

**Municipality of North Cowichan  
Official Community Plan Advisory Group  
Growth Management Working Group  
AGENDA**

Friday, March 26, 2021, 3:30 p.m.  
Electronically

Pages

**1. CALL TO ORDER**

This meeting, though electronic, is open to the public and all representations to the Official Community Plan Advisory Group Growth Management Working Group form part of the public record. At this time, due to the COVID-19 Pandemic, public access to Council Chambers is not permitted, however, this meeting may be viewed on the District's live stream webcast at [www.northcowichan.ca/meetings](http://www.northcowichan.ca/meetings).

**2. APPROVAL OF AGENDA**

Recommendation:

That the Official Community Plan Advisory Group Growth Management Working Group approve the agenda as circulated [or as amended].

**3. BUSINESS**

3.1. Introduction/Roles/Purpose/Appointment of Chair

3.2. Review of memo / maps

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3.3. Discuss approach for growth scenarios

3.4. Detailed discussion of scenario

3.5. Next steps and expectations

**4. NEW BUSINESS**

**5. ADJOURNMENT**



# REVISED GROWTH SCENARIOS APPROACH

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## INTRODUCTION:

The purpose of this stage of the OCP update is to create growth scenarios for North Cowichan that will provide direction for the growth management policy including the land use designations map. This document presents a revised approach to developing the growth scenarios and builds on the engagement we have had to date with Council and the OCP Advisory Committee on this topic in January and February 2021. On February 24, 2021 the OCP Advisory Committee decided to strike a working group to discuss this topic. This document provides background for the first working group meeting.

## BACKGROUND:

The [OCP Backgrounders](#) provide important context for this stage of the process. In particular, the Growth Management backgrounder highlights the following:

- Single family is currently the primary housing form in the District.
- There is a lack of diversity of housing options, including plexes (duplex, triplex etc.) and townhomes.
- There is an insufficient supply of purpose-built rental housing.

The current (2016) population of North Cowichan is 29,913 residents and includes:

- 24% who are 65 years or older
  - The percentage of seniors is higher than the provincial average and expected to grow over time.
- 2% who are 85 years or older,
- 5% who are children (aged 0–14),
- 5% who are 15–19 years old, and
- 5% are aged 20–24 years old.

It is proposed that the growth scenarios build on the work completed in Phase 2: Vision, Goals, and Community Character. See the link for the draft [Vision + Goals Report](#) which will help frame this stage of the process. At the February 24, 2021 OCP Advisory Committee meeting an additional goal was suggested to address the climate emergency:

- *Reduce energy consumption and emissions and adapt to climate change.*

Early findings from the Community Character study include community preferences for land use, development and housing forms and provide further insight into the kind of community North Cowichan residents want as we move into the growth management phase of the OCP update. These findings reinforce the draft growth management goal to ‘*focus growth and development in established centres*’. A high-level summary of the Community Character report findings include:

- the residents of the **established centres** of the South End Centre/ University Village, Chemainus and Crofton support low-rise, multi-family and mixed-use (residential/commercial) buildings to promote resilient, supportive, inclusive communities.

- residents **of communities in transition** on the urban and rural edge such as Berkey's Corner and Bell McKinnon are supportive of some growth that promotes housing diversity and economic opportunities.
- residents of Maple Bay have an **appetite for change** that promotes housing options and creation of viable commercial options
- Quamichan Lake area residents report rapid **development that is perceived as being 'out of character'** and aren't receptive to any more growth in housing units
- the Rural Areas need **continued protection and regeneration** of the natural areas and farmland.

## WHAT DO WE MEAN BY GROWTH?

Many communities in BC, including North Cowichan, are experiencing population growth that results from immigration to Canada and migration from other Canadian communities/regions. As with most BC communities, North Cowichan is not seeing any natural increase (more births than deaths). The growth in population results in increased demand for housing and services and the need for employment for these people. Increased demand for residential development also arises from a change in household size (households are getting smaller so more units are required for the same population) as well as demand for recreational and commercial properties.

When we use the term “growth”, we are usually referring to a combination of increased population and increased development (residential and employment-related) that accompanies it. When discussing OCP policy and growth management, it is worth differentiating the type of growth we are referring to. According to the baseline projections in the [Rennie Intelligence Long-Range Projections of Population, Housing, and Employment in the Cowichan Valley Regional District Report \(June 2019\)](#):

- North Cowichan might expect its population to increase from 29,913 (2017) to 38,612 by 2050, an increase of 8,699 people or 29% over 34 years.
- Housing units are projected to increase from 12,820 in 2017 to 16,519 in 2050 (an increase of 3,699 or 29%).
- Jobs are expected to increase from 11,310 to 14,542 (an increase of 3,232 or 29%) over the same time period.

It is worth noting that in addition to the baseline projection, the Rennie Report modelled three additional scenarios for future growth:

- Scenario 1: 90% of Future Electoral Area (EA) Growth within EA Boundaries
  - Projects an increase of 8,774 people, 3700 housing units and 3,231 jobs
- Scenario 2: 90% of Future Regional Growth Within All Urban Containment Boundaries
  - Projects an increase of 8,082 people, 3421 housing units, 2,744 jobs.
- Scenario 3: 75% of Future Regional Growth Within Areas Serviced by Water & Sewer
  - Projects an increase of 3,460 people, 1628 housing units and 1,357 jobs

In order to be consistent with the Climate Action and Energy Plan and Housing Need Assessments, we recommend using the baseline projections for planning purposes.



The [2021 Housing Needs Assessment](#) for North Cowichan provides further detail on the form and tenure of the projected housing units. The data used for the HNA is from the Rennie Intelligence report and uses the baseline projections.

## KEY QUESTIONS FOR OUR GROWTH MANAGEMENT WORK

### GROWTH – WHERE / HOW MUCH / HOW FAST?

Growth management is the practice of planning for and controlling the location, density and type of land use and development in a community. The idea is that by managing where and how growth occurs, we can increase the public benefits arising from growth and also mitigate the negative impacts of growth on health, asset management costs and the environment.

Depending on how it is shaped and managed, growth can have positive or negative impacts on a community. Growth has typically been seen as positive for economic development and the accompanying social benefits (more jobs, amenities, local taxes etc.) and as negative for the things like environment and community character. Over the last decade or so, several studies have indicated how certain types/patterns of growth can have a negative impact on the fiscal health of a community if not managed properly. Additionally, growth can actually lead to positive environmental outcomes if used to leverage restoration/protection of environmental resources.

Due to the potentially large positive and negative outcomes resulting from growth, OCPs typically place a lot of emphasis on how growth is managed. Successfully managing growth depends on setting clear objectives and using policy to strategically manage the type, mix, density and location of growth that occurs and the requirements, amenities and benefits that accompany it. Growth management is challenging because the community may have very different priorities and values when it comes to the perceived costs and benefits of growth.

How can we control and manage the impacts of growth for positive benefit while not becoming “exclusive” and driving up housing prices?

### EXISTING APPROVED DEVELOPMENT

North Cowichan already has a lot of approved development in the form of Comprehensive Development Plans (with approved zoning and phased development agreements) as well as other land zoned for additional density.

Can we influence any approved development to help achieve our outcomes?

### CAPACITY IN EXISTING PLANS

Beyond the approved (already zoned) development noted above, North Cowichan has significant capacity in recently-approved LAPs (including Bell McKinnon, University Village).

Do we want to revisit local area plans to achieve the OCP goals?

### ASKING MORE OF DEVELOPMENT

Growth and development have the power to be forces of positive impact but only if we are willing to set clear expectations/ requirements and if the market responds positively to those expectations/requirements.

To what extent can we shape development to help achieve our sustainability goals?

What expectations can we place on developers and businesses?

### HOUSING NEWCOMERS VERSUS EXISTING RESIDENTS

Some think that North Cowichan is essentially building (facilitating the development of) expensive housing for newcomers from Vancouver and elsewhere and that is driving up the cost of housing, rather than focusing efforts on building housing for existing residents who need it most.

Do we want to prioritize the type of housing needed by existing residents? How should we pay for it and ensure it goes to those in need?

## GROWTH SCENARIO PLANNING

Growth scenario planning is a technique to examine various growth options in order to inform a rich discussion with stakeholders and the public about trade offs and implications for each scenario. The idea is that after this robust discussion, a decision is made about a preferred scenario. The chosen preferred scenario may be one or the scenarios or a hybrid that lays the foundation for the creation of the land use designation and map that will become part of the growth management policy in the new OCP. Not all objectives can be dealt with through growth management. The other OCP policies chapters will reinforce the identified direction. For example, this process may identify the need for more rental and affordable housing which will be further detailed in the housing chapter and may indicate a need to develop an affordable housing policy.

In order to develop the growth scenarios, we have attached technical memos for infrastructure and environment that provide context.

### WATER AND SEWER INFRASTRUCTURE

The Municipality operates water systems in Chemainus, Crofton, and the South End areas. The South End system supplies the local areas of Berkey's Corner, Bell McKinnon, Quamichan, Maple Bay, plus portions of South End Centre, Rural West and Rural East. They have adequate capacity for anticipated growth; however, the biggest consideration is fire flow demands for water if density increases.

The South End, Chemainus and Crofton are connected to the municipal sewer system and have adequate capacity for the anticipated growth. Some upgrade may be needed in older neighbourhoods.

Increased density and site coverage results in more impervious area and increased runoff. Properly designed and maintained drainage works need to be incorporated into all new developments to ensure that municipal infrastructure and natural systems are not adversely impacted. See Attachment 1 for a memo on North Cowichan's servicing capacity.

## ENVIRONMENT

North Cowichan includes large tracts of rural, agricultural and forest reserves. Attachment 2 contains an environmental memo. Supplemental mapping can be found [here](#) showing the location of:

- Water bodies, i.e., lakes, marshes, wetlands, rivers and streams,
- DPA 3, i.e., riparian areas (30m buffer),
- Conservation land, e.g., Garry Oak Preserve, Somenos/S'amunu conservation area, covenants
- Parks,
- Municipal Forest Reserve, and
- ALR and agriculturally zoned land.

## CURRENT STATUS (BASELINE)

It is important to understand the current number of housing units and jobs in North Cowichan and the number of units currently approved under comprehensive development zones.

### *Housing Units*

According to the census, there are currently 8,200 single detached homes in North Cowichan and 1,535 apartments and 2,580 duplex/ triplex/ townhouse plus 510 moveable dwellings. Attachment 3 contains a summary of availability of new units and lots based on current zoning.

### *Jobs*

According to the Rennie Report (Table 3) there are currently 11,310 jobs in North Cowichan with the majority in the in health and education, followed by manufacturing and trades.

Primary	TWU	Construction	Manu.	Trade	Fire & Pro/Sci/Tech /Service	Educ & Health	Acc & Food Services	Other Services	Public Admin	Total
653	397	859	1,586	1,814	1,102	3,323	772	558	249	11,310

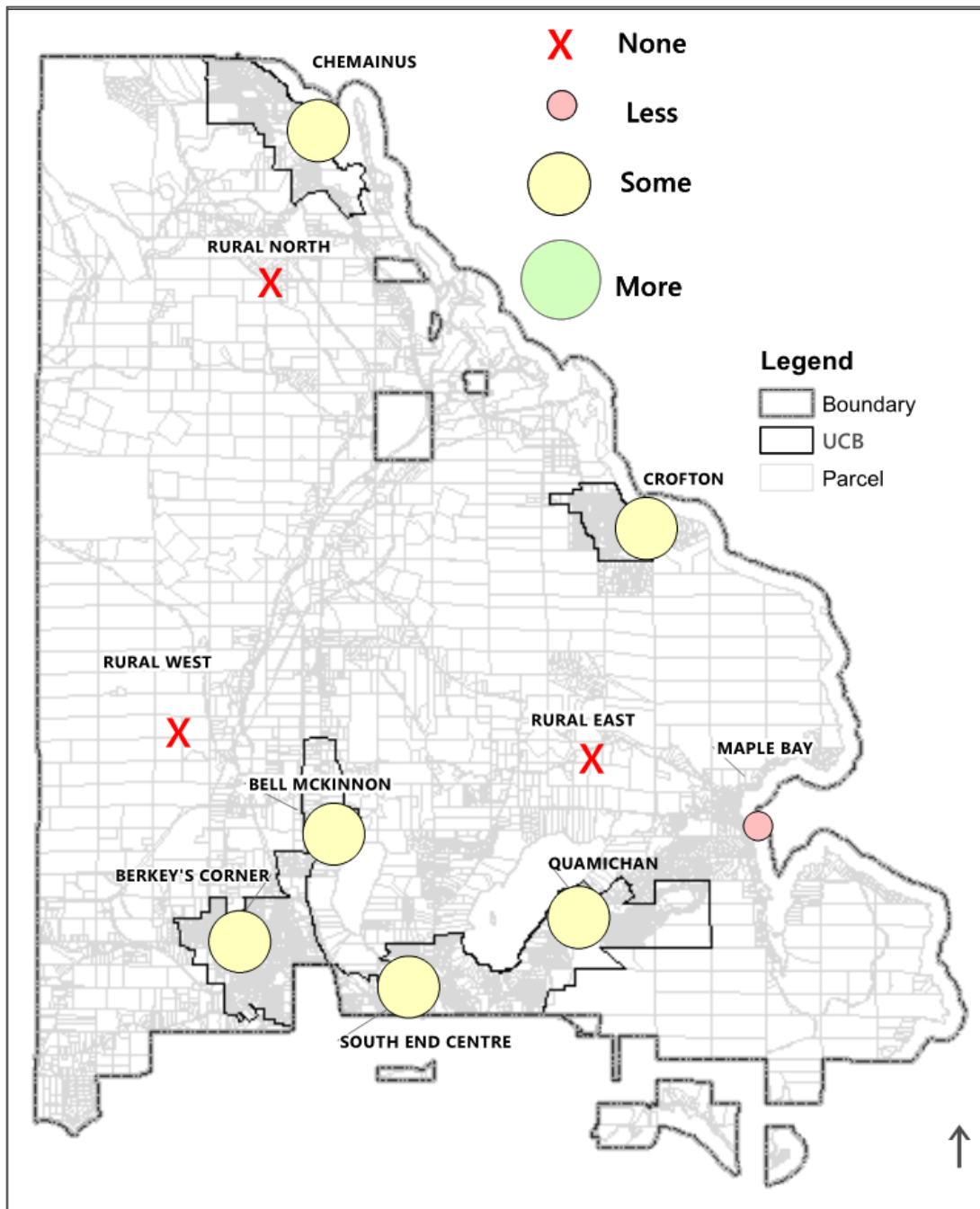
Table 3: Rennie Report Job Numbers

## SCENARIO #1: BUSINESS AS USUAL

This scenario follows the growth patterns set out by the 2011 OCP (i.e. the present Urban Containment Boundary). It acknowledges Local Area Plans and Zoning Bylaw and a similar density and pattern to what has occurred in the last 20 years.

Though the local plans support development their respective areas, the recent development patterns show growth has been and could be dispersed at a lower density throughout North Cowichan under this scenario. Past development patterns show the majority of new housing units have been large single-family homes which does not meet the need for affordable or rental housing.

### **Business as Usual Map**



## SCENARIO #2: CORE COMMUNITIES INFILL DEVELOPMENT

We have provided the following simple scenario as an example for discussion. Depending on feedback from the committee, this scenario could be expanded and other scenarios could be developed using a similar approach.

This scenario is guided by the vision, goals and principles developed in phase two of the OCP update and includes the following high level strategic approaches:

### 1. Growth and Development in Established Centres

This scenario seeks to avoid any further greenfield development (beyond what is already approved) and uses infill policies to focus development and maximize infrastructure in existing developed areas. The existing sewer and water in the South End, Chemainus and Crofton have adequate capacity for anticipated growth; however, fire flow demands may be an issue if density increases.

It re-imagines the Bell-McKinnon as a high tech medical oriented business node that contributes to a thriving sustainable economy rather than a greenfield residential community.

### 2. Resilient, Supportive and Inclusive Communities

Incorporating the principles of social justice and equity, this scenario will foster supportive, resilient communities through a range of OCP policies that support social justice and equity such as child care, social services to address homelessness, substance abuse, mental health and accessibility in the built environment.

Units will be focussed around commercial nodes to promote walkability to reduce energy use and emissions.

### 3. Diversity of Housing, Types and Tenures

This scenario explores how residential use, type and density can be configured to meet affordability objectives and local housing needs versus market demands. In order to meet housing needs and affordability this scenario will see a higher percentage of units will be multi-family (duplexes, townhomes, apartments) versus single family and a higher percentage will be rental tenure and non-market units to support low-income residents. New units will be fit the local character of the built environment as identified in the character profiles and will be built to energy efficient standards.

### 4. Regeneration and Protection of the Natural Environment

This scenario will enhance landscape scale ecological connectivity and biodiversity across North Cowichan with a view to fostering sustainability, resilience and regenerative change. It will seek to improve air and water quality. Environmental and ecosystem protection and natural hazards areas would guide the creation of updated growth areas boundaries.

### 5. Food Security

This scenario will sustain or expand upon existing green space, expand agricultural activity and local food production on non-ALR lands to create a sustainable, local food system in North Cowichan.

**6. Thriving Sustainable Economy**

This scenario would seek to expand land for local, sustainable employment such as food distribution in rural areas. It would include land for trades education nodes.

**7. Climate Action**

In addition, to focusing growth to reduce vehicle emissions and stewarding the natural environment, this scenario proposes to manage community waste using principles of waste minimization circularity.

**Attachment 1: Infrastructure Servicing Memo****Attachment 2: Environmental Memo****Attachment 3: Current Housing Unit Availability**

# Memo

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Date	February 10, 2021	File:	5600-01 5340-01
To	Chris Hutton, MCIP, RPP, Community Planning Coordinator		
From	Ken Horton, P.Eng., Project Engineer	Endorsed by	
Subject	<b>OCP Growth Management – Summary of Preliminary Servicing Comments</b>		

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## Water Supply

- The Municipality operates water systems in Chemainus, Crofton, and the South End areas. The South End system supplies the local areas of Berkey's Corner, Bell McKinnon, Quamichan, Maple Bay, plus portions of South End Centre, Rural West and Rural East.
- It should be noted that portions of the South End are serviced by the City of Duncan water system. This is because the City of Duncan water system was established a number of years before the Municipality's South End water system. The areas serviced by the City include James Street and Lewis Street south to the City boundary, Sherman Road east of Lane Road to the City boundary, and the Quamichan Heights/Seine Road area.
- Overall supply and storage capacity of the three systems operated by the Municipality is generally good. System design and improvements over past decades have been conservative and based on higher growth rates than are now projected, which has helped to ensure there is adequate capacity. Water conservation programs have also been very successful in reducing per capita demand.
- Water studies were carried out for Chemainus, Crofton, and the South End in 1999/2000 which identified upgrades required for ultimate (full buildout) conditions. Some upgrades are included in the Municipality's annual capital project lists. The water studies are in the process of being updated.
- The City of Duncan needs to be consulted with respect to the capacity of its system to service growth in South End Centre.
- An important growth management consideration is that higher density building forms require more water for fire protection than detached single family housing. As a result, even though overall system capacity is good, some water mains in local areas may need to be upgraded to accommodate higher density.
- Some of the water mains in older residential areas are nearing the end of their service life. Redevelopment presents an opportunity to replace/upgrade these mains with some of the funding coming from new development.

## Sanitary Sewer

- Similar to water supply, the Municipality operates sanitary sewer collection and treatment systems in Chemainus, Crofton, and the South End areas. It also operates a small system near Birds Eye Cove.



- The South End system currently services the local areas of Berkey's Corner, South End Centre and portions of Quamichan and Bell McKinnon. It is designed to accommodate further servicing of the Quamichan and Bell McKinnon areas. The Maple Bay neighbourhood is not serviced with sanitary sewer, and the current municipal system design does not anticipate servicing this area.
- Sanitary sewer studies were carried out for Chemainus, Crofton, and the South End in 2008. These studies identified a number of upgrades to the collection system that are required for existing and ultimate (full buildout) conditions. It should be noted that existing and ultimate densities assumed in 2008 were based on the OCP and zoning at that time, so they may not reflect current thinking for some areas. These studies are currently being updated.
- Sewage treatment capacity is adequate for all three systems as growth rates have been lower than assumed when the Sewage Treatment Plants (STPs) were designed. We have done detailed assessments of the remaining capacity of the Chemainus STP, Crofton STP, and Joint Utilities Board STP that services the South End, based on historical growth trends and the current OCP and zoning. Results are summarized below:
  - **Chemainus STP:** Sufficient capacity to at least 2053.
  - **Crofton STP:** Sufficient capacity to at least 2053 under the current operating permit.
  - **Joint Utilities Board STP:** Sufficient capacity to approximately 2043.
  - **Maple Bay STP:** Sufficient capacity. Growth in its catchment area is constrained by the sewer service area boundary.
- Similar to water, some of the sewer pipes and manholes in older residential areas are nearing the end of their service life and redevelopment presents an opportunity to have new development partially fund upgrades.

## Drainage

- The impact of growth on drainage systems should not be overlooked. Increased density and site coverage results in more impervious area and increased runoff. Properly designed and maintained drainage works need to be incorporated into all new developments to ensure that municipal infrastructure and natural systems are not adversely impacted. In particular, the South End urban core area is protected from flooding by a dike network. There are numerous flood pump stations (5 in North Cowichan and 1 in the City of Duncan) that pump water that accumulates within the urban core area, behind the dikes, over the dikes to prevent localized flooding. It is important to ensure there are not significant increases in runoff from impervious areas (in particular rooftops and paved areas) that will result in excessive flows to these pump stations.
- It is recommended that an updated Master Drainage Plan become a priority related to growth management and asset management.

Ken Horton PEng

Project Engineer

Engineering | Development Services and Engineering

Municipality of North Cowichan

# Memo

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Date	February 23 , 2021	File:	5600-01 5340-01
To	Chris Hutton, MCIP, RPP, Community Planning Coordinator		
From	Dave Preikshot, PhD, RPBio, Senior Environmental Specialist	Endorsed by	
Subject	<b>OCP Growth Management – Summary of Environmental Comments</b>		

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## Greenhouse Gas Emissions

- Greenhouse gas emissions in the municipality were estimated to be 338,000 tCO<sub>2eq</sub>/yr in 2021. The emissions come from five major sectors; light industrial operations 39%, vehicles 34%, agriculture 13%, residences 7%, and losses during storage/transport 5%
- 77% of home heating is currently derived from renewable energy, e.g., electricity and wood
- Light industrial emissions are largely from burning natural gas and other fossil fuels
- 55% of agricultural emissions are from animals and animal waste, especially methane from cows and 45% is from farm machinery and buildings.
- Because the vast majority of our electricity, >90%, is derived from hydroelectric dams changes in housing type have less impact on community emissions than changes in transportation mode and pattern.
- Several thousand vehicle trips per day are made between North Cowichan and either Nanaimo or Victoria, which constitutes a significant share of personal vehicle emissions. The emissions from these trips are unaffected by dense urban versus dispersed suburban trip origin.
- The maximum likely storage of carbon in the municipal forest reserve (MFR) would offset about 6% of community emissions in 2021. Because the carbon sequestration is annually constant, the proportion of this offset would increase if we meet our emissions reduction targets.
- Development within the existing UCB would allow North Cowichan to meet greenhouse gas reduction targets.
- Between 2020 and 2050 it is anticipated (Rennie Intelligence 2019) that the number of residences in North Cowichan will increase from 12,820 to 16,519. Therefore, in 2050 more than two-thirds of the housing stock will be the housing stock that exists *today*.

## Climate Resilience

- The Municipality operates four reservoirs to store surface water. One function these is to help maintain stream flow and consequently protect fish habitat. For example Crofton Lake is used to maintain Richard's Creek in the summer and Holyoak Lake is used to maintain flow in the Chemainus River during the summer. Water storage will be a key component of dealing with anticipated climate change effects like longer, hotter, and drier summers.

- Although groundwater sources for drinking water appear to be relatively stable, many streams, e.g., Bings, Quamichan, and Bonsall are at increased risk of drying and losing fish habitat.
- Sea level rise is anticipated to pose an increasing risk for drainage and inundations to lower lying parts of the community, especially areas in the lower parts of the Somenos Basin and Chemainus River. The dyke system in the Somenos Marsh and Cowichan River area is anticipated to remain capable of withstanding extreme events.
- Extreme flow events are going to be more intense and more frequent. The effects will be largest in the riparian areas near the Cowichan and Chemainus Rivers.

## Ecosystem Function

- The municipality currently operates 16 wetlands/ponds in order to help remediate surface water discharge from developed areas before it enters the natural environment. This number will increase as new developments are constructed.
- Somenos and Quamichan Lake suffer persistent Blue-Green Algae blooms as a result of excessive nutrients built up in the lake beds from decades of poor control of nutrient runoff. The majority of nutrients that now enter the lakes come from agricultural runoff.
- Concentration of new residential and commercial development in the UCB will minimise threats to ecosystem function but this will not change the impact of industrial and agricultural land use.
- Increasing the number of high density housing options will need to be offset by protection of riparian areas and include consideration of buffers.
- Surface water quality is poorest in Somenos and Quamichan Lakes. The major threat to these systems arises from excessive nutrients.
- Surface water quality in the Cowichan and Chemainus River is well within provincial water quality guidelines.
- Aquatic invasive weeds pose a risk to water quality, fish habitat and overall ecological function in Somenos Creek
- Invasive plant species are a threat to riparian and terrestrial systems as well as property. For example Scotch Broom can elevate fire risk, compromise ecosystem function and promote soil disturbance. Species like Knotweed, Himalayan Blackberry, and Canary Reed Grass can form large monocultures that exclude native species. Species like Giant Hogweed, Poison Hemlock, and Tansy Ragwort can be harmful to people and livestock.
- A growing body of research suggests that corridors to foster the movement of fish and wildlife species will be increasingly important to mitigate effects of urban and rural development. Such corridors are fostered by riparian protection guidelines used by MNC as well as covenants and green spaces that allow natural pathways for fish and land animals.

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## North Cowichan Zoning Analysis

As part of the Growth Management phase of the OCP update project, a zoning analysis was undertaken to determine the capacity for growth in each of our 7 communities. This analysis looked at each property individually, and calculated a) the maximum density under existing zoning (in units) b) the existing density (in units) and c) the net potential density, in units (the maximum density subtracting the existing density). This allows us to determine the capacity for development under existing zoning, and the existing UCB and to determine whether this can accommodate expected growth in the next 30 years. The results of this analysis are just one factor and measure of growth potential that will be used during this phase of the project.

A number of assumptions went into the analysis including the following:

1. Analysis was only conducted for those properties within the Urban Containment Boundary (excluding Maple Bay, whose boundary was determined by existing census districts).
2. Lack of consideration of natural and
3. Only those zones that have specific density provisions were used in this analysis. Zones such as commercial, industrial, private/public were excluded.
4. For those zones that regulate their density using Floor Area Ratio (FAR) a standard of 92.9m<sup>2</sup> unit size was used to calculate the maximum potential density
5. If a property has been "over developed" (more units than zoning permits) it is shown as "0"

A subdivision potential analysis was also conducted gross yield only (=lot size/minimum lot size). Please note there are many factors that go into approval of subdivisions such as frontage, servicing, roads, riparian areas that were not considered as part of this analysis. These numbers are provided for each community and conducted separately from the density analysis.

A summary of each community is identified below including the applicable zones, and percentage of buildout.

### **BELL MCKINNON**

Bell McKinnon is situated on the south end of the Municipality, just north of the City of Duncan.

There are 10 unique zones in the Bell McKinnon area. See the table to the right. Zones bolded were excluded from the analysis.

Agriculture Zones	A2, A3
Commercial Zones	<b>C2, C3</b>
Comprehensive Development Zones	CD10, <b>CD11</b>
Industrial Zones	<b>I1</b>
Public/Private Zones	<b>PI, PU</b>
Residential Zones	R1

The maximum density available in Bell McKinnon is approximately 595 units. There are 291 units developed, leaving potential for an additional 304 units. Of those, approximately 120 are

secondary suites/two-family dwellings. The remaining development potential in Bell McKinnon is attributed to a CD10 zoned property on Paddle Road that has not been built yet.

In addition, the 300 existing units are distributed amongst 296 lots. Under existing gross yield holds potential for 1,300 more lots.

## BERKEY'S CORNER

There are 22 unique zones in Berkey's Corner. See the table to the right. Zones bolded were excluded from the analysis.

The maximum density available in Berkeys Corner is 4,988 units.

Approximately 3,480 units have been developed thus far, leaving potential for an additional 1,480 units. Of those, 1,200 are secondary suites/two-family dwellings. The remaining development potential in Berkey's Corner is largely contributed by:

- A CD10 zoned property on Somenos Road, that although has had minor development – is not being developed to its full capacity
- Other properties that either have not been developed, or have been but not to their full capacity – with a net potential of up to approximately 60 units

In addition, those 1,480 existing units are distributed amongst 1,800 lots. Under existing zoning, gross yield holds potential for 3,400 more lots.

## CHEMAINUS

There are 24 unique zones in Chemainus. See the table to the right. Zones bolded were excluded from the analysis.

The maximum density available in Chemainus is 3,358 units.

Approximately 1,900 units have been developed thus far, suggesting there is still

potential for an additional 1,458 units. Of the 1,458 units, approximately 1,100 are secondary suites/two-family dwellings. The remaining development potential in Chemainus is largely contributed by:

Commercial Zones	<b>C1, C2, C3, C6</b>
Comprehensive Development Zones	CD5, CD9 CD10, CD17
Industrial Zones	<b>I1</b>
Public/Private Zones	<b>PI, PU</b>
Residential Zones	R1, R2, R3, R3-CH, R3-MF, R3-S, R4, R6, R7, R7-A, R8

Agriculture Zones	A2
Commercial Zones	<b>C1, C2, C3, C9</b>
Comprehensive Development Zones	CD4, CD5, CD6, CD10, CD13, CD16
Industrial Zones	<b>I1, I2</b>
Marine Zones	<b>MA1</b>
Public/Private Zones	<b>PI, PU</b>
Residential Zones	R1, R2, R3, R3-MF, R3-S, R6, R7, R8

- A CD4 zoned property on Askew Creek Drive that still has capacity for development
- A R8 zoned property on Oak Street that has been partially developed but still has capacity for additional units
- A few properties zoned multifamily (CD13, CD4) and R6 that have not been developed.

In addition, those 1,900 existing units are distributed amongst 1,400 lots. Under existing zoning gross yield holds potential for another 2,100 lots.

## CROFTON

There are 13 unique zones in Crofton. See the table to the right. Zones bolded were excluded from the analysis.

The maximum density available in Crofton is 1,389 units. 843 units have been developed. Of the 546 available units, 540 are from secondary suites/two family dwellings.

Agriculture Zones	A2
Commercial Zones	<b>C2, C3, C4</b>
Comprehensive Development Zones	CD5, CD20
Industrial Zones	<b>I2</b>
Public/Private Zones	<b>PI, PU</b>
Residential Zones	R1, R3, R3-MF, R6

In addition, those 850 units are distributed amongst approximately 835 lots (suggesting many are underdeveloped and/or vacant). Based on existing zoning, gross yield holds potential for an additional 1,200 lots.

## MAPLE BAY

There are 11 unique zones in Maple Bay. See the table to the right. Zones bolded were excluded from the analysis.

The maximum density available in Maple Bay is 1,116 units. Just over half of those units have been developed thus far. Of the 560 potential units, approximately 520 are secondary suites/two-family dwellings. The remaining development potential in Maple Bay is attributed to one R6 zoned property on Beaumont Avenue

Agriculture Zones	A1, A2, A3, A5
Commercial Zones	<b>C2, C4</b>
Comprehensive Development Zones	CD8
Marine Zones	<b>MA1, MA2</b>
Residential Zones	R1, R6

In addition, those 540 units are distributed on approximately 425 lots. Based on existing zoning and minimum lot size, there is still potential for 380 lots.

## QUAMICHAN

There are 15 unique zones in Quamichan. See the table to the right. Zones bolded were excluded from the analysis.

Agriculture Zones	A1, A2
Commercial Zones	<b>C7</b>
Comprehensive Development Zones	CD1, CD7, CD12, CD18,
Public/Private Zones	<b>PI, PU</b>
Residential Zones	R1, R2, R2-A, R3, R3-S, R6,

The maximum density available in Quamichan is approximately 4,710 units. 1,714 of those units have been developed, leaving 2,996 units. Of the remaining development potential, approximately 1,200 are secondary suites/two-family dwellings.

The remaining development potential in Quamichan is largely contributed by:

- Remaining development capacity in the Kingsview CDP.
- Stonehill Estates, a large CD7 zoned property on Maple Bay Road that is undeveloped
- A significant amount of CD18 zoned properties that are undeveloped with a net potential of under 10 units

Based on existing zoning, gross yield holds potential for 2,600 lots.

## SOUTH END

There are 17 unique zones in the South End. See the table to the right. Zones bolded were excluded from the analysis.

Agriculture Zones	A2, A3
Commercial Zones	<b>C2, C3, C4</b>
Comprehensive Development Zones	CD14, CD19
Public/Private Zones	<b>PI, PU</b>
Residential Zones	R1, R2, R3, R3-CH, R6, R7, R7-A, R8,

The maximum density available in the South End is 3,629 units. Approximately half of those units have been developed so far. Of the 1,809 potential units approximately 700 are secondary suites/two family dwellings.

The remaining development potential in South End is largely contributed to:

- Hamlets Site: CD19 zones properties on York Road and two on Beverly Street
- Recently rezoned CD14 properties on Lewis Street, Howard Avenue and Dingwall Street under UV LAP
- Numerous historically zoned R8 properties that are presently undeveloped

The 1,809 available lots units are distributed on approximately 900 lots. Based on existing zoning, gross yield holds potential for 850 lots.

## Overall:

The table below summarizes some of the total unit availability above. Overall, the gross availability of dwelling units and lots is substantial. Over half of these lots are in existing single-family dwelling sites. Some availability exists for multifamily development exists, particularly in the Chemainus and South End Centre neighbourhoods.

The gross additional lots is a very rough number. This does not take into account things like roads, parks, natural features, built form, infrastructure, environmentally sensitive areas, and hazard lands. It should be noted that depending on these variables, this number could be reduced anywhere from 20-50%.

<b>Neighbourhood</b>	<b>Available Total</b>	<b>Available Suites/Duplex</b>	<b>Available Multifamily</b>	<b>Additional Lots</b>
Bell McKinnon	304	120	122	1,300
Berkey's Corner	1,480	1,200	142	3,400
Chemainus	1,458	1,100	233	1,400
Crofton	546	540	4	1,200
Maple bay	530	520	12	425
Quamichan	3,156	1,200	60	2,600
South End Centre	1,809	700	1,109	850
<b>Total</b>	<b>9,283</b>	<b>5,380</b>	<b>1,682</b>	<b>11,175</b>



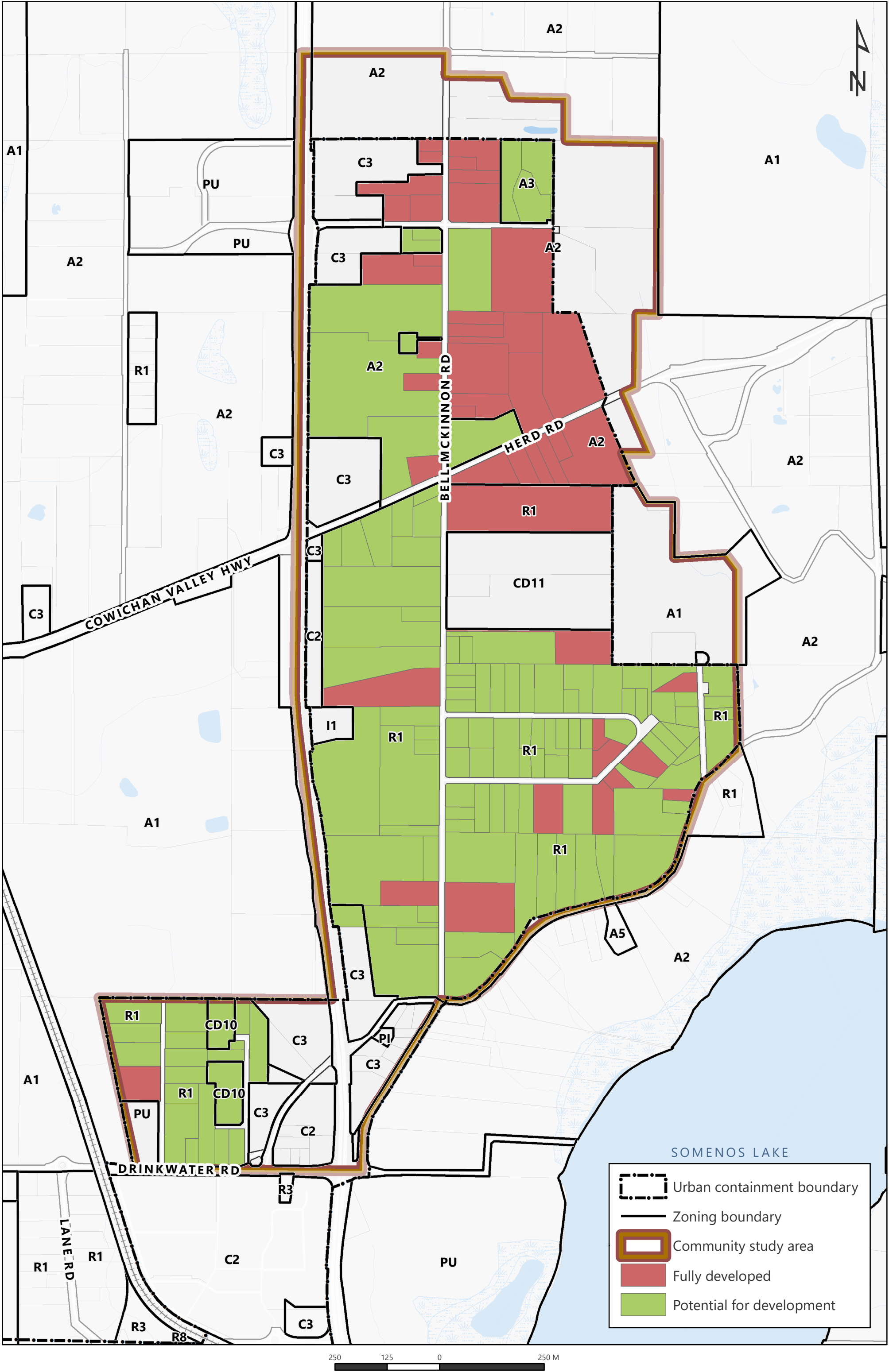


Figure 0.0 Build-out potential based on current zoning: Bell McKinnon







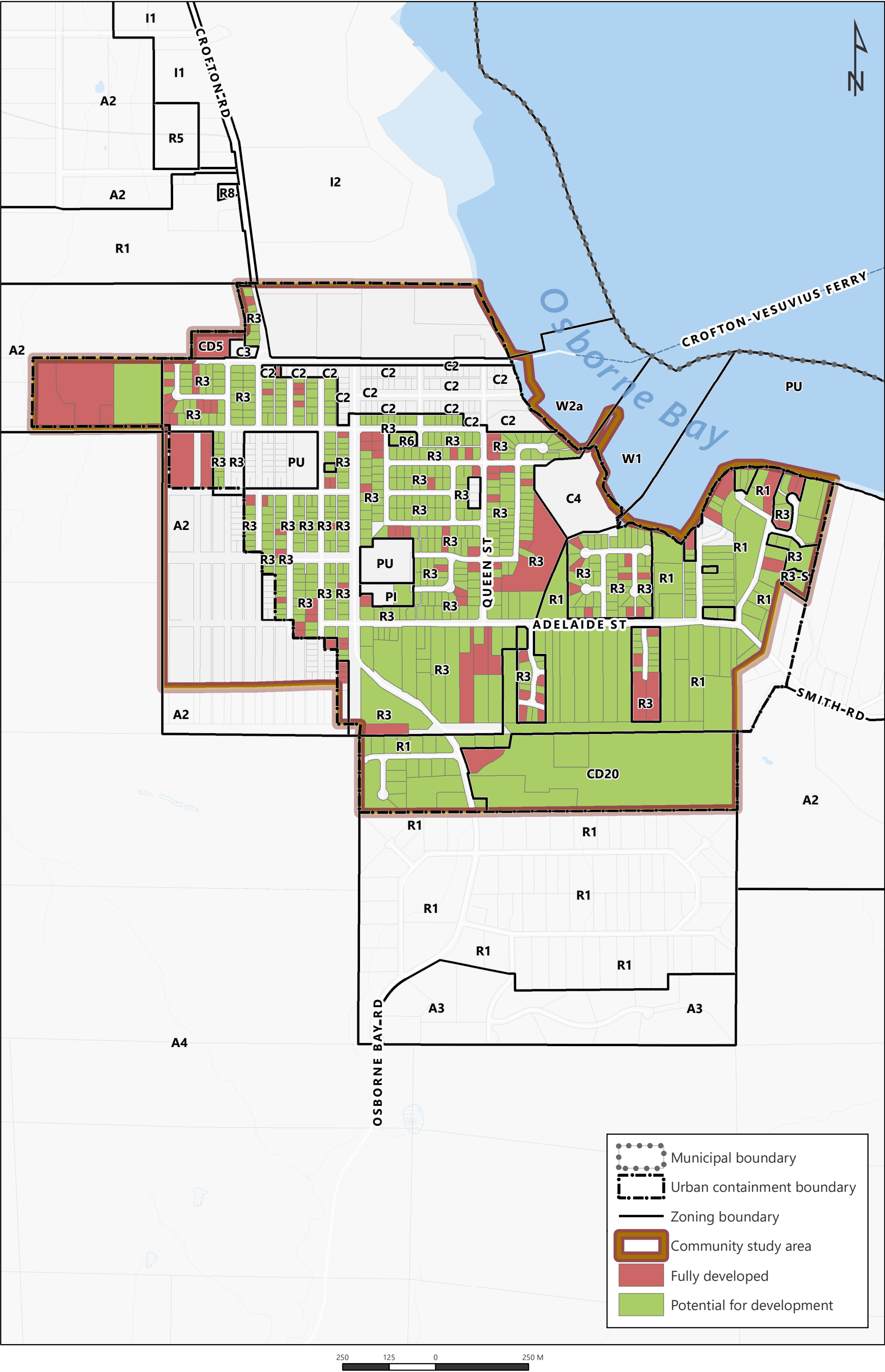


Figure 0.0 Build-out potential based on current zoning: Crofton

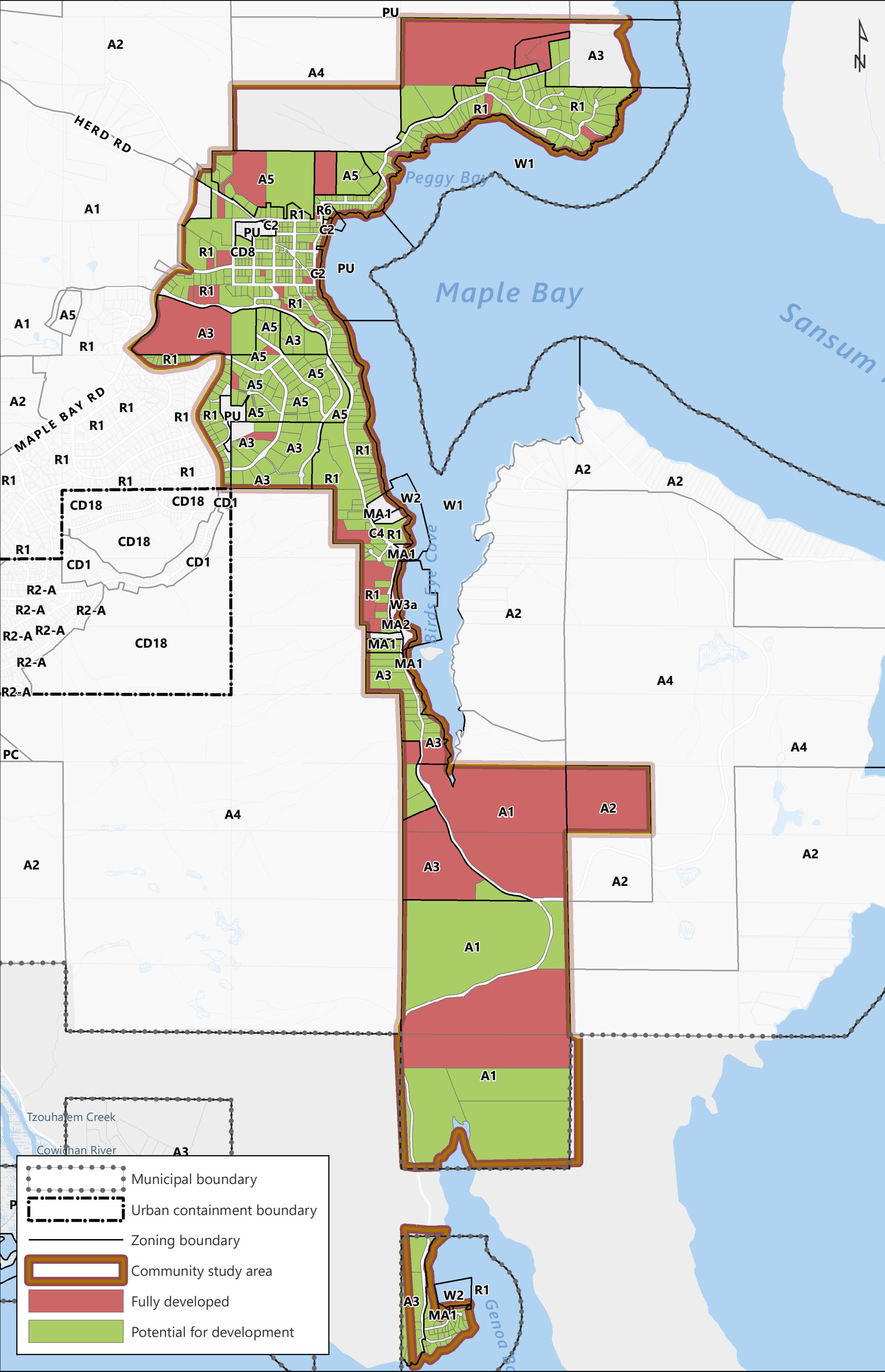


Figure 0.0 Build-out potential based on current zoning: Maple Bay



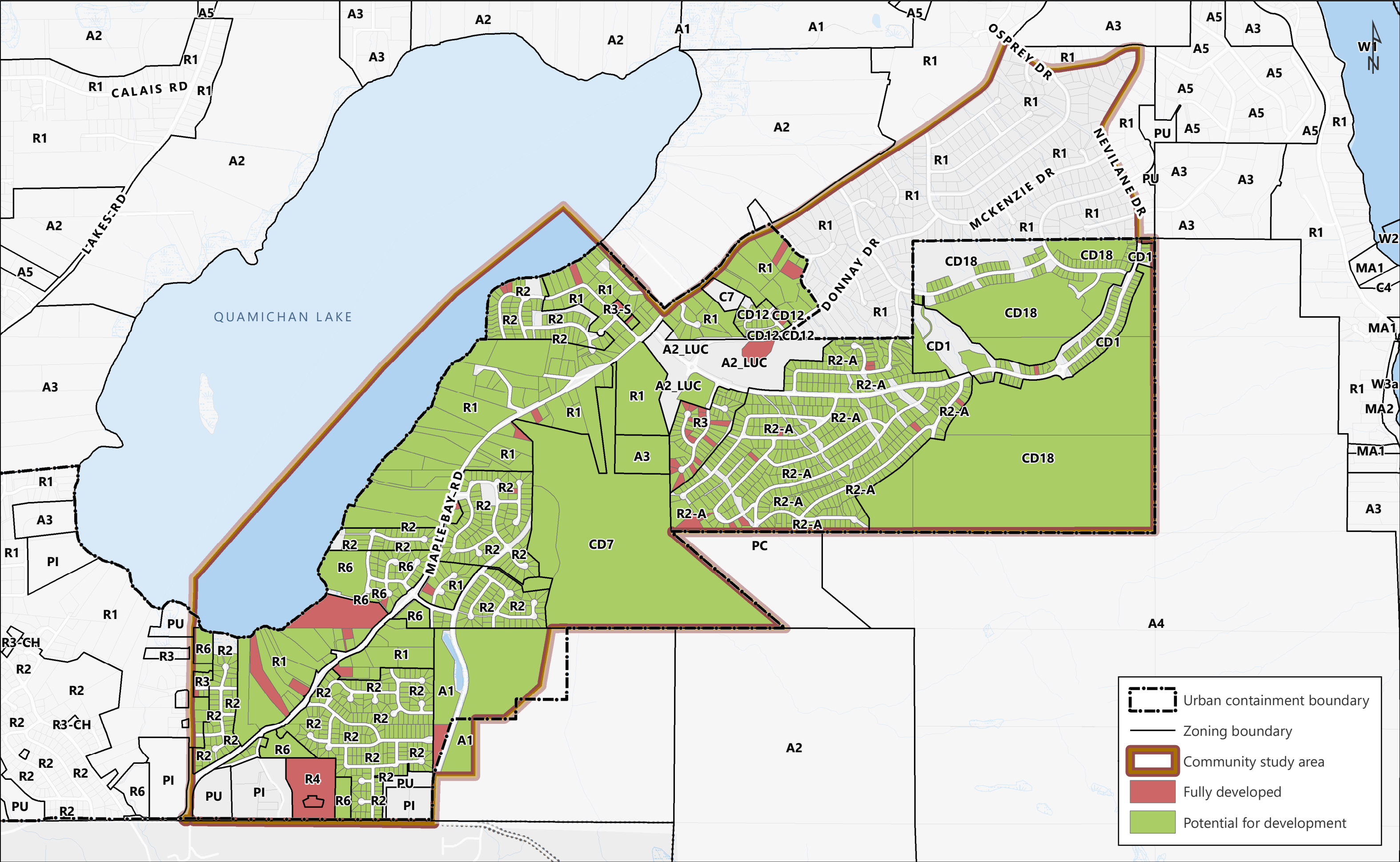


Figure 0.0 Build-out potential based on current zoning: Quamichan



Figure 0.0 Build-out potential based on current zoning: South End Centre 3/18/2020



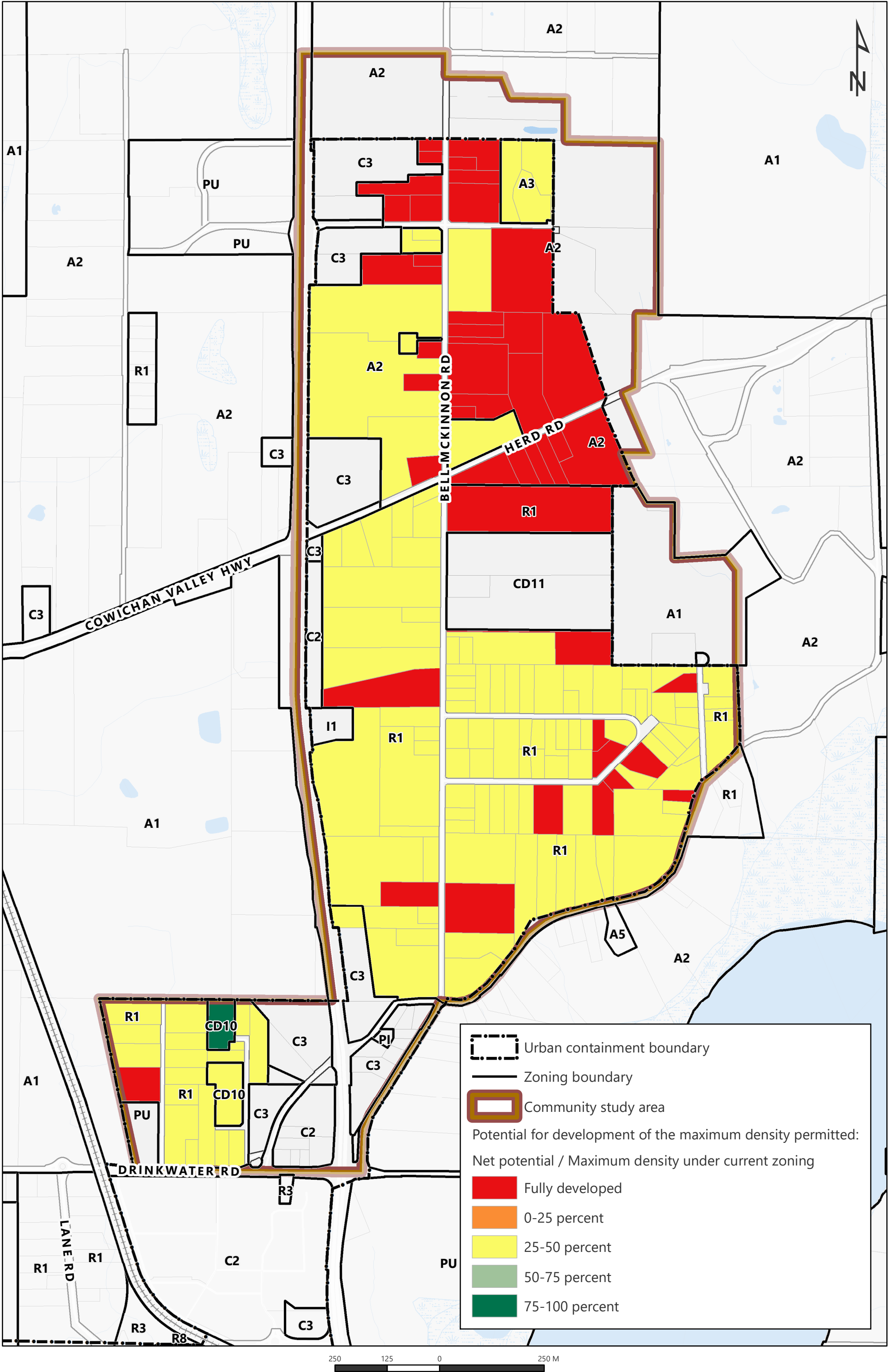


Figure 0.0 Build-out potential based on current zoning: Bell McKinnon









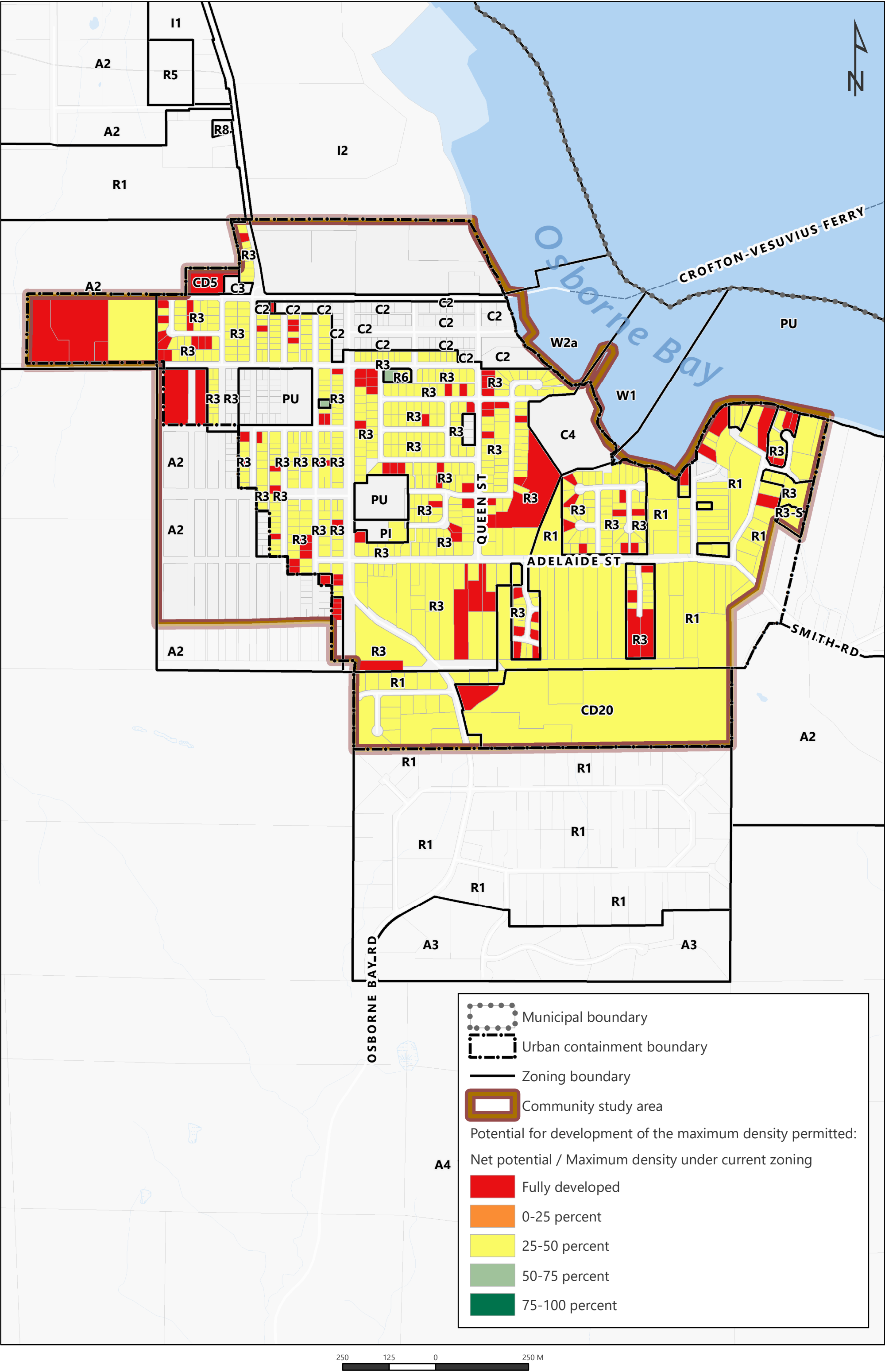


Figure 0.0 Build-out potential based on current zoning: Crofton

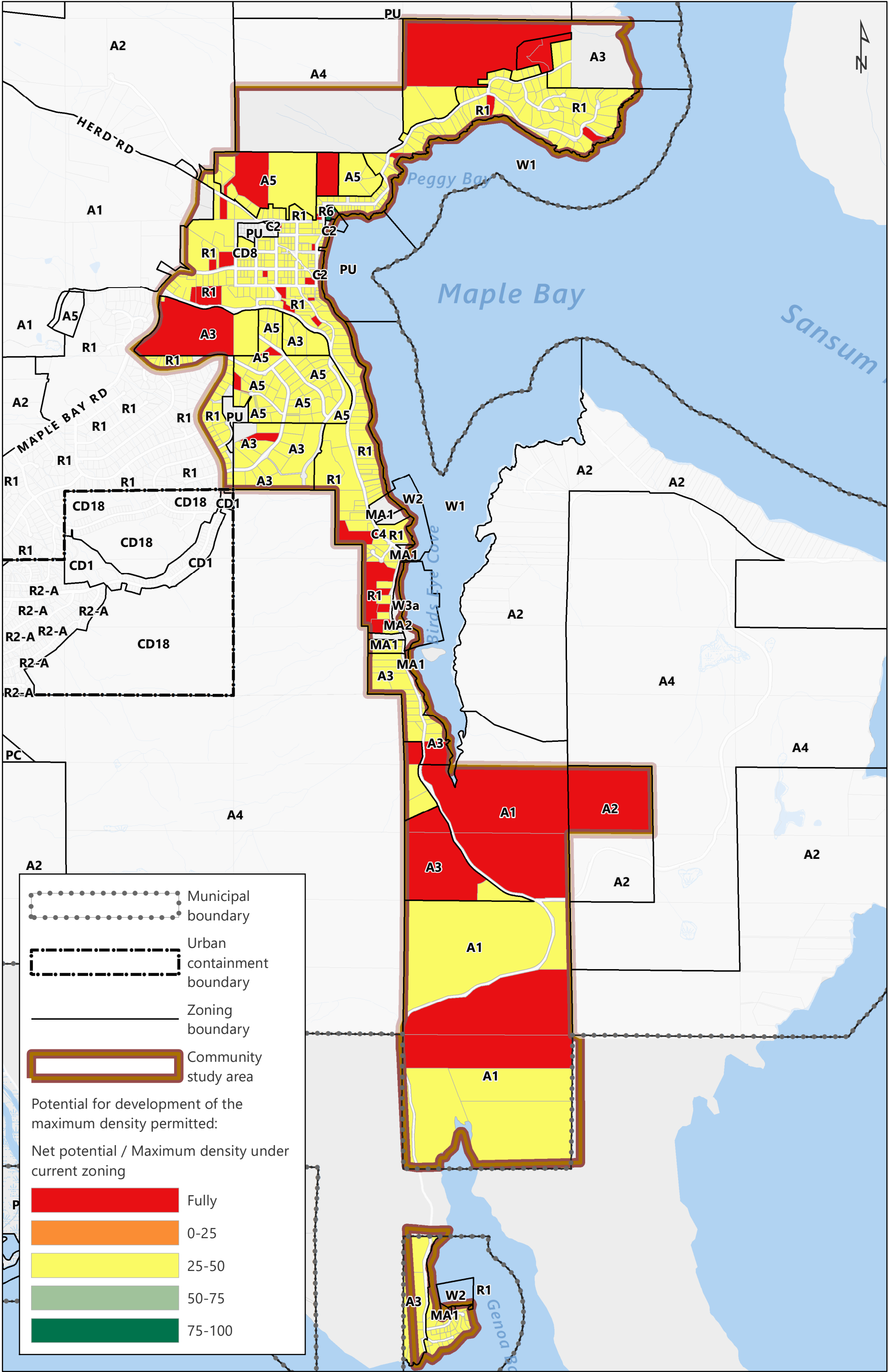


Figure 0.0 Build-out potential based on current zoning: Maple Bay

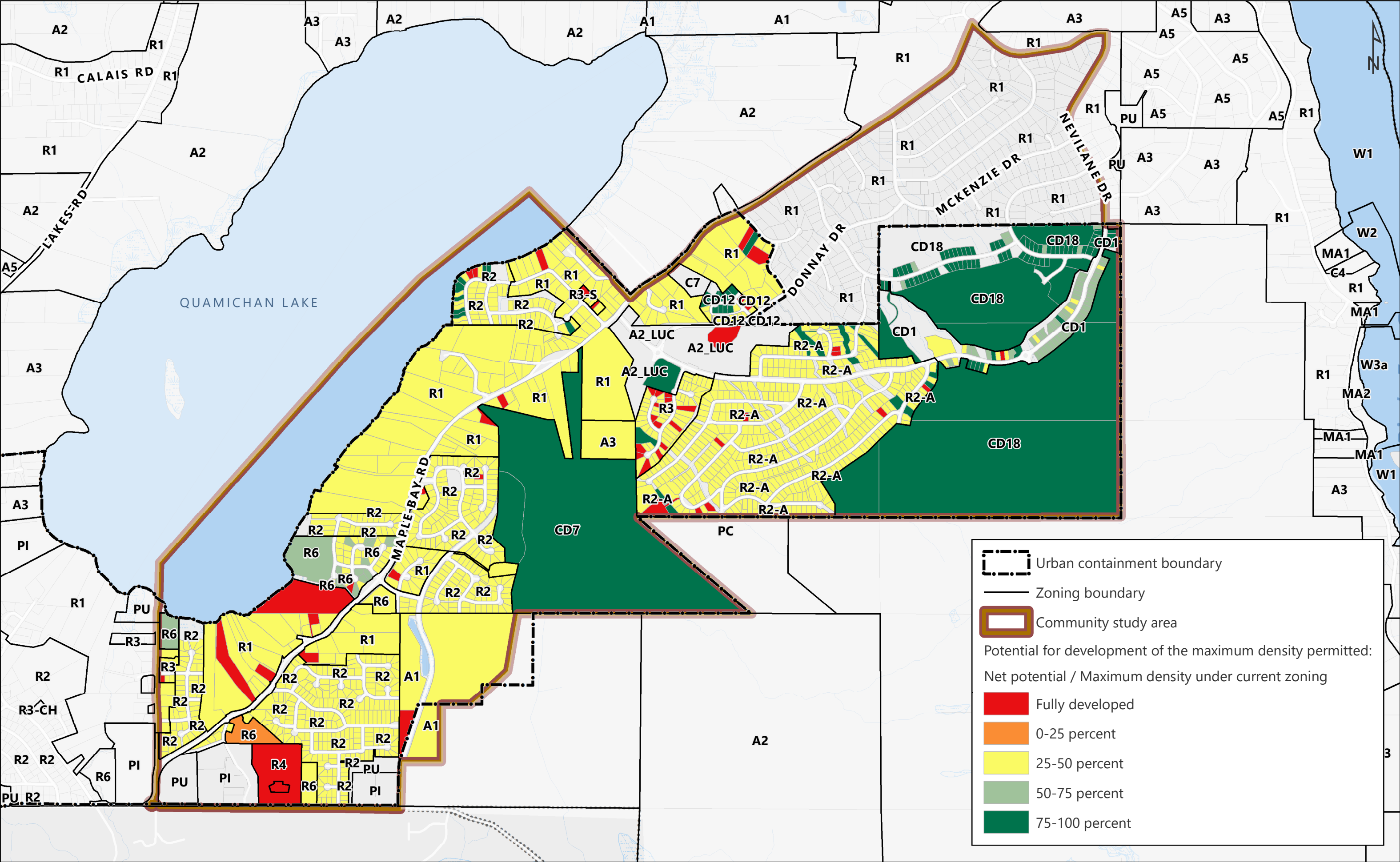


Figure 0.0 Build-out potential based on current zoning: Quamichan



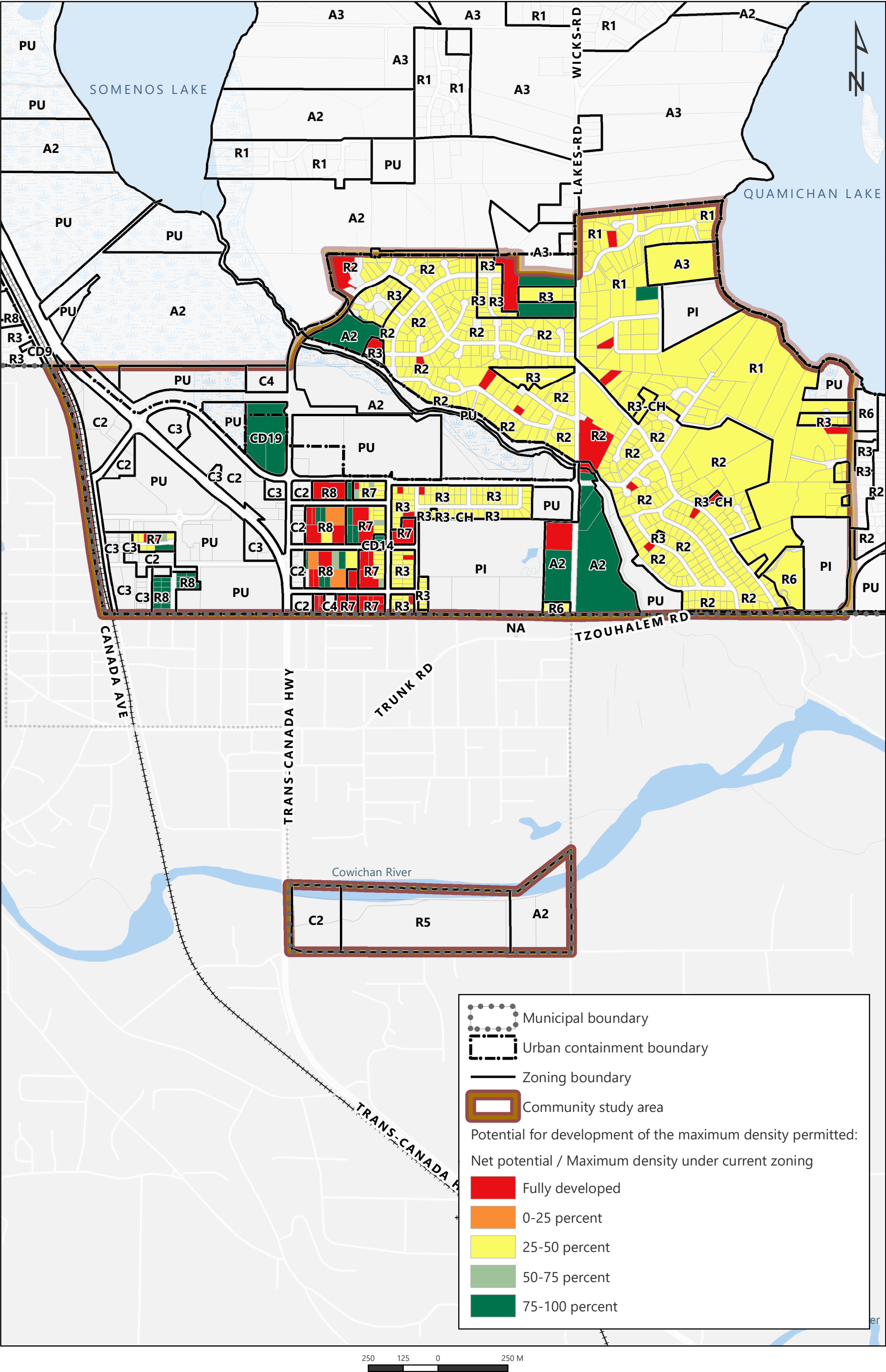


Figure 0.0 Build-out potential based on current zoning: South End Centre 3/18/2020