

REPORT

Oyster Bay Neighbourhood Concept Plan: Residential Stz'uminus First Nation



550 - 1090 Homer Street, Vancouver, BC V6B 2W9 | T: 604.235.1701

March 2014

File: 2970.0005.01

Table of Contents

1.0	Oyster Bay Neighbourhood	1
1.1	Overview	1
1.2	The Vision	1
1.3	Location & Natural Amenities	2
1.4	Stz'uminus First Nation Planning and Policy Context	3
1.5	Servicing Agreement with Town of Ladysmith	4
1.6	Background Analysis of Development Potential	4
2.0	Neighbourhood Concept Plans (NCPs)	5
2.1	Overview	5
2.2	Design Guidelines	6
3.0	Oyster Bay Neighbourhood Concept Plan: Residential	7
3.1	The Opportunity	7
3.2	Site Overview	8
3.3	Land Use & Zoning	9
3.4	Access & Servicing	11
4.0	Residential NCP: Conceptual Development Plan	13
4.1	Plan Overview	13
4.2	General Design Considerations	14
4.3	Key Features	14
4.4	Site Access & Trip Generation	20
4.5	Site Servicing	20
4.6	Environmental & Geotechnical	22
4.7	Policies & Procedures	22

Figures

Figure 1: Regional Context	2
Figure 2: Local Context	2
Figure 3: Oyster Bay Natural Environment	3
Figure 4: Oyster Bay Neighbourhood Concept Plan Areas	5

Figure 5: Oyster Bay Design Guidelines (2011)	6
Figure 6: Residential NCP – Site Overview (21.3 acres / 8.6 ha)	7
Figure 7: Residential NCP – Development Area	8
Figure 8: Examples of Single-Family Residential Development	9
Figure 9: Residential NCP – Lease Areas	10
Figure 10: Residential NCP – Site Access & Circulation	11
Figure 11: Residential NCP – Site Servicing & Setbacks	12
Figure 12: Residential NCP – Conceptual Development Plan	13
Figure 13: Single-Family Residential Units	15
Figure 14: Typical Single-Family Lot Layout	16
Figure 15: Multi-Family Townhouse Residential Units	17
Figure 16: Apartment Residential Units	18
Figure 17 & 18: Ladysmith Harbour, Existing Wharf, Trail Network & Bush Creek Park	19
Figure 19: Site Access & Circulation (Detail)	20
Figure 20: Site Servicing (Detail)	22

Tables

Table 1: Residential NCP – Land Use & Zoning	10
--	----

Appendices

Appendix A – Concept Plans & Mapping

Appendix B – Market Studies

Appendix C – Stz'uminus First Nation Policy & Law

Appendix D – Environmental, Engineering & Land Status Reports

1.0 Oyster Bay Neighbourhood

1.1 Overview

Stz'uminus First Nation has identified its Oyster Bay Neighbourhood (the Neighbourhood) for future development. Located between the city of Nanaimo and town of Ladysmith, the Neighbourhood consists of 64.8 acres (26.2)¹ of land that straddles the Trans-Canada Highway and sits adjacent to beautiful Ladysmith Harbour. Due its size and unparalleled location, the Oyster Bay Neighbourhood presents multiple development opportunities, including residential, commercial, assisted living, and hotel uses.

Stz'uminus First Nation is currently seeking development partners to help realize the Nation's vision for the Oyster Bay Neighbourhood. The Nation has worked diligently over the last decade to establish a strong policy foundation, legal structure, and community vision for development on this key site. This report serves as the next step in the process – to turn the vision into a reality through providing potential development partners with:

- A development overview of the Oyster Bay Neighbourhood and the Residential Neighbourhood Concept Plan (NCP). This will include a summary of relevant policies, procedures, guidelines, and/or studies; and
- A detailed Conceptual Development Plan for the Residential development opportunity and a description of key features.

The Conceptual Development Plan has been designed to convey the Nation's vision for the site and to demonstrate the site's substantial potential to prospective development partners. However, it is important to note that **the Conceptual Development Plan does not represent the only approach to development on the site. Rather, it represents one (of many) potential development scenarios.** Stz'uminus First Nation is committed to working with its partners to develop a final product tailored to meet their needs.

1.2 The Vision

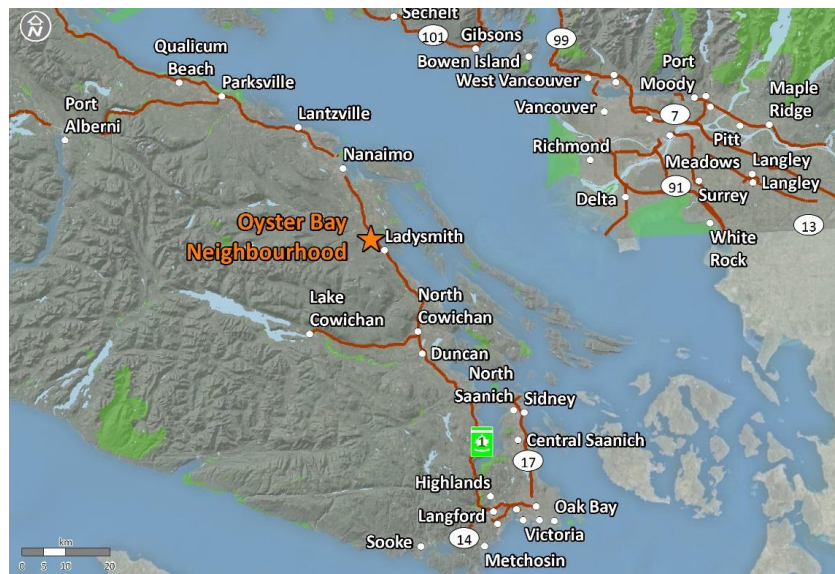
Stz'uminus First Nation envisions the Oyster Bay Neighbourhood to be a vibrant and complete community, serving as an active and attractive residential, commercial, recreational, and tourism hub for the region. In offering a wide range of high quality amenities and services for residents and visitors, the development will bring economic prosperity to Stz'uminus First Nation and its development partners. Furthermore, it will provide a stable and sustainable source of revenue, jobs, and business opportunities for the First Nation and the broader, local economy. The development will balance sustainable urbanism while embracing the cultural heritage of the area and protecting the natural environment. It will be a place that both Stz'uminus members and non-members can enjoy and share.

¹ All land areas included in this report are approximate. For precise land areas, a site survey is required.

1.3 Location & Natural Amenities

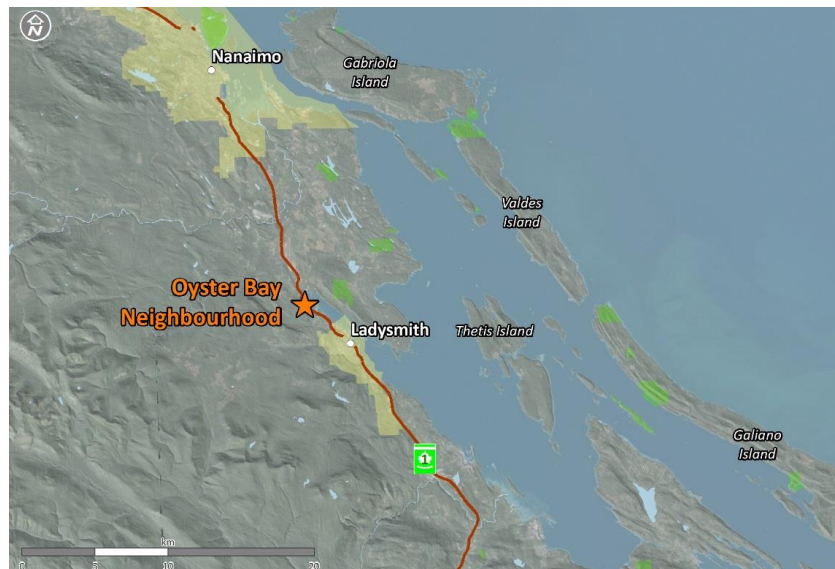
The Oyster Bay Neighbourhood is located on Vancouver Island, British Columbia, approximately 4 km north of the town of Ladysmith and less than 20 km south of the city of Nanaimo, both major local / regional service centres.

Figure 1: Regional Context



The Nanaimo airport and ferry terminals, which provide key transportation linkages to the city of Vancouver (among other places), are located approximately 8 km and 20 km, respectively, from the site. The site's location along the Trans-Canada Highway (Highway 1) – the major highway on the island – provides exceptional access and mobility on the local level.

Figure 2: Local Context



The site boasts a range of natural amenities, including a beautiful coastal location along Ladysmith Harbour, the adjoining Bush Creek Park, and a pristine forest environment full of native plants and trees.

Figure 3: Oyster Bay Natural Environment



1.4 Stz'uminus First Nation Planning and Policy Context

Stz'uminus First Nation is a signatory to the federal *Framework Agreement on First Nations Land Management*. The Agreement establishes a First Nation's right to adopt its own *Land Code*, rather than operating under the land-related rules of the *Indian Act*. In accordance with the Agreement, Stz'uminus First Nation enacted its *Land Code* on January 17, 2013. All future development on Oyster Bay I.R. 12 will be subject to this *Land Code*. A copy of the **Land Code** can be found in **Appendix C**.

In addition to its *Land Code*, Stz'uminus First Nation has established a comprehensive planning and policy framework to guide future development on its lands, which include the Oyster Bay Neighbourhood. **Key documents** can be found in **Appendix C**. These laws and policies underpin the Oyster Bay Neighbourhood Concept Plans:

- *Stz'uminus First Nation Governance Manual*
- *Stz'uminus First Nation Land Code (July 25, 2013)*
- *Oyster Bay Land Use Plan (2010)*
- *Stz'uminus First Nation Development Permit Law*
- *Oyster Bay Design Guidelines (2011)*
- *Stz'uminus First Nation Zoning Law (includes Zoning Guidelines)*
- *Stz'uminus First Nation Building Law*
- *Stz'uminus First Nation Land Development Procedures Manual*
- *Stz'uminus First Nation Fees and Charges Law*
- *Co-operation Protocol between Stz'uminus First Nation and the Town of Ladysmith*
- *Servicing Agreement (Town of Ladysmith) [furnished upon request]*

1.5 *Servicing Agreement with Town of Ladysmith*

As part of its *Cooperation Protocol* with the Town of Ladysmith, Stz'uminus First Nation has signed a *Servicing Agreement* with the Town concerning the provision of certain municipal-type services for future development on Stz'uminus land. Securing these services was a key step for Stz'uminus, as it greatly increases the development capacity of the site and simultaneously reduces the servicing and infrastructure costs for the First Nation and its development partners. In return for the provision of municipal-type services, Stz'uminus First Nation has agreed to collect Development Cost Charges and reimburse the Town of Ladysmith.

Development Cost Charges:

As defined in the *Servicing Agreement* between Stz'uminus First Nation and the Town of Ladysmith, payment of Development Cost Charges to the Town is required for any development in the Oyster Bay Neighbourhood. **Stz'uminus First Nation requires that these costs be covered – in their entirety – by its development partner(s) under the terms and conditions outlined in the Servicing Agreement. A copy of the Agreement will be provided to potential development partners upon request.**

1.6 *Background Analysis of Development Potential*

The development scenario presented in this document is supported by detailed site and market analysis, as well as local development expertise, including:

- *Highest and Best Use Market Study* for Oyster Bay I.R. 12 (completed by Urbanics in 2009)
- *Residential and Retail Market Demand for Proposed Multi-Use Development Report* (completed by Site Economics in 2013); and
- Development expertise of the Coast Salish Development Corporation.

The 2009 and 2013 reports can be found in **Appendix B**.

2.0 Neighbourhood Concept Plans (NCPs)

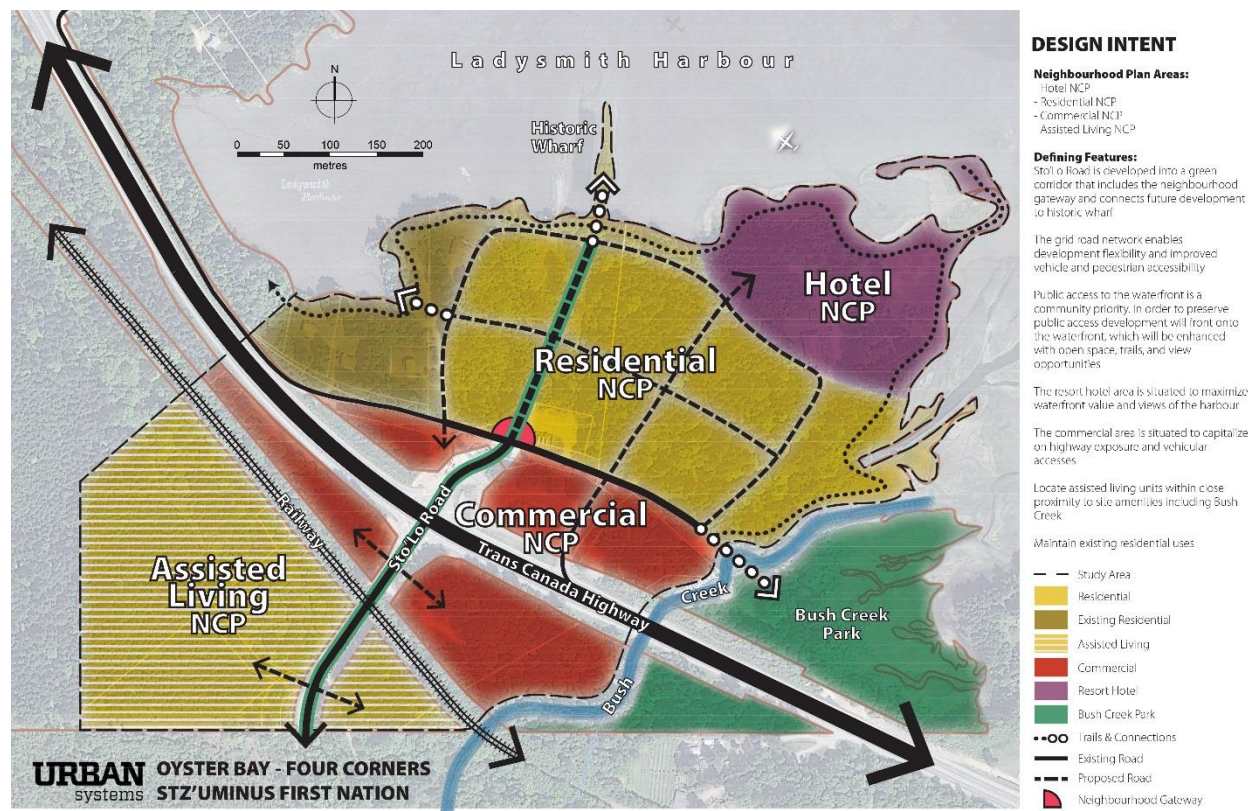
2.1 Overview

The Oyster Bay Neighbourhood can be viewed as one cohesive site or, alternatively, as a combination of four, smaller 'sub-areas', each defined by unique site conditions and characteristics. To advance its vision, Stz'uminus First Nation has developed Neighbourhood Concept Plans (NCPs) for these distinct areas. The NCPs have been carefully designed to allow them to be developed independently (i.e. staged development or multiple development partners) or as a whole (i.e. simultaneous development or one development partner). The intent of the NCPs is to provide potential development partners with a clear direction for development on Stz'uminus land. As mentioned earlier, the Conceptual Development Plans have been designed to convey the Nation's vision and is just one of many different development scenarios.

Neighbourhood Concept Plans (NCPs):

1. **Commercial NCP (18.5 acres / 7.5 ha):** The commercial anchor and neighbourhood gateway;
2. **Residential NCP (21.3 acres / 8.6 ha):** The core residential neighbourhood;
3. **Hotel NCP (3.7 acres / 1.5 ha):** The tourism and recreational hub, and Neighbourhood showpiece; and
4. **Assisted Living NCP (21.3 acres / 8.6 ha):** Assisted living for local seniors in close proximity to commercial and natural amenities.

Figure 4: Oyster Bay Neighbourhood Concept Plan Areas



2.2 Design Guidelines

To ensure high quality design and development on the Oyster Bay site, Stz'uminus First Nation has developed *Design Guidelines* (2011). The Neighbourhood Concept Plans have incorporated the following general principles of the *Design Guidelines*:

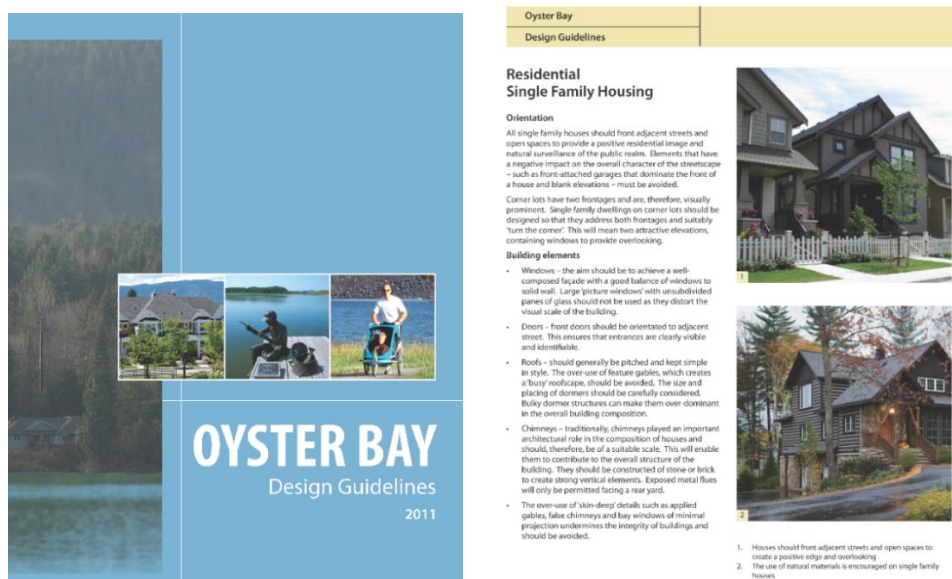
- Capitalize on the natural setting of the site including the mature forest and the coastline;
- Create a visually attractive development with a distinct sense of place;
- Create a mix of land uses, including residential, office, commercial and community uses;
- Provide a range of housing opportunities and choices; and
- Promote a compact, walkable urban form.

A key principle included in the *Design Guidelines* is the concept of placemaking. It is the intention of Stz'uminus First Nation that this concept helps guide the design and development of projects on its lands:

“Placemaking is the process of bringing individuality and distinctiveness to the built environment in order to produce a sense of place. Responding to local character and context provides a starting point for creating a unique sense of place... There are many existing features, such as views across Ladysmith Harbour, the interesting coastline and existing vegetation, which should act as form-givers for the development with the purpose of assisting in achieving uniqueness of character.”

In addition to general principles, the document provides specific design guidelines for a range of land uses and development types relevant to the Oyster Bay Neighbourhood (e.g. residential single-family housing). As plans for the site advance in further detail, the Guidelines will serve as a key tool to guide the physical form and character of each component of the site. A copy of the *Oyster Bay Design Guidelines* can be found in **Appendix C**.

Figure 5: Oyster Bay Design Guidelines (2011)

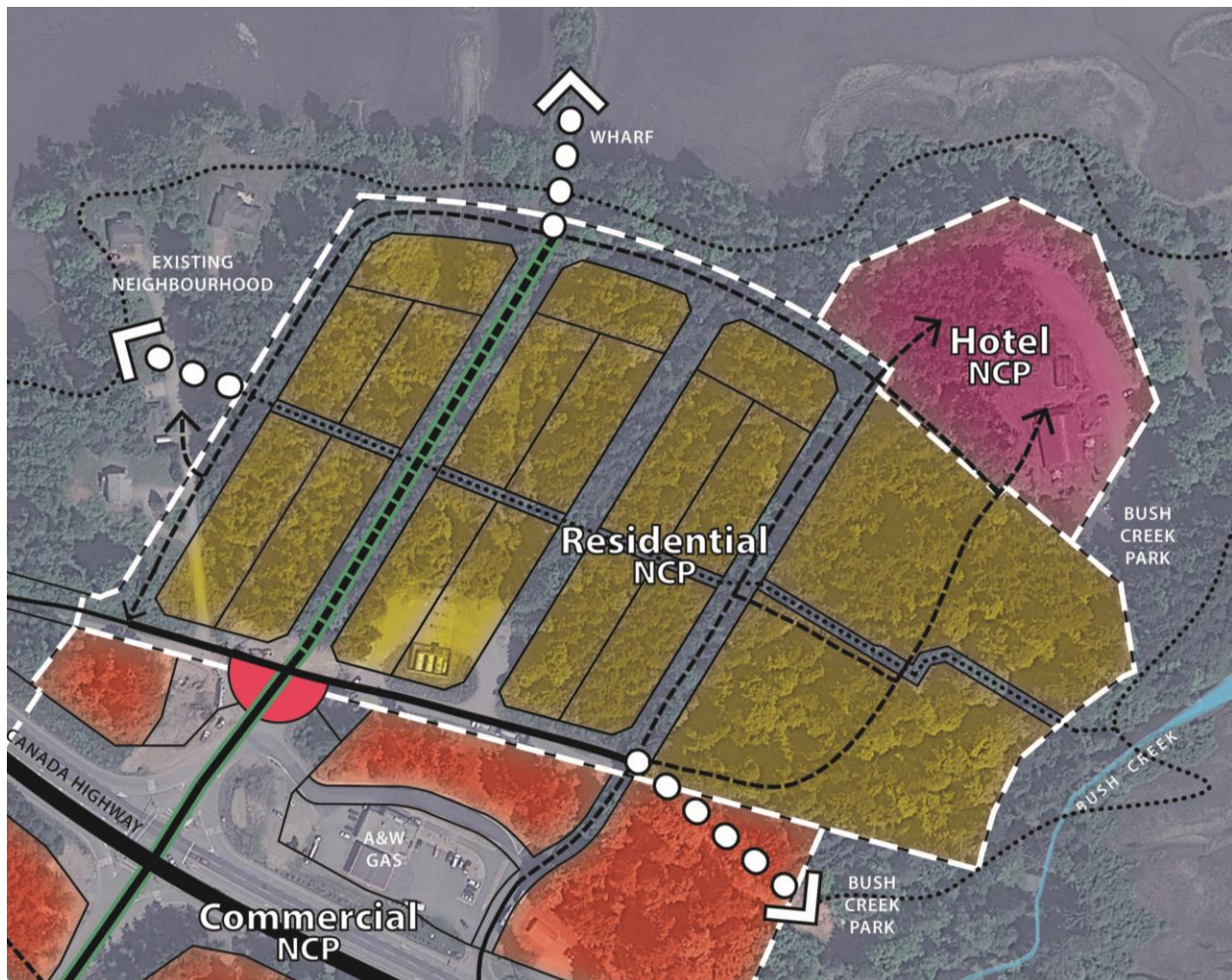


3.0 Oyster Bay Neighbourhood Concept Plan: Residential

3.1 The Opportunity

Nestled between the Commercial NCP and Ladysmith Harbour, the Residential NCP is one of the largest sites within the Oyster Bay Neighbourhood. Based on the combination of the site's unique characteristics, its spectacular location, and the aforementioned market analysis / development expertise, the Residential NCP has been identified by Stz'uminus for substantial **Residential** development. This will include single-family homes, townhouses, and apartment buildings that will combine to form an integrated residential neighbourhood. With a sizeable resident population, the site will serve as the residential core for the broader Oyster Bay Neighbourhood.

Figure 6: Residential NCP – Site Overview (21.3 acres / 8.6 ha)



3.2 Site Overview

The Residential NCP has a total area of 21.3 acres (8.6 ha). The site is bordered to the north by Ladysmith Harbour and the Hotel NCP, to the south by the Commercial NCP, to the east by Bush Creek Park, and to the west by an existing Stz'uminus First Nation residential neighbourhood.

As noted previously, the site is ideally suited for residential development. Its close proximity to the Trans-Canada Highway (less than 200m) ensures quick and easy access to Ladysmith and Nanaimo, while its location behind the Commercial NCP ensures sufficient separation from the Highway to allow for a quiet and safe residential neighbourhood – a residential neighbourhood within easy walking distance of Ladysmith Harbour, Bush Creek Park, and the numerous recreational opportunities the area has to offer.

Primary access to the site is via Oyster Sto'Lo Road, which runs perpendicular to the Trans-Canada Highway through the eastern portion of the site. The site is primarily undeveloped, with existing development consisting of administrative buildings and a pump station.

Figure 7: Residential NCP – Development Area



3.3 Land Use & Zoning

As noted previously, the site has been identified for **Residential** development, including **Single-Family** and **Multi-Family (Townhouse & Apartment)**.

Figure 8: Examples of Single-Family Residential Development



Source: *Oyster Bay Land Use Plan (2010)*

The leasable area of each development type is summarized below and illustrated in Figure 9.

- Single-Family Area: **8.9 acres (3.6 ha)**
- Multi-Family Area (Townhouse & Apartment): **6.2 acres (2.5 ha)**
 - Townhouse: **3.2 acres (1.3 ha)**
 - Apartment: **3.0 acres (1.2 ha)**
- Proposed Road / Pathway Network: **6.2 acres (2.5 ha)**

Figure 9: Residential NCP – Lease Areas

Generally, use of the site for residential purposes is supported by First Nation's existing laws and policies governing land use and development, including its *Land Use Policy* and *Zoning Law*. Procedurally, the current zoning requires that a zoning amendment(s) be adopted prior to proceeding with development on the site. However due to the aforementioned policy / law support of residential development on the site, a zoning amendment should not be seen as a barrier.

Specific details of the location of each land use and zoning designation and the relevant requirements can be found in **Appendix C**.

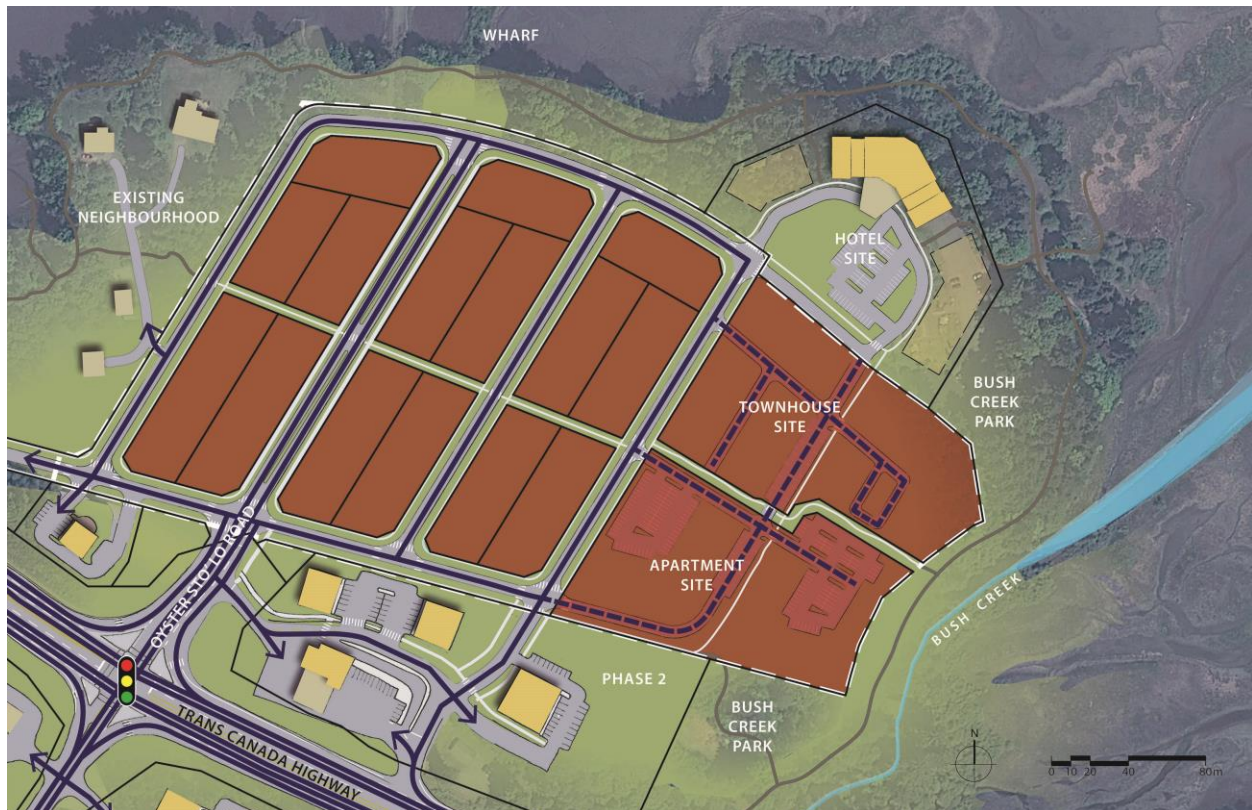
Table 1: Residential NCP – Land Use & Zoning

Current & Proposed Land Use & Zoning		
Current Land Use Policy Designation(s)	Current Zoning Law Designation(s)	Proposed Land Use / Zoning
Residential	Village Centre Holding (H3)	Residential Single-Family / Low Density Residential (R2)
Main Street Mixed Use	General Office Commercial (C1)	Multi-Family Townhouse Residential (RM1)
		Multi-Family Apartment Residential (RM2)

3.4 Access & Servicing

Access to the Residential NCP is from the full-movement signalized intersection of the Trans-Canada Highway and Oyster Sto'Lo Road, as shown in Figure 8. As of 2012, the average traffic volume along the Trans-Canada Highway was approximately 27,000 per day². The highway intersection is characterized by two eastbound and two westbound through lanes, along with dedicated left-turn and right-turn lanes. Oyster Sto'Lo Road is a paved two-lane road and identified as the primary access road to the Residential NCP.

Figure 10: Residential NCP – Site Access & Circulation



An existing trunk sanitary forcemain and trunk watermain system services the Residential NCP. These sanitary and watermain systems have been designed to accommodate the full build-out for the entire Oyster Bay Neighbourhood. McElhanney Consulting Services designed the water system to supply a fire flow of 150 L/s for commercial land uses. These trunk services extend to the Town of Ladysmith's municipal system at a connection point approximately 2 kilometres southeast of the lands. The Town of Ladysmith provides water supply and sewage collection services by way of a Municipal Type Servicing Agreement with Stz'uminus. For further information relating to the design of these systems, please refer to McElhanney Consulting Services' design report provided in **Appendix D**.

² BC Ministry of Transportation, Average Annual Daily Trips (AADT), Traffic Information GIS Website - Uniform Traffic Volume Segment View along Trans-Canada Highway from First Avenue (Ladysmith) to Cedar/Carmichael Road.

Figure 11: Residential NCP – Site Servicing & Setbacks


Please note the engineering servicing commentary provided in this report is preliminary in nature and has been developed solely for conceptual level planning purposes. As such, confirmation of engineering opportunities and/or constraints requires further investigation, analysis and engineering design. The developer of the lands will need to identify offsite infrastructure and access related improvements based on their proposed development concept.

4.0 Residential NCP: Conceptual Development Plan

4.1 Plan Overview

To demonstrate the substantial potential of the site, Stz'uminus has completed a detailed Conceptual Development Plan for the Residential NCP. The purpose of the Plan is to convey the First Nation's vision for the Residential NCP to potential development partners. The Conceptual Development Plan presents a development scenario consistent with:

- The results of detailed highest and best use / market analysis by Urbanics and Site Economics (**Appendix B**);
- The site's physical characteristics;
- Best practices in planning, design, and engineering;
- The goals, priorities, policies, and regulatory framework of Stz'uminus First Nation; and
- The expertise of Coast Salish Development Corporation.

Built upon this foundation, the Conceptual Development Plan presents a development scenario that is **realistic**, yet **flexible** enough to be tailored to the needs of Stz'uminus and its development partners. The Plan does not represent the *only* approach to development of the Residential NCP. Rather, it represents *one* potential development scenario for the site.

Figure 12: Residential NCP – Conceptual Development Plan



4.2 General Design Considerations

As within the broader Oyster Bay Neighbourhood, the Residential NCP has been designed to function both independently and as a whole. As a result, the following overall principles underpin the design of the Conceptual Development Plan and its key features:

- Maximizing value for Stz'uminus First Nation;
- Providing a realistic, yet flexible layout and mix of uses;
- Ensuring high connectivity to the broader Neighbourhood;
- Providing a high quality destination and experience for users;
- Allowing for potential expansion of certain uses;
- Incorporating natural areas into the site while meeting parking and circulation needs (i.e. accommodating cars as well as neighbourhood pedestrians);
- Ensuring adequate parking:
 - The design respects the Stz'uminus First Nation parking Bylaw;
 - Site densities / demand have been projected based on the on assumption of surface parking only; and
- Providing a visually attractive product to residents and visitors that reflects the high quality design and character of the broader Oyster Bay Neighbourhood.

With those principles in the background, the following section provides a detailed breakdown of the key components of the site.

4.3 Key Features

Based on the aforementioned market analysis / development expertise, the site conditions, and the land use and zoning policies and regulations of Stz'uminus First Nation, the site has been designed to include the following key features:

- 77 single-family homes;
- 35 two-storey townhouse units;
- 2 low-rise apartment buildings;
- A grid circulation pattern; enhanced walkability:
 - Streets running N / S through the neighbourhood and E / W around the periphery;
 - An interior pedestrian walkway running E / W that bisects the site;
- Easy access to the harbour, Bush Creek Park, recreational trails, and the wharf;
- Strong overall connectivity to surrounding areas – both for automobiles and pedestrians; and
- Form and layout of units consistent with the Stz'uminus *Zoning Law* (e.g. lot size, setbacks, etc.).

Single-Family Residential

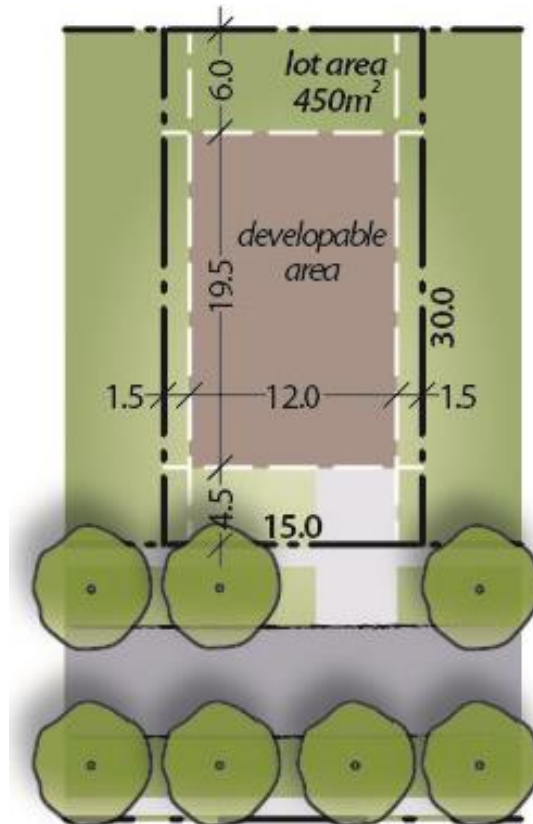
The western portion of the site (roughly two-thirds of the total area) has been allocated for Single-Family Residential development. The individual units, site layout, and parking have been designed to conform to the Stz'uminus *Zoning Law's* R2 Zone. However, additional unit yield could be realized pending a zoning amendment.

Figure 13: Single-Family Residential Units



Based on existing zoning and in accordance with market demand, the site has been designed to accommodate approximately 77 detached, single-family units of approximately 1,000 sq. ft., each with its own driveway. To ensure a strong feel and character consistent with a single-family neighbourhood, the units have been located primarily along the N / S roads, oriented to the interior of the site, away from the commercial development to the south. On the north side of the site, 12 units have been located on the E / W peripheral road to take advantage of the spectacular views and location along the harbour.

Figure 14: Typical Single-Family Lot Layout

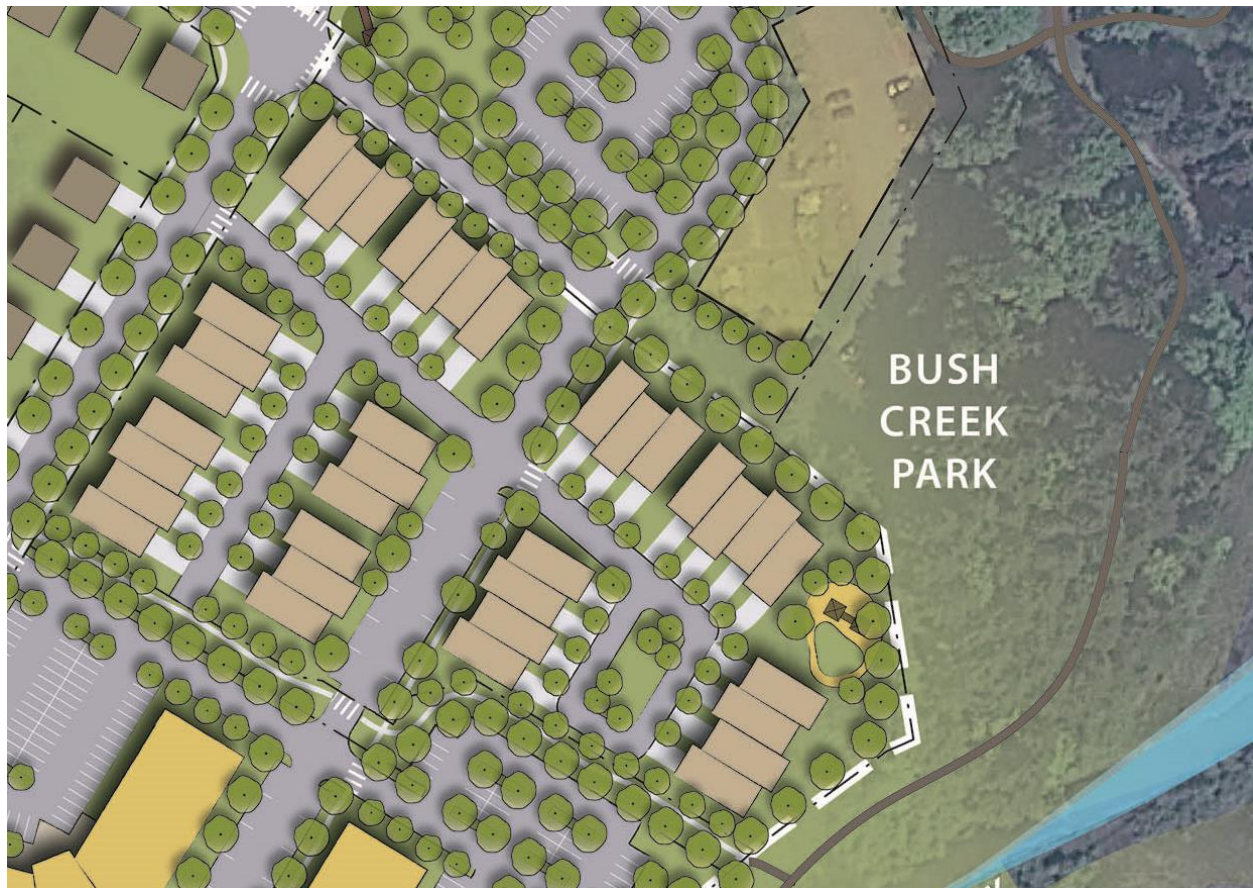


Multi-Family Townhouse Residential

A portion of the eastern third of the site has been identified for Multi-Family Townhouse Residential development, in the form of 35 two-storey units, each approximately 1,600 sq. ft. in total. This medium density form of development will allow for an increased range of options and affordability for potential residents of the Neighbourhood. This form will complement – with regards to housing type and affordability – the apartment units to the south and the resort hotel to the north and may be suited for full-time or seasonal use (e.g. a time-share). The units have been laid out to ensure privacy and greenspace for residents, easy access and parking (including a private road / mews with parking), and, on the far eastern edge, to take advantage of the adjacent Bush Creek Park.

Similarly to the other development types proposed, the townhouse units / layout have been designed to conform to the Stz'uminus *Zoning Law* (RM1 Zone). However, additional yield could be realized pending a zoning amendment.

Figure 15: Multi-Family Townhouse Residential Units



Multi-Family Apartment Residential

Stz'uminus First Nation has identified the southeastern corner of the site for Multi-Family Apartment Residential development in the form of two buildings, three to four storeys in height, with 12 units per floor (72 total units if three storeys and 96 total units if four storeys), yielding a total floor area of 48,000 – 64,000 sq. ft. per building.

The apartment buildings will add a third residential / affordability option for potential residents. This higher density can be supported by the site due to its location on the southeast corner adjacent to the Commercial NCP and Bush Creek Park. The current design of the apartment buildings and parking meet the applicable guidelines as set out in the *Zoning Bylaw*.

Figure 16: Apartment Residential Units



Natural Areas & Recreation

The Residential NCP boasts a myriad of natural and recreational amenities. This includes Ladysmith Harbour, Bush Creek Park, an existing wharf, and a recreational walking / biking trail. The site design embraces each of these aspects, offering residents and visitors multiple opportunities to access each of these features, both physically and visually.

Figure 17 & 18: Ladysmith Harbour, Existing Wharf, Trail Network & Bush Creek Park



Circulation, Connectivity & Parking

To ensure ease of access to the site from Oyster Sto'Lo Road and the Commercial NCP, the Conceptual Development Plan utilizes a grid circulation pattern. While it is anticipated that most of the circulation will occur N / S – to the water or to the highway / Commercial NCP – the Conceptual Development Plan also includes a pedestrian greenway that bisects the single-family blocks and continues into the townhouse / apartment section of the site. This will allow easy E / W pedestrian access between streets and, most importantly, to Bush Creek Park. The Conceptual Development Plan also recognizes the existing Stz'uminus First Nation residential neighbourhood to the west of the Residential NCP and includes a driveway that connects off the site's western-most road.

Adequate parking has been provided in accordance with the character of each use and in conformance with the Stz'uminus *Zoning Bylaw*.

Figure 19: Site Access & Circulation (Detail)


4.4 Site Access & Trip Generation

As previously noted, the existing access to the Residential NCP is provided from Oyster Sto'Lo Road and the Trans-Canada Highway. The intersection of the Trans-Canada Highway and Oyster Sto'Lo Road is a full turn signalized intersection, therefore providing easy access to Oyster Sto'Lo road from multiple directions. As shown on the proposed concept for the area, a number of local roads are proposed to allow easy access and to maximize circulation throughout.

Based on the proposed land uses and dwelling units, we have approximated that the subject development could generate the following traffic volumes:

- A total of 2,220 weekday trips;
- 170 trips during the weekday AM peak period; and
- 220 trips during the weekday PM peak period.

4.5 Site Servicing

The subject lands are located in close proximity to existing services and utilities. We note that an existing 200mm diameter sanitary sewer is located near the southwest corner of Oyster Sto'Lo Road and Beale

Road. The nearest watermain is an existing 300mm diameter main located within the Oyster Sto'Lo Road right-of-way east of the A&W property. Upon development, both water and sanitary sewers would need to be sized and extended throughout the proposed development. Please note that the developer will need to determine a servicing strategy for the lands based on their development concept and grading plan. As part of this work, the developer will need to determine if the sanitary system requires pumping/forcemains or if the system can operate with conventional gravity sewers. Existing utilities in the area also include overhead hydro and telephone along the north side of the Trans-Canada Highway.

Based on the proposed land use and dwelling units, it is anticipated that the proposed development could generate the following servicing requirements and loads³:

- Watermain Servicing
 - Average Day Demand = 2.8 L/s
 - Maximum Day Demand = 4.9 L/s
 - Peak Hour Demand = 9.7 L/s
 - Design Fire Flow Provided = 150 L/s⁴
- Sanitary Servicing
 - Average Day Dry Weather Flow = 2.3 L/s
 - Peak Wet Weather Flow = 10.4 L/s

³ Servicing requirements are based on the criteria established in the Town of Ladysmith's Manual of Engineering Standards and Specifications along with the criteria established in McElhanney Consulting Services' report entitled Coast Salish Development Corp., Oyster Bay IR No. 12 Water and Sewer Servicing Study, January 2011.

⁴ Fire Flow provided is based on McElhanney Consulting Services' report entitled Coast Salish Development Corp., Oyster Bay IR No. 12 Water and Sewer Servicing Study, January 2011. Required fire flows shall be in accordance with the latest release of "Water Supply for Public Fire Protection" as published by the Fire Underwriter's Survey and/or INAC's Design Guidelines for First Nations Waterworks. During a fire situation, the system shall be designed to supply an adequate volume of water at a minimum residual pressure of 140 kPa (20 psi).

Figure 20: Site Servicing (Detail)

4.6 Environmental & Geotechnical

The primary environmental features of the site are Ladysmith Harbour and Bush Creek. To analyse potential impacts on such features and to identify areas of potential environmental concern, Stz'uminus First Nation commissioned two recent Environmental Site Assessments. Of particular note, the reports identify the Historic Sawmill site as an area of potential environmental concern (APEC). For further information, please see the full reports located in **Appendix D**.

4.7 Policies & Procedures

As noted, the proposed residential uses for the site are generally supported by Stz'uminus First Nation *Land Use Policy* and *Zoning Law*. However, certain zoning amendments will be necessary to proceed with the proposed uses.

Pending such amendments, the design for the Residential NCP – as proposed in the Conceptual Development Plan – conforms to the zoning requirements for each use / development type outlined in the First Nation's *Zoning Law*. However, should adjustments to the Conceptual Development Plan be made, it is recommended that the *Zoning Law* be consulted prior and / or an amendment be filed.

For further information regarding Stz'uminus First Nation policy and the next steps in the development process, please see the following documents located in **Appendix C**:

- *Stz'uminus First Nation Governance Manual*
- *Stz'uminus First Nation Land Code (July 25, 2013)*
- *Oyster Bay Land Use Plan (2010)*
- *Stz'uminus First Nation Development Permit Law*
- *Oyster Bay Design Guidelines (2011)*
- *Stz'uminus First Nation Zoning Law (includes Zoning Guidelines)*
- *Stz'uminus First Nation Building Law*
- *Stz'uminus First Nation Land Development Procedures Manual*
- *Stz'uminus First Nation Fees and Charges Law*
- *Co-operation Protocol between Stz'uminus First Nation and the Town of Ladysmith*
- *Servicing Agreement (Town of Ladysmith) [furnished upon request]*

Appendix A

Concept Plans & Mapping

Appendix B

Market Studies

Appendix C

Stz'uminus First Nation Policy & Law

Appendix D

Environmental, Engineering & Land Status Reports