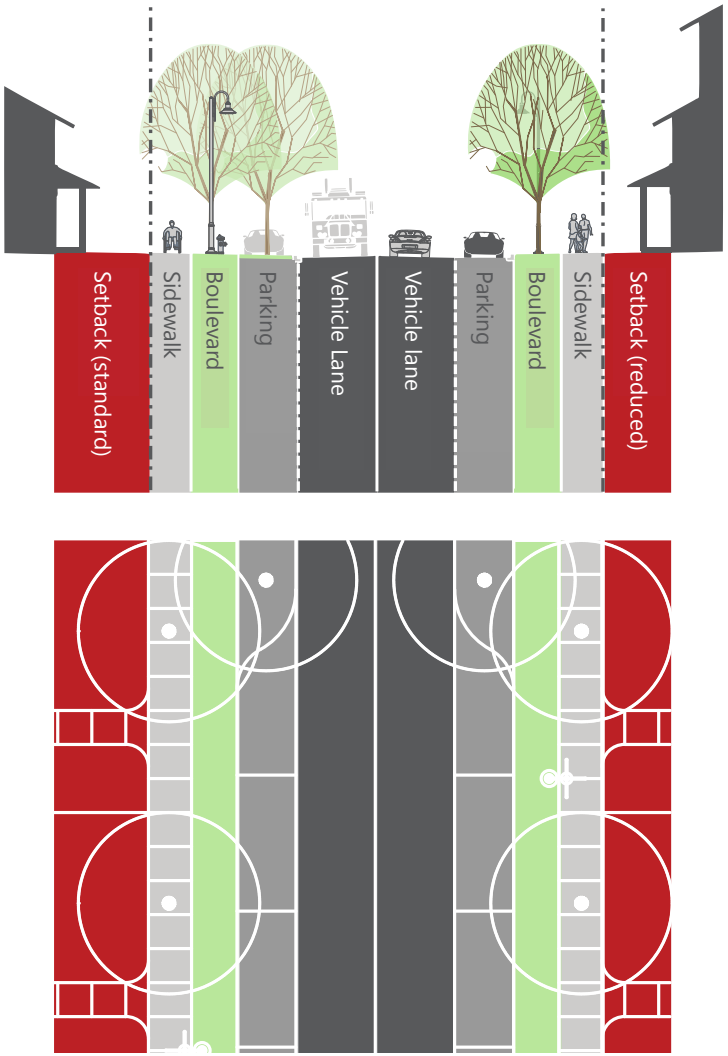
d) In the case of restrictive right of way widths, improved sidewalk widths shall be the priority over parking lanes.

e) Stand-alone parking lots and parking structures are discouraged.

f) New neighbourhood commercial or mixed uses shall be sensitively integrated into the existing neighbourhood by respecting the importance of a strong street frontage and by providing parking areas accessible from the rear of the lot.

g) Refer to Table 2 (pg. 26) for parking options.

Figure 10: Typical Parallel Parking Cross Section for Residential Streets



### 5.7.4. Transportation Zone

The following section describes a variety of physical changes to travel lanes intended to reduce the overall paved width of the roadway in order to achieve a better balance between the use of the road as a cycling and vehicle traffic corridor and its other role as a street and public outdoor space.

The proposed cross section concepts illustrate reduced vehicle lane widths on key streets within the Plan area. The reduction of lane widths can be expected to produce a lower effective travel speed.

#### 5.7.4.1. Vehicle Travel Lanes

**Vehicle Travel Lanes Policies (VTL1)**

a) Vehicle travel lanes shall be reduced to minimum width possible with an emphasis on those streets listed below, while considering impact on the safe function of the streetscape.

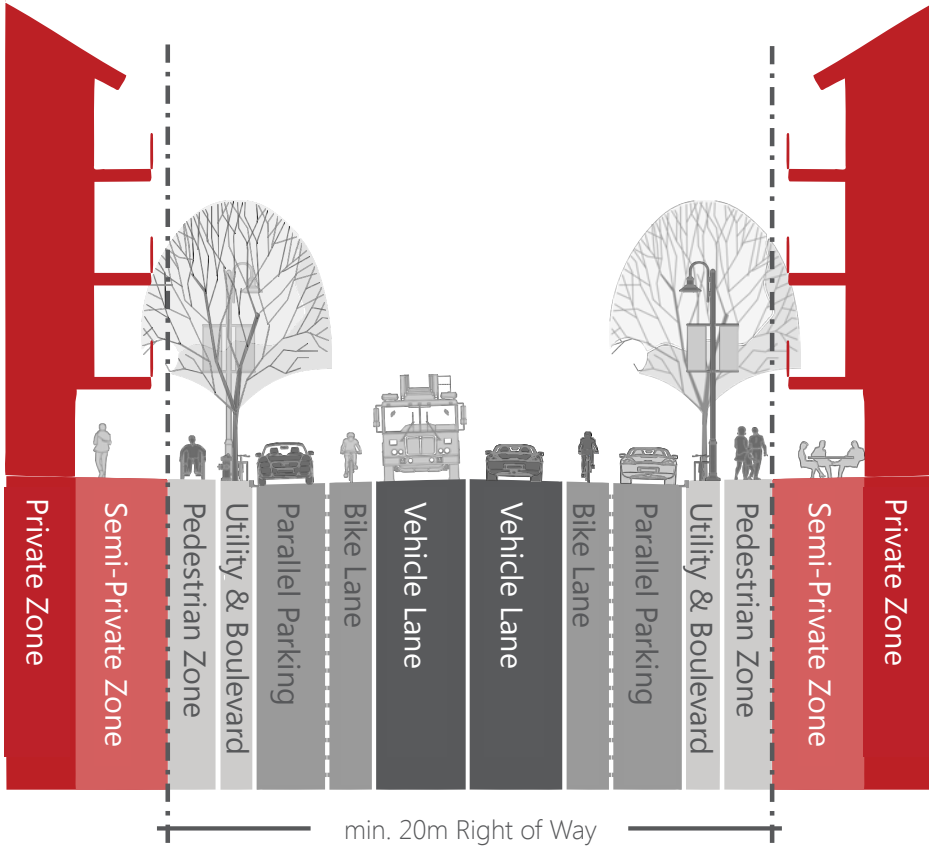
b) Canada Avenue, Duncan Street, St. Julian Street, Festurbert Street, Alderlea Street, Garden Street, James Street and York Street shall prioritize transit, pedestrian and cyclist movement.

c) Lane width reductions should be considered in the context of a traffic analysis, specific to the proposed location.

d) In the case of restrictive right of way widths (including but not limiting the TCH), providing a minimum safe width for vehicle travel lanes shall be the priority.

e) Proposals should be consistent with Table 2: Street Palette Options.

Figure 11: Typical Mixed Use Residential Commercial Cross Section for James Street



Example of marked cycle lane with safe shoulder width


Covered bicycle facilities within the streetscape

### 5.7.4.2. Bicycle Facilities

**Bicycle Facilities Policies (BF1)**

a) Marked bike lanes should be provided along James Street, Canada Avenue, Coronation Avenue, York Road and other routes identified as suitable for cyclists and along pedestrian priority streets.

b) Marked bike lanes shall include adequate line painting, pavement markers, and signage to clearly delineate the area.

c) Cyclists shall be accommodated within side streets and non-commuter routes by way of a combined bike / vehicle lane with adequate shoulder width.

d) Bicycle racks should be provided within the street furnishings strip of the streetscape;

e) New developments shall be required to provide adequate short term bicycle parking facilities (covered where possible) adjacent to the street within the private interface zone.

f) Bicycle storage facilities shall be included in all sites with a multifamily residential, commercial or institutional land use. Storage facilities shall be contained within the building or in a secure sheltered space within close proximity to the building. Sites with a commercial or institutional land use, should also have end of trip facilities for employees (e.g., lockers and showers). Multi-family residential developments comprising of 4 units or less are exempt.

g) In the case of restrictive right of way widths, improved sidewalk widths shall be the priority over bike lanes.


Examples of bicycle signage

### 5.7.4.3. Mid-Block Crossings

**Mid Block Crossing Policies (MBC1)**

a) Mid- block crossings shall be provided within the following pedestrian priority streets:
   i) James Street
   ii) York Road
   iii) Duncan Street
   iv) Canada Avenue

b) Mid-block crossings should be marked with adequate signage, pedestrian activated signals, textured pavements or raised crossings level to the adjacent sidewalk.

Example of a mid-block crossing with median

## 5.8. Semi Public / Public Open Spaces, Plazas and Squares

**Semi Public/Public Open Spaces, Plazas and Squares Policies (PL1)**

a) The policies contained in Section 5.7.1. Private Interface Zone are also applicable.

b) Crime Prevention through Environmental Design (CPTED) principles shall be considered in the development of semi-public open spaces, plazas and squares.

c) Development sites shall provide public access and semi-public open space as identified in the plan.

d) Semi-public plazas, squares and open spaces shall be designed to promote social interaction, barrier free access and social inclusiveness.

Example of a semi-public open space

Energy

Architecture

Landscape

## 5.9. Built Form & Site Design

The purpose of the following policies is to guide the scale and intensity of development within designated areas to support the desired visions and goals of the plan, including synergy with Public Realm policies. New buildings are intended to fortify a coherent, thematically unified, and engaging urban environment. The Built Form for the purposes of this plan establishes a framework for the structural hierarchy of future buildings, structures and open spaces based on the desired quality and character of the Plan area. Built form is more commonly defined as the use, design, massing, scale and type of buildings. For the purposes of this plan the definition and application of built form policies has been integrated with site design considerations and structural relationships to the public realm.

The function, character, architectural style and configuration of buildings as well as their relationship to streets and open spaces are key elements of the built form framework. Policies related to built form seek to inform the scale and intensity of land uses within designated areas as defined in the Plan area. These policies will inform and be supported by subsequent land use policies, design guidelines, development standards and incentive programs.

The components that comprise the built form framework include:

- 5.9.1. Building Architecture - General
- 5.9.2. Landscape Architecture and Site Planning - General
- 5.9.3. Accessibility
- 5.9.4. Signs
- 5.9.5. Lighting
- 5.9.6. Access and Parking
- 5.9.7. Energy Conservation and Reduction of Greenhouse Gas Emissions
- 5.9.8. Water Conservation
- 5.9.9. Stormwater Erosion Control and Flood Management

### 5.9.1. Building Architecture

The following policies should be read in conjunction with the relevant Development Permit Area Guidelines associated with each Municipality.

Figure 12: Building Articulation and Street Zones

Application Submission Requirements

- ✓ Building Layout / Floor Plans
- ✓ Elevation Plans
- ✓ Materials Board
- ✓ Sustainability Statement
- ✓ Design Rationale

**Building Architecture Policies (BA1)**

a) The Municipality shall consider aerial encroachments into the public right-of-way for building designs that include appropriate overhangs, environmental protection from weather elements, wind turbines, solar panels and cell repeaters.

b) At the discretion of the Municipality, renewable energy components (such as solar collectors or wind turbines) shall not be considered within a building height restriction.

c) Strongly thematic architectural styles associated with chain restaurants and service stores are discouraged.

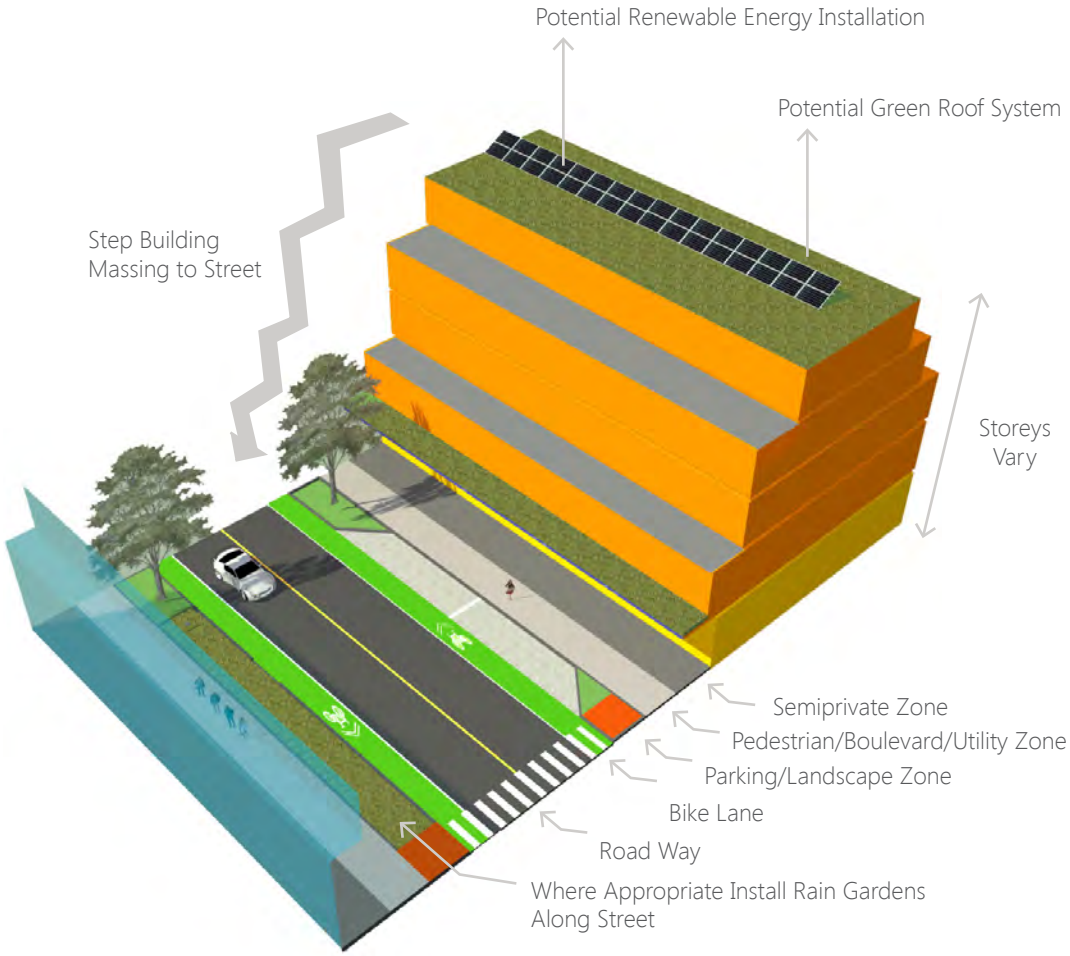
d) Buildings should be sited to ensure that adjacent residential properties have sufficient visual privacy, as well as protection from site illumination and noise.

e) Building design should include a variety of architectural design treatments, including articulated building footprints to reduce massing and to promote architectural definition and interest.

f) Building massing shall consider the preservation or enhancement of public view corridors to open areas and mountain vistas.

g) Building massing should respond to a human scale with materials and details that are proportionate to human height and provide visual interest at the street and sidewalk level.

h) Building entrances should be well defined through architectural means, such as overhangs, porticos and awnings.



**Landscape Architecture and Site Planning Policies (LA1)**

a) Landscape plans shall be provided for all Development Permit applications at the developer's expense, which have been prepared by a registered professional.

b) Building footprints should be located to create opportunities for plazas, courtyards, or garden patio areas with appropriate site furniture and lighting.

c) Parking areas and storage shall be located at the rear of buildings or be screened with appropriate landscaping except in exceptional circumstances. Green or "living" walls will be encouraged in these circumstances.

d) Ensure linkages with nearby areas and neighbourhoods are fully considered in the development of the works proposed.

e) Rooftop gardens shall be encouraged.

f) Efforts should be made to retain as many existing mature private trees as possible. Where existing mature trees have to be removed, they should be replaced with a tree (or trees) of equal value that must:

i) Have a minimum caliper size of 50mm(2 inches).

ii) Have a minimum height of 1.5m.

g) A tree shading plan for parking areas shall be required for all new parking lots associated with commercial, mixed use and (3) three or more unit residential development sites and shall include tree plantings designed to result in (50)fifty percent shading of parking lot surface areas within a 15 year timeframe, subject to the following:

i) If a site has two or more unconnected parking areas, shade is calculated separately for each area;

ii) The amount of shade provided by a given tree is determined by using the appropriate percentage and square footage of the tree crown as a mature tree. Shading credit is given in 25 percent increments based on the amount of the tree crown that shades the parking area.

iii) Overlapping shade does not count twice;

iv) Street trees and existing on-site trees that shade parking lots may be included in shade calculations;

v) Development applications shall provide shade calculations and a shade legend prepared by a registered landscape professional. The planting plan may be used as the shade plan provided all required information is listed and the trees are drawn to the appropriate scale; and

vi) Integrate storm water management measures within areas used for tree shading to reduce land requirements and costs. Rain gardens, infiltration swales, detention ponds and filter strips can be integrated effectively with tree shading. Trees planted within storm water runoff areas should only be species adapted to variable moisture conditions, such as riparian species.

h) Landscape berms for screening and noise attenuation are encouraged.

Application Submission Requirements

- ✓ Site Layout Plan
- ✓ Planting Plan
- ✓ Irrigation Plan
- ✓ Tree Shading Plan
- ✓ Landscape Bonding Estimate

### 5.9.3. Accessibility

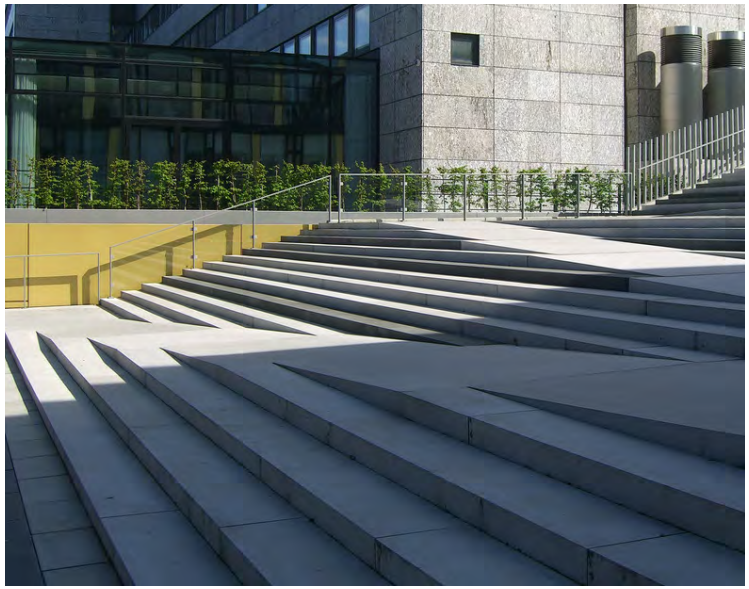
**Accessibility Policies (A1)**

a) Accessibility features shall be integrated into the overall design concept and identified on the site plans.

b) Accessible travel routes shall be provided from adjacent roadways and parking areas to the main building entry and shall incorporate barrier-free universal design principles.

c) Accessible travel routes shall be of a hard, slip- resistant surface with a minimum width per requirements of the most current edition of the British Columbia Building code (BCBC).

d) Accessible travel routes shall conform to the requirements of the most current edition of the British Columbia Building code (BCBC).



Accessible ramps can be integrated into stairs for larger developments

### 5.9.4. Signs

The proliferation of signs and advertising within the Plan area must be carefully considered in order to establish the desired character of neighbourhoods and reduce the effect of visual clutter within the public realm. Signage should not dominate building facades nor cause distraction to drivers, pedestrians and cyclists.

**Sign Policies (S1)**

a) Sign illumination for new signs shall be exterior, from the front and downcast. Internally illuminated signs may include halo lighting or the direct back lighting, only for individual letters and logos, subject to Section 5.9.5.

b) Sign heights and size shall be in context with the neighbourhood, subject to the applicable bylaw provisions.

c) No signs shall be equipped with flashing, oscillating or moving lights or beacons.

d) New single pylon signs are not permitted within the Plan area.

Example of halo lighting

Application Submission Requirements

✓ Exterior Building Signage Details

Lighting should be appropriate to the context and adhere to CPTED principles

Application Submission Requirements

- ✓ Lighting Layout Plan
- ✓ Lighting Fixture Details

### 5.9.5. Lighting

Natural cycles of day and night lighting are important for human health, the natural environment, astrophysical endeavors, and the conservation of energy. To minimize these impacts in line with Dark Sky principles, outdoor lighting should be regulated to control both the quantity and quality of night lighting.

**Lighting Policies (L1)**

a) Developments shall employ energy efficient lighting design such as Light Emitting Diodes (LED) and motion or photo-sensitive lighting for all outdoor lighting.

b) Lighting powered by on-site renewable energy sources shall be encouraged where appropriate.

c) A lighting plan will be provided for all Development Permit applications at the developer's expense, which have been prepared by a registered professional, subject to the following requirements:

  i) All site lighting installations shall be fully shielded (full cutoff).

  ii) Light shall be shielded such that the lamp itself or the lamp image is not directly visible outside the property perimeter.

  iii) Exterior building lighting should generally be concealed in soffits or other similar architectural features.

  iv) Lamp poles and luminaries used for site area lighting should be complementary to the form and character of adjacent sites and street lighting standards.

  v) Adhere to the principles of Crime Prevention through Environmental Design Principles (CPTED), lighting for pedestrian pathways, building entrances and parking areas should be designed at a human scale (i.e., low level bollards) and address pedestrian safety.

  vi) Energy efficient lighting shall be used

### 5.9.6. Access and Parking

Large surface parking areas may be broken down into smaller parking lots evenly dispersed throughout the development and integrated or defined with planted, landscaped areas.

**Access and Parking Policies (AP1)**

a) Parking areas shall clearly identify pedestrian circulation areas, preferably with different paving and landscaping treatment.

b) Parking stalls and lanes shall be surfaced and textured concrete..

c) All parking requirements for the development shall be met on-site.

d) Reductions in parking requirements may be considered for mixed use development at the discretion of the Municipality.

e) Ensure the safe, efficient, convenient, and functional movement of multiple modes of transportation.

f) Give priority to alternate modes of transportation, including public transit, bicycles and pedestrians.

g) Promote the safety and mobility of through traffic by minimizing the number of access and egress points.

h) Electric Vehicle charging stations should be provided for new retail, mixed use and commercial developments with a gross floor area greater than 1000m$^2$.

i) Parking areas shall be located at the rear of buildings and be screened with appropriate landscaping.

j) Service areas should be located at the rear of buildings and screened with appropriate opaque fencing and/or landscaping.

k) Shared parking areas and accesses should be encouraged.

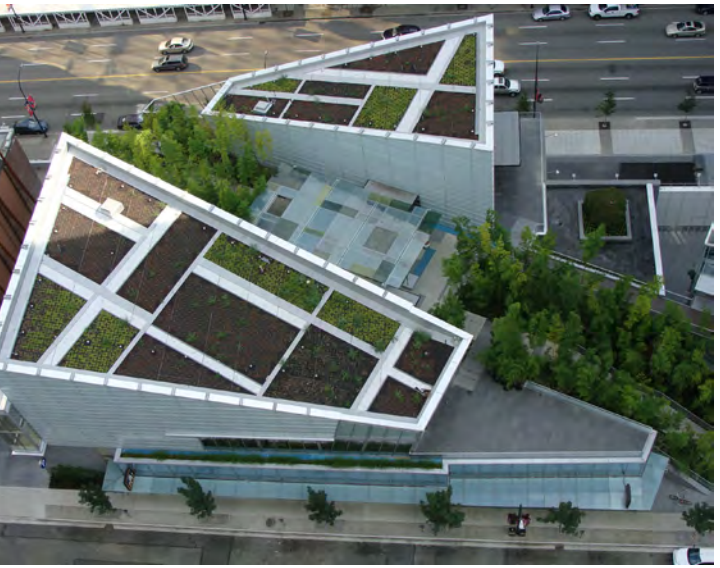
Application Submission Requirements

✓ Parking Access and Layout Plan

Example of perveous paving to reduce stormwater runoff


Example of an electric vehicle charging station

Buildings should be designed to ensure renewable technologies can be incorporated at a later date



Incorporating green roof technology can reduce the effects of the urban heat island effect and reduce the impact on stormwater infrastructure

### 5.9.7. Energy Conservation and Reduction of Greenhouse Gas Emissions

The City of Duncan and the Municipality of North Cowichan have a significant opportunity to reduce air pollution, GHG emissions, and energy consumption through resource conservation and recovery and the application of Smart Growth principles. This LAP encourages development that benefits the economy, the community, the environment, and public health. By reducing sprawl, increasing density within serviceable areas and developing along existing corridors, communities can reduce energy consumption, and thus GHG emissions.

Reference should be made to current editions of the Municipality of North Cowichan Climate Action & Energy Plan (CAEP) and the City of Duncan Integrated Community Sustainable Plan

Application Submission Requirements

✓ Energy Conservation & GHG Reduction Policy Statement Letter

**Energy Conservation and Reduction of Greenhouse Gas Emissions Policies (GHG1)**

a) Within new and retrofitted residential, commercial and mixed use developments, to satisfy a high standard for green building performance, 10 percent of the site's estimated annual energy consumption (energy consumption multiplied by the total floor area) should be supplied by on-site or community-based Eligible Renewable Energy Sources. Up to 50% (i.e. 5% of total energy requirement) of this target can consist of energy conservation and efficiency technologies that exceed the minimum requirements for such buildings. Before this policy is adopted, it will have a phasing in period of 6 to 12 months to determine the details and its viability

b) To support energy conservation and GHG reduction in residential buildings, a home energy improvement loan program should be investigated to assist homeowners in undertaking energy efficiency retrofits. When possible, this program will be tied to the property so that the return on investment from the retrofits goes to the property at that time.

c) The applicant should develop a package of low cost, practical energy efficiency products for homeowners and tenants, to be sold at a cost (or subsidized), along with information and support to help realize electricity savings.

d) If a district energy system is established, a Service Area bylaw shall be created that mandates all new buildings with a floor area ratio equal to or greater than 1.0 to be connectable to a district energy system.

e) Building design should include passive heating, lighting and cooling design features.

f) Buildings should be permitted to install micro wind power generation equipment to meet on-site energy requirements, when permitted within the BC Building Code and under relevant legislation.

g) Landscaping and building design should consider the incorporation of natural daylight and seasonal shade needs.

h) Building orientation should, where practical, be designed to optimize the benefits of solar orientation and ensure sun penetration for adjacent residential uses.

i) All buildings shall be designed and engineered to adapt to future sustainable technologies for solar thermal, district energy systems and grey water reclamation fully aligned with the BC Building Code.

j) Adaptive reuse of buildings and on-site materials is encouraged, where permitted within the BC Building Code and under relevant legislation.


Example of a smart controller for irrigation

Drought tolerant planting is encouraged

## 5.9.8. Water Conservation

Application Submission Requirements

✓ Water Conservation Statement

**Water Conservation Policies (WC1)**

a) Irrigation plans shall be provided for all Development Permit applications at the developer's expense, which have been prepared by a registered or certified professional, subject to the following requirements:

   i) Single-family and duplex residential developments are exempt.

   ii) Landscaped areas shall be watered by an irrigation system, complete with an automated 'smart' controller.

   iii) Irrigation scheduling requirements shall be provided with each permit application to illustrate water conservation measures and that the proposed system can be effectively operated within watering restriction windows. The IIABC offers and on-line Landscape Irrigation Scheduling Calculator at: http://landscape-calculator.irrigationbc.com.

b) Development projects should incorporate rainfall capture systems for irrigation where feasible.

c) Development projects should incorporate greywater for irrigation where feasible.

d) Development projects should minimize impervious areas and incorporate on-site integrated stormwater management solutions that maintain pre-development infiltration rates and site hydrology.

e) The Municipality should consider the requirement for water audits for commercial mixed use units of 1000m$^2$ and above, as part of new comprehensive development proposals.

### 5.9.9. Stormwater Erosion Control and Flood Management

The Plan area lies within a known floodplain. The following policies have been established in order to ensure that people and property are protected from flooding. In order to adequately mitigate this hazard and reduce damage from floodwaters, flood construction levels for habitable space in new developments must be applied.

Application Submission Requirements

- ✓ Storm Water Management Plan
- ✓ Lot Grading Plan
- ✓ Geotechnical Report as per City of Duncan Hazard Areas DPA and Municipality of North Cowichan – Hazard Lands DPA

**Stormwater Erosion Control and Flood Management Policies (FM1)**

a) All habitable residential portions of new buildings shall be raised above the Flood Construction Level (FCL) on appropriate structural fill, crawl space, garage, or carport that is designed to withstand flooding.

b) Non-residential buildings or portions thereof below the current FCL shall provide wet proofing.

c) A storm water management plan shall be required as prepared, signed, and sealed, by a registered professional member of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), that has as its goal the maintenance of post-development flows equivalent to those of pre-development flow patterns and volumes over the entire wet weather season.

d) Stormwater management should take advantage of on-site opportunities to recycle water to absorbent soils, wetlands, and forests.

e) A registered professional shall prepare a Sediment and Erosion Control Plan for the construction and operational phases of the development.

f) New developments that incorporate flood prevention and stormwater drainage elements must not adversely affect neighbouring properties.

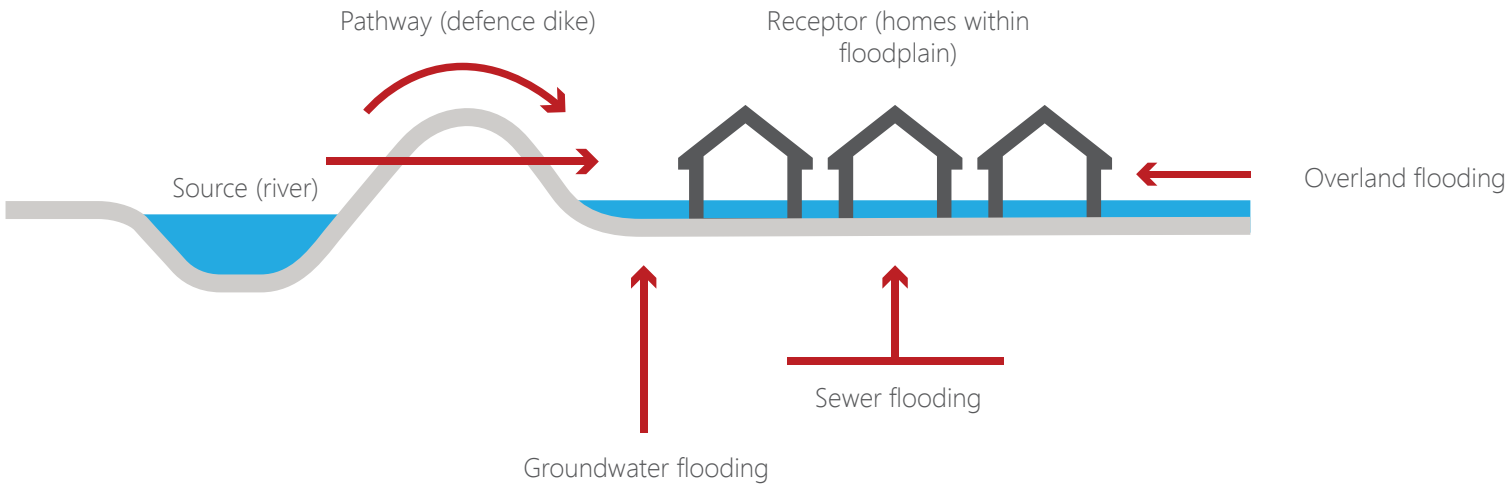



Figure 13: Sources of Flooding

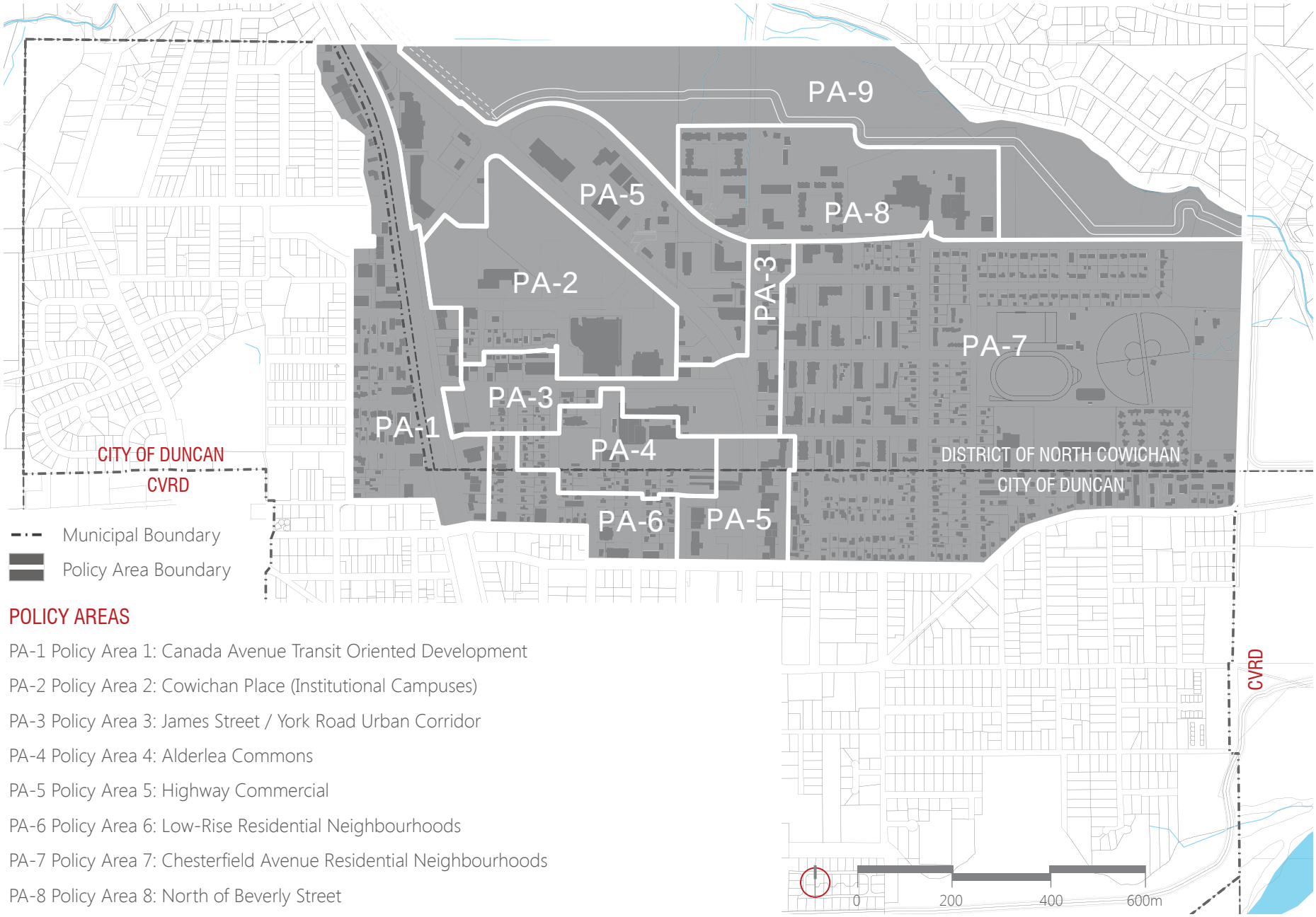
## 5.10. Neighbourhood Specific Policies

The following policy sections are applicable to designated neighbourhoods within the Plan area. Refer to the Village-Wide Policies section for general policies applicable to the entire Plan area.

- PA-1 Canada Avenue Transit Oriented Development
- PA-2 Cowichan Place (Institutional Campuses)
- PA-3 James Street / York Road Urban Corridor
- PA-4 Alderlea Commons
- PA-5 Highway Commercial
- PA-6 Low-Rise Residential Neighbourhoods
- PA-7 Chesterfield Avenue Residential Neighbourhoods
- PA-8 North of Beverly Street
- PA-9 Somenos Marsh

A list of preferred uses is included under each specific policy area. This list is not intended to be exhaustive, but does provide an indication as to the overall intent of the area, in line with the vision of the Plan.

Figure 14: Policy Areas




## POLICY AREAS

PA-1 Policy Area 1: Canada Avenue Transit Oriented Development

PA-2 Policy Area 2: Cowichan Place (Institutional Campuses)

PA-3 Policy Area 3: James Street / York Road Urban Corridor

PA-4 Policy Area 4: Alderlea Commons

PA-5 Policy Area 5: Highway Commercial

PA-6 Policy Area 6: Low-Rise Residential Neighbourhoods

PA-7 Policy Area 7: Chesterfield Avenue Residential Neighbourhoods

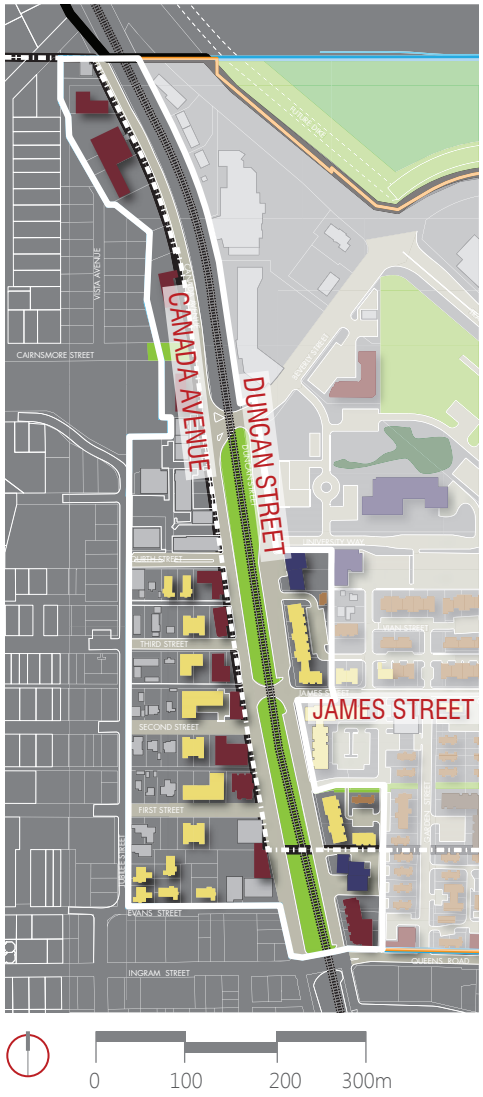
PA-8 Policy Area 8: North of Beverly Street

PA-9 Policy Area 9: Somenos Marsh

## 5.11. PA-1 Canada Avenue Transit Oriented Development Corridor

This area is intended to act as multimodal transportation corridor for potential future rail service, transit, pedestrians, cyclists and road vehicles. Land use, public realm and built form policies seek to create a defined urban corridor that is liveable and walkable with special public amenities, public art and attractions. Public and private development proposals shall consider improved connectivity within the corridor linking surrounding road and trail networks.

Figure 15: Policy Area 1 (PA-1)




- Policy Area Boundary
- Municipal Boundary
- Multi-Family (low-rise up to 3 storeys)
- Mixed Use Residential
- Mixed Use Commercial
- Existing Institutional/Community Facility
- Green Space

**Preferred Land Uses:**

- Small Scale Retail and Commercial
- Low Rise Multifamily Residential
- Mixed Use Residential
- Live-work
- Public Open Space
- Public Parking

**Preferred Building Typologies:**

- Small Lot / Narrow Lot Infill Residential Homes
- Ground Oriented Townhomes and Rowhouses
- Low Rise Apartments
- Live-Work Studios with ground floor commercial retail space

**PA-1 Policies**

a) The history of rail service should be considered as a potential thematic element for the public realm.

b) New infill development along the rail corridor and flanking avenues will draw design cues from and be sensitive to the quality, scale and character of adjacent heritage buildings.

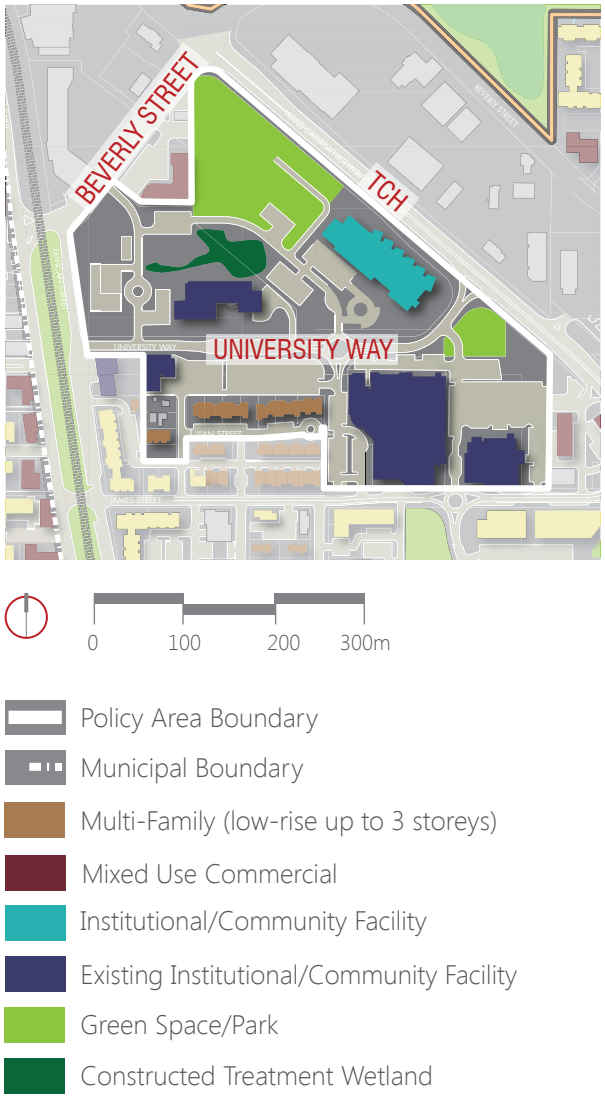
c) Retail uses shall be ground oriented with studios, offices and residential uses above.

d) Restaurants are encouraged to locate along Duncan Street and Canada Avenue.

## 5.12. PA-2 Cowichan Place (Institutional Campuses)

This policy area is home to a number of local and regionally important institutional recreational and community facilities, which includes the Aquatics Centre, Islands Savings Centre (including the world's largest hockey stick) Cowichan Theatre and VIU. VIU is an important post-secondary learning centre attracting students from both the Cowichan Valley and further afield. VIU has future plans to expand its curricular activities and campus buildings. It is important that this area continues to build on this learning and recreational hub which has started to develop in this area and allow expansion and further development to help build on the synergies to create an innovative learning and recreational campus and help in attracting more students and employment to this area.

Figure 16: Policy Area 2 (PA-2)




**Preferred Land Uses:**

- University Campus
- Institutional Community Facilities
- College Campus
- Trade Technology School
- Public Library
- Civic / Conference Centre / Hotel
- Recreation
- Park
- Community Facilities
- New High School
- Student Housing
- District Energy Centre

**Preferred Building Typologies:**

- Campus Style Buildings
- Student Housing / Mixed Use Building

**PA-2 Policies**

a) The Municipality will support the future development of the University's campus and encourage a site Master Plan to be developed and adopted by the Board following consultation with the Municipality and local community.

b) The University should continue to evolve as a high quality mixed use campus, incorporating education led mixed use development with active ground floor uses, which will contribute to the street level vibrancy of the campus, together with areas for student accommodation. The following strategic development

principles should be used to guide development proposals brought forward by the University:

i) Safeguard and enhance the University as a vibrant, distinctive and diverse area of University Village, taking into consideration the needs and requirements of the local community;

ii) Improve the quality of the environment and improve connections (including way finding through the campus) by all modes and gateways into the University;

iii) Create new high quality streets and public spaces, including green spaces;

iv) Create an environment where pedestrians and cyclists have priority;

v) Build upon its location adjacent to Downtown Duncan;

vi) Introduce new high quality architecture using the latest sustainable design;

vii) Promote itself as a community asset providing access to recreation and other facilities by the local community.

c) To ensure good planning and meaningful dialogue with communities, the Municipality will encourage VIU to follow a development liaison process when intending to develop on university lands on a voluntary basis and undertake consultation with the Municipality.

d) A feasibility study should be conducted by the Cowichan Place partners for a district energy plant(s) as part of a campus master plan or redevelopment of other institutional facilities.

e) Considerations for the development of district energy systems within the feasibility study should include the following:

i) Location of thermal plant

ii) Transmission distances (shorter is better)

iii) Cooling load concentrations

iv) Substantial anchor loads

v) Plant footprint

vi) Condenser water sources

vii) Age of buildings and life cycle

viii) Utility rates

ix) Combined heat and power (CHP)

x) Low carbon design and passive measures to reduce energy and associated carbon emissions and air pollutant measures (Particulate Matter, Ozone precursors, Nitrogen Oxides and Sulphur oxides)

xi) Local heat demand mapping and off-site heat export and import opportunities to be used to evaluate for technical and commercial viability.

## 5.13. PA-3 James Street / York Road Urban Corridor

This urban corridor is intended to provide the main connection for pedestrian and cyclist movements within the Focus area and across the Trans-Canada Highway. The corridor spans a number of major roadways and is bisected by the highway commercial corridor. This area shall be the priority for development or redevelopment. Densification of street oriented commercial and retail services along the corridor is strongly encouraged in combination with office space and residential units above the ground floor.

James Street and York Road shall act as a multimodal transportation corridor prioritized for pedestrian and cyclist movements. Land use, public realm and built form policies seek to create a defined urban corridor that is liveable and walkable. Public and private development proposals shall consider improved connectivity within the corridor linking surrounding open spaces, streets and trail networks.

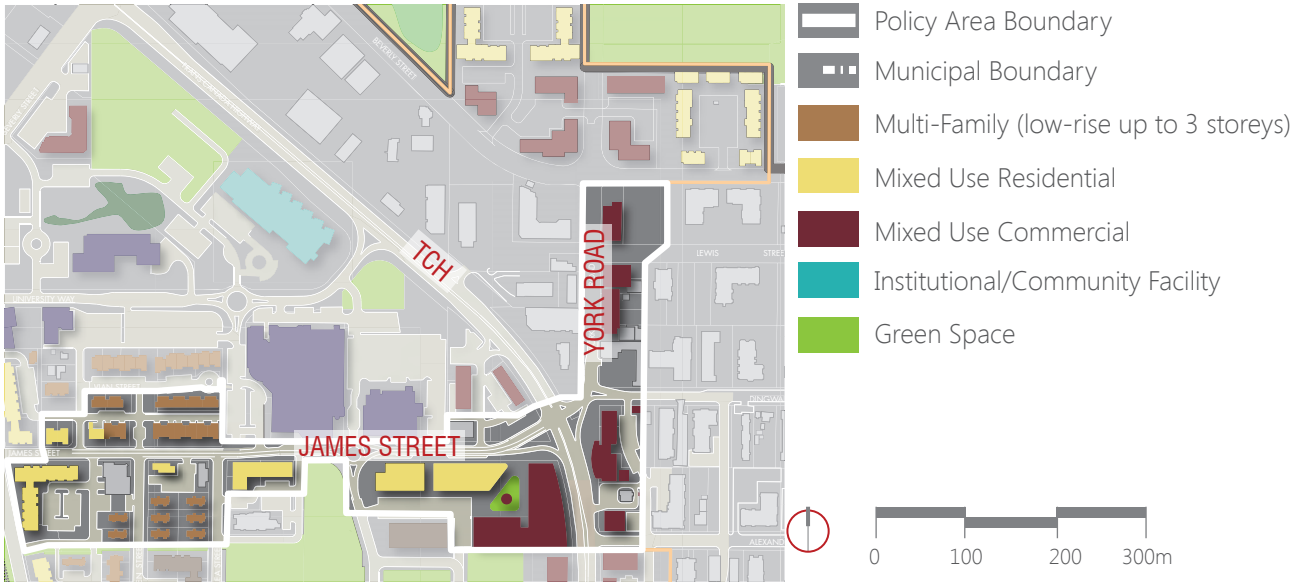
**Preferred Land Uses:**

- Street Oriented Retail and Commercial
- Mid Rise Multifamily Residential
- Mixed Use Residential
- Mixed Use Commercial
- Multifamily Low Rise
- Live-work
- Institutional/Community Facility

**Preferred Building Typologies:**

- Ground floor commercial / retail
- Office Space above the ground floor

Figure 17: Policy Area 3 (PA-3)




- Residential Units above the ground floor
- Mixed Use Buildings
- Mid Rise Apartments (up to 5 storeys)
- Live-Work Studios with ground floor commercial retail space

**PA-3 Policies**

a) The cultural and natural history of the area should be the central thematic element for the public realm. Building form and character and material selections should reflect the area history and utilize locally available materials such as wood and natural stone.

b) Landscaping should mimic plant communities endemic to the region. For example, streetscape planting may be themed by block to reflect a specific ecosystem: alpine, subalpine, upland, riparian and marshland.

c) Retail uses shall be ground oriented with studios, offices and residential uses above.

d) Restaurants, bars, arts and cultural entertainment uses are encouraged to locate along James Street.

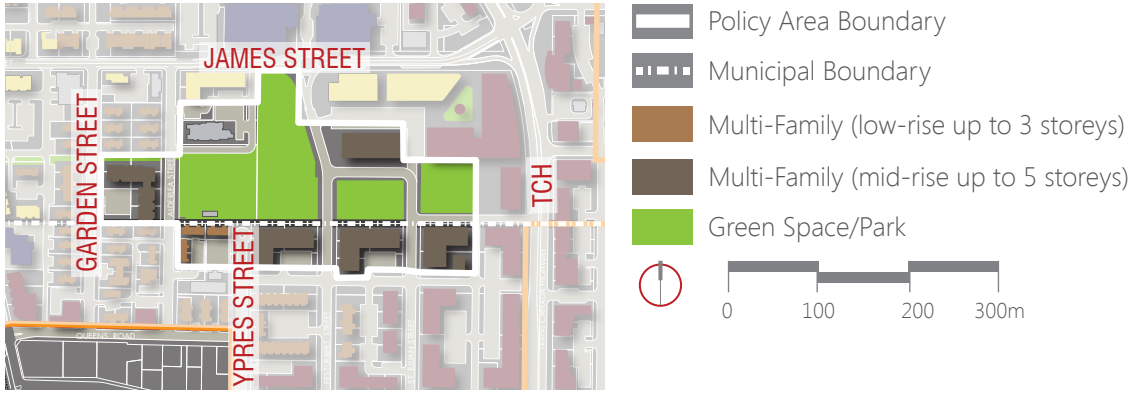
e) Prior to rezoning, a detailed master plan shall be required

## 5.14. PA-4 Alderlea Commons

The Alderlea Commons neighbourhood is intended to act as the dominant organizing feature of the University Village plan. The Alderlea name is drawn from the history and heritage of the Cowichan Valley reinstating the original name of the rural settlements at Duncan Crossing. While named after pioneer 'hwunitum' settlers the overall program and character of the park should include distinctive elements, appropriate for an inclusive community. The linear open space component will be multi purposed to provide active and passive recreation opportunities, while also acting as an off roadway circulation route and storm water management infrastructure components of the overall plan.

Land uses adjacent to the Commons will be primarily mid-rise density residential with buildings, balconies and patios overlooking the open space. Through the principles of "Crime Prevention of Environmental Design" (CPTED), full time residents next to the park will add a level of active monitoring and civic ownership to the healthy enjoyment of the space, mitigating negative behavior commonly associated with dead zones (districts that are vacant after business hours). Through roadways, mid-block pedestrian connections, integral walkways, and trail linkages penetrate the Commons providing additional eyes and ears in the park.

Figure 18: Policy Area 4 (PA-4)




**Preferred Land Uses:**

- Parks and Open Space
- Greenway
- Multifamily Residential Mid Rise
- Mixed Use Commercial (along James Street and the TCH)
- Multifamily Residential Low Rise

**Preferred Building Typologies:**

- Mixed Use Buildings
- Mid Rise Apartments

**PA-4 Policies**

a) The cultural and natural history of the area should be the central theme for the linear open space including:

   i) A park naming program that draws on original First Nations place names of the area.

   ii) A public art walk woven through the site featuring sculptural artwork.

   iii) Programming for festival and events spaces.

   iv) A botanical garden approach to site landscaping that draws from the endemic flora of the region.

b) Residential buildings shall provide well-defined entrances onto the Alderlea Commons open space.

c) Residential balconies and private open spaces shall be oriented toward the Alderlea Commons open space.

d) An exemption to the stormwater management requirement of the general policy section of this document will be considered where detention facilities within the Alderlea Commons open space are sufficient to mitigate increased post development storm water flows.

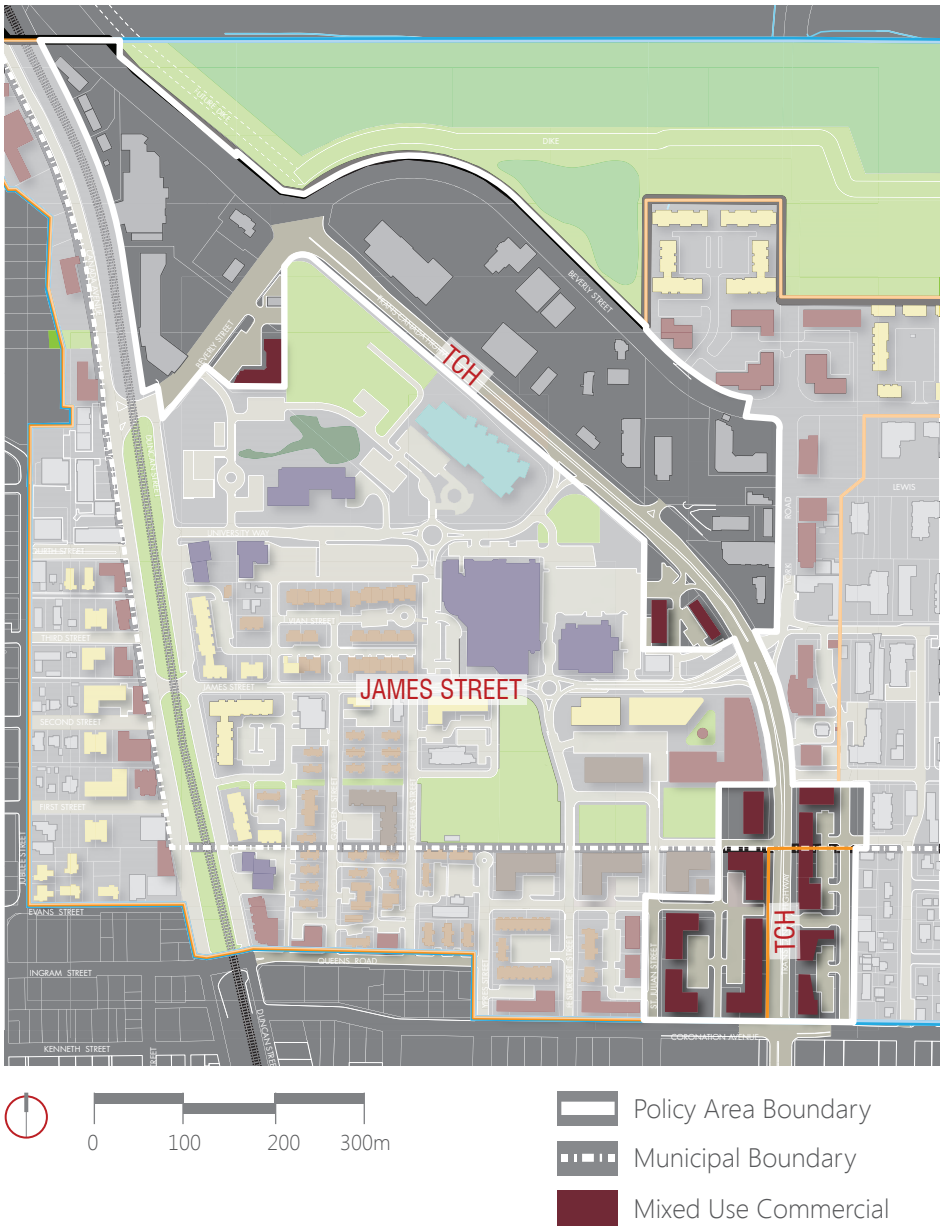
e) A conceptual master plan for the park should be developed to build on the ideas set out in the LAP.

## 5.15. PA-5 Highway Commercial

This urban corridor is intended to provide the main connection for vehicle and commuting cyclist movements through the Plan area along the Trans-Canada Highway. This area is currently a hub for automobile oriented services and highly visible retail commercial frontages. Working in tandem with recommendations and desired outcomes of the Trans-Canada Highway (TCH) corridor transportation study, this neighbourhood should present an aesthetically pleasing regional gateway to the overall plan area.

The TCH spans a number of major roadways bisecting the Plan area and is currently considered a barrier to safe pedestrian and cyclist movements. This area shall be a priority for revitalization or redevelopment. Densification of street oriented commercial and retail services along the corridor is strongly encouraged in combination with office space above the ground floor. Land use, public realm and built form policies seek to revitalize the appearance and functional relationships of Highway commercial development. Public and private development proposals will be required to carefully consider improved connectivity within the corridor linking surrounding open spaces, streets and trail networks.

Figure 19: Policy Area 5 (PA-5)



**Preferred Land Uses:**

- Highway Oriented Retail and Commercial
- Mixed Use Commercial
- Office
- Public Use

**Preferred Building Typologies:**

- Ground floor commercial / retail
- Office Space above ground floors
- Residential units above ground floors
- Mixed Use Buildings

**PA-5 Policies**

a) The cultural and natural history of the area should be the central thematic element for the public realm.

b) Retail uses shall be ground oriented with studios, offices and residential uses above;

c) Primary retail and commercial building entries should face the highway; secondary entries may be provided from rear parking plazas and local road network.

d) Parking areas for all new developments shall be to the rear of buildings.

e) Buildings shall be massed along and located at the building setback for the highway corridor.

f) Reduced front yard setbacks shall be granted to a minimum of (0)zero m where an expanded right of way dedication has been provided as a negotiated amenity. Refer to Table 4.

g) Vehicle access to and from the TCH shall not be permitted unless there are no other options (side street, laneway, shared access agreement).

h) Existing accesses along the TCH shall be consolidated when opportunities arise. Refer to Figure 5 and Figure 6.

i) Truncated local roads shall be reconnected to improve local connectivity (e.g., Whistler Street to Alexandra Street).

j) New single storey developments shall not be permitted.

k) Consult with local affected corridor users, businesses, Cowichan Tribes, and relevant authorities having jurisdiction, prior to plan finalization for short, medium and long term infrastructure improvement projects.

l) Coordinate Land Use and Zoning applications with proposed short, medium and long term TCH improvements outlined in the Trans-Canada Highway Corridor Management Plan: Boys Road to Beverly Street 2014.

m) Public safety shall be the first priority of any reviews and plan finalizations.

n) Indirect access (via side roads) shall be provided for prior to the removal of a direct right in / right out TCH accesses. TCH access to businesses

o) Where there is no existing sidewalk on the west (southbound) side of the TCH, a minimum 2.0 metre sidewalk should be provided from Boys Road to Beverly Street, separated from the TCH by a raised curb and gutter as a minimum, and with a minimum of 1 metre wide landscaped boulevard between intersections where right-of-way exists and where feasible.

p) Where there is no existing sidewalk on the east (northbound) side of the TCH between Boys Road and Beverly Street, a multi-use paved pathway of 4 metres should be provided, separated from the TCH by a raised curb and gutter as a minimum, and a 1 metre boulevard where right-of- way exists and where feasible.

q) Paint lines to delineate the sidewalks and multi- use pathways across driveway let-downs shall be installed to aid in alerting drivers of the potential presence of pedestrians and cyclists.

r) Pedestrian indicators shall be upgraded, over the short and medium term to include count-down indicators.

s) All pedestrian and cycling pathways and roadway crossings shall have adequate lighting (to meet current best practices and standards) to promote pedestrian and cyclist visibility during nighttime hours.

**Gateway Policies**

a) Signature and artistic gateway structures (such as locally designed and constructed totem poles sculptures), incorporating artistic pedestrian median fencing, should be erected within the raised median and boulevard in the area of Beverly Street.

b) Signature and artistic gateway structures and landscaping should be erected along the roadside north of Beverly Street in order to slow southbound traffic in advance of the intersection.

c) Permanent electronic road-side radar speed signs should be installed north of Beverly Street facing the southbound direction to alert drivers entering the urban area of their speed and that they must slow down.

d) Moving the speed reduction zone further north of Beverly Street should be considered.

e) Where median and boulevard width permit in the gateway areas, there should be landscaping installed that is coordinated with and enhances the appearance of the gateway features.

**Median Policies**

a) Existing concrete median barrier (CMB) between Boys Road and Beverly Street should be replaced with raised concrete median curbed island to reinforce the visual indication that motorists are entering an urban area.

b) Median shall have appropriate fencing to prevent jaywalking across the TCH. This shall be applicable from Boys Road to Cowichan Way and from James Street / York Road to Beverly Street to encourage pedestrians and cyclists to use designated crossing locations only.

c) Medians should have appropriate landscaping and/or rain gardens wherever median width allows.

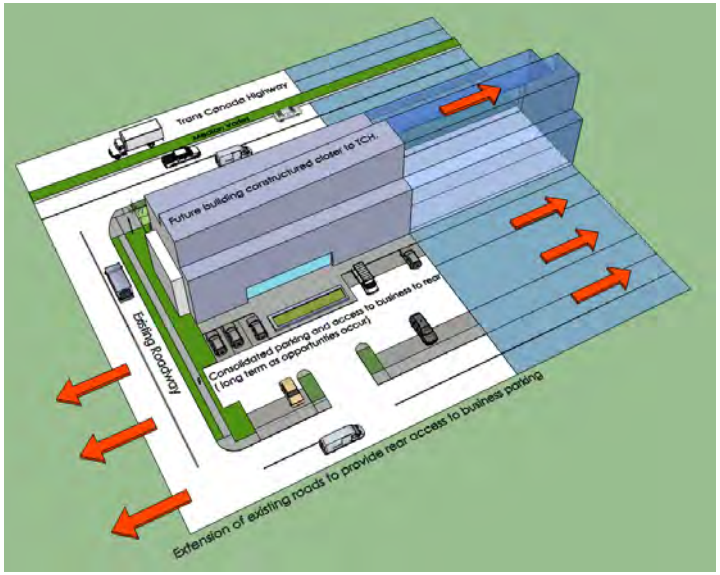
**TCH Access Policies**

a) In the short to medium term, depending on re-development rates and types, accesses and parking areas directly off of the TCH shall be consolidated wherever possible and shared access and parking agreements should be made to ensure that:

   i) Any parking areas with inadequate area for the safe maneuvering of vehicles without backing onto pedestrian / cyclist areas or the TCH shall be decommissioned as soon as alternate access is provided.

   ii) Any unused driveway let-downs shall be reinstated to full height curb and gutter.

b) Bylaw(s) shall be created to address the granting of permits for parcels abutting the TCH that will state that: prior to any change in land use, ownership, or zoning, an access permit shall be required. Permits for direct access from the TCH will only be granted if there is no legal access available from the local roadway network.




Conceptual future access to businesses off the TCH

**Future Local Roadways – Medium and Long term Property Acquisition**

a) Road right of way shall be acquired when possible and/or upon re-development application to connect the following roads:

   i) Extend Al Wilson Grove to the TCH at Cowichan Way

   ii) Extend Price Road to Al Wilson Grove

   iii) Provide for a backage road parallel to Price Road connecting properties along TCH south of Dobson Street.

   iv) Extend Bundock Avenue south to connect with Price Road at Dobson Road.

   v) Extend Whistler Street south to Trunk Road.

   vi) Extend Whistler Street north across Alexander Road to Dingwall Street.

   vii) Extend Bundock Avenue north across Alexander Road to Dingwall Street.

   viii) Connect Bundock Avenue and Whistler Street between Alexander Street and Powell Street.

   ix) Extend Festubert Street north to James Street.

   x) Extend St. Julien Street north and west to Festubert Street.

   xi) Revise backage road connection between the TCH and St. Julien Street at the south end of the Cowichan Secondary property.

   xii) Create an east – west connecting roadway between the existing lots occupied by car dealerships across Festubert Street to Ypres Street between Coronation Avenue and the current Cowichan Secondary School property.

## 5.16. PA-6 Low-Rise Residential Neighbourhoods

This area is intended to remain as a low to medium density residential neighbourhood with provisions for additional infill and adaptive reuse developments. The general goal of future development is to double the existing density to reduce the long-term infrastructure costs associated with service low-density residential neighbourhood. As there are older character homes and other existing homes within the area, the adaptive reuse of these structures to multiple suites or addition of garden suites is encouraged, where feasible.

**Preferred Land Uses:**

- Small Lot / Narrow Lot
- Character Home Suites
- Low Rise Multifamily Residential

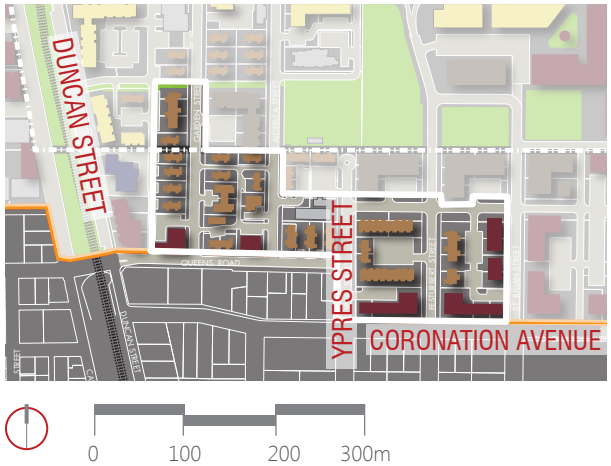
**Preferred Building Typologies:**

- Small Lot / Narrow Lot Infill Residential Homes
- Ground Oriented Townhomes and Rowhouses
- Low Rise Apartments (up to 4 storeys)
- Duplex, Triplex, Fourplex

**PA-6 Policies**

a) New infill development will be sensitive to the quality, scale and character of adjacent buildings and draw design cues from local history.

Figure 20: Policy Area 6 (PA-6)



## 5.17. PA-7 Chesterfield Avenue Residential Neighbourhoods

This area is intended to remain as a low to medium density residential neighbourhood with provisions for additional infill and adaptive reuse developments and improved streetscapes and public realm. The long term goal is to double the existing density to reduce the long term infrastructure costs associated with servicing low density neighbourhoods.

University Village and in particular this specific areas ability to successfully adapt existing residential areas to incorporate new development will greatly influence and strengthen the area's sustainability. The Plan supports the needs of residents throughout their lifetime and should be adaptable to change over time, partly by allowing aging within the community and by including additional housing choices. By providing a diverse mix of house types in terms of density, size, affordability and tenure, in coordination with other uses, like commercial space, public spaces, and institutions; places are created where existing residents will want to stay and new residents are attracted to the area.

This area has large areas of low-density developed housing which offers significant potential for strategic intensification. While with this, come opportunities for the integration of a range of housing options in comprehensive developments to support complete communities.

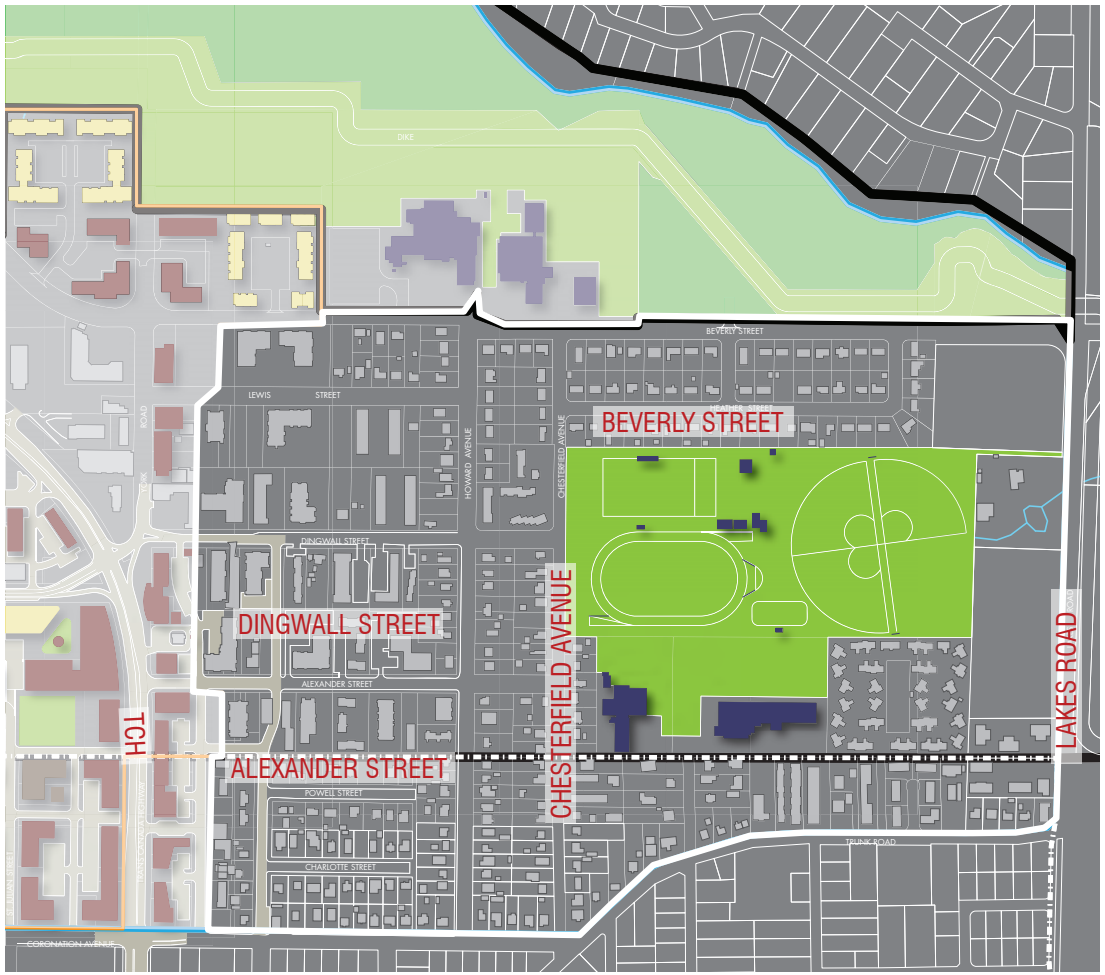



Figure 21: Policy Area 7 (PA-7)

For a community to be socially, economically, and environmentally sustainable it must maintain long-term viability. The social, economic and environmental fabrics are interrelated. All must grow in support of one another

**Preferred Land Uses:**

- Public Use/Community Facilities
- Small Lot / Narrow Lot
- Character Home Suites
- Low Rise Multifamily Residential where currently zoned
- Mid Rise Multifamily Residential where currently zoned

**Preferred Building Typologies**

- Small Lot / Narrow Lot Infill Residential Homes
- Ground Oriented Townhomes and Rowhouses
- Duplex, Triplex, Fourplex

**PA-7 Policies**

a) New multi-residential development will be supported provided the following criteria are met:

i) The proposal is sympathetic to the scale, character and context of the established residential area, particularly taking account the physical scale and form of new houses and vehicular access and parking, which is well integrated into the development;

ii) High standards of space, amenity, light and privacy are maintained for adjacent occupiers;

iii) Trees are retained and new trees planted where appropriate;

iv) The proposal provides opportunities for strategic intensification that supports housing affordability and/ or affordable housing objectives;

v) The proposal conforms to the Housing Policies in the OCP;

vi) Streams and watercourses shall be protected and buffered from development.

Examples of low-rise residential infill development that currently exists within the Plan area

## 5.18. PA-8 North of Beverly Street

This area is comprised of public use and commercial recreational lands located between the south side of the dike and north of Beverly Street. The public use lands contain Quamichan Middle and Alexander Elementary School as well as existing School District 79 Administration and some maintenance buildings. To the west, the Fun Pacific Lands are occupied by a golf course and other recreational uses. Only the SD 79 property containing the Administrative building and maintenance facilities fall within the current UCB Boundary. The intent of the specific policies are to allow for future school development, amend land use of the SD 79 administrative and portion of the maintenance property, to allow for Commercial and Residential Mixed uses. In addition, contemplated changes to the current land use for the existing Fun Pacific Lands include Commercial and Residential mix use. Residential mixed use is located to the north of the property and commercial mixed use along the Beverly Street corridor opposite to existing permitted commercial uses across Beverly Street and future commercial mixed use contemplated to the east across York Road on SD 79 lands. Environmental protection of Somenos Marsh will to be an overriding concern for any proposed development in this area. Public access to the dike trail will be encouraged.

The considerations for amending land use to mixed use commercial and mixed use residential is contemplated with adjustment to the current UCB boundary. This is subject to council review and adoption.

**Preferred Land Uses:**

- Public Use/Institutional Community facilities
- College Campus
- Commercial Mixed Use
- Residential Mixed Use

**Preferred Building Typologies**

- Institutional
- Mixed Use Commercial
- Mixed Use Residential

**PA-8 Policies**

a) The cultural and natural history of the area should be the central thematic element for the public realm.

i) New multi-residential development will be supported provided the following criteria are met:

ii) The proposal is sympathetic to the scale, character and context of the area, particularly taking account the physical scale and form of new houses and vehicular access and parking, which is well integrated into the development;

iii) Trees are retained and new trees planted where appropriate;

iv) The proposal provides opportunities for strategic intensification that supports housing affordability and/ or affordable housing objectives;

v) The proposal conforms to the Housing Policies in the OCP;

vi) Streams and watercourses shall be protected and buffered from development.

b) Residential balconies and private open spaces shall be oriented towards views of the Somenos Marsh or open spaces.

c) Commercial Retail uses shall be ground oriented with studios, offices and residential uses above;

d) Primary retail and commercial building entries should face the Beverly street; secondary entries may be provided from rear parking plazas and local road network.

e) Parking areas for all new developments shall be to the rear of buildings.

f) Buildings shall be massed along and located at the building setback for the Beverly Street corridor.

g) Reduced front yard setbacks shall be granted to a minimum of zero (0) m where an expanded right of way dedication has been provided as a negotiated amenity. Refer to Table 4 (pg. 70).

h) New single storey developments shall not be permitted.

i) Consult with local affected corridor users, businesses, Cowichan Tribes, and relevant authorities having jurisdiction, prior to plan finalization for short, medium and long term infrastructure improvement projects.

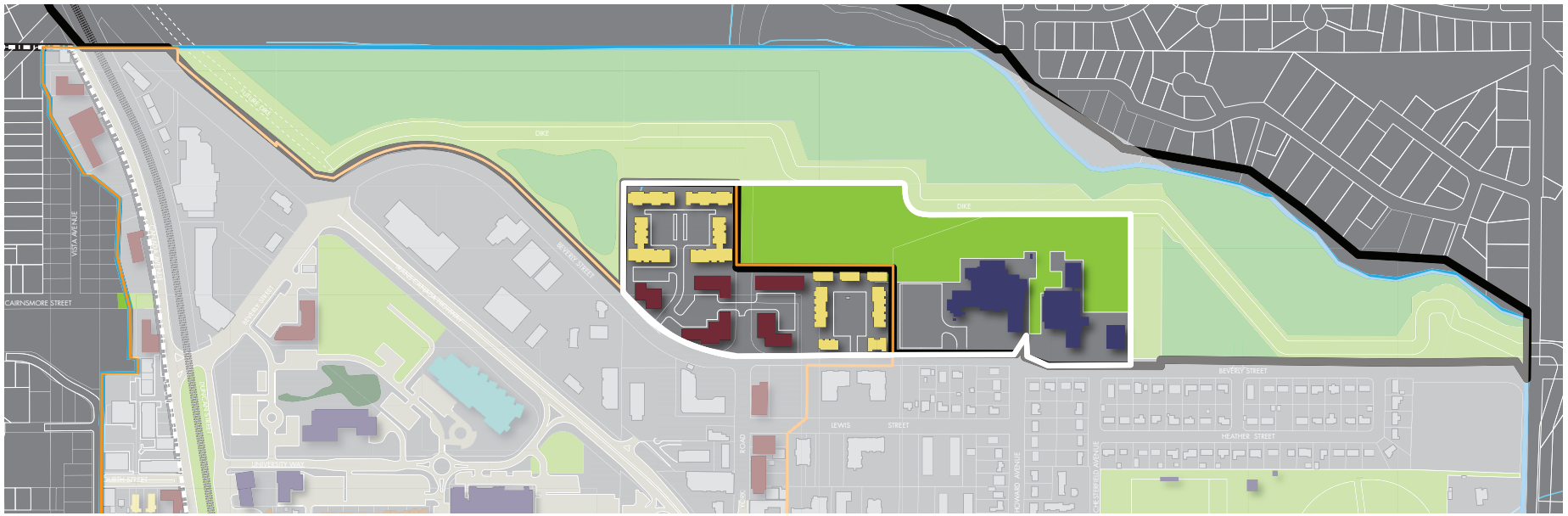



Figure 22: Policy Area 8 (PA-8)

j) Public safety shall be the first priority of any reviews and plan finalizations.

k) Where there is no existing sidewalk on the north (westbound) side of Beverly Street a minimum 2.0 metre sidewalk should be provided in front of the proposed development separated by a raised curb and gutter as a minimum, and with a minimum of 1 metre wide landscaped boulevard between intersections where right-of-way exists and where feasible.

l) Where there is no existing sidewalk on the east (northbound) side of York Street, north of the existing roundabout a multi-use paved pathway of 4.0 metres should be provided on one side of the property, with the opposite side provided with a 2.0 m wide sidewalk, separated from York Street by a raised curb and gutter as a minimum, and a 1 metre boulevard where right-of- way exists and where feasible. Coordinate this with current MNC Active Transportation and Bike Pathway plans.

m) Paint lines to delineate the sidewalks and multi- use pathways across driveway let-downs shall be installed to aid in alerting drivers of the potential presence of pedestrians and cyclists.

n) All pedestrian and cycling pathways and roadway crossings shall have adequate lighting (to meet current best practices and standards) to promote pedestrian and cyclist visibility during nighttime hours.

## 5.19. PA-9 Somenos Marsh

This area is outside the Municipality's OCP Urban Containment Boundary (UCB) and is comprised of public use land environmental areas (Somenos Marsh) and agricultural land. Flood defenses in the form of a new dike have been built through this area to protect the residential neighbourhoods to the south from future flooding events. The intent of the specific policies are to provide protection to the environmental and agricultural areas and allow for providing opportunities for other public facilities such as visitor, recreation, agriculture, interpretation and ancillary development associated with the Somenos marsh and to increase public access through more formal access pathways along the dike and along York Road to right of way.

**Preferred Land Uses:**

- Agriculture
- Recreational
- Stormwater Management

**Preferred Building Typologies:**

- Recreational amenities and structure
- Agricultural

**PA-9 Policies**

a) Any proposed development on parcels directly adjacent to lands within the Agricultural Land Reserve (ALR) should be designed to reduce impacts on the agricultural use of the ALR lands.

b) Any proposed development for constructed wetland treatment facility should ensure provision of educational or interpretive facilities associated with the adjacent Somenos Marsh such as a nature centre or visitor's facility, as deemed appropriate by the Municipality.

c) The Municipality working with its partners will continue to provide protection to the Somenos Marsh Management Plan area as amended and seek further protection by applying to the Province to designate the area as a Wildlife Management Area.

   i) Innovation in design and sustainable development techniques will be strongly encouraged, and where appropriate variances to the Zoning Bylaw will be supported.

   ii) Stormwater management and stream protection recommendations.

d) New dike to be constructed along TCH as part of Phase 4. Subject to senior government funding and approvals.

e) Dike trail should be upgraded to a paved fully accessible multi-use pathway.


Figure 23: Policy Area 9 (PA-9)

Policy Area Boundary

Municipal Boundary

Green Space/Park

Somenos Marsh/Agriculture

Constructed Treatment Wetland

0 100 200 300m

# 06 REGULATING PLAN

A Regulating Plan provides the framework for establishing rules to guide the physical development of a certain area or site, in this case the Focus Area of the LAP. The rules are intended to provide developers with clear direction for future proposals, and more certainty for governing jurisdictions that the LAP vision will be delivered through appropriate built form over the long term. It allows enough flexibility to enable single or multiple developers to prepare plans on a site by site basis, or as part of a larger consolidated development.

## 6.1. Implementation of the Regulating Plan

In preparing applications for development, applicants shall have particular regard to the content of the respective Official Community Plans for the Municipality of North Cowichan and the City of Duncan. The design requirements are based on these documents, best practice and site constraints and opportunities. The Regulating Plan is site specific and applies to the areas listed in Figure 24: Regulating Plan. The Regulating Plan describes the building types, setbacks and maximum heights required for blocks within the Focus Area.

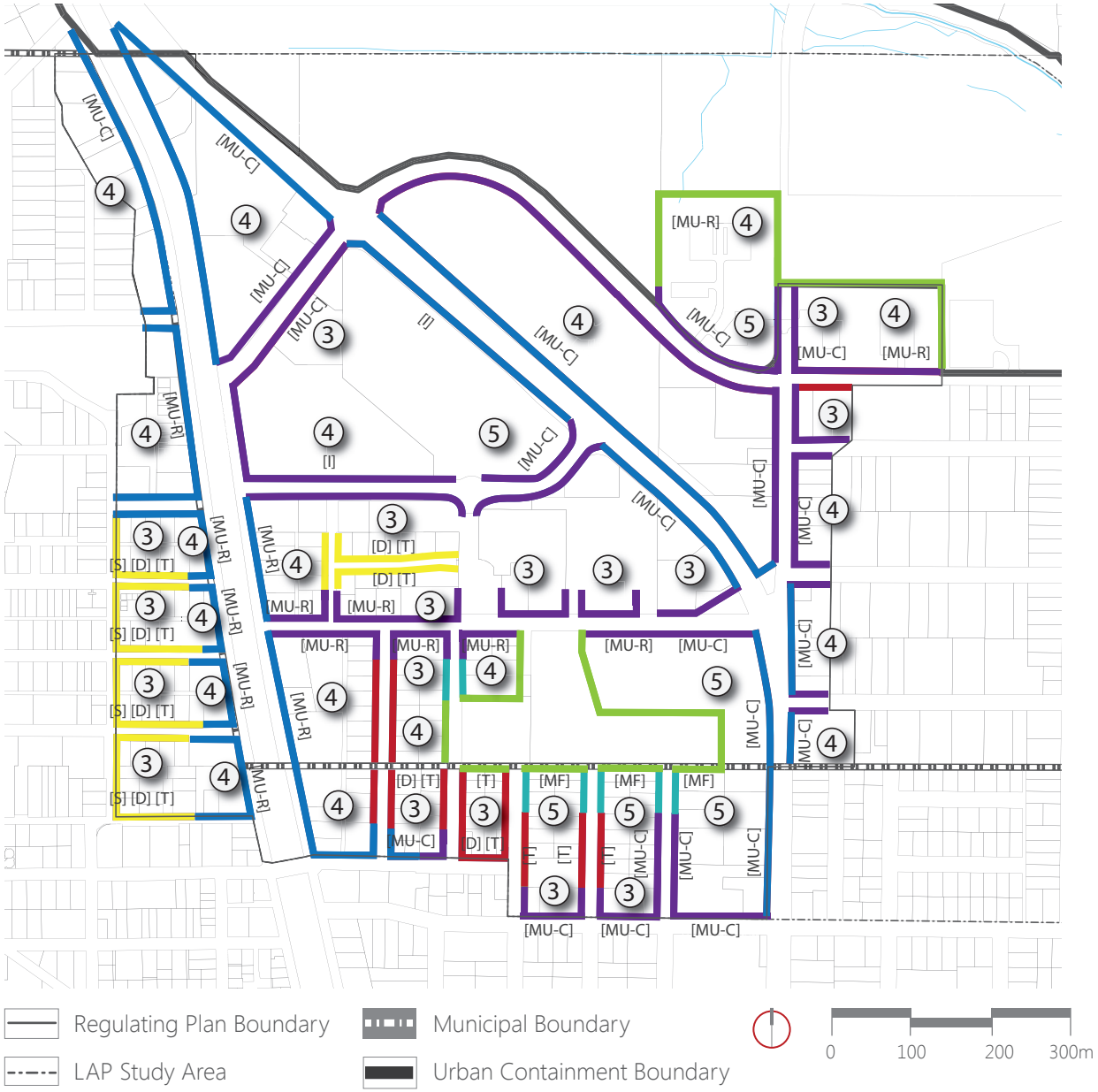
Since many of the proposed uses and regulations set out in the LAP do not conform to the standard districts within the current zoning bylaws (Municipality of North Cowichan Zoning Bylaw no. 2950 and City of Duncan Zoning Bylaw 1540, 1988), future development may require a comprehensive development zone or new zoning district. This will be based on the University Village Sustainable LAP and shall conform to the rules set out in the Regulating Plan.

### 6.1.1. Regulating Plan Policy

a) In determining land use and development permits within the Plan area, new development must comply with the rules set out in the Regulating Plan. With the exception of maximum building height, variances to a rule may be considered to address site specific circumstances, provided the overall intent of the rule is maintained and respected.

b) Where applicable, existing zoning rights shall be upheld.

Figure 24: Regulating Plan




## REGULATING PLAN REQUIREMENTS WITHIN THE FOCUS AREA

### Heights

4 Preferred Maximum Building Height in Storeys

### Building Lines

See Table 4

- Line 1
- Line 2
- Line 3
- Line 4
- Line 5
- Line 6

### Building Typologies

See Table 5

| | |
|---|---|
| [S] | Single Detached |
| [D] | Duplex |
| [T] | Townhouse/Rowhouse |
| [MF] | Multi-Family |
| [MU-C] | Mixed-Use Commercial |
| [MU-R] | Mixed-Use Residential |
| [I] | Institutional |

### 6.1.2. Building Setbacks

Table 4: Building Setbacks

| BUILDING LINE | MINIMUM SETBACK | MAXIMUM SETBACK | BUILD TO REQUIREMENT | APPLICATION |
|---|---|---|---|---|
| 1 | 3 m | 5 m | 60% of frontage at minimum setback | For primary frontage of blocks with townhouse/ rowhouse and semi-detached building types |
| 2 | 0 m | 4 m | 80% of frontage at minimum setback | For primary frontage of blocks with commercial or mixed-use building type or for blocks facing a street |
| 3 | 2 m* | 6 m | 60% of frontage at minimum setback | For primary frontage of blocks with commercial or mixed-use building facing a transit corridor/highway |
| 4 | 3 m | 4 m | N/A | For primary frontage of mid-rise residential blocks facing the street |
| 5 | 3 m | 6 m | N/A | For primary frontage of mid-rise residential blocks facing a green space |
| 6 | 4 m | 6 m | N/A | For primary frontage of low-rise residential blocks facing a street |

* Reduced front yard setbacks shall be granted to a minimum of (0)zero m where an expanded right of way dedication has been provided as a negotiated amenity.

### 6.1.3. Building Typologies

Table 5: Building Typologies

| | TYPOLOGY | MIN. / MAX. NO. ADJOINING UNITS* | MAX. PARKING STALLS | RECOMMENDED COMMERCIAL PARKING STALLS | ACCESS - PEDESTRIAN | ACCESS - VEHICLE | GENERAL USE |
|---|---|---|---|---|---|---|---|
|  | SINGLE DETACHED (S) | N/A | 2 stalls per unit | N/A | N/A | Front driveway or rear | Residential |
|  | DUPLEX (D) | 2 - 2 | 1 stall per unit | N/A | Separate direct entry | Front driveway or rear | Residential |
|  | TOWNHOUSE/ ROWHOUSE (T) | 3 - 7 | 1.5 stalls per unit (inc. 0.5 visitor stalls) | N/A | Separate direct entry | Rear | Residential |
|  | LIVE/WORK (LW) | 4 - 8 | 1 stall per unit | 1 stall | Separate direct entry | Rear | Mixed |
|  | MULTI-FAMILY (MF) | N/A | 1.5 stalls per unit (inc. 0.5 visitor stalls) | N/A | Separate direct entry and common direct entry from grade adjacent to a street | Rear | Residential |
|  | MIXED USE COMMERCIAL (MUC) | N/A | 1.5 stalls per unit (inc. 0.5 visitor stalls) | As per current zoning bylaw requirements | At-grade commercial: separate direct entry from grade; floors 2 and above: common direct entry from grade adjacent to a street | Rear | Commercial |
|  | MIXED-USE RESIDENTIAL (MUR) | N/A | 1.5 stalls per unit (inc. 0.5 visitor stalls) | As per current zoning bylaw requirements | At-grade commercial: separate direct entry from grade; floors 2 and above: common direct entry from grade adjacent to a street | Rear | Mixed |
|  | INSTITUTIONAL (I) | N/A | To be determined on a case by case basis | N/A | Common direct entry from grade adjacent to a street | Rear | Institutional |

*Minimum/Maximum number of adjoining buildings: number of units allowed to be in a row, with maximum indicating when a break in the building must be made

# 07 IMPLEMENTATION AND ADMINISTRATION

The University Village Sustainable LAP sets out a future vision that will transform the area over the next thirty years. Responsibility for implementation of the LAP rests with developers, Municipal and City Council, administration within each local government area, and through their active involvement in civic affairs, the residents and businesses within the neighbourhood.

Over time, it is anticipated that there will be increased private sector interest in development in the area. That interest has to be encouraged but it is essential that the Municipality, City and their partners play their part by seeking the right mix of development, by securing the high quality development expected by the LAP, by negotiating the best outcomes from developer contributions and by providing the framework of public sector investment and infrastructure which is essential for generating private sector confidence.

University Village has entered a period in its development where opportunities for change can be realized. These are outlined in the monitoring and action plan below and together they have the potential to increase the attractiveness of the area through residential and mixed use development, enhanced streetscapes and new and improved park facilities.

## 7.1. Administration of the Plan

In order to fully implement certain aspects of this Plan, it is acknowledged that amendments to the Municipal OCPs may be required, including Development Permit Area justifications and categories to facilitate the following:

- Energy conservation and GHG reduction
- Water conservation
- Flood hazard mitigation
- Revitalization area

During this interim period, the current OCP bylaw will take precedent in the event of any discrepancies.

## 7.2. Amendment of the Plan

It is reasonable to expect there may be new concepts and ideas that arise due to policy or site constraints that were not anticipated at the time of preparing this Plan. Where such new concepts and ideas respond or meet the overall intent of the Vision and Guiding Principles or offer an innovative solution to a particular problem, efforts shall be made to find ways to allow for their implementation, including where necessary, amendments to the Plan. To make any changes to text or maps within the Plan, an amendment to the Plan will be through standard bylaw amendment processes. Where an amendment to the Plan is requested, the applicant shall submit the supporting information necessary to evaluate and justify the potential amendment and ensure its consistency with the OCP and other relevant policy documents.

## 7.3. Monitoring of the Plan

Monitoring and evaluation will have a crucial role to play in providing feedback and information on the performance of policies within the LAP. It will determine how well policies are working and whether any appropriate policy adjustments are needed.

In the context of the OCPs, the Climate Action and Energy Plan (MNC, 2013) and the Integrated Community Sustainability Plan (COD, 2013) monitoring will have an added importance in providing information on whether sustainability aims and objectives are being achieved. Monitoring provides information on the performance of policy, the delivery of development and impacts on the environment. Monitoring will help each jurisdiction to assess whether the Plan remains valid or whether adjustments need to be made in order to meet the Plan's objectives.

### 7.3.1. Monitoring Policies

a) A monitoring report produced every 5 years should be developed jointly by the Municipality and the City which will be based on Table 6 and contain information on the implementation of the University Village Sustainable LAP and the extent to which policies in the LAP are being successfully implemented.

b) MNC and COD should record and report progress on the delivery of the infrastructure proposals listed in this plan within the framework of the monitoring report system and timetable.

### 7.3.2. Implementation Metrics

To monitor the implementation of the LAP, a series of indicators have been derived and outlined in Table 6: Implementation Metrics. These seek to measure the effectiveness of the LAP policies. Given the importance each jurisdiction has placed on sustainability initiatives, these indicators have been tailored to addressing the reduction of GHG and energy consumption specifically.

Metrics are for the whole plan are, not the focus area, unless otherwise stated.

Table 6: Implementation Metrics

| LAP INDICATOR | RELEVANT POLICY | KEY PERFORMANCE INDICATOR (KPI) METRIC | BASELINE (PLAN AREA) | 2044 TARGET (PLAN AREA) | RATIONALE |
|---|---|---|---|---|---|
| Increased Density | LU1, PA-1, PA-3, PA-4, PA-6, PA-7 | % of multi-family housing | 1358 units or 74% of all units (not including hotels or supported living) are MF<br>Source: GIS analysis from MNC dataset | 90% | Reflects the desire to have more diversity of housing in the Plan area. A broader range of housing types will meet the needs of a diverse population and reduce energy consumption. |
| Growth Management | LU1, PA-1, PA-3, PA-4, PA-6, PA-7 | Number of all residential dwelling units within 400m of the LAP core (as illustrated in Figure 5) | 45 residential buildings/87 residential dwelling units<br><br>Source: GIS analysis from MNC dataset | 200 residential dwelling units | Demonstrates a commitment to creating a compact neighbourhood in line with "smart growth" principles. |
| Urban Tree Forest | GP1, B1, LA1, PA-4 | Number of existing trees<br><br>Tree canopy coverage | 2310 trees within 4m of City streets (source Urban Forest Strategy, 2010)<br>1.94 ha (4.79 ac) of tree canopy cover for MNC (source MNC GIS dataset) | 2500 trees (City of Duncan)<br><br>Increase by 60% for MNC | Increased tree cover provides shading during summer months, reduces CO2 emissions and the heat island effect and is considered fundamental to good urban design through an improved public realm. |
| | | Preparation of Urban Forest Strategy | 0 | 2 | |
| Access to Green Space* | GP1, LA1, PG1, PA-4, PA-8 | Area ($m^2$) of green space maintained per person | 7–78 $m^2$ per person<br>(19 ha/2440 population) | 10–15 $m^2$ per person<br>Increase by 50% | Improving availability of green space reduces the need to travel and potential trips generated for recreational purposes.<br>Green spaces significantly contribute to community health and well being. |

*Green space = publicly active/passive accessible recreational green space for all ages

| LAP INDICATOR | RELEVANT POLICY | KEY PERFORMANCE INDICATOR (KPI) METRIC | BASELINE (PLAN AREA) | 2044 TARGET (PLAN AREA) | RATIONALE |
|---|---|---|---|---|---|
| Achieving High Quality Design | BA1, GHG1 WC1 | Number of green developments (LEED®, BOMA, Energy Star, Built Green etc.) | Total 3 developments:<br>(VIU)<br>730 Jubilee Street (4 units)<br>472 Chesterfield Avenue<br>(4 units) | 20% of all new development permit applications | A number of evaluation tools are available to assess the environmentally friendly and carbon reducing measures in new construction and retrofits. This demonstrates a commitment to move towards a more sustainable future. |
| | | Number of buildings implementing 10% target reductions in on-site renewable energy. | 0 | 100% of all new developments meeting the criteria | |
| Energy Consumption | BA1, GHG1, WC, FM1 | Per capita GHG emissions | 6.8 tC02e/per capita* | 3.4 tCO2e/per capita | As the community grows, the total emissions are generated by a larger population. Thus to achieve a modest total reduction, a greater per capita reduction is required. |
| | | Residential buildings per capita GHG emissions | 0.71 tC02e/per capita* | 0.35 tC02e/per capita* | |
| | | Energy consumed per building – residential | 135 GJ/year | 68 GJ/year | |
| | | Energy consumed per building – commercial/institutional | 1084 GJ/year | 542 GJ/year | |
| | | Number of new policies introduced to promote energy reduction measures | 0 (baseline year 2013) | 15–20 | |
| Compact Communities | M1, PL1, GOU1, IS1, BF1, MBC1, PL1, BA1, AP1 | Units her hectare<br>Efficient use of land | 1327 dwelling units/175.75 ha = 7.5 units/ha | 15–20 units/ha | Promoting higher density living near local employment opportunities contributes to the reduction of vehicle trips. Transportation is the highest source of GHGs for both MNC and the City (73% and 58% respectively based on 2010 CEEI). By increasing density and providing alternative modal infrastructure, GHG emissions from transportation can be reduced. |

**Values are reflective of the Plan area only and not of North Cowichan whose per capital GHG emissions and residential buildings per capita is 5.4 tC02e/per capita and 0.51 tC02e/per capita, respectfully.*

- *It should be noted that the difference of percent consumption for the plan area and MNC as a whole is due to the more in depth analysis conducted for the LAP*
- *Plan Area = 175.75 ha*
  *434.28 ac*
- *Focus Area = 76.245 ha*
  *188.39 ac*

## 7.4. Infrastructure Action Plan

### General Approach

a) Complete system modelling of the water, storm water, and sewer systems is not required at this time. The extent of future development and timing of that development is market dependent, and as such, is not definite as this point.

b) Any utility upgrades resulting from an application within the study area will be the responsibility of the developer. The Municipality and City will indicate that the proposed infrastructure may not be adequate to support the new development and it is the developers responsibility to evaluate required utilities and will be responsible for any cost of upgrade. Having said that, the City and the Municipality can support late comer agreements and also have the ability to contribute if necessary.

### Water

a) The City of Duncan has contracted Focus to model impacts of the proposed LAP densities on the current model system. The local government will be upgrading the James Street water main in two phases in the near future and want to make sure that the proposed design respects the future land use. Stantec will provide recommended fire flows for the proposed land use. Stantec may also be required to evaluate the Focus model with respect to fire flow rates.

b) Consultant or staff to recommend fire hydrant spacing for the proposed land use within the Focus Area. This will be based on the Fire Underwriters Survey (FUS).

c) The fire protection water flows for the LAP study have been identified based on a combination of the District of North Cowichan Engineering Standards (DNC) reinforced with the Master Municipal Construction Documents (MMCD) Design Guideline Manual. The DNC fire flow for commercial and light industry is a flow range of (110-225 L/s). The MMCD minimum requirements for institutional and commercial are 150 L/s which falls inside the DNC range. We recommend the system be designed for 150 L/s.

d) Hydrant spacing for the proposed land use has been based on the Fire Underwriters Survey (FUS). Using the suggested minimum fire flow of 150 L/s the distribution density of hydrants is recommended to be one hydrant per 12,000 m2 without exceeding the maximum recommended spacing of 90m for commercial, industrial, institutional, and multi-family residential areas.

e) Four potential large diameter service connections have been identified for three potential future users which are:

i) The Vancouver Islands University expanding campus on University Way.

ii) The potential future High School location west of the Vancouver Island University Campus on University Way.

iii) The future five story commercial/ residential mixed use building proposed for the northeast corner of James Street and the Island Highway.

## Storm Water

a) Storm water treatment is of more importance that storm water attenuation for the proposed area. The majority of the area is hardscape and significant changes in permeability are not expected.

b) Consultant or staff to provide space for a large scale public storm green water treatment area (location) that would accept water from new developments for treatment prior to discharge. This treatment area could be designed to be used as an amenity for the community as well. This treatment area could be limited to use of smaller scale developments where providing treatment infrastructure on constrained sites is challenging, and sometimes prohibitive to development. Larger development sites may be required to include some type of treatment on-site. Policy with respect to treatment is under review by the Municipality of North Cowichan. The public storm water treatment area would also provide a more meaningful benefit as ongoing operations a maintenance of the system can be assured.

Table 7: Basis of Sewer and Water Analysis within Focus Area

| | |
|---|---|
| Current Residential Population | 480 |
| Total Current Residential Units (except SFD) | 62 |
| | |
| Total Potential New Residential Units (Multifamily Low Rise and Mid Rise/Mixed Use Residential/ Commercial Mixed Use | 1336 |
| Total Area Net $M^2$ of Residential Units | 202,131 |
| Total Area Net $Ft^2$ of Residential Units | 2,174,926 |
| Estimated Persons per Unit | 2.5 |
| Average Area of Unit $M^2$ | 105 |
| Average Area of Unit $Ft^2$ | 1129.8 |
| Projected Potential Residential Population by 2044 | **5541** |
| COMMERCIAL ADJUSTMENT FACTOR % (OUT OF AREA - OFFICE WORKERS/SERVICES/RETAIL) WITHIN CATCHMENT AREAS | |
| CA-1 (Pioneer) | 25% |
| CA-2 (Lomas) | 25% |
| CA-3 (Berkley) | 20% |
| CA-4 (Beverly) | 20% |
| | |
| Total Estimated Population Residential + Public Use (Institutional) +Commercial within Focus Area by 2040 | **6881** |

## Sanitary Sewer

a) Municipality is to develop new average and peak loadings for each affected sewer catchments. Municipality will use the final University Village Sustainable LAP land designations within the Focus Area and apply Municipality of North Cowichan flow requirements and good engineering practice to develop flows.

b) New design sewage loading rates have been developed for each of the four sanitary catchment areas that overlap the LAP study area using the estimated combined commercial residential and public institutional 2040 population. This task has been performed using the DNC's per capita calculations and stormwater infiltration design values listed in the DNC Engineering Standards section 5A.2.1. Per the DNC standards the total design sewage loading rates have been developed by combining the calculated per capita flow for the future population with the area based peak stormwater infiltration and inflow values.

c) The projected 2040 flow rates, DNC parameters used and names of each catchment are tabulated in Table 8. It should be noted that the flow rates in Table 8 are based on the 2040 population of 6881 people, the current population is 480 and the actual flow rates occurring at any given time will be dependent on the current level of development and population density.

d) Subject to further detailed analysis as projects come on stream

Table 8: Estimated Flows

| STUDY AREA SHARED SEWAGE CATCHMENT | 2040 POPULATION | DNC VALUE TABLE 5A.2.1 (L/CAP/DAY) | CATCHMENT AREA (HA) | DNC VALUE FOR STORMWATER INFLOW (L/DAY/HA) | DESIGN FLOW L/S |
|---|---|---|---|---|---|
| Pioneer | 4100 | 1365 | 29.77 | 5615 | 66.56 L/s |
| Lomas | 1708 | 1640 | 18.59 | 5615 | 33.52 L/s |
| Berkley | 89 | 3000 | 9.29 | 5615 | 3.69 L/s |
| Beverly | 984 | 1910 | 21.36 | 5615 | 17.85 L/s |

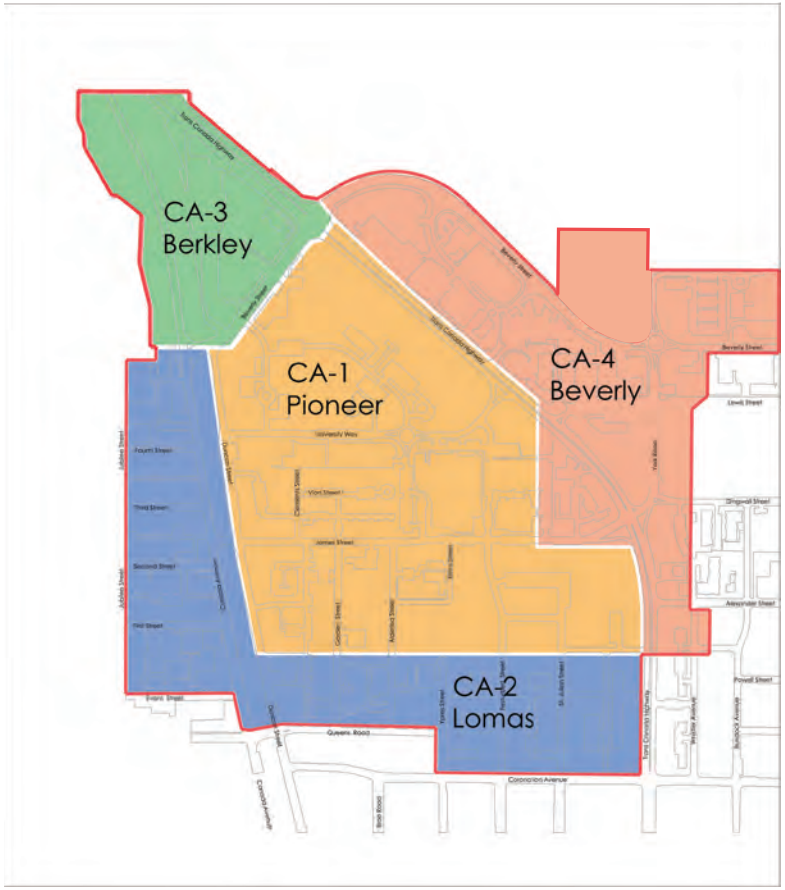



Figure 25: Sewage Catchment Areas Within Focus Area

## Flood Management

The Focus Area and Study Area are subject to flood risk. Given the proposed density increase for the LAP flood impact assessment of future development is a critical part of the planning process.

Climate change will play a major role in increasing the risk of flooding in the future. For example, short intense rain storms are becoming more frequent, often causing severe local flooding, particularly in urban areas with high-density development and under capacity of drainage.

Subsequently, future development will need to ensure that flood risk is considered as an integral factor in the planning process and that new development does not increase the risk of flooding elsewhere.

The following figure provides a general "road map" for reviewing flood impacts within the LAP as infrastructure and new developments come on stream.

Key recommendations for future initial land use assessment include:

- Evaluation of the possible source and frequency of flooding and the flood pathways
- Estimation the depth, velocity and duration of flooding
- Avoid adding to the source, cause or impact of flooding with inappropriate development
- Ensure the development maximizes the use of on-site storage/attenuation to minimize the effect on developments downstream; and
- Design the building to reduce the consequences of flooding on people and property.
- Work to reduce the flood risk overall

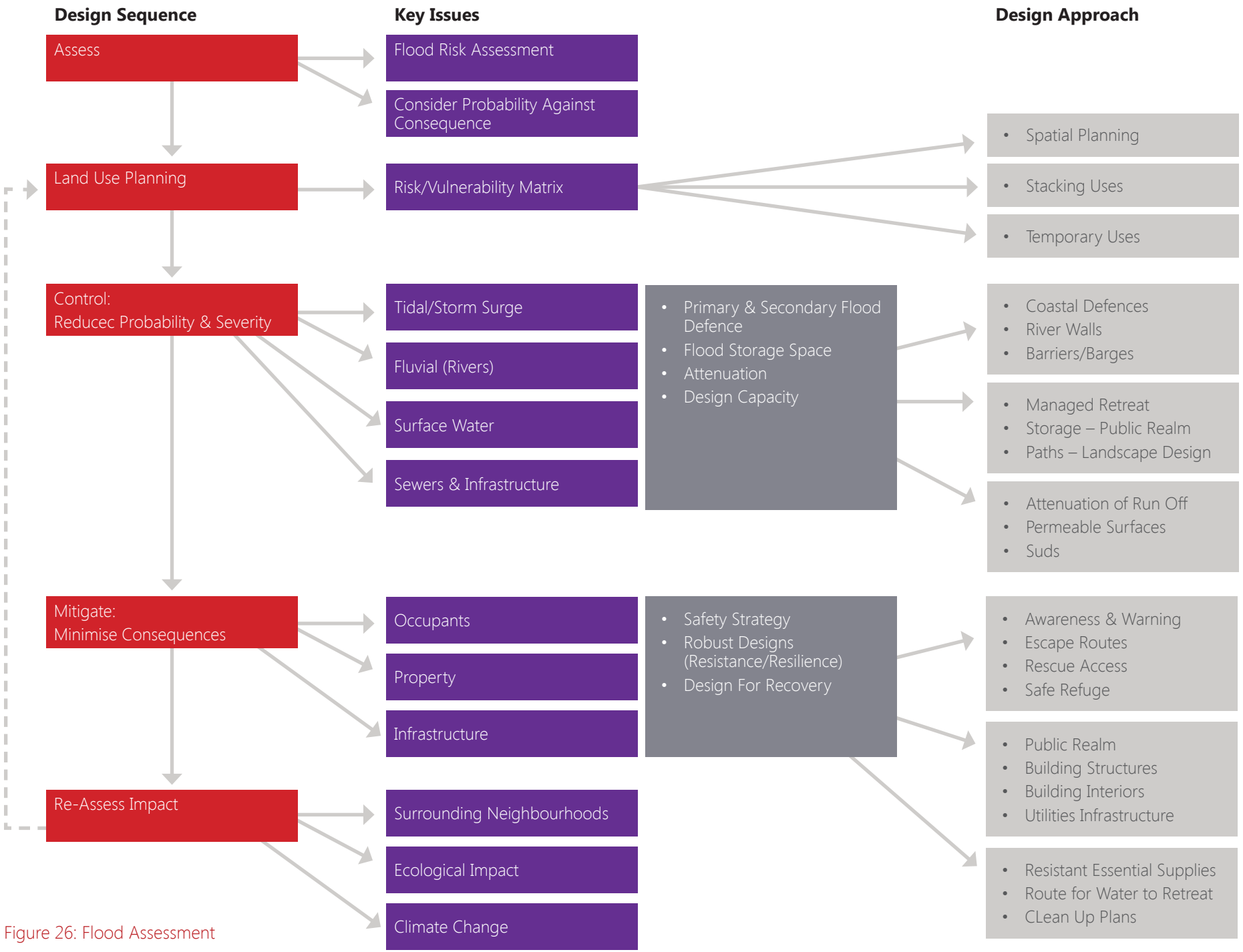



Figure 26: Flood Assessment

## 7.5. Funding

The Municipality of North Cowichan has tentatively identified funding for improvements to James Street as part of the 2014–2018 Capital budget. It is anticipated this work will commence following adoption of the LAP.

A variety of funding sources should be explored further to determine their relevance for delivering other improvements in the LAP area, and which can be summarized as follows:

- Developer amenity contributions for upgrades to the public realm adjacent to the development site as part of a condition of the development permit
- Public sector funding including Federal (Federal Canadian Municipalities), Provincial and Municipal Capital and Revenue as well as spending from other public service providers and the relevant infrastructure providers
- External sources such as ICET
- Local Improvement Tax
- Off-site levies
- Density Bonus mechanisms

## 7.6. Recommendations for Further Studies and Policies

During the preparation of the Plan, a number of issues were raised that require more detailed investigation. In addition to this, the University Village Sustainable LAP has suggested a number of conceptual ideas that will help to achieve the overall vision. These concepts are not detailed design solutions and further work will be required to determine their feasibility. This additional work will ultimately be influenced by community support and Council direction, although it does serve as a useful starting point in moving forward with the implementation of the LAP. The items identified for further research at this stage are as follows:

- Review of DCC bylaws
- Introduction of a comprehensive schedule of costs for public improvement works
- Development of a public art bylaw
- Development of an urban forest strategy between COD and MNC
- Detailed design and construction plans as part of a Contract Document package including but not limited to:
  - » Expansion of Kinsmen Park
  - » New pedestrian overpass across the TCH
  - » Streetscape improvements (new planting, bike lanes and intersection upgrades)
  - » Landscape schedule for new boulevard planting along the TCH and major corridors and residential streets
  - » Street furniture selection (such as lighting, seating, signage, garbage bins)
  - » Detailed design of on-street parallel parking bays
  - » Product and supplier lists for green supply chain
  - » Cost estimates for proposed works
  - » Maintenance program
  - » Merton Rule Implementation

## 7.7. Next Steps

The University Village is the means for enhancing the community in order to make it a vibrant healthy and sustainable neighbourhood.

The LAP aims to realize the opportunities provided in the Plan area and to reflect a shared vision that can help to create a distinctive identity and sense of place as well as providing a robust framework for investment and decision making.

It is recommended the next steps are to undertake more detailed feasibility and design work for the public improvement proposals and establish implementation programs.

# APPENDIX A
# GLOSSARY OF TERMS

***Access:*** The accessibility to and within the site for vehicles, cycles and pedestrians in terms of the positioning and treatment of access and circulation routes and how these fit into the surrounding access network.

***Affordable Housing:*** Housing (mortgage/rent payments plus taxes) which cost no more than 30 percent of total household income.

***Apartment building:*** A building with a number of self-contained housing units.

***BC Building Code:*** The BC Building Code applies to the construction of buildings; including extensions, substantial alterations, buildings undergoing a change for occupancy, "green" building specifications, and upgrading of buildings to remove an unacceptable hazard. It applies the core concepts of the National Building Code, combined with elements specific to BC's unique needs.

***Best Management Practices for stormwater management:*** A method by which adverse stormwater impacts from development or redevelopment, including but not limited to the release of pollutants into water, are controlled through the application of schedules of activities, prohibition of practices, maintenance procedures, structural protocols, and managerial practices.

***Brownfields:*** As per Canada's National Round Table on the Environment and the Economy (NRTEE), brownfields are defined as "abandoned, vacant, derelict or underutilized commercial and industrial properties where past actions have resulted in actual or perceived contamination and where there is an active potential for redevelopment". Furthermore, "Redeveloped and returned to productive use, brownfield sites can generate significant economic, social and environmental benefits and more sustainable communities overall. "

***Built Green (Canada):*** Built Green Canada is a national organization committed to working with builders interested in responsible sustainability practices in the residential building sector. It includes third party certified, energy efficient and environmentally responsible homes.

***Building Owners and Managers Association (BOMA) and BOMA Standards:*** The Building Owners and Managers Association publishes and administers a range of BOMA Standards which has been the only floor measurement method for commercial real estate approved by the American National Standards Institute (ANSI). These standards are utilized by building owners, managers, facilities managers, tenants, appraisers, architects, leasing professionals, lending institutions and others when calculating leases, allocating building expenses to cost centers, or comparing occupancy. The Standard includes how to measure new tenant amenities and building features such as entrance lobbies, conference centers, health clubs, and day care facilities. In addition BOMA standard offer guidance on green building performance for tenants, operators and owners. Reference to BOMA standards in the LAP is per BOMA International Standards.

***Capital budgeting:*** A method for evaluating investment proposals to determine whether they are financially sound, and for allocating limited capital resources to the most desirable proposals.

***Certified Energy Advisor:*** An energy advisor certified with a service organization licensed by the Office of Energy Efficiency of Natural Resources Canada.

***Climate Change:*** The term used to describe changes in long-term trends in the average climate conditions, such as changes in average temperatures. According to the United Nations Framework Convention on Climate Change (UNFCCC), climate change is a change in climate that is attributable directly or indirectly to human activity that alters atmospheric composition.

***Community Engagement:*** Timely and meaningful citizen and stakeholder involvement in civic priority setting, decision-making, program development, and service delivery. The goal is to ensure that the decision-making is well-informed and offers citizens the chance to contribute their ideas and knowledge to policy development.

***Crime Prevention Through Environmental Design (CPTED):*** A multi-disciplinary approach to deterring criminal behaviour through environmental design, which relies upon the ability to influence offender decisions that precede criminal acts, mostly within the built environment.

***Commercial building:*** A building that provides professional, personal, or other services for profit.

***Comprehensive redevelopment:*** The consolidation of two or more parcels for redevelopment purposes.

***Dark sky principles:*** Principles advocated by a non-profit organization to reduce light pollution. The advantages of reducing light pollution include an increased number of stars visible at night, reducing the effects of unnatural lighting on the environment, and cutting down on energy usage

***Design Verification Report:*** A document, signed by the Coordinating Registered Professional or Registered Professional of Record (as defined in the British Columbia Building Code), stating that the components necessary for compliance with the energy standard applicable to the building for which a permit application has been made have been reflected in the building design, prepared to the satisfaction of the Municipality in the form prescribed by the Municipality from time to time.

***Development*** means***:***

- any excavation or stockpile and the creation of either of them
- a building or an addition to it
- the replacement, repair, or construction of a building
- the placement of a building in, on, over, or under land
- a change of use of land or a building
- a change in the intensity of use of land or a building

***Development cost charge:*** A development levy that a Municipality may impose by bylaw in accordance with the LGA for anyone who obtains subdivision, or a building permit to be used to pay for capital costs, such as providing, constructing, altering or expanding sewage, water, drainage and highway facilities, other than off-street parking facilities and providing and improving park land. These lands may not be located on the subject development site but which would directly or indirectly benefit the subject development.

***Development permit:*** A document that includes approved site and building development plans illustrating land use, landscaping, built form, intensity of use, and appearance of the site and buildings, as well as conditions of development approval.

***Density:*** The number of dwelling units on a site expressed in dwelling units per acre (u.p.a) or units per hectare (u.p.ha).

***Duplex housing:*** A pair of houses built as units sharing a dividing partition or common wall or floor between the two adjoining buildings. More commonly this consists of units side by side, but also can include units above, known as vertical duplexes.

***Dwelling unit:*** A complete building or self-contained portion of a building intended for the domestic use of one or more individuals living as a single housekeeping unit, with cooking, eating, living, sleeping and sanitary facilities.

***Eligible Renewable Energy Sources:*** Any clean or renewable resource specified in section 1 of the *BC Clean Energy Act 2010* (including, but not limited to***:*** biomass, biogas, geothermal heat, hydro, solar, ocean, and wind) that provide heating, cooling or electrical energy or a combination thereof, that does not result in a net increase in electricity or natural gas demand from electrical or natural gas utility infrastructure, and that does not result in an increase in GHG emissions.

***ENERGY STAR®:*** ENERGY STAR® is the mark of high-efficiency products in Canada. The symbol makes it easy to identify the best energy performers on the Canadian Market. ENERGY STAR qualified products meet strict technical specifications for energy performance—tested and certified. They save energy without compromising performance in any way. Typically, an ENERGY STAR qualified product is in the top 15 to 30 percent of its class for energy performance.

***Enhancement:*** To augment an area, street or open space in quality, value, beauty, or effectiveness.

***Evapotranspiration (ET):*** The sum of the water lost from the soil surface (evaporation) and water used by plants (transpiration). There are many factors that affect the rate of ET, including plant species, weather factors, and the amount and quantity of water available to the plant.

***Gateway:*** An urban design feature or area that provides visual access, direction and/or celebration of the community for those entering. Within the Plan, there is one area that haa been defined as being appropriate for such features, which could include (but is not limited to) architectural detailing, signage, streetscape elements and public art.

***Green roof:*** A roof of a building that is partially or completely covered with vegetation and a growing medium. It may also include additional layers such as a root barrier and drainage and irrigation systems.

***Green wall:*** A wall, either free-standing or part of a building that is partially or completely covered with vegetation, and in some cases, soil or an inorganic growing medium.

***Guidelines:*** Statements of planning intent that are more detailed than policies, but not as strict as rules and regulations.

***Human Scale:*** The experience or comfort and fit between the size (height, distance, aerial extent, details) of physical surroundings and its natural and built elements relative to the size of a human person with normal vision, hearing and walking ability.

***Infill:*** The development of a property, site or area at a higher density that currently exists through***:*** a) redevelopment; b) the development of vacant or underutilized lots within previously developed areas; and c) the expansion or conversion of existing buildings.

***Infrastructure:*** The services and facilities for which the municipality has capital investment and maintenance responsibilities, including roadways, sidewalks, bridges, street lights and traffic signals, transit buses, solid waste management systems, potable water distribution systems, storm sewers, sanitary sewers, sports fields, playgrounds, arenas, pools, police and emergency response stations, vehicles and equipment, civic buildings, parks, boulevard trees and computer and telecommunications equipment.

***Integrated Sustainable Community Plan:*** A long-term plan, developed in consultation with community members, that provides direction for the community to realize the sustainability goals it has for the environmental, cultural, social, and economic dimensions of its identity.

***Land Use Bylaw:*** A bylaw of the municipality passed by Council as a Land Use Bylaw pursuant to the provisions of the Local Government Act, and intended to control and regulate the use and development of land and buildings within the municipality.

***Land use redesignation:*** A statutory decision of a municipal Council, often referred to as rezoning, which legally changes the acceptable uses for specific parcels of land.

***LEED™:*** Leadership in Energy and Environmental Design (LEED) is a set of rating systems for the design, construction, operation, and maintenance of green buildings, homes and neighborhoods. The LEED (Leadership in Energy and Environmental Design) green building rating system was originally developed by the US Green Building Council (USGBC) to provide a recognized standard for the construction industry to assess the environmental sustainability of building designs. Canadian Green Building Council (CaGBC) has since adapted the USGBC LEED rating system to the specific concerns and requirements of buildings in Canada. LEED is a point-based rating system; points are earned for building attributes considered environmentally beneficial. LEED differs from other rating systems in that it has quantified most of the "green credits." For example, 10% of the building materials must contain recycled content to achieve the recycled content credit. LEED has 110 points covering seven topic areas. Each topic area has a statement of associated goals.

***Letter of Completion:*** A document, signed by the Coordinating Registered Professional or Registered Professional of Record (as defined in *the British Columbia Building Code*), stating that Eligible Renewable Energy Sources have been provided or that the construction of a building has been completed and its energy performance should, to the best of the knowledge of the person signing the document, meet the energy standard applicable to the building, prepared to the satisfaction of the municipality in the form prescribed by the municipality from time to time.

***Local Area Plan (LAP):*** A statutory plan, adopted by Bylaw, that outlines proposed redevelopment for a specified area, and which sets forth municipal policies on the following elements***:***

- Land use
- Land development proposals
- Urban design and built form, including scale and massing
- Public open space and community linkages
- Transportation (including pedestrians and cyclists)
- Servicing, including water, sewer and stormwater
- Climate change mitigation and adaptation
- Aging population and future demographics
- New services and housing forms

***Low-rise multi-family building:*** A multiple dwelling comprising three or more dwelling units (no more than 3 storeys high) either in townhouse or apartment configuration.

***Mature Tree:*** Any tree that has a caliper of 30cm or more, measured at 1.4m from grade.

***Mews development:*** Pedestrian-oriented retail developments accessed via walkways or plazas and flanked by buildings.

***Mid-rise multi-family building:*** A multiple dwelling unit 4 storeys or higher (up to a maximum of 5 storeys) with shared entrances and other essential facilities, services and with shared exit facilities provided for dwelling units located above the first storey.

***Minor variance:*** A variance to a development permit application which is considered lesser or comparatively small in size or importance.

***Mixed Use Commercial:*** A building in which the primary use commercial, but which may include a residential component above the first or second floor.

***Mixed Use Residential:*** A building in which the primary use is residential, but which may include an element of small scale commercial or live/work units.

***Multi-family development:*** A building containing 3 or more units, usually but not exclusively in the form of townhouse, condo or apartment style units.

***Multi-modal Transport System:*** An interconnected transportation system that supports vehicles, bicycles, pedestrians, and public transit.

***Municipality:*** A governing body incorporated by the Province of British Columbia. For University Village this includes both the Municipality of North Cowichan and the City of Duncan.

***Narrow lot single-family dwelling:*** A single family unit with a minimum lot size of 260m$^2$ and a minimum width of 10m.

***NECB 2011:*** The National Energy Code of Canada for Buildings 2011 developed by the Canadian Commission on Building and Fire Codes.

***Natural environment:*** Self-sustaining areas with native vegetation, water, or natural features.

***Node:*** A focal point or intersection.

***Official Community Plan:*** An Official Community Plan (OCP) can be developed by both municipalities and regional districts. The OCP provides the longer term vision for the community. Under the Local Government Act section 875, an OCP is a statement of objectives and policies to guide decisions on planning and land use management, within the area covered by the plan, respecting the purposes of local government.

Local governments consider how the OCP can be integrated with other community strategies, including transportation plans, sustainability plans, and waste management plans. Approaching planning and development in an integrated way supports coordinated efforts. Both OCP's for the City of Duncan and Municipality of North Cowichan are "umbrella" documents that overarch and inform the policies of this Local Area Plan.

***Open Space:*** All open space of public value, including not just land, but also inland bodies of water such as rivers, lakes and reservoirs which offer important opportunities for sport and outdoor recreation and can also act as a visual amenity. The following typology illustrates the broad range of open spaces that are of public value.

***Passive Heating:*** Use of building components to collect, store, and distribute solar heat gains to reduce the energy demand for space heating.

***Park:*** Dedicated parks or other publicly owned, publicly managed, or publicly accessible land, which serves a recreational function, or has the primary purpose of enhancement of landscape character, or protection of environmental resources.

***Physical planning:*** A form of urban land use planning which attempts to achieve an optimal spatial coordination of different human activities for the enhancement of the quality of life.

***Planning approvals:*** The exercise of municipal authority to approve land use redesignations, subdivisions, and development permits.

***Policy:*** An official plan of action adopted by an individual or group, which for land use plans adopted by municipalities in British Columbia can be distinguished as either statutory plans (e.g. Official Community Plans, Local Area Plans) or non-statutory plans.

***Portfolio Manager:*** The current version of the online energy consumption measurement tool developed by the U.S. Environmental Protection Agency.

***Public art:*** Works of art in any media that has been planned and executed with the specific intention of being sited or staged in the physical public domain, usually outside and accessible to all.

***Renewable Energy Source*** (eligible)***:*** The following renewable energy sources have been determined as being appropriate to incorporate within University Village, either on a site-by-site or community-wide basis for reducing energy consumption in new or retrofitted developments***:***

**Biomass** - any organic material not derived from fossil fuels, including agricultural crops, agricultural wastes and residues, waste pallets, crates, dunnage, manufacturing, and construction wood wastes, landscape and right-of-way tree trimmings, mill residues that result from milling lumber, rangeland maintenance residues, sludge derived from organic matter, and wood and wood waste from timbering operations.

**Solar photovoltaic** - a technology that uses a semiconductor to convert sunlight directly into electricity.

**Solar thermal** - use of concentrated sunlight to produce heat that powers an electric generator.

**Wind** - energy from wind converted into mechanical energy and then electricity

***Residential development:*** Development that includes all manner of dwellings and associated uses intended for habitation by persons.

***Retail building:*** A building that provides the sale of goods to the general public.

***Rowhouse:*** A variety of 3 or more residential buildings where individual houses lining a street share adjacent walls in common under a fee-simple land title, with each dwelling unit having a separate entrance and yard area.

***Sense of Place:*** The subjective experience of a place as having physical and social attributes that make it distinctive and memorable.

***Shy space:*** Additional space required to facilitate the safe movement of pedestrians, cyclists and vehicle movement beyond the static width of those facilities. In the case of a parking lane, the shy space is sufficient to open a car door, without interfering with the adjacent space.

***Sidewalks:*** Principally used for pedestrians and located to the side of a carriageway within a road right-of-way.

***Single-detached housing:*** A free-standing residential building, generally built on a lot larger than the structure itself, adding an area surrounding the house, which is commonly called a yard.

***Smart 'ET' controller:*** A computerized or automated irrigation controller that uses evapotranspiration data to set irrigation scheduling.

***Stakeholders:*** Organizations, community groups, and more formal associations that are representative of the wider community and have related interests.

***Streetscape:*** All the elements that make up the physical environment of a street and define its character. This includes paving, trees, lighting, building type, style, setbacks, pedestrian amenities, street furniture, etc.

***Subdivision:*** The creation or separation of new titled parcels of land from an existing parcel of land, which may sometimes be referred to as the parent parcel.

***Subdivision approving authority:*** A body or person legally empowered by a municipal Council to make subdivision decisions.

***Sustainable development:*** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

***Townhouse:*** A variety of 3 or more residential buildings where individual houses lining a street share adjacent walls in common under a strata title, with each dwelling unit having a separate entrance and yard area.

***Traffic impact assessment:*** A tool used to analyse traffic generated by proposed developments with either new access or increased use of existing access points.

***Urban Sprawl:*** The term used to describe development that encroaches into Greenfield or undeveloped land not in close proximity to the growth centre.

***Utilities:*** Either (1) municipal and regional utilities such as water and sanitary sewer or (2)"shallow" utilities such as gas, telephone and electric.

***Vision Statement:*** A statement about the future desired for a particular area or an organization. The vision statement in this LAP describes the future desired in the University Village neighbourhood. It frames the goals for area and sets the basic direction for planning, policies and actions.

***Walkable:*** A community is walkable when it is scaled, dimensioned and provided with facilities and a mix of uses and activities that make walking an easy, convenient way to get around to people of all ages and abilities. As a general rule most people will not walk much more than 10 minutes to shop or reach services such as libraries and schools.

***Water Audit:*** A report that analyzes a facility's water use and identifies ways to make it more efficient. Audits review domestic, sanitary, landscaping, and process water use and identify ways to increase a facility's water-use efficiency.