



File No.: 6500-20 – Water  
Sustainability

DATE OF MEETING: May 26, 2020  
TO: Salt Spring Island Local Trust Committee  
FROM: Jason Youmans, Island Planner  
Salt Spring Island Team  
William Shulba, P.Ge, Senior Freshwater Specialist  
SUBJECT: Proof of Sustainable Water in Subdivision Applications

## RECOMMENDATION

1. That the Salt Spring Island Local Trust Committee endorse the project charter “Proof of Sustainable Water – Subdivision v1” attached as Appendix 1 to the staff report of May 26, 2020.
2. That the Salt Spring Island Local Trust Committee direct staff to draft a bylaw to strengthen groundwater protection during the subdivision approval process.

## REPORT SUMMARY

This staff report provides the Salt Spring Island Local Trust Committee (LTC) with information and a draft project charter for a proposal to amend the Salt Spring Island Land Use Bylaw to better protect the Island’s freshwater resources and groundwater users. The proposed project will ensure that professionals engaged to provide potable water information on behalf of subdivision applicants are undertaking that work with due diligence and in accordance with standardized professional documentation guidelines for the application of hydrogeological practices in British Columbia.

## BACKGROUND

### *Issue Background*

On Salt Spring Island, as in some rural areas of the province, the Ministry of Transportation and Infrastructure (MOTI) is the approving body for subdivisions. However, in the course of processing subdivision applications, the provincial subdivision approving officer refers those applications to Islands Trust planning department for review against applicable subdivision regulations in the Land Use Bylaw. Islands Trust planning staff, with assistance from the Islands Trust Senior Freshwater Specialist, determine whether the proposal is consistent with those regulations, and recommend conditions that must be satisfied in order to meet the Land Use Bylaw’s regulatory requirements. The provincial subdivision approving officer then incorporates those conditions into the Preliminary Layout Approval (PLA) for the subdivision. Among the conditions that applicants must fulfil at Islands Trust request is submission of information to demonstrate a sufficient supply of water to service all uses allowed by zoning on all lots within the proposed subdivision.

Staff have observed that water quantity reports received at time of subdivision are of varied quality and are occasionally inadequate to determine the long term reliability of the groundwater source. This suggests that there are ambiguities within the current regulations which results in inconsistent reporting. Current regulations are based on a “professional reliance” model and defer responsibility for determining water sufficiency to the

consulting engineer hired by the applicant to certify, based on the test undertaken, that the quantity of available water is satisfactory. This professional reliance model was developed when Islands Trust did not have in-house expertise to interpret groundwater reporting. However, with the creation of the Senior Freshwater Specialist position, Islands Trust now has on staff a professional hydrogeologist that can advise on groundwater matters. Notwithstanding the availability of the Senior Freshwater Specialist, proposed bylaw amendments arising from this project are unlikely to be drafted such that review of submitted information by a professional staff hydrogeologist will be required. Rather, it will make the reporting requirements for applicants more prescriptive, such that planning staff are ensured consistent report content across applications.

The anticipated bylaw will reference guidance documents created by the Ministry of Environment and Climate Change Strategy for the implementation of the [Water Sustainability Act](#). This Act came into force in 2016 and restricts groundwater resource work to licensed professionals, defined as a professional engineer, or a professional geoscientist, who is registered or licensed under the [Engineers and Geoscientists Act](#), or a holder of a limited licence under the [Engineers and Geoscientists Act](#), with competency in hydrogeology, acting within the scope of the limited licence.

In November 2018, the Province passed the [Professional Governance Act](#) and in response to this the Engineers and Geoscientists of BC Association drafted a new Code of which includes, “Work Diligently and Follow Standards of Documentation: Undertake work and documentation with due diligence and in accordance with any guidance developed to standardize professional documentation for the applicable profession.”

At its April 28, 2020 meeting staff provided a report to the LTC recommending a sub-project within its greater Water Sustainability Project to improve clarity about the standards to be applied in the course of conducting pumping tests at time of subdivision. At its April meeting LTC passed the following resolution:

**SS-2020-042**

**It was MOVED and SECONDED,**

that the Salt Spring Island Local Trust Committee direct staff to prepare a report regarding proof of water availability for subdivision that will include examples from other jurisdictions.

**CARRIED**

Additionally, the Salt Spring Island Watershed Protection Alliance (SSIWPA) has identified “Proof of Water” as priority project to improve water sustainability in its fiscal 2020/21 work plan.

*Legislative/Regulatory Background*

[Local Government Act](#) section 506(1)(c) enables local government to implement water system requirements at time of subdivision:

**Subdivision servicing requirements**

- 506** (1) A local government may, by bylaw, regulate and require the provision of works and services in respect of the subdivision of land, and for that purpose may, by bylaw, do one or more of the following:
- (a) regulate and prescribe minimum standards for the dimensions, locations, alignment and gradient of highways in connection with subdivisions of land;
  - (b) require that, within a subdivision, highways, sidewalks, boulevards, boulevard crossings, transit bays, street lighting or underground wiring be provided, located and constructed in accordance with the standards established by the bylaw;
  - (c) require that, within a subdivision, a water distribution system, a fire hydrant system, a sewage collection system, a sewage disposal system, a drainage collection system or a drainage disposal system be provided, located and constructed in accordance with the standards established in the bylaw.

[Salt Spring Island Land Use Bylaw No. 355](#) provides the following two regulations applicable to determining sufficient quantity of potable water at time of subdivision:

5.5.5 Where water is to be supplied by groundwater, the applicant for *subdivision* must provide written certification under seal of an *engineer* with experience in groundwater hydrology that there is sufficient available groundwater to provide the required amount of *potable* water on a continuous basis, and that the extraction from the groundwater table of that amount of water is not reasonably expected to adversely affect the quantity or quality of water obtainable from any existing well or surface water that is used as a source of *potable* water.

5.5.7 For the purposes of the certification referred to in Subsection 5.5.5, the *engineer* must supply supporting documentation of a pump test conducted by the *engineer* which must indicate that the test was of sufficient duration to establish the long term reliability of the water supply in accordance with generally acceptable hydrological engineering practices.

See Appendix 2 for all water-supply-related subdivision regulations.

Staff have increasingly found themselves in conflict with applicants and their consultants about what constitutes “sufficient duration to establish the long term reliability of the water supply” and “generally acceptable hydrogeological practices.” For example, staff have received reports that include “pumping tests” undertaken for as little as four hours, which appear inconsistent with best practices in hydrogeology and are better understood as “well yield” tests that are insufficient to satisfy Land Use Bylaw Subsection 5.5.5.

## ANALYSIS

### Policy/Regulatory

#### ***Islands Trust Policy Statement:***

The Islands Trust Policy Statement contains the following policies related to freshwater:

- 3.1.5 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the regulation of land use and development to restrict emissions to land, air and water to levels not harmful to humans or other species.
- 3.3.2 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means to prevent further loss or degradation of freshwater bodies or watercourses, wetlands and riparian zones and to protect aquatic wildlife.
- 4.4.2 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, water quality is maintained, and existing, anticipated and seasonal demands for water are considered and allowed for.
- 4.4.3 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure water use is not to the detriment of in-stream uses

Staff consider that a project to strengthen groundwater protections on an Island in the Islands Trust region is inherently consistent with the Islands Trust Policy Statement.

The proposed project is consistent with Islands Trust 2018-2022 Strategic Plan to protect quality and quantity of fresh water resources of the Trust Area by specifically aiding in the development of a model land use regulation regarding freshwater sustainability including groundwater. The proposed project is also supported by the LTC's strategic priority to ensure fresh water sustainability.

***Official Community Plan:***

The Salt Spring Island Official Community Plan is generally supportive of protecting groundwater resources. It contains the following relevant objectives and policies

*Objectives*

- C.3.3.1.1 To avoid zoning changes that result in the depletion of existing wells or springs or water bodies used as water supplies.
- C.3.3.1.2 To preserve known groundwater recharge areas.

*Policies*

- C.3.3.2.3 The Local Trust Committee should continue to require proof of adequate potable water supply for each new lot created by subdivision.

See Appendix 3 for a complete list of applicable OCP policies.

***Land Use Bylaw:***

Staff are proposing to amend Land Use Bylaw sub-sections 5.5.5 and 5.5.7 above, and perhaps others within section 5.1, to strengthen groundwater protections at time of subdivision.

**Issues and Opportunities**

*Bylaw Development Process and Anticipated Bylaw Amendments*

Development of bylaw amendments will be based on review of:

- Existing subdivision regulations within the Land Use Bylaw to identify their strengths and weaknesses;
- Government of British Columbia guidance documents to determine whether existing Land Use Bylaw regulations implement recommended best practices;
- Review of regional district bylaws to identify good practices elsewhere; and

will be developed in cooperation with staff from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) Water Protection Branch and the Ministry of Environment and Climate Change Strategy Water Protection and Sustainability Branch.

Staff anticipate that a draft bylaw to provide greater clarity concerning proof of sustainable groundwater resources may include the following elements:

- Reporting and documentation requirements to lower applicant costs by eliminating professional reporting on established hydrogeological knowledge of Salt Spring Island such as climate, geology, and geography;
- Site specific requirements depending on associated aquifer risk with respect to susceptibility to salt water intrusion, contamination vulnerability, zoning density, regional water balance, and environmental flow needs. These would be based on available Islands Trust mapping.
- Certification of well construction and protection as per the Groundwater Protection Regulation;
- Minimum duration for pumping tests based on number of lots in proposed subdivision;
- Certification that the tests have been conducted in accordance with the Government of British Columbia Guide to Conducting Pumping Tests; and
- Specific Provincial documentation including but not limited to Well Registration Form, Well Identification Report, and Pumping Test Records.

#### Provincial Guidelines and Best Practices

The Government of British Columbia has established a [Guide to Conducting Pumping Tests](#). This document lays out the protocols that should be followed by those undertaking groundwater pumping tests. The guide notes:

“Pumping tests can last from hours to days or even weeks, depending on the purpose of the pumping test, but traditional pumping tests typically last for 24 to 72 hours.”

“Minimum durations of typical pumping tests are 24 to 72 hours unless stabilization of the pumping water level occurs. Local by-laws, regulatory requirements (eg. an Order issued by a Water Manager) or a professional can stipulate minimum pumping durations.”

Additionally, the British Columbia Groundwater Protection Association has developed a [Groundwater Protection Regulation Handbook](#). The handbook includes the following information:

“A pumping test (also referred to as an aquifer test) is a longer flow test typically conducted by a well pump installer. It is intended to provide a more accurate estimate of the well’s sustainable (or “safe”) yield, the potential impact of pumping the well on other wells (drawdown inference) and the hydraulic properties of the aquifer (e.g. transmissivity, storativity).

“Pumping tests generally involve pumping the well at a constant rate for 24 hours (in overburden aquifers) to 72 hours (in bedrock aquifers), and recording water levels in the pumped well (and sometimes nearby wells or streams). Some constant rate tests are preceded by a variable rate test (or step test), wherein the well is pumped at incrementally higher rates for short periods, in order to choose the appropriate rate for the constant rate test and determine the well efficiency.”

### Other Jurisdictions

By way of resolution, the LTC requested that staff provide information about how other jurisdictions approach this issue.

Staff have compiled the subdivision servicing bylaws of 10 regional districts; 5 from Vancouver Island, and 5 from elsewhere in British Columbia and undertaken a cursory review. A more detailed review will be undertaken if the LTC directs staff to proceed to the bylaw drafting stage.

Not surprisingly, there are a range of approaches to regulating water quantity at time of subdivision across regional districts owing to the:

- Era in which the bylaws were adopted;
- Political culture of the subject region;
- Nature of its groundwater resources;
- Presence of in-house technical advisory staff or engineering department; and
- Presence of an in-house subdivision approving officer.

Of the regional districts surveyed, only the Thompson-Nicola Regional District (TNRD) appears to be current with the [Water Sustainability Act](#) and apply the level of prescription that staff are proposing the LTC introduce into the Land Use Bylaw.

- 4.4.5 Pumping tests shall be undertaken in accordance with the provisions of the BC Ministry of Environment "Guide to Conducting Water Well Pumping Tests" and in conformance with the following:
- a) yield tests are not a satisfactory measure of sustainable well volume; rather, the well should receive a pumping test at a minimal flow rate of either
    - i) 5.0 litres per minute (1.32 US gal/min.) for a minimum duration of 8 hours or until 2,400 Litres of water has been removed within a maximum of 8 hours if the water well is completed within an unconsolidated formation; or
    - ii) 2.5 litres per minute (0.66 US gal/min) for a minimum of 16 hours or until 2,400 Litres of water has been removed within a maximum of 16 hours if the water well is completed in fractured bedrock; and

See TNRD's full subdivision servicing regulations as they relate to water provision in Appendix 4(a).

Some jurisdictions, such as the Cowichan Valley Regional District (Appendix 4(b)), require different pumping volumes depending on the season:

#### 11.4 Required Volume

For each well that has been drilled under section 11.3, the results of the pump test must indicate a minimum per minute yield of 1.2 US gallons based on tests done between June 1<sup>st</sup> and November 1<sup>st</sup> (summer testing) and 2.4 US gallons based on tests done between November 2<sup>nd</sup> and May 31<sup>st</sup> (winter testing).

Other areas, such as a North Okanagan Electoral Area E (Appendix 4(c) require nothing at all, although staff understand this to be because of unique zoning and water characteristics of the area:

#### **407 Where Proof of Water is Not Required**

1. Where connection to a **community water system** is not required, the **subdivision** of parcels within Electoral Area “E” may be approved without the provision of a **potable water** supply.

Regional district subdivision servicing bylaws reviewed by staff are available in Appendix 4.

Staff also undertaken a cursory review of the Land Use Bylaws of the 13 major islands of the Trust Area. Several approach the issue with similar language to that of the Salt Spring Island Land Use Bylaw (see Appendices 5 (i)(j) and (l)). Others, such as Hornby Island and Gabriola Island (Appendices 5 (d) and (f)), defer entirely to the provincial approving officer.

#### **Impact on Land Owners**

Staff cannot determine at this stage what impact the proposed bylaw amendments will have on land owners.

Longer pumping test times will cost more. However, this may be offset by reduced reporting costs by eliminating discussion of Salt Spring climate and geology. Additionally, greater transparency of methodology could enable on-Island pump installers to do the majority of the field work, which could lower the cost of professional analysis.

Regardless of the financial impacts on land owners, regulating for consistency with provincial guidelines will help ensure a sustainable groundwater supply for prospective property owners and other well users in the adjacent area.

#### **Consultation**

The proposed bylaw amendments are largely a technical exercise to bring the land use bylaw into alignment with the [Water Sustainability Act](#), [Groundwater Protection Regulation](#), [Professional Governance Act](#) and associated guidelines established by the Province. Bylaw amendments will be largely developed by Islands Trust Senior Freshwater Specialist in cooperation with staff from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), and the Ministry of Environment and Climate Change Strategy.

Staff will refer a draft bylaw to public agencies and qualified professionals for comment.

The proposed amendments will require minimal public consultation. Staff recommend one community information session in a question-and-answer format and the development of information materials for distribution both during, and after, the bylaw adoption process to inform land owners and professionals of the changes.

This bylaw amendment will be drafted to be consistent with the official community plan, thus staff will likely recommend that the LTC waive the holding of a public hearing as per section 464 (2) of the [Local Government Act](#). If a public hearing is waived, notice must still be given as per section 467 of the [Local Government Act](#).

Correspondence may be sent to [ssiinfo@islandstrust.bc.ca](mailto:ssiinfo@islandstrust.bc.ca) .

#### **Protocols**

Islands Trust role in the MOTI subdivision approvals process is captured in a letter of understanding between the two organizations. It is available [here](#).

Proof of water is specifically addressed in the following clause:

- iv. Where proof of potable water is required by bylaw, the information will be provided to Islands Trust staff by the applicant. Trust staff will advise the Provincial Approving Officer of bylaw compliance based on the information provided. If proof of potable water is not required by bylaw, the criteria for potable water will be set by the Provincial Approving Officer. The applicant will supply the information to the Ministry of Transportation and Highways District staff who will forward that information to the Provincial Approving Officer for assessment.

### ***Agencies and Organizations***

Staff will refer any draft bylaw to agencies and organizations of interest. Staff anticipate that this will include:

- Ministry of Transportation and Infrastructure (MOTI);
- Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD);
- Ministry of the Environment and Climate Change Strategy;
- Island Health;
- Engineers and Geoscientists of British Columbia (EGBC);
- BC Groundwater Association;
- Salt Spring Island Watershed Protection Society;
- Salt Spring Island Watershed Protection Alliance (SSIWPA); and
- Capital Regional District building inspection

### ***First Nations***

Amendments to the Land Use Bylaw trigger the requirement for First Nations referral.

Staff do not anticipate that First Nations interests will be adversely affected by a Land Use Bylaw amendment that strengthens stewardship of the Island's groundwater resources.

Staff will work with Islands Trust Senior Intergovernmental Policy Advisor on bylaw referral.

### **Rationale for Recommendation**

- 1. That the Salt Spring Island Local Trust Committee endorse the project charter "Proof of Sustainable Water – Subdivision v1" attached as Appendix 1 to the staff report of May 26, 2020.**

The project charter proposed in Appendix 1 provides a path toward amending the Salt Spring Island Land Use Bylaw to improve groundwater resource sustainability and watershed protection at time of subdivision. The project is supported by Trust Council's Strategic Plan and the LTC's strategic priorities.

- 2. That the Salt Spring Island Local Trust Committee direct staff to draft a bylaw to strengthen groundwater protection during the subdivision approval process.**

With direction to draft a bylaw staff can turn its attention to reviewing applicable documents as described above and developing bylaw improvements it will recommend the LTC consider.



## ALTERNATIVES

### 1. Receive for information

If the LTC determines that it has other project, or water sustainability project, priorities at the current time it can receive this report for information. If this is the case, the LTC may also wish to consider some of the alternative water sustainability projects proposed in the [staff report](#) of April 28, 2020. Recommended wording for such resolutions is as follows:

*That the Salt Spring Island Local Trust Committee receive the water sustainability project report of May 26, 2020 for information.*

And

*That the Salt Spring Island Local Trust Committee direct staff to provide a scoping report on [...] water sustainability project as proposed in the staff report of April 28, 2020.*

The implications of these resolutions are that staff would cease any work to amend the Land Use Bylaw to improve groundwater protections at time of subdivision. Staff would then provide the LTC with a report on any other water sustainability projects it would like to consider.

## NEXT STEPS

If the LTC adopts staff's recommendation, staff will begin detailed review of applicable provincial guidance documents and subdivision servicing bylaws of regional districts and other Local Trust Areas and use those to inform the development of a draft bylaw.

If the LTC adopts an alternative resolution, staff will carry out the LTC's direction.

Submitted By:	Jason Youmans, Island Planner William Shulba, P.Geo, Senior Freshwater Specialist	May 19, 2020
Concurrence:	Stefan Cermak, Regional Planning Manager	May 19, 2020

## ATTACHMENTS

1. Project Charter – Proof of Water – Subdivision v1
2. Salt Spring Island Land Use Bylaw No. 355 – Subdivision Regulations – Potable Water
3. Salt Spring Island Official Community Plan Bylaw No. 434 – Freshwater Policies
4. Regional District SUBD Bylaws – Potable Water
5. Local Trust Area SUBD Bylaws – Potable Water

**Water Sustainability Project: Land Use Management for Watershed Protection  
Proof of Water – Subdivision: Project Charter v1**

Salt Spring Island Local Trust Committee

Date: May 19, 2020

**Purpose:** *The purpose of this project is to amend the Salt Spring Island Land Use Bylaw to better protect groundwater resources and groundwater users by improving the quality of groundwater information provided by subdivision applicants.*

**Background:** *Staff have determined that groundwater information furnished by subdivision applicants is not always consistent with the Province’s Guidelines for Conducting Pumping Tests. This has led to conflict between staff, applicants and their consulting engineers. Staff believe that greater clarity around required information will minimize conflict. Additionally, the Salt Spring Island Watershed Protection Alliance (SSIWPA) has identified “Proof of Water” as a priority project to enhance water sustainability on the Island.*

**Objectives**

- Consistency between Land Use Bylaw and Government of British Columbia Guidelines for Conducting Pumping Tests
- Clear deliverables for applicants
- Reduced staff/applicant conflict

**In Scope**

- Land Use Bylaw amendments
- Cooperation with provincial agencies in bylaw development
- Agency, Professional + SSIWPA Technical Working Group referrals
- 1 Community Information Session
- Development of supplementary communications materials

**Out of Scope**

- Non-water-related bylaw amendments
- Extensive community engagement

**Workplan Overview**

Deliverable/Milestone	Date
Project Charter endorsement, direction to draft bylaw	May 26, 2020
Draft bylaw for LTC review, first reading + First Nations, agency, professional and SSIWPA referral	July 28, 2020
Bylaw amendment, second reading, Community Information Meeting	October 6, 2020
Third reading, executive committee referral	November 10, 2020
Bylaw adoption	December 15, 2020

**Project Team**

Jason Youmans	Project Manager
William Shulba	Technical Advisor
Kristine Mayes	Project Assistant
Daniela Murphy	Legislative Clerk
<b>RPM Approval:</b> Stefan Cermak <b>Date:</b> May 19, 2020	<b>LTC Endorsement:</b> Resolution #: <b>Date:</b> xxx

**Budget**

Budget Sources:		
Fiscal	Item	Cost
20/21	Community Information Session	\$0-500
20/21	Bylaw Notification (waive public hearing)	\$1,000
	Total	\$1,500

<b>PROJECT CHARTER WORK PLAN OVERVIEW</b>			
<b>Meeting</b>	<b>Deliverable/Milestone</b>	<b>Target Date</b>	<b>Cost</b>
May 26, 2020	Project Charter endorsement, direction to draft bylaw		\$0
	Review background materials, Coordinate with FLNRORD and MOE staff, draft bylaw	July 15, 2020	\$0
July 28, 2020	LTC review bylaw, first reading + agency, professional and SSIWPA referral		\$0
	Develop bylaw amendments based on First Nations, agency, professional, and SSIWPA recommendation	September 20, 2020	
October 6, 2020	Bylaw amendment, second reading		
	Mid-stream communications materials (why is the LTC doing this? what does it mean?)	October 20, 2020	\$0
	Community Information Session (targeted to stakeholders, although general public can join)	October 20, 2020	\$0 if online, \$500 if in-person
November 10, 2020	Bylaw amendment, third reading, executive committee referral (waive public hearing)		\$1,000
December 15, 2020	Bylaw adoption		
	Post-adoption communications materials (what happens now?)	December 15, 2020	\$0
<b>TOTAL</b>			<b>\$1,500</b>

## SUBDIVISION REGULATIONS – SALT SPRING ISLAND LAND USE BYLAW NO. 355

## 5.5 POTABLE WATER

5.5.1 Each lot in a proposed subdivision must be supplied with potable water in accordance with the service levels specified in Part 9 of this Bylaw.

5.5.2 Each lot in a proposed subdivision must be supplied with sufficient water to supply all uses, buildings and structures permitted on the lot by this Bylaw according to the standards set out in Table 1. Where more than one use is permitted on a lot, the amount of water to be supplied is the sum of the amounts required for each permitted use, calculated separately.

Information Note: If more than one dwelling unit is connected to the same source of water, the water system is subject to Vancouver Island Health Authority regulations of water supply systems, the Drinking Water Protection Act, and may be subject to the Water Utility Act.

5.5.3 Where water is to be supplied by a community water system, the community water system must provide written confirmation of the amount of water it is able to supply to each lot.

5.5.4 Where water is to be supplied from a surface water body, the applicant for subdivision must provide proof of a water license issued after November 30, 1994, that permits the withdrawal of the required amount of water. Information Note: The provincial Water Management Branch completed a study of surface water availability in November of 1994. Water licenses issued before this time may not be a reliable indication that water is actually available in the necessary quantity.

5.5.5 Where water is to be supplied by groundwater, the applicant for subdivision must provide written certification under seal of an engineer with experience in groundwater hydrology that there is sufficient available groundwater to provide the required amount of potable water on a continuous basis, and that the extraction from the groundwater table of that amount of water is not reasonably expected to adversely affect the quantity or quality of water obtainable from any existing well or surface water that is used as a source of potable water.

<b>TABLE 1 POTABLE WATER SUPPLY STANDARDS FOR SUBDIVISION</b>	
<b>USE</b>	<b>VOLUME (litres per day per lot)</b>
<i>Dwelling unit</i>	1600
<i>Secondary Suite</i>	1200
<i>Seasonal cottage</i>	680
<i>Bed and breakfast home-based business</i>	225/bedroom
<i>Commercial or Industrial use</i>	900
<i>Community hall or church</i>	1590
<i>School</i>	50/classroom
<i>Commercial guest accommodation units</i>	450/unit
<i>Campground</i>	225/campsite

5.5.6 If the required amount of water cannot be supplied or if the certification, water license or confirmation referred to in Subsections 5.5.3, 5.5.4 or 5.5.5 cannot be made, the Approving Officer may

nonetheless approve the subdivision if the applicant grants a covenant under the Land Title Act to the Salt Spring Island Local Trust Committee that restricts the development of the subdivision to the buildings, structures and uses for which the required amount of water can be supplied, licensed or certified under Subsections 5.5.3, 5.5.4 or 5.5.5.

5.5.7 For the purposes of the certification referred to in Subsection 5.5.5, the engineer must supply supporting documentation of a pump test conducted by the engineer which must indicate that the test was of sufficient duration to establish the long term reliability of the water supply in accordance with generally acceptable hydrological engineering practices.

5.5.8 Where the water supply is provided through a groundwater well or through a private surface water license, an engineer must also provide a water quality analysis that demonstrates that the surface water or the groundwater from each proposed water supply source or well is potable or can be made potable with a treatment system that is customarily used in a single-family dwelling. The certificate must include a plan of the proposed subdivision indicating each well location where a water sample was taken, and a statement that the water samples upon which the water quality analysis was performed were unadulterated samples taken from the locations indicated on the plan. If the water to be supplied is not potable, but can be made potable with a treatment system that is customarily used in a single-family dwelling, then the Approving Officer may nonetheless approve the subdivision if the applicant grants a covenant under the Land Title Act to the Salt Spring Island Local Trust Committee that requires ongoing treatment of the water to ensure that it is potable before it is used as drinking water

## Salt Spring Island Official Community Plan Bylaw No. 434

### Excerpts re. Groundwater Sustainability

#### **A.4.2 Sustainability**

- A.4.2.1 To recognize the importance of sustainability in all community decisions. To avoid land use decisions that threaten the integrity or sustainability of natural ecosystems.
- A.4.2.2 To maintain and restore the community's natural capital represented by such items as our agricultural and forest land base, our potable water supplies, and primary value of our natural and unspoiled rural character.
- A.4.2.3 To recognize our local responsibility to contribute to global sustainability, particularly in relation to mitigation of and adaptation to climate change.
- A.4.2.4 To recognize that long-term social and economic well being requires living within the limits of ecological sustainability, which is the maintenance of ecological processes so that the biological productivity of the Earth endures without dependence on non-renewable resources.

#### **A.4.3 Limits to Growth**

- A.4.3.1 To continue to focus attention on the finite nature of all of our island's resources, especially those that are drawn from our natural environment.
- A.4.3.2 To provide direction for the conservation and stewardship of natural resources, especially our surface and groundwater supply.
- A.4.3.3 To reflect the finite nature of islands by identifying limits to residential, commercial and institutional growth tailored to the community's land base and ecological carrying capacity. Special attention should be paid to ensuring that the human use of potable water can be sustained without negative impact on other values and uses for natural water bodies.
- A.4.3.4 To accommodate and direct appropriate development so that its location, appearance and impact are in harmony with the natural environment, community resources, character and existing land uses. To ensure that clustered settlements are well designed so that they become and remain acceptable and compatible with existing development.

### **C.3.3 Private Surface Water and Groundwater Supplies**

#### **C.3.3.1 OBJECTIVES**

- C.3.3.1.1 To avoid zoning changes that result in the depletion of existing wells or springs or water bodies used as water supplies.
- C.3.3.1.2 To preserve known groundwater recharge areas.

#### **C.3.3.2 POLICIES**

- C.3.3.2.1 To protect groundwater recharge areas, zones in the upland areas of the island will continue to allow only a low density of development. The Local Trust Committee may consider undertaking or supporting further analysis of groundwater recharge areas on the island, including the creation of a groundwater conservation strategy. The transfer of development potential to other parts of the island will be encouraged.
  - C.3.3.2.2 When considering rezoning applications, the Local Trust Committee should consider the impacts of the proposed new use on existing wells, springs, or other water supplies. If the proposed use is expected to need more water than the uses already allowed on the property, then the Committee should ask for evidence that wells or other water supplies in the neighbourhood would not be depleted. The Committee should also consider whether water use would affect agricultural activities or deplete any springs necessary to maintain fish habitat. Should a zoning change be proposed where groundwater supplies are not adequate, the applicant could be encouraged to find other means of supplying water. Rainwater catchment or a water conservation program could be considered.
  - C.3.3.2.3 The Local Trust Committee should continue to require proof of adequate potable water supply for each new lot created by subdivision.
  - C.3.3.2.4 The Local Trust Committee could establish an advisory group to provide advice regarding local groundwater topics.
  - C.3.3.2.5 The Local Trust Committee should not support rezoning applications that depend on the import of water from off the island.
  - C.3.3.2.6 The Local Trust Committee should consider working with other agencies and stakeholders to development a groundwater conservation strategy for Salt Spring Island. The strategy would combine educational efforts with the creation of demand management measures.
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**THOMPSON-NICOLA REGIONAL DISTRICT  
SUBDIVISION SERVICING BYLAW  
BYLAW NO. 2403**



Thompson-Nicola Regional District  
300-465 Victoria St., Kamloops, BC

Telephone	1.250.377.8673
Toll Free in BC	1.877.377.8673
Facsimile	1.250.372.5048
Email	admin@tnrd.ca





### **3.0 Water Supply System**

#### **3.1 General Requirements**

- 3.1.1 Where a subdivision is required to be connected to a *community water system* but no *community water system* is proximate or capacity is unavailable, the subdivision is required to connect to a *water supply system* designed in accordance with the applicable provincial legislation and regulations.
- 3.1.2 Where a *water supply system* is provided, it must be designed and constructed in accordance with the standards and specifications of the authorities having jurisdiction.
- 3.1.3 Proof of connection or secured commitment of undertaking to connect to a *water supply system* must be provided and shall consist of written confirmation from the system owner and a *professional engineer*.

### **4.0 Private Water Supply**

#### **4.1 General Requirements**

Where a proposed *parcel* of land is not required to be serviced by a *community water system* or a *water supply system* as a condition of *subdivision approval*, and the *parcel zone* permits any residential or accessory residential use or is proposed to be used for a single family residence, the following is required for *subdivision approval*:

- a) the source of water shall be either surface water in which case there shall be proof of a domestic water source which produces no less than 2,273 litres per day (500 Imperial gallons per day) for each individual *parcel*; or
- b) in the case of a groundwater, there shall be proof of a domestic water source which produces no less than 2,400 litres per day (528 Imperial gallons per day) for each individual *parcel*; and
- c) proof that the proposed water source is sustainable on a year round basis,
- d) a water sample analysis to determine if potable in relation to the "Guidelines for Canadian Drinking Water Quality" and the viability of available treatment methods to ensure that it can reasonably meet potable water standards; and
- e) a s. 219 covenant under the Land Title Act shall be applied to the subject land title advising of water analysis results, any specific risks relating to the given analysis, and potential health risks associated with consuming untreated water; notwithstanding, that the *Approving Officer* may refuse an application where the water analysis indicates a severe risk that cannot reasonably be treated.

#### **4.2 Exemptions**

The requirements of s.4.1 shall not apply where:

- a) the *subdivision* is a lot line adjustment that does not result in an increase in the number of *parcels*;
- b) a *parcel* has an existing lawfully constructed dwelling unit and a well or surface water license serving that dwelling; or

- c) the proposed *parcel* area exceeds 16 hectares in the AF-1 Zone or 8 hectares in the RL-1 Zone.

#### 4.3 Surface Water Sources within the Terms of the BC Water Act

Where a surface water supply is proposed as the domestic water source subject to provincial legislation, the *owner* shall provide the following to the *TNRD*:

- a) a water license for domestic purposes which entitles each *parcel* a minimum of 2,273 litres per day issued by the Province of BC; or
- b) proof of application and confirmation in writing from the authority having jurisdiction that a water licence or an amendment to an existing license suitable for division will be issued.

#### 4.4 Groundwater Supply

- 4.4.1 All water well drilling and testing procedures shall conform to the BC Ministry of Environment requirements, Water Act, Ground Water Protection Regulation (March 2009) as amended and superseded.
- 4.4.2 Individual water wells shall be sited in accordance with the mandatory setbacks from both water tight septic tanks and wastewater disposal systems in accordance with the Sewerage System Regulation or Municipal Wastewater Regulation, as applicable and as amended and superseded.
- 4.4.3 Individual drilled and cased water wells are restricted to supplying domestic water to a single *parcel*.
- 4.4.4 Where groundwater is proposed as the domestic drinking water source, a water well must, upon each *parcel*, be drilled, cased and constructed by a *qualified well driller* and must satisfy all pertinent requirements of the BC Ground Water Protection Regulation, as amended and superseded.
- 4.4.5 Pumping tests shall be undertaken in accordance with the provisions of the BC Ministry of Environment "Guide to Conducting Water Well Pumping Tests" and in conformance with the following:
  - a) yield tests are not a satisfactory measure of sustainable well volume; rather, the well should receive a pumping test at a minimal flow rate of either
    - i) 5.0 litres per minute (1.32 US gal/min.) for a minimum duration of 8 hours or until 2,400 Litres of water has been removed within a maximum of 8 hours if the water well is completed within an unconsolidated formation; or
    - ii) 2.5 litres per minute (0.66 US gal/min) for a minimum of 16 hours or until 2,400 Litres of water has been removed within a maximum of 16 hours if the water well is completed in fractured bedrock; and
  - b) water well recovery shall be monitored for 2 hours or until 90% of recovery has been achieved;
  - c) pumping test data shall be recorded on the Ministry's Pumping Test Report form and submitted to the *TNRD*; and

- d) during the pumping test the testing contractor shall identify any and all drilled water wells within a 300 metre radius of the pumping test well and monitor those wells for any drawdown interference impacts.

4.4.6 Water wells within the proposed *subdivision* must not deplete the capacities of pre-existing active neighbouring water wells within a 300 metre radius to meet this Bylaw for proposed *subdivision approval*.

#### 4.5. Dug Wells

4.5.1 Dug wells are not acceptable as a private water source except where allowed by Development Variance Permit which shall be considered on the basis of the given site characteristics, including but not limited to water sample analysis; vulnerability to surface contamination; distance and interference to other wells; surrounding land uses and waste water disposal fields; potential impacts to groundwater; sustainability on a year round basis, and other relevant site issues.

4.5.2 A report prepared by a *professional engineer* or geoscientist examining the risks and matters outlined under s. 4.5.1, above, must be submitted for consideration of a Development Variance Permit application for a dug well.

#### 4.6 Documentation

4.6.1 If a surface water supply is proposed for the *subdivision*, all submissions described under s. 4.3 and where required, proof of easements and restricted covenant(s) shall be submitted to the *TNRD*.

4.6.2 If a groundwater supply is proposed for the *subdivision*, then a letter report prepared or certified by a *professional engineer* including the following shall be submitted to the *TNRD*:

- a) site plan with well location and GPS coordinates of water well;
- b) well drillers log prepared by a *qualified well driller* and completion document with proof of submission to the BC Ministry of Environment;
- c) raw pumping test data;
- d) analysis and assessment of the pumping test data including professional assurance as to whether the subject well meets the requirements of this Bylaw;
- e) potential impacts to neighbouring wells within a 300 metre radius from pumping of the subject water well at 2,400 Litres per day; and
- f) proof of easements, where required, and restricted covenant(s).



**COWICHAN VALLEY REGIONAL DISTRICT  
SUBDIVISION BY-LAW No. 1215, 1989, 4072**

Appendix 4(b)  
Cowichan Valley  
Regional District

7.2 Following receipt of one copy of the proposed subdivision plan together with all supporting documentation from the Approving Officer, the Regional District shall advise the Approving Officer, in writing, as to any Regional District requirements or regulations that apply to the proposed subdivision.

a) Applications for subdivision shall be submitted to the appropriate District Office of the Provincial Ministry of Transportation and Infrastructure;

b) The Ministry of Transportation and Infrastructure shall forward one copy of the proposed subdivision together with all supporting documentation to the Regional District;

c) The Regional District shall advise the Ministry of Transportation and Infrastructure, in writing, as to any requirements for the subdivision.

d) Where an application for a subdivision has been submitted to the Ministry of Transportation and Infrastructure in a form satisfactory to the Approving Officer and the Regional District adopts a bylaw that would otherwise be applicable to that subdivision, then the bylaw has no effect with respect to the subdivision for a period of 12 months after the bylaw is adopted unless the applicant agrees in writing that it should have effect.

## 8.0 FEE FOR APPLICATION

8.1 Prior to the Regional District deeming subdivision conditions met, the applicant must pay all subdivision fees payable to the Regional District, as prescribed under the Cowichan Valley Regional District Development Application Procedures and Fees Bylaw No. 3275, as amended or replaced from time to time.

## 9.0 SERVICES – WATER SUPPLY

9.1 An applicant seeking subdivision approval must demonstrate that each new parcel within the proposed subdivision has a supply of potable water in accordance with the requirements of this Bylaw.

9.2 The requirement under section 9.1 does not apply to a subdivision application that is limited to boundary adjustments between two or more parcels, where proof of potable water has already been provided for each parcel, and where an occupied dwelling exists on each affected parcel.

## 10.0 COMMUNITY WATER SYSTEMS

10.1 If an applicant intends to connect the lots to be created by subdivision to an existing community water system, the applicant must provide evidence satisfactory to the Regional District, prior to subdivision approval, that the owner and operator of the community water system accepts the new lots into its service area and has agreed to provide potable water to the lots.

10.2 Where the owner wishes to connect the lots to be created by subdivision to a community water system that is owned and operated by the Regional District, the regulations in sections 10.3 to 10.7 apply.

### 10.3 Design

The design of each portion of the water distribution system within the lands being subdivided, and all works providing a connection to a Regional District water main, must conform to the MMCD Standards applicable to potable water services.

### 10.4 Approval

All plans and specifications for a water distribution system that is to be constructed within the subdivision, and for the works that will connect that water distribution system to a Regional District water main, must be submitted to the Regional District Engineering Services Department for approval, before the applicant:

- (a) undertakes any construction or installation of the water distribution system;
- (b) establishes any service line connections to any new lot the parcel to be subdivided;
- (c) constructs any works for the purpose of establishing a connection to a Regional District water main.

### 10.5 Surface Water Source

Where a surface supply of water is to be the source of domestic water for a community water service operated by the Regional District, the applicant must transfer its water license to the Regional District prior to the final approval of the subdivision.

### 10.6 Ground Water Source

Where a ground supply of water is to be the source of domestic water for a community water service, the applicant must provide a 72 hour pump test result from the well to be used for that purpose which indicates that there is a minimum per minute yield of 1.2 US gallons based on tests done between June 1<sup>st</sup> and November 1<sup>st</sup> (summer testing) and 2.4 US gallons based on tests done between November 2<sup>nd</sup> and May 31<sup>st</sup> (winter testing).

#### 10.7 Water Quality Testing

For any proposed source of water for a community water system, samples of the water shall be tested in a laboratory for all potential contaminants that would otherwise render the water incapable of meeting the standards for potable water under the *Drinking Water Protection Act*. The test results shall be submitted to the Regional District and indicate clearly whether or not the results meet the requirements of the *Drinking Water Protection Act*. In the event that treatment is required to meet this standard, provision of a treatment system to the satisfaction of the CVRD Engineering Services Department shall be a precondition of acceptance of the source of water, and shall be provided prior to subdivision approval.

#### 11.0 PRIVATE WATER SOURCES

11.1 Where a water source other than a community water system is proposed as the source of domestic water to parcels within a subdivision, each parcel must have its own source of potable water in accordance with the regulations in sections 11.2 to 11.5.

#### 11.2 Surface Water Source

All components, including the intake, for a private water system using surface water sources must be located on the same Parcel as the residential Dwelling Unit in respect of which they are required.

#### 11.3 Ground Water Source

Where a ground supply of water is to be the source of domestic water for a parcel or parcels to be subdivided, a well shall be drilled on each parcel by a registered Well Installer or registered Well Pump Installer. Prior to subdivision approval, a Well Construction Report shall be submitted to the Regional District that

indicates that there is a sufficient supply of potable water that has the flow capacity required under section 11.4 for each parcel to be created.

#### 11.4 Required Volume

For each well that has been drilled under section 11.3, the results of the pump test must indicate a minimum per minute yield of 1.2 US gallons based on tests done between June 1<sup>st</sup> and November 1<sup>st</sup> (summer testing) and 2.4 US gallons based on tests done between November 2<sup>nd</sup> and May 31<sup>st</sup> (winter testing).

#### 11.5 Water Quality Testing

Every separate source of water proposed for a subdivision shall be tested in a laboratory for potential contaminants that would otherwise render the water incapable of meeting the standards of potability that apply to domestic water systems that are regulated under the *Drinking Water Protection Act*. The test results shall be submitted to the Regional District and indicate clearly whether or not the results meet the regulations applying to domestic water systems under the *Drinking Water Protection Act*. In the event that treatment is required to meet this standard, provision of a treatment system shall be a requirement of the subdivision approval. Where a treatment system cannot be installed on a proposed parcel until a building or structure is built, the applicant shall register a covenant on the parcel(s) whose water supply will require treatment, under which occupancy and use of any building constructed will not be permitted until such time as the treatment system has been installed and is in satisfactory operating condition.

#### 12.0 SHARED WATER SOURCES

12.1 Other than a community water system, no parcel proposed to be created by subdivision shall share a source of potable water with another parcel through any kind of distribution system, whether the source is surface water or ground water.

#### 13.0 SERVICES – SEWAGE DISPOSAL

##### 13.1 Community Sewer System

Where a parcel proposed to be created by subdivision is within an area served by a community sewer system, or requires community sewer service in order to meet minimum parcel size requirements specified in a zoning bylaw, the costs of connecting to the community sewer system shall be borne by the applicant, and the specifications shall be submitted to CVRD Engineering Services Department for approval, using the MMCD Standards as the standards and specifications.



Appendix 4(c)

North Okanagan  
Regional District

**REGIONAL DISTRICT OF NORTH OKANAGAN  
SUBDIVISION SERVICING  
BYLAW NO. 2600, 2013**

## **SECTION 400 – SERVICING REQUIREMENTS**

### **401 General**

The **works** and **services** specified in this bylaw shall be required to be constructed and installed by an **applicant** prior to obtaining final approval for a plan of **subdivision** and shall be based upon the **zone** in which the land is located, as set out in:

1. Schedule A of the *Regional District of North Okanagan Zoning Bylaw No. 1888, 2003*, and amendments thereto;
2. Schedule A of *Silver Star Zoning Bylaw No. 1926, 2004*, and amendments thereto.

### **402 Highways**

All **highways** must be dedicated and constructed in accordance with the requirements of the Ministry of Transportation and Infrastructure.

Notwithstanding the above, **highways** must be dedicated by a plan of **subdivision** in accordance with the major road designations of the applicable Official Community Plan.

### **403 Onsite Sewage Disposal**

If a **subdivision** is to be serviced with a sewage disposal system other than a **community sanitary sewage system**, an **onsite sewage disposal** system must be capable of being provided for each proposed lot in accordance with the standards prescribed by the authority having jurisdiction.

For proposed lots smaller than 2 ha in size, written confirmation from the authority having jurisdiction must be submitted to the **Regional District** stating that their requirements with regard to **onsite sewage disposal** have been satisfied.

Notwithstanding the above, a **parcel** must not be serviced by **onsite sewage disposal** if a **community sanitary sewage system** is available to service the property.

### **404 Community Sanitary Sewage Systems**

A **community sanitary sewage system** must be provided for lots less than 1 ha in size, except those lots created pursuant to Section 946 of the *Local Government Act*, and be provided in accordance with the requirements of any authority having jurisdiction.

**Community sanitary sewage systems** shall not discharge effluent either directly or indirectly to a watercourse.

Proof of connection to a **community sanitary sewage system** must be provided and shall consist of written confirmation from the authority having jurisdiction that the **community sanitary sewage system** satisfies the requirements of the authority having jurisdiction.

### **405 Community Water System**

A **community water system** must be provided for lots less than 1 ha in size, except those lots created pursuant to Section 946 of the *Local Government Act*.

Where a **community water system** is provided it must be designed and constructed in accordance with the standards and specifications of the authority having jurisdiction.

Proof of connection to a **community water system** must be provided and shall consist of written confirmation from the authority having jurisdiction that the **community water system** satisfies the requirements of the authority having jurisdiction.

In no case shall a water source other than a **community water system** service a **subdivision** occurring within the area of jurisdiction of a **community water system** unless the authority responsible for the **community water system** confirms that the **subdivision** is not required to be serviced by the system.

#### 406 **Potable Water Source other than a Community Water System**

If a **subdivision** is to be serviced with a water source (dug well, drilled well or surface) other than a **community water system**, each **parcel** must be serviced with a **potable water** supply. Where the water source is not located on the parcel it will service, the location and access to the water source, including any wells, water mains, and all other appurtenances, shall be protected by an easement. (See also **Section 306 Easements for Works and Services**.)

Unless exempted by this bylaw, a water sample must be taken from the water source and tested by a laboratory accredited by the Canadian Association for Environmental Analytical Laboratories to determine conformity to **potable water** standards. **Potable water** must be verified in writing by a **Qualified Water Quality Specialist** and the results must be submitted to the **Regional District**.

If the water is determined to be not potable, but can be treated in such a manner that it becomes potable as determined by a **Qualified Water Quality Specialist**, a Section 219 Covenant must be registered on the title of the subject property as a priority above financial charges stating that an occupancy permit for a dwelling will not be issued until a treatment system meeting the specifications of a **Qualified Water Quality Specialist** has been installed to ensure a **potable water** supply.

All water quality test reports must be dated not more than five (5) years prior to the date of **subdivision** application.

##### 1. **Dug Wells**

Where connection to a **community water system** is not required and a dug well is proposed as a source of **potable water** for a **parcel** created by **subdivision** in all Electoral Areas, proof of water shall consist of the following:

- a. A site plan must be provided indicating the location of a constructed well which must be tested by a **pumping test** that has been conducted by a **Qualified Well Driller** or a **Qualified Well Pump Installer** or a person working under the direct supervision of a **Qualified Well Driller**, a **Qualified Well Pump Installer**, or a **Qualified Professional**. **Pumping tests** of all dug wells shall be conducted during the dry months of the year, defined as the period between August 1 and March 1, or at another time of year as confirmed in writing by the **Qualified Professional** in order to determine the year-round capacity of the well. A hydrogeological report must be prepared by the **Qualified Professional** and submitted to the **Regional District**.

- b. The hydrogeological report must demonstrate that the dug well can provide at least 6,550 litres of water per day (1.0 Imperial Gallons per Minute) per **parcel** and that this amount can be provided on a year round basis. The report must demonstrate that the use of the well will not negatively impact the use of neighbouring wells.
- c. All hydrogeological reports and **pumping tests** must be dated not more than five (5) years prior to the date of **subdivision** application.

## 2. Drilled Wells

Where connection to a **community water system** is not required and a drilled well is proposed as a source of **potable water** for a **parcel** created by **subdivision** in all Electoral Areas, proof of water shall consist of the following:

- a. A site plan must be provided indicating the location of a constructed well which must be tested by a **well yield test** conducted by a **Qualified Well Driller**, **Qualified Well Pump Installer** or a person working under the direct supervision of a **Qualified Well Driller**, a **Qualified Well Pump Installer**, or **Qualified Professional**.
- b. The **well yield test** must be submitted to the **Regional District**. A well that demonstrates a yield of at least 14 Litres per Minute (3.0 Imperial Gallons per Minute) satisfies the proof of water quantity requirements of this bylaw.

A **pumping test** must however be carried out when a **well yield test** reports less than 14 Litres per Minute (3.0 Imperial Gallons per Minute) or when a well is less than 15 m deep. A **pumping test** must be conducted by a **Qualified Well Driller** or a **Qualified Well Pump Installer** or a person working under the direct supervision of a **Qualified Well Driller**, a **Qualified Well Pump Installer** or a **Qualified Professional**. A hydrogeological report must be prepared by the **Qualified Professional** and submitted to the **Regional District**. **Pumping tests** of all drilled wells shall be conducted during the dry months of the year, defined as the period between August 1 and March 1, or at another time of year as confirmed in writing by the **Qualified Professional** in order to determine the year-round capacity of the well.

- c. In Electoral Areas “B”, “C”, and “F”, when a **pumping test** is required, the report must demonstrate that the drilled well can provide at least 6,550 litres of water per day (1.0 Imperial Gallon per Minute) per **parcel**. The report must demonstrate that the use of the well will not negatively impact the use of neighbouring wells.
- d. In Electoral Areas “D” and “E” when a **pumping test** is required, the report must demonstrate that the drilled well can provide at least 2,273 litres of water per day (0.35 Imperial Gallons per Minute) per **parcel**. The report must demonstrate that the use of the well will not negatively impact the use of neighbouring wells.
- e. All hydrogeological reports, **pumping tests**, and **well yield tests** must be dated not more than five (5) years prior to the date of **subdivision** application.

### 3. Surface Water Source

Where connection to a **community water system** is not required and surface water is proposed as a source of **potable water** for a **parcel** created by **subdivision** in all Electoral Areas, submission of the following to the **Regional District** would satisfy the proof of water quantity requirements of this bylaw:

- a. A site plan indicating the location of the surface water source.
- b. Confirmation in writing from the authority having jurisdiction that a water licence will be issued pursuant to the *Water Act* that authorizes on a year round basis, a minimum quantity of 2,273 litres (500 Imperial Gallons) per day per **parcel**.

### 407 Where Proof of Water is Not Required

1. Where connection to a **community water system** is not required, the **subdivision** of parcels within Electoral Area “E” may be approved without the provision of a **potable water** supply.
2. Proof of water supply is not required where an existing water source serves a **legally constructed dwelling**.
3. The **subdivision** of parcels 2 ha (4.942 acres) or larger in size within the Country Residential **Zone** (C.R.); Non-Urban **Zone** (N.U.); or the Large Holding **Zone** (L.H.) of the **Regional District** Zoning Bylaw may be approved without the provision of a **potable water** supply if a written report is obtained from a **Qualified Professional** verifying that **potable water** of sufficient quantity is available on or to the proposed lot(s) to satisfy the requirements of this Bylaw and a covenant is registered pursuant to Section 219 of the Land Title Act prohibiting the construction or location of any residential dwelling or manufactured home on the proposed lot(s) until a **potable water** supply is provided meeting the standards of this bylaw. The covenant shall be registered as a priority over all financial charges in favour of the **Regional District** of North Okanagan.
4. The **subdivision** of parcels 7.2 ha (17.79 acres) or larger in size within the Non-Urban **Zone** (N.U.) and the Large Holding **Zone** (L.H.) may also be approved without the provision of a **potable water** supply or a written report from a **Qualified Professional** if a covenant is registered pursuant to Section 219 of the Land Title Act prohibiting the construction or location of any residential dwelling or manufactured home on the proposed lot(s) until a **potable water** supply is provided meeting the standards of this bylaw. The covenant shall be registered as a priority over all financial charges in favour of the **Regional District** of North Okanagan.

### 408 Street Lighting

All street lighting serving a **subdivision** must be constructed and installed in accordance with the standards of the authority having jurisdiction.

Schedule "A" of Capital Regional District Bylaw No. 2040  
Juan de Fuca Land Use Bylaw

Appendix 4(d)  
Capital Regional District  
(Juan de Fuca)

5.02 Street lighting required by this section may be incorporated into existing utility with good current engineering practice, and in compliance with B.C. Hydro standards. B.C. Hydro or any other utility whose poles are used for this purpose shall be obtained by the owner. Where existing utility poles are used, the owner shall arrange with B.C. Hydro to install the lighting using B.C. Hydro standard luminaries. The owner shall pay all charges levied by B.C. Hydro for the installation.

5.03 Without limiting Sections 5.01 and 5.02, the following standards shall apply:

- (a) Light source to be high pressure sodium (HPS) luminaries;
- (b) Ballasts shall be 120 volt supply and have 55 VAC lamp voltage, and shall be auto regulating type with class H insulation;
- (c) Individual instant on/off photocell control shall be provided on all street lighting;
- (d) Minimum height of luminaries shall be 9m from finished grade where the configuration of the utility pole allows for this height;
- (e) Refractor shall be polycarbonate type 440 series;
- (f) Bracket length supporting the luminaire over the road surface shall vary depending on the pole-to-road distance and the overhang shall be a maximum of 1.5m;
- (g) at all locations, luminaire mounting heights and lateral spacing is to be adjusted wherever reasonably possible to make maximum use of B.C. Hydro poles;
- (h) Where street lighting is required, and a suitable B.C. Hydro pole is not available, all required overhead street lighting installation shall be provided by the owner. Poles added by the owner which are not the property of the utilities shall not be located beneath the B.C. Hydro lines or within 3 meters of any power lines. Where the Approving Officer requires, the owner shall employ the services of a Professional Electrical Engineer or design a street lighting system, satisfactory to the Approving Officer, that complies with the B.C. Hydro standards and the standards of the Illuminating Engineering Society of North America;
- (i) Average horizontal illumination levels, minimum lamp sizes and spacing between luminaries (approximate) shall be:

<u>Road Classification</u>	<u>Illumination (LUX)</u>	<u>Lamp Size (Watts)</u>	<u>Spacing (m)</u>
Major	15	150	50
Collector	10	150	60
Local	6	100	60

- (j) If underground services are to be installed by the owner, then the owner shall employ the services of a professional electrical engineer to design a street lighting system satisfactory to the Approving Officer, that shall comply with the B.C. Hydro standards, where applicable, and the standards of the Illuminating Engineering Society of North America and be approved by B.C. Hydro.

**6.0 WATER**

6.01 Notwithstanding the minimum lot sizes specified in Part 2 of this Bylaw, a community water system shall be provided for subdivisions creating lots less than 2ha in size where, in the opinion of the Environmental Health Officer:

- (a) individual wells are incompatible with septic tanks; or
- (b) there is not an available and proven source of potable water of 1400 litres per day.

Schedule "A" of Capital Regional District Bylaw No. 2040  
Juan de Fuca Land Use Bylaw

- 6.02 Where a subdivision is not served by a community water system, each lot shall be required to have a proven source of potable water of at least 1400 litres per day.
- 6.03 Without limiting the generality of this Section, the Approving Officer may refuse to approve a subdivision intended to be served by a community water system if he is satisfied that the subdivision will injuriously reduce the quantity of water normally available to established users of water from the community water system.
- 6.04 The design of any community water system to serve the subdivision shall be in accordance with the requirements of any authority having jurisdiction over the system pursuant to:
- (a) the *Health Act*, the *Energy Act*, the *Water Utility Act*, or *Bylaw 3705*
  - (b) the *Health Act* and the *Water Act*, when an improvement district has an applicable subdivision bylaw pursuant to the *Local Government Act* or the *Water Act*; or *Bylaw 3705*
  - (c) the *Health Act* and the *Local Government Act*, when the District has an applicable bylaw setting out the terms and conditions of any extension to its community water system; as the case may be. *Bylaw 3705*
- 6.05 Public access to lakes shall not be closer than 300m to the water intake of a community water supply.
- 6.06 The community water system approved pursuant to Section 6.04 shall be constructed as approved, provided however that a subdivision may be approved prior to the construction of the community water system, if an arrangement ensuring such construction satisfactory to the Approving Officer has been made with the appropriate water improvement district, but in no case shall the subdivision be approved before the plans for the community water system have been approved.
- 6.07 In all zones, where subdivision is based on a community water system the applicant shall cause sufficient watermains, hydrants, and their appurtenances to be installed from an existing District watermain to provide an adequate supply of water to service the subdivision.
- 7.0 ON-SITE SEWAGE DISPOSAL**
- 7.01 In zones requiring each lot to contain on-site sewerage system, the system must comply with the *Public Health Sewerage System Regulations*. *Bylaw 3705*
- 8.0 DRAINAGE**
- 8.01 Drainage shall be required where necessary to ensure that the subdivision will be suited to the use to which it is intended or where in the opinion of the Approving Officer, it is necessary for the protection of the established amenities of adjoining or adjacent properties.
- 9.0 INSTALLATION OF WORKS AND SERVICES**
- 9.01 Services shall be installed in accordance with the approved engineering plans and no departure shall be allowed unless approved in writing by the Approving Officer. The applicant's professional Engineer shall lay out and supervise the installation of works to be installed by the applicant, and upon completion of the works shall submit an "as constructed" drawing to the Approving Officer.
- 9.02 The applicant shall deposit with the Approving Authority a maintenance bond in a form satisfactory to the Approving Officer and for an amount equal to ten percent of the cost of all works and services installed in a subdivision for a period of one year after the installation of such works and service.

- c. An archaeological reserve designated under the *Heritage Act*, provided that no building or structure in which food is served or washrooms are located are to be located on the proposed lot;
- d. A cemetery;
- e. The unattended equipment necessary for the operation of a public utility;
- f. A sanitary landfill site or transfer station;
- g. An emergency water supply system/storage;
- h. A private utility lot provided that the lot is used for utility purposes only; or
- i. A common lot created pursuant to the *Land Title Act Regulation 334/79* provided that the common lot is restricted to access and utility purposes only.

Appendix 4(e)  
Regional District of  
Central Kootenay

PROVIDED that the owner enters into a covenant under Section 219 of the *Land Title Act* with the Regional District in a form satisfactory to the Regional District. The cost of preparation of the covenant shall be bourn by the developer.

## **PART 8 - WATER SUPPLY**

### **8.01 Source within the Terms of the Water Act**

Where a water source comes within the terms of the *Water Act*, the following are required:

- a. Proof of application for a new water license or an amendment to an existing water license suitable for diversion, which entitles each lot in the proposed subdivision to at least 2,270 litres (500 imp. gal.) of water per day for domestic purposes upon confirmation there is adequate water to meet the intent of the application from the authority having jurisdiction;
- b. Proof of application for new water licenses shall be restricted to Kootenay Lake, Little Slokan River, Slokan Lake, Arrow Lakes, Kootenay River, Slokan River or the Columbia River or an alternative water body at the discretion and where the requirements of the authority having jurisdiction have been met;
- c. A construction permit pursuant to the *Drinking Water Protection Act* if a new water supply system or extension and alteration to a water supply system is proposed;
- d. If untreated surface water is to be used as proof of adequate water supply, a covenant under Section 219 of the *Land Title Act* shall be placed on Title that advises of the potential health risks associated with consuming untreated surface water.



## 8.02 Individual Groundwater Services

Where individual ground water sources are proposed, the applicant must provide evidence that there are sufficient quantities of ground water for each proposed lot and the remainder, and:

- a. Must drill or excavate a well on every proposed lot and the remainder and submit a well construction report signed by a registered well driller or a professional engineer;
- b. The well construction report must verify that the well is a minimum of 15 meters (49 feet) deep. If the well is less than 15 meters deep it is recommended that the minimum sealing requirements for excavated wells as found under the *Groundwater Protection Regulation 299/2004* including the installations of well identification plates is followed;
- c. The applicant must provide a well log or pump test confirming that each well is capable of producing at least 15 litres (3 imp. gal.) per minute of water, or in cases where well capacity is less than 15 litres (3 imp. gal.) per minute that balancing storage of not less than 2, 270 litres (500 imp. gal.) of water per day is provided;
- d. The sharing of one well by two or more parcels is not permitted unless a community water system is proposed and meets the requirements of this Bylaw;
- e. If untreated groundwater is to be used as proof of adequate water supply, a covenant under Section 219 of the *Land Title Act* shall be placed on Title that advises of the potential health risks associated with consuming untreated groundwater.

## 8.03 Community Water Systems

Where an applicant proposes to connect to an existing community water system the applicant must submit to the Regional District:

- a. A letter from the Owner/Operator of the community water system confirming that all parcels proposed can be connected to the water system and that fees have been paid for connection to the water system. Confirmation must be submitted prior to final Approval of the subdivision;
- b. Construction, extension, or addition to a community water system must not proceed until a construction permit has been issued by the Issuing Official under the *Drinking Water Protection Act*; and
- c. Confirmation of existing connection(s) to community water systems currently on boil water advisory shall be accepted as proof of water for the purposes of subdivision where the connection currently serves an existing

residence as long as no new connections to the community water system are involved.

Where an applicant proposes to establish a new community water system, the applicant must submit to the Regional District:

- d. A copy of the construction permit issued pursuant to the *Drinking Water Protection Act*;
- e. Where a community water system is to be acquired by the Regional District, the design of such shall be submitted to the Regional District for approval prior to the commencement of construction as required by this Bylaw;
- f. That the water source to be used by the system is adequate to serve each parcel to be served by the system as determined by the authority having jurisdiction over the system.

## **PART 9 - SEWAGE**

### **9.01 On-Site Sewage Disposal**

Where no community wastewater system exists, or is proposed, soil and site conditions for on-site sewage disposal systems shall be subject to the following:

- a. Each lot be assessed on the basis of Type 1 (septic tank) treatment and trench disposal systems;
- b. Each lot must be self-contained, providing an initial and replacement sewage disposal area;
- c. Sewerage holding tanks will not be considered an acceptable method of waste water disposal.

### **9.02 Community Wastewater Systems**

Where an applicant proposes to connect to an existing community wastewater system the applicant must submit to the Regional District:

- a. A letter from the Owner/Operator of the community wastewater system confirming that all parcels proposed can be connected to the wastewater system and that fees have been paid for connection to the wastewater system. Confirmation must be submitted prior to final Approval of the subdivision;

Where a new community wastewater system is proposed, conditions for approval shall include:

Appendix 4(f)

Columbia Shuswap  
Regional District

## **COLUMBIA SHUSWAP REGIONAL DISTRICT SUBDIVISION SERVICING BYLAW NO. 641**

**THIS CONSOLIDATED BYLAW IS NOT INTENDED TO BE USED FOR LEGAL PURPOSES**

**CONSOLIDATED FOR CONVENIENCE ONLY WITH:**

**Bylaw No. 641-1**

**February 3, 2014**

this bylaw, *MMCD* standards, the Municipal Sewage Regulation (BC Reg 129/99) and good engineering practice.

## DISCHARGE RESTRICTIONS

- 6.5 *Community Sewer Systems* shall not discharge effluent directly to a watercourse, except as approved by the Ministry of Environment, or as supported in an Electoral Area Liquid Waste Management Plan.

## PART 7 ACCESS TO PROPERTY

### BUILDING SITES

- 7.1 An *Owner* must supply a diagram with an application for subdivision that shows adequate building sites for *Parcels* proposed to be subdivided. For the purpose of this bylaw an adequate building site, where on-site sewer and water servicing is proposed is an area of 1,000 m<sup>2</sup>, having average natural (pre-development) slopes in the identified area of less than 20%, in the case of parcels smaller than 1.0 Ha., at least 40% of the lot area must be under 30% average natural slope.

### ACCESS DRIVEWAYS

BL641-1

- 7.2 An *Owner* must provide a diagram indicating access driveways to any existing and proposed building site, as indicated in 7.1, above. Access Driveways, to single *Dwelling Units* must be a minimum of 4.0 m wide and have a maximum grade on the property of less than 15%. Access Driveways, where multiple *Dwelling Units* are proposed must be a minimum of 6.9 m wide and have a maximum grade of 12.5%. All Access Driveways must conform to Ministry of Transportation and Infrastructure requirements for private access within the Ministry of Transportation and Infrastructure Right-of-Way area.

## PART 8 ASSESSMENT AND DEMONSTRATION OF POTABLE WATER (for Independent On-site Water System)

### APPLICATION AND EXEMPTIONS

- 8.1 Sections 8.2 through 8.20 do not apply:
- (a) to a parcel being created:
    - i. to provide highway access by common lot;
    - ii. for installation of Public Utilities and related structures and equipment;
    - iii. for use as a surface parking lot, provided that a covenant in favour of the Regional District restricting the use to that purpose is registered against the land under section 219 of the *Land Title Act*;
  - (b) to a parcel being created solely for use as an unserviced park; or
  - (c) to a parcel being created that contains a pre-existing residential dwelling unit that is connected to and using a water source, provided that:

- i. the water source meets current setback requirements, established by an enactment, from sources of contamination, and
- ii. the water source is either:
  - A. located on the same parcel as the pre-existing residential dwelling unit; or
  - B. located on Crown land along with all water system components, which have been approved or permitted by the Provincial authority.

## **INDEPENDENT ON-SITE WATER SYSTEM**

- 8.2** Where no *Water Supply System* is available, all new *Parcels* created by subdivision must be provided with an *Independent On-site Water System*.
- 8.3** The water source for an *Independent On-site Water System* must be:
- a) surface water from an intake in a water source that has *Unrecorded Water* and is listed on the *List of Eligible Sources* of the Ministry of Natural Resource Operations that is current as of the date of application for subdivision;
  - b) *Groundwater* from a *Drilled Well*; or,
  - c) *Groundwater* from a *Shallow Well*.
- 8.4** All *Wells* other than those identified in Section 8.1 (c) and related components of the *Independent On-site Water System* using *Groundwater* sources must be on the same *Parcel* as the residential *Dwelling Unit* in respect of which they are required.
- 8.5** All components, including the intake, for *Independent On-site Water System* using surface water sources must be:
- a) located on the same *Parcel* as the residential *Dwelling Unit* in respect of which they are required; or
  - b) located within easements or rights-of-way meeting the requirements of Section 9.11, provided that the delivery system from the surface water source to the *Dwelling Unit* is only for a single residential *Dwelling Unit*.
- 8.6** A person must not proceed to develop any water source or construct any water system until documentation for all information required under subsections 8.11 through 8.12 has been received and approved by the *Manager, Environment and Engineering Services* or his designate.
- 8.7** If the Owner is required under this bylaw to engage a *Qualified Professional*, a person must not commence any work, study or analysis related to the proposed development of an *Independent On-site Water System* without the involvement of a *Qualified Professional*.
- 8.8** Each *Independent On-site Water System* must be capable of providing, year round, at least 2,275 litres of *Potable Water* per day for each *Parcel* that includes, or can be reasonably expected in future to include, a residential *Dwelling Unit*.

- 8.9** Each *Independent On-site Water System* must meet each of the water quantity and water quality requirements for the relevant subdivision type set out in Table 1.
- 8.10** Where testing of the *Independent On-site Water System* indicates that treatment is required, the *Owner* must enter into a covenant under section 219 of the *Land Title Act* in favour of the *Regional District*, in accordance with subsection 8.20, to ensure suitable treatment systems are installed and maintained so that each *Dwelling Unit* is provided with *Potable Water*, and must register the covenant against the property title.

## **DOCUMENTATION REQUIREMENTS**

- 8.11** The *Owner*, where proposing to develop an Independent On-site Water System, shall submit to the *Regional District* the following information:
- a) agent contact information if the *Owner* has hired an agent to develop an *Independent On-site Water System* on the *Owner's* behalf;
  - b) general information about the proposed subdivision or current phase of subdivision, as well as information about any plan for future phases of subdivision;
  - c) information about water supplies and sewage systems and any other potential sources of contamination (including, but not limited to underground storage tanks, car wrecks, manure piles, dead animal pits, privies, holding tanks, and on-site sewerage systems, whether or not permitted or currently lawful) and plans showing these situated within 30 meters of the land being subdivided that could affect either the quantity or quality of water available to the subdivision;
  - d) information regarding the proposed water source for the subdivision or current phase of subdivision; and
  - e) plans showing, proposed water sources for the subdivision, and proposed subdivision layout.
- 8.12** All documentation submitted to the *Regional District* in connection with subsection 8.11, above must reflect conditions prevailing at the time of application for the subdivision.
- 8.13** The Regional District reserves the right to require information on a larger area than 30.0 meters, as specified in paragraph (c) of subsection 8.11, above, at the discretion of the *Manager, Environment and Engineering Services*, or his designate. If the *Manager, Environment and Engineering Services*, or his designate considers that soil conditions, aquifer sensitivity and potential sources of contamination warrant further consideration, the *Manager, Environment and Engineering Services*, or his designate may require further or additional information, including about an area beyond that specified in paragraph (c) of subsection 8.11 of up to 60 meters.

## **PROFESSIONAL-DIRECTED APPROACH (QUALIFIED PROFESSIONAL)**

- 8.14** The *Owner* shall engage a *Qualified Professional* to manage all aspects of developing an *Independent On-site Water System* (this approach is referred to as the "Professional-Directed Approach") if any of the following conditions apply:

- a) the proposed subdivision will result in three or more *Parcels*;
- b) the proposed *Parcels* are each less than 2 hectares in area;
- c) the proposed subdivision is not located within an area indicated as being within a known aquifer, as identified on the *Mapping for Areas of Groundwater Concern*;
- d) the proposed subdivision is located within an area of concern for *Groundwater* issues as identified on the *Mapping for Areas of Groundwater Concern* that is current at the time of subdivision application;
- e) any proposed *Groundwater* source is within 30.0 m of any other existing groundwater source or source of potential contamination;
- f) the proposed water source is surface water;
- g) the proposed water source is a *Shallow Well* that the *Owner* intends to install without hiring a *Qualified Well Driller* or a *Qualified Pump Installer*;
- h) prior to commencing construction or testing, the *Qualified Well Driller* or *Qualified Pump Installer* engaged to provide a *Well* expects that drawdown interference, or water quality issues are likely to occur based on their personal knowledge of the area the *Well* is proposed; or
- i) the *Regional District* has requested a review of the information provided, as required in 8.12 above, by a *Qualified Professional*, and that professional recommends a professional-directed approach.

## **OWNER-DIRECTED APPROACH**

BL641-1

- 8.15** If conditions described in subsection 8.14 do not apply, the *Owner* may direct the development of an *Independent On-site Water System* without engaging a *Qualified Professional* (this approach is referred to as the "Owner-Directed Approach") by hiring either a *Qualified Well Driller* or a *Qualified Pump Installer*. Having been retained by the *Owner* for this purpose, the *Qualified Well Driller* or *Qualified Pump Installer* must submit a copy of all *Well* reports together with the water quality analysis, indicating a potable source, as required in the Water Act to the *Comptroller* of Water Rights and to the *Manager, Environment and Engineering Services*, or his designate.
- 8.16** Notwithstanding Section 8.15, the *Regional District* may require the *Owner* to engage, at the *Owner's* cost, a *Qualified Professional* at any point during the testing and development of an *Independent On-site Water System* if any of the conditions described in Section 8.14 become apparent in the course of the procedures set out in this Bylaw.
- 8.17** If a *Qualified Professional's* involvement is required, the *Qualified Professional* retained to undertake the project shall provide written confirmation to the *Regional District* that:
- a) they have suitable training and experience in the discipline of Engineering or Geosciences including documentation that their registration with the Association of Professional Engineers and Geoscientists of BC is in a relevant area;

- b) they are a member in good standing of the Association of Professional Engineers and Geoscientists of BC; and
- c) they are familiar with this bylaw and in particular, without limitation, Schedule "B"; and will perform their work in accordance with the procedures set out in Schedule "B".

**8.18** If the *Owner* appoints a substitute *Qualified Professional* during the process of developing required *Independent On-site Water System*, the substitute *Qualified Professional* must immediately provide to the *Regional District* the written confirmation required by Section 8.17.

**8.19** If a *Qualified Professional* is required, the *Qualified Professional* must supervise all components of developing the *Independent On-site Water System* and the *Owner* must not commence any work, study or analysis related to the water system without the involvement of the *Qualified Professional*.

**Table 1: Requirements for Independent On-site Water System**

<b>Groundwater Sources</b>					
<b>Subdivision Type</b>	<b>Proof of Water Quantity</b>			<b>Proof of Water Quality</b>	<b>Covenant</b>
	<b>Source Yield</b>	<b>Well Recovery</b>	<b>Drawdown Interference</b>		
Subdivisions qualifying for the <i>Owner-Directed Approach</i> as per Section 8.15.	A <i>Qualified Well Driller</i> or <i>Qualified Pump Installer</i> has performed a <i>Well</i> test and determined that the <i>Well</i> yield is 2,275 liters/day.	To be indicated on required <i>Well</i> logs.	N/A	A <i>Qualified Well Driller</i> or <i>Qualified Pump Installer</i> has sampled the <i>Well</i> water and submitted a sample to an authorized water testing laboratory for analysis of water quality which has then provided written confirmation that the water will be <i>Potable Water</i> as defined in this bylaw.	A covenant as per Section 8.20 has been placed on the property.

BL641-1



**Table 1: Requirements for Independent On-site Water System (cont'd)**

<b>Groundwater Sources</b>					
<b>Subdivision Type</b>	<b>Proof of Water Quantity</b>			<b>Proof of Water Quality</b>	<b>Covenant</b>
	<b>Source Yield</b>	<b>Well Recovery</b>	<b>Drawdown Interference</b>		
Subdivisions requiring a Professional-Directed Approach as per Section 8.14	A <i>Qualified Professional</i> has submitted written confirmation that the sustainable <i>Well</i> yield is at least 2,275 liters/day.	A <i>Qualified Professional</i> has submitted written confirmation that <i>Well</i> recovery is adequate to support the intended use of the <i>Well</i> (minimum 2,275 L/day).	A <i>Qualified Professional</i> has submitted written confirmation that the operation of the proposed <i>Well</i> at the desired rate (minimum 2,275 L/day) will not: reduce the amount of available Water for any <i>Well</i> , within 250 m of the tested <i>Well</i> ; or result in changes to the water balance of the aquifer, considering cumulative impacts that could result in long-term environmental changes and/or reduced yield on a regional scale.	A <i>Qualified Professional</i> has reviewed the water quality results, prepared a water system design, including treatment and disinfection system components if required, and provided written confirmation that the water will be <i>Potable Water</i> as defined in this bylaw when the recommended system is properly installed and operated.	A covenant as per Section 8.20 has been placed on the property

**Table 1: Requirements for Independent On-site Water Systems (cont'd)**

BL641-1

<b>Surface Water Sources (only those included on the List of Eligible Sources)</b>			
<b>Subdivision Type</b>	<b>Water Quantity</b>	<b>Water Quality</b>	<b>Covenant on Title</b>
All types of subdivision.	The <i>Owner</i> submits, either: A copy of an application for a water license for at least 2,275 L/d for domestic purposes for each <i>Parcel</i> created by the subdivision; or, An undertaking from a solicitor that a suitably worded Section 219 covenant will be registered on title, at the <i>Owners</i> cost, that any lots created with a surface water source will not be used for residential purposes until the <i>owner</i> has provided a copy of an issued license to the <i>Regional District</i> .	A <i>Qualified Professional</i> has reviewed the water quality results, prepared a water system design, including treatment and disinfection system components if required, and provided written confirmation that the water will be <i>Potable Water</i> as defined in this bylaw when the recommended system is properly installed and operated.	A covenant as per Section 8.20 has been placed on the property.

**SECTION 219 COVENANT**

**8.20** Where an *Owner* is required to enter a covenant under this Part pursuant to section 219 of the *Land Title Act*, the covenant must be registered in the Land Title Office against the title to the land subject to the covenant. The covenant may include such prohibitions, restrictions and requirements as a condition of subdivision, use, building, or, in relation to a parcel, transfer, as required by the *Manager, Environment and Engineering Services*, or his designate; provisions for conditions for reimbursement by the *Owner* for any expenses that may be incurred by the *Regional District* as a result of any breach of the covenant; and without limitation, any or all of the following conditions:

- (a) proper installation and maintenance of a pump by a *Qualified Pump Installer*;
- (b) submission of a *Well* report and water quality analysis by a *Qualified Pump Installer* to the *Manager, Environment and Engineering Services*, or his designate and to the *Comptroller* of Water Rights;

- (c) construction and maintenance of any and all water system infrastructure in a safe and sanitary manner and in compliance with applicable enactments of the *Regional District*, Province of British Columbia, and Canada;
- (d) installation and maintenance of effective cross-connection control;
- (e) completion of system disinfection prior to use and as may be necessary or recommended for safety and sanitation;
- (f) installation of a water system and any components of a water system as may be recommended by the *Qualified Professional*, to ensure that the water supplied through the system and its components is *Potable Water*;
- (g) confirmation through water quality testing that the water is *Potable Water*;
- (h) a water licence for surface water sources;
- (i) irrigation conditions, restrictions and requirements; and
- (j) obligations of the *Owner* to ensure ongoing monitoring, maintenance, inspection, repair and replacement of water systems and components so that the water supplied is *Potable Water*.

## **PART 9 GENERAL PROVISIONS (for community water and sewer systems)**

### **PROFESSIONAL ENGINEER**

**9.1** The *Owner*, at its expense, shall retain an *Engineer* to design, inspect, test and certify all *Works and Services*.

### **COST OF SERVICES**

**9.2** All *Works and Services* required by this bylaw shall be designed, reviewed, constructed and inspected at the expense of the *Owner*. All costs of documentation and fees required by this bylaw or any other bylaw of the *Regional District*, or any other authority having jurisdiction must be paid by the *Owner*.

**9.3** The *Manager, Environment and Engineering Services*, or his designate, may direct that tests of materials, equipment, devices, construction methods, assemblies or soil conditions be made, or sufficient evidence or proof be submitted, at the expense of the applicant, to determine whether the materials, equipment, devices, construction methods, assemblies or soil conditions meet the requirements of this bylaw, or any other bylaw of the *Regional District*, or any other authority having jurisdiction.

### **ENGINEERING DRAWINGS**

**9.4** Where *Works and Services* are to be constructed, Engineering drawings and other required reports and documentation certified by an *Engineer* shall be submitted to the *Regional District* for approval. The Engineering drawings shall contain at least the information set out in Schedules "C" and "F" and be accompanied by the following:

The Corporation of the District of North Cowichan

Bylaw No. 1851

A bylaw to regulate the subdivision of land within  
the Municipality of North Cowichan

Appendix 4(g)  
Municipality of North  
Cowichan

The text of this bylaw has been consolidated for convenience only.  
Copies of the original bylaw and amendment bylaws may be viewed at the  
North Cowichan Municipal Hall located at 7030 Trans Canada Highway, North Cowichan, BC.  
The schedules referred to in this bylaw are available for separate purchase.

Amendment By law	Date
1991 .....	JUN 17, 1981
2266 .....	OCT 01, 1986
2712 .....	AUG 11, 1993
2714 .....	JUL 27, 1994
2837 .....	SEP 13, 1995
2943 .....	DEC 17, 1997
3011 .....	APR 07, 1999
3044 .....	FEB 02, 2004
3224 .....	MAR 02, 2005
3470 .....	MAY 16, 2012
3548 .....	JUL 16, 2014

WHEREAS it is desirable to prescribe the requirements to be met as a condition precedent to granting of approval to a subdivision;

NOW THEREFORE the Municipal Council of the Corporation of the District of North Cowichan ENACTS as follows:

- 1) In this bylaw, unless the context otherwise requires, the following words shall have the meanings hereinafter assigned to them:
  - (a) "Approving Officer" means the person duly authorized by Council to administer this bylaw
  - (b) "Building Area" on a parcel means a specified portion (or portions) which is topographically and otherwise suited for the construction of a building in accordance with this bylaw, the building, Zoning, and other relevant bylaws
  - (c) "Cul-de-sac" means a dead end local street which terminates in a turning area for motor vehicles
  - (d) "Lane" means a public way not less than 6.0m (19.68') or more than 10.0m (32.8') in width
  - (e) "Major Street" means a street which, in addition to serving local needs, is, or is designed to form part of the major or arterial street system of the Municipality, wherein a significant proportion of the traffic has both its origin and destination outside the subdivision area
  - (f) "Minor Street" means a street used primarily for travel and access to and from the parcels contiguous thereto created in the subdivision
  - (g) "Municipality" means The Corporation of the District of North Cowichan
  - (h) "Director of Engineering and Operations" means the person so appointed by the Chief Administrative Officer
  - (i) "Owner and Registered Owner" means the relevant person registered in the books of any Land Title Office as owner of the land or of any charge on the land being subdivided, whether entitled thereto in his own right or in a representative capacity or otherwise, as defined in the "Municipal Act"
  - (j) "Panhandle Lot" means any parcel, the building area of which is serviced and gains road frontage through the use of a strip of land at least 6 metres (19.68') in width, which is an integral part of the parcel

BL 2837

BL 3548

BL 2266

BL 2837

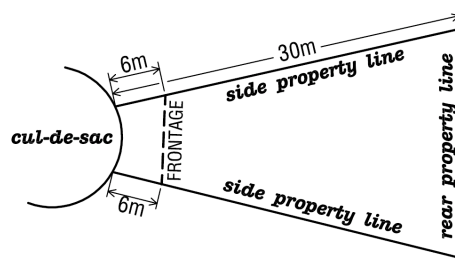
Except in special circumstances, the length of any such cul-de-sac shall not exceed 160.0m (524.98') to the end of the turnaround, and shall permit a direct line of vision from the point of entry to the closed end.

BL 3224

21. In the subdivision of a parcel of land smaller than 1 675.0 square metres (18 029.5 square feet), the following apply to each lot fronting on a cul-de-sac:

- (a) frontage is deemed to be the length of a straight line parallel to the arc of the cul-de-sac between the two side property lines, measured from a point 6 metres (19.68 feet) towards the rear of the lot;
- (b) frontage as defined in paragraph (a) must not be less than 60 per cent of the minimum frontage requirement for that zone;
- (c) the length of each side property line must not be less than 30 metres (98.42 feet);
- (d) side property lines must be radial to the centre of the cul-de-sac's turnaround area.

22. Where extra road width order to bring any new gradient, the Approving dedicate such additional



for cuts or fills is necessary in street or lane to the required Officer may require the owner to width as public road allowance.

23. Pedestrian walkways shall be dedicated and constructed where they are deemed by the Approving Officer to be essential to provide circulation or access to schools, playgrounds, shopping centre, transportation, beaches, and other community facilities or for property circulation of pedestrian traffic.

BL 2266 / 3548

24. Where sanitary sewer accommodation is not available to serve the parcels in a subdivision under application for approval, arrangements satisfactory to the Medical Health Officer shall have been made for the proper disposal of such sewage or industrial waste as may result from the anticipated use of the parcels. For proposed subdivision of land in areas of known sewage disposal problems, as determined by the Director of Engineering and Operations, the Public Health Inspector's written approval for septic percolation sites may be required prior to further processing of the subdivision application.

25. Where any sewage collection system or water system is required to service parcels to be created by subdivision, the owner shall be required to connect the system(s) to Municipal trunk lines at his own expense.

BL 3548

26. No subdivision requiring Municipal sanitary sewer service or Municipal water service shall be approved until the Director of Engineering and Operations has confirmed to the Approving Officer that sewers and/or water will be available and of adequate capacity to serve the parcels to be created by the subdivision within 90 days after the tentative approval of the subdivision.

BL 2837

27. Where lots are not required to connect to a Municipal water system, individual wells must be installed on each lot less than four (4.0) hectares in size to supply water, and the following conditions apply:

- a) Well locations must be plotted by a British Columbia Land Surveyor on a print of the subdivision plan and submitted for review prior to final approval.
- b) Water quantity shall be determined from accredited well log construction records or by a well pump test performed by a recognized well testing company or witnessed by a Professional Engineer. The pump test shall be a minimum length of four (4) hours or longer, if necessary, to determine the sustained yield of the well.
- c) The minimum well quantity requirements are as follows:

Minimum Well Quantity Requirements		
Well Depth	Minimum Sustained Yield	Useable Storage
Wells 25 or more metres deep & Wells less than 25 metres deep tested between Jun. 1st and Nov. 1st	9.0 litre/min (2.0 lgal/min)	
	or	
	7.0 litre/min (1.5 lgal/min)	1140 l (250 lgal)
Wells less than 25 metres deep tested between Nov. 2nd and May 31st.	18.0 litre/min (4.0 lgal/min)	
	or	
	13.5 litre/min (3.0 lgal/min)	1140 l (250 lgal)

- d) Well water shall be tested for the presence of total and fecal coliform bacteria by a recognized testing laboratory. Testing and acceptable standards shall be as specified in the latest edition of the Guidelines for Canadian Drinking Water Quality. A copy of the test result, including an assessment of the result with respect to acceptable standards, shall be submitted for review.

- BL2266** 28. Where land within a plan of subdivision is subject, or could reasonably be expected to be subject to flooding, the Approving Officer shall not approve the subdivision without prior consent of the Deputy Minister of Environment who may require, as a condition of his consent, that the subdivider enter into such covenants registerable under Section 215 of the Land Title Act as the Deputy Minister considers advisable.
29. The owner of the land being subdivided shall provide, without compensation land for public open space in the locations and to the extent required by the Approving Officer for the purpose of providing sufficient open space for park and public use.
30. Where land being subdivided adjoins a lake, river, stream, or other body of water, the Approving Officer may, as a condition of approving the subdivision, require the dedication, without compensation of a strip of land not exceeding 7.0m (22.97') in width along the bank or shore of the purpose of providing public access if, in his opinion, it is in the public interest to do so.
31. Land to be dedicated under Section 30 shall be measured from
- the high water mark, or
  - the controlled high water mark, or
  - the natural boundary of the lake, river, stream, or other body of water as defined by the Land Act.
- whichever is applicable.
32. The amount of land required to be provided or dedicated under Sections 29 and 30 shall not exceed 5% of the land being developed.
33. Sections 29 and 32 do not apply
- to subdivision of one or two lots, or
  - to subdivision where the smallest lot being created is larger than 2 hectares (4.94 acres), or
  - to consolidations of existing subdivided parcels.
34. All structures encroaching upon and obstructions of any kind to the free and uninterrupted use by the public of full width and extent of all new streets and lanes shall be removed therefrom before approval of any subdivision plan is granted, unless by prior arrangement with the Municipality, such are allowed to remain for a limited period of time.
- BL 3548** 35. All new streets and lanes within the subdivision, including widening strips of existing streets and lanes, if any, shall be cleared, graded, drained, and surfaced to the standard prescribed by the Director of Engineering and Operations.

- 7.12.4. The required *Highway* standard will be at the discretion of the *Approving Officer* and the final location of the *Highways* determined during the *Development* application.
- 7.12.5. Any infrastructure required to be owned and maintained by shall be subject to the relevant service area bylaw requirements.

Appendix 4(h)

Fraser Valley  
Regional District

### **7.13. Water**

- 7.13.1. The *Developer* of any lands which are proposed to be developed or *subdivided* shall provide each *Parcel* created with an adequate supply of *Potable Water* suitable for the proposed land use as determined by the level of service for that area.
- 7.13.2. All *Community Water Systems* shall ensure adequate supply, quality through water treatment, distribution, design and construction in accordance with the requirements of the Province of British Columbia authorities having jurisdictional control and in accordance to the *Drinking Water Protection Act* and regulations. Further water servicing shall be provided in accordance with the *Regional District Policies* for Sustainable Water Service Provision. Specifically all new *Community Water Systems* must provide documentation to the satisfaction of the *Director of Engineering* to demonstrate that the system will be financially viable to own and operate regardless of whether private or public *Ownership* is proposed. Any proposed public *Community Water System* is subject to the requirements of a service area establishment bylaw.
- 7.13.3. Where required by the level of service here within Schedule A of this Bylaw, *Community Water Systems* shall be constructed and connected to the existing *Regional District* water distribution system in accordance with the design standards here within Schedule B of this bylaw and approved by the *Approving Officer*
- 7.13.4. The *Developer* of any lands which are proposed to be developed or *Subdivided* and serviced by an onsite well shall obtain confirmation from a *Hydrogeologist* certifying that a pump test was performed and the quality and capacity of the well conforms to the more stringent of the Guidelines for Canadian Drinking Water Quality and the *Drinking Water Protection Act* and Regulation without compromising the capacity or recharge rate of the aquifer. Where water quality levels are above the aesthetic objectives outlined in the Canadian Guidelines for Drinking Water Quality, specific *Approval* must be obtained from the Fraser Health Authority for use of this well.
- 7.13.5. Where a *Community Water System* is not required as prescribed by the level of service and an independent on-site water supply system is deemed appropriate, the following is required for *Approval* by the *Approving Officer*:
- a. The quality of the water must be approved by the Fraser Health Authority;
  - b. The capacity of the well conforms to the requirements outlined in Schedule B of this bylaw without compromising the capacity of the water source;

- c. Flow rates shall be no less than 18 litres per minute for one hour;
  - d. Capacity shall be no less than 2500 litres per day for each *Parcel* that includes, or can reasonably be expected in the future to include, a residential dwelling unit; and,
  - e. Quality standards must meet the requirements set by the Guidelines for Canadian Drinking Water Quality.
- 7.13.6. When the water source for a single property is not a well serviced by an aquifer the following shall apply:
- a. A water license for the supply shall be obtained pursuant to the provisions of the *Water Act*;
  - b. The water supply for each *Parcel* has its own intake and supply line and is completely independent from any other water supply; and,
  - c. The water supply complies with design standards here within Schedule B of this bylaw.
- 7.13.7. Where testing of an independent on-site water system indicates that treatment is required, *Approval* of the Fraser Health Authority is required, and the *Owner* must enter into a covenant under Section 219 of the *Land Title Act* in favour of the Ministry of Transportation and Infrastructure, to ensure that suitable treatment systems are installed and maintained so that each dwelling unit is provided with *Potable Water*. The covenant must be registered against the property title.
- 7.13.8. Where the water system is to provide fire protection, fire hydrants are required at the time of *Development* and shall comply with the design standards here within Schedule B of this bylaw.
- 7.13.9. All Subdivisions and *Developments* within any service area established by bylaws of the *Regional District* for the purpose of providing a water supply and distribution system shall connect to, and be served by that system. The *Regional District* will own and operate the totality of the systems including new *Works and Services* associated with the proposed *Subdivision* or *Development*.
- 7.13.10. The design standards set out in Schedule B of this bylaw apply to all new infrastructure. If a *Subdivision* or *Development* requires a connection to an existing service area system that does not require upgrades, the existing *Regional District* system will not be retrofitted to meet the design standards set out in Schedule B of this bylaw.
- 7.13.11. Any infrastructure required to be owned and maintained by the *Regional District* shall be subject to the relevant service area bylaw requirements.



# Bylaw No. 500

**REGIONAL DISTRICT of NANAIMO  
LAND USE AND SUBDIVISION BYLAW NO. 500, 1987**

**PLANNING DEPARTMENT  
6300 HAMMOND BAY ROAD  
NANAIMO, BC V9T 6N2**

**Consolidated: July 2014**

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Toll Free: 1-877-607-4111  
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shall, be constructed and installed at the expense of the owner of the land being subdivided and shall be carried out in accordance with the standards and specifications set out in Schedule '4D1'.<sup>1</sup>

#### **4.8 Water Supply**

- 1) Where a parcel to be created is not to be served by a community water system and is less than 5.0 ha in area, the applicant shall provide reasonable proof to the satisfaction of the Approving Officer that a minimum year-round potable water supply of 3.5 m<sup>3</sup> per day can be provided for each parcel being created.
- 2) Any community water system, or part thereof, provided within the subdivision, to service the subdivision or to connect the water distribution system within the subdivision to a Regional District trunk water main shall, if constructed after the enactment of this Bylaw, be constructed and installed at the expense of the owner of the land being subdivided and shall be carried out in accordance with the standards and specifications set out in Schedule '4C'.
- 3) Notwithstanding Section 4.8 (1), for lands within the Lakes District and Schooner Cove Community Water and Sewer Standards Area, all parcels shall be serviced by a community water system.<sup>2</sup>
- 4) Notwithstanding Section 4.8 (2), for lands within the Lakes District and Schooner Cove Community Water and Sewer Standards Area any community water system, or part thereof, provided within the subdivision, to service the subdivision or to connect the water distribution system within the subdivision to a Regional District trunk water main shall, be constructed and installed at the expense of the owner of the land being subdivided and shall be carried out in accordance with the standards and specifications set out in Schedule '4C1'.<sup>3</sup>
- 5) The standards and specifications set out in Schedule '4C' do not apply to community water system owned, operated and maintained by a municipality or an improvement district, or a community water system which is operated by a person required to hold a certificate of public convenience and necessity under the **Water Utility Act**.<sup>4</sup>

#### **4.9 Exception**

Subdivision regulations to not apply to:

- a) parcels to be used solely for unattended public utility use;
- b) park.

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<sup>1</sup> Bylaw No. 500.388, adopted July 22, 2014

<sup>2</sup> Bylaw No. 500.388, adopted July 22, 2014

<sup>3</sup> Bylaw No. 500.388, adopted July 22, 2014

<sup>4</sup> Bylaw No. 500.238, adopted February 10, 1998



**BYLAW NO. 64**

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**A BYLAW TO ESTABLISH MINIMUM STANDARDS FOR THE SUBDIVISION OF LAND**

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**WHEREAS** the Regional District may, pursuant to Part 26, Division 11 of the *Local Government Act*, regulate and require the provision of works and services in respect of the subdivision of land;

**AND WHEREAS** the Regional District wishes to establish the minimum standards for subdivisions in the electoral areas;

**NOW THEREFORE**, the Board of Directors of the Strathcona Regional District, in open meeting assembled, enacts as follows:

**1. TITLE**

This Bylaw may be cited as "Subdivision Servicing Standards Bylaw No. 64, 2010".

**2. APPLICATION**

2.1 This Bylaw applies to all land located within an electoral area of the regional district.

2.2 This Bylaw applies to all subdivisions except:

- i) Subdivisions involving only the consolidation of existing parcels or to facilitate a road closure;
- ii) Subdivisions involving only a lot line adjustment between existing parcels and thereby not increasing the number of parcels;
- iii) Where the lot is intended for a non-sewage generating use such as unattended utility or navigational structures, public assembly and public utility uses;
- iv) Where a lot is registered as park or intended for park use;
- v) The strata conversion of previously occupied residential buildings.

**3. REPEAL**

Bylaw No. 673, being "Campbell River Area Subdivision Control Bylaw, 1983" is repealed.

- 9.2 No subdivision shall be approved which would cause any existing building or structure, sewage disposal installation, or used source of potable water to contravene any bylaw or other regulation in force unless otherwise approved by the applicable approval authority.

**10. REQUIRED WORKS AND SERVICES**

10.1 Water

- i) Where a property is within a local water service area, or where a community water system is available, or is being provided, every proposed subdivision which would create a minimum of one (1) additional parcel is required to connect to the water service as per district standards.
- ii) In all subdivisions where a community water system is not available, each newly created parcel is required to be provided with a source of potable water to provincial standards.

10.2 Sewage Disposal

- i) Where a property is within a local sewer service area, or where a community sanitary sewer system is available, or is being provided, every proposed subdivision which would create a minimum of one (1) additional parcel is required to connect each lot to the sanitary sewer system as per district standards.
- ii) In all subdivisions where a community sanitary sewer system is not available, each newly created parcel is required to be provided with an adequate onsite sewage disposal system or onsite sewage treatment facility as approved by the Municipal Sewerage Regulation, the Vancouver Island Health Authority (VIHA) or the *Environmental Management Act* as regulated by the Ministry of Environment (MOE).

10.3 Roads

- i) All highways, including internal common strata roads, created through subdivision within the regional district and administered by the Ministry of Transportation and Infrastructure (MoT) shall be located, constructed and otherwise meet the standards of the MoT.

**11. MINIMUM LOT AREA REQUIREMENTS FOR ON-SITE SEWAGE DISPOSAL**

Notwithstanding minimum lot area requirements as otherwise regulated by zoning or land use bylaw, to allow for adequate onsite sewage disposal, all new parcels created through subdivision that are not connected to a community sanitary sewage system are required to adhere to the following requirements:

- 11.1 All new parcels created through subdivision that are to be serviced by an on-site sewage disposal system must maintain a minimum one hectare (2.47 acre) parcel size requirement.

**12. LOT AREA CONDITIONS**

- 12.1 Where permitted by zoning or land use bylaw, lot area requirements may be reduced by a maximum of 5% per lot, provided that at the decreased size, all other applicable requirements can be satisfied.

submitted by the developer that:

- a) is an automatically renewing, irrevocable letter of credit with a Canadian financial institution; and
  - b) be based upon a cost estimate for the community sewage system prepared by the registered professional engineer (P.Eng.) of record for the design of the system to the satisfaction of the Regional District, and that includes a 10% contingency, 4% inflation and applicable GST.
- 3.6 Construction shall be carried out under periodic inspection by Regional District staff and supervision of the registered professional engineer (P. Eng.) of record prior to acceptance of substantial completion of the community sewer system by the Regional District.
- 3.7 Notwithstanding Schedule "B", regardless of whether a servicing agreement is entered into under Section 3.5, twenty (20) percent of value of community sewer system as determined under Section 3.5 will be held until the end of a two (2) year maintenance period, commencing at the date of acceptance of substantial completion, and until such time that a written final inspection of the sewer system has been made by professional engineer of record to the satisfaction of the Regional District and the system has been inspected to the satisfaction of the Regional District.

## 302 Water Supply

### 1. Community Water Supply

- 1.1 Each water system shall be constructed and provide water quality in compliance with the Health Act and Ministry Health drinking water standards and to the standards of the Regional District, as set out in Schedule `B' of this Bylaw, and shall be approved by the Regional District prior to construction.
- 1.2 An extension to a water system shall only be connected to an existing community water system if the water sources used for the combined system are adequate to serve each parcel to be served by the combined system with at least 2,500 litres of water per day year round.
- 1.3 Where a new community water system is not to be connected to an existing system;

- (a) the water source to be used by the system shall be adequate to serve each parcel to be served by the system with at least 2,500 litres of water per day, and
- (b) when the water source to be used comes under the terms of the Water Act, a licence to divert and use the amount of water required to serve the subdivision shall be obtained by the applicant and be in force at the time of final approval.

1.4 All works constructed or installed as part of a community water system shall become the property of the Regional District, or of any Improvement District having the function of water supply to the land being subdivided, as soon as the works have been satisfactorily installed and tested.

400 **Adoption**

READ A FIRST TIME this 25th day of August, 1988.

READ A SECOND TIME this 15th day of December, 1988.

READ A THIRD TIME this 23rd day of February, 1989.

APPROVED BY THE MINISTER OF MUNICIPAL AFFAIRS  
this 30th day of May, 1989.

RECONSIDERED AND ADOPTED  
this 8th day of June, 1989.

\_\_\_\_\_  
P. Connor, Chairman

\_\_\_\_\_  
L. Jardine, Secretary

**PART 7 SUBDIVISION REGULATIONS**

Appendix 5(a)  
Ballenas-Winchelsea  
Local Trust Area

**7.1 Exemptions from Minimum Lot Area Requirements**

- (1) The minimum lot sizes specified in Part 5 do not apply if:
  - (a) the lot being created is to be used solely for unattended equipment necessary for the operation of facilities referred to in Section 3.1, a community sewer or water system, electrical and telecommunication utilities, telephone receiving antenna, radio or television broadcasting antenna, a telecommunication relay, an automatic telephone exchange, an air or marine navigational aid, or an electrical substation, and the owner grants to the Local Trust Committee a Section 219 covenant under the *Land Title Act* restricting the use of the lot to one of these uses;
  - (b) the lot being created is for a public park, a conservation area, an ecological reserve or dedication to the Crown;
  - (c) the lot being created results from the consolidation of two or more lots, provided the area of the consolidated lot could not be subdivided into more lots than would be permitted under this bylaw without the consolidation; or
  - (d) to the adjustment of boundaries between lots, provided the area of any lot would not be increased to an extent that it could be subdivided into more lots than would be permitted under this bylaw without the boundary adjustment.
  
- (2) If the approval of a bare land strata plan would create common property in the same zone as the strata lots, and this bylaw would permit the construction of a dwelling on the common property if it were a lot, the applicant shall grant a Section 219 covenant complying with Section 2.6 in respect of the common property prohibiting the further subdivision of the common property, the construction of any residential dwelling unit on the common property, and the disposition of the common property separately from the strata lots.

**7.2 Boundary Adjustment Subdivisions**

- (1) A boundary adjustment subdivision that would result in the increase of the area of any lot to the point where the new lots created could be subdivided into more lots than would be permitted under this bylaw without the boundary adjustment is prohibited.
  
- (2) A boundary adjustment subdivision resulting in an additional lot lying in two or more zones is prohibited.

**7.3 Section 946 subdivisions (Residence for a Relative)**

- (1) No lot having an area less than 60 hectares (148.3 acres) may be subdivided under Section 946 of the *Local Government Act* to provide a residence for a relative of the owner unless the lot is entirely within the Agricultural Land Reserve.

**7.4 Highway Standards**

*Information Note: For information on road standards see the Letter of Agreement between the Islands Trust and the Ministry of Transportation and Highways, dated October 20, 1992 and amended July 18, 1996, and as may be subsequently amended.*



- 7 For any lot created by subdivision, the minimum highway frontage is 20.0 metres, and for a strata title subdivision, the minimum access road frontage is 10.0 metres.

**INFORMATION NOTE:** For information on road standards see the Letter of Agreement between the Ministry of Transportation, dated October 20, 1992 and amended July 18, 1996.

**INFORMATION NOTE:** For information on park dedication requirements of a subdivision see Section 944 of the *Government Act*, and for information on the 10 per cent frontage requirements see Section 944 of the *Act*.

Appendix 5(b)

Denman Island  
Local Trust Area

#### **Proof of Potable Water - Amounts**

- 8 Each lot in a proposed subdivision must be supplied with sufficient potable water from a well, surface water supply or community water system to accommodate all uses, buildings and structures permitted on the lot by this Bylaw according to the standards set out in regulations 9 to 11 of this section.
- 9 In Residential and Resource zones, the minimum amount of potable water that must be provided per day is 1200 litres for each permitted principal residential dwelling unit, unless a cistern, subject to Regulation 17 of this section, is provided, in which case the minimum is 1000 litres for each permitted principal residential dwelling unit
- 10 In the Commercial zone, the minimum amount of potable water that must be provided per day is 3600 litres for each one hectare of lot area.
- 11 In Public zones, the minimum amount of potable water that must be provided per day is:
- 50 litres for each classroom in a school; and
  - 1200 litres per lot for all other institutional uses.

#### **Proof of Potable Water – Well and Surface Water Certification**

- 12 Where a well is proposed as a source of water for a proposed subdivision, the applicant must provide written certification under seal of a **qualified professional**:
- that there is, in respect of each building, structure or use of land permitted by this bylaw, sufficient available groundwater to provide the required amount of **potable** water on a continuous basis; and
  - that extraction from the groundwater table for that amount of water is not reasonably expected to adversely affect the quantity of water obtainable from any existing well or surface water that is used as a source of water.
- 13 Where a surface water supply is proposed as a source of potable water for a proposed subdivision, the applicant for subdivision must provide proof of a water license that permits the withdrawal of the required amount of water.
- 14 If the applicant proposes to provide potable water from a well or surface water supply on another lot, the applicant must concurrently with the registration of the subdivision plan, register against title on the lot on which the well is located an easement in favour of each lot to which water is provided, and a statutory right-of-way complying with Regulation 4 of Section 1.2 for water supply purposes.
- 15 If the required amount of potable water cannot be supplied, as measured at the tap, or if the certification referred to in Regulation 12 of this section cannot be made, the applicant must:
- provide a community water system complying with the requirements of Regulation 18 of this section, or
  - grant a covenant complying with Regulation 4 of Section 1.2 restricting the development of the subdivision to the buildings, structures and uses in respect of which water can be supplied in accordance with regulations 9 through 11 and a certification has been made under Regulation 12 of this section.

#### **Proof of Potable Water - Cisterns**

- 16 Where a cistern is required by this Bylaw, the landowner must:
- provide one or more cisterns with a combined capacity of 8400 litres of potable water; and
  - provide a covenant complying with Regulation 4 of Section 1.2 prohibiting use of the property for which proof of potable water is required until cisterns are in place capable of holding the required amount of water.

**Community Water System**

- 17 Where a community water system is proposed to serve a subdivision:
- the community water system must comply in all respects with applicable provincial enactments;
  - the water supply for the community water system must be obtained on Denman Island; and
  - if the water system is to be supplied by a well, the immediate catchment area of the well, as defined by an Engineer, is to be protected from pollution by a covenant in accordance with Regulation 4 of Section 1.2 prohibiting the installation of sewage disposal fields or other sanitary facilities.

**Waste Disposal**

- 18 For any lot created by subdivision, the applicant must demonstrate the availability of an area of the lot for the installation of a conventional septic tank or package treatment sewage disposal system with the characteristics required by the Sewerage System Regulation under the *Health Act*.

**Exceptions**

- 19 Regulations 2 to 19 of this section do not apply:
- to a lot being created solely for the purpose of locating unattended equipment necessary for the operation of a community water or sewerage system, an automatic telephone exchange, an electrical substation, or a similar public service facility or utility, and where no sewage would be generated, provided a covenant complying with Regulation 4 of Section 1.2 restricts the uses on this lot; or
  - to a lot being created for park purposes where such parcel is to be shown as park on the plan of subdivision or for an ecological reserve that does not contain buildings, provided a covenant complying with Regulation 4 of Section 1.2 restricts the uses on this lot; or
  - to a lot being created solely for the purpose of sale or dedication to a conservation agency for conservation purposes, provided a covenant complying with Regulation 4 of Section 1.2 restricts the use of the lot to conservation.
- BL 200
- to a lot being created solely for the purpose of a cemetery
- 20 Minimum lot areas permitted by subdivision in Part 3 do not apply:
- to a lot resulting from a consolidation of two or more lots; or
  - to a lot resulting from a boundary adjustment between two or more lots, provided that no additional lots are created and no lot is increased in area such that it could be subdivided into more lots than would be permitted under this Bylaw, without the boundary adjustment.

**INFORMATION NOTE:** A lot created by subdivision for the provision of a residence for a relative under Section 946 of the Local Government Act is exempt from the minimum lot areas in Part 3 of this Bylaw.

- 21 The minimum area of a lot eligible for subdivision under Section 946 of the Local Government Act outside the Agricultural Land Reserve is 8.0 hectares.

**INFORMATION NOTE:** For land outside the ALR, section 946 of the Local Government Act requires that the landowner enter into a covenant with the local trust committee limiting the use of the newly created lot to a residence for a relative and prohibiting further subdivision of the lot.

**Covenant Against Further Subdivision and Development**

- 22 Where:
- a subdivision is proposed that yields the maximum number of lots permitted by the applicable minimum average lot area specified in Part 3; and
  - one or more of the lots being created has an area equal to or greater than twice the applicable minimum average lot area

the applicant must grant a covenant complying with Regulation 4 of Section 1.2 in respect of every such lot prohibiting further subdivision of the lot.

- (4) If a panhandle lot proposed to be created has insufficient area to be further subdivided, the minimum width of the access strip of land shall be 10 metres.

Appendix 5(c)

### **8.7 Split Zoned Lots**

Gambier Island  
Local Trust Area

- (1) The creation of a lot lying within two or more zones is prohibited unless part of a lot is within a Park, Wilderness Conservation or Nature Reserve zone, or the subdivision consolidates lots or readjusts property lines.

### **8.8 Split or Hooked Lots**

- (1) No lot which is divided into two or more portions by a highway or other lot may be created by subdivision, except where required to provide highway access within a water access subdivision.
- (2) Where a part of a parcel is separated from the main portion of the parcel by a road, watercourse, marine water or topographical feature, it may be consolidated with an adjacent parcel to which it may be more properly related without meeting other provisions of this Part, as long as the main portion of the parent parcel conforms to the provisions of this Part.

### **8.9 Water Access Subdivisions**

- (1) Subdivisions that propose access by water only shall provide access by road dedication to a location suitable for the establishment of a neighbourhood dock for use by the owners and occupiers of the subdivision.

### **8.10 Highway Standards**

*Information Note: For information on road standards see the Letter of Agreement between the Islands Trust and the Ministry of Transportation and Highways, dated October 20, 1992 and amended July 18, 1996.*

### **8.11 Water Supply**

*Information Note: For information on water quantity (volume) and quality (potability) requirements for proposed lots served by individual wells, contact the Provincial Approving Officer, Ministry of Transportation, and for proposed lots served by a community water system contact the Vancouver Coastal Health Authority.*

*Information Note: Some words and phrases are defined in Part 1.  
A chart at the end of the Bylaw provides approximate imperial equivalents.*

**E.1.8 Water Supply**

Repealed by Bylaw 215

**E.1.9 Drainage Requirements**

- E.1.9.1** Every subdivision must be designed and constructed to maximise the amount of natural drainage that is percolated into the ground and to minimise direct overland runoff.
- E.1.9.2** Every surface drainage system must at minimum, be connected to and conform with the design capacity of existing systems located on adjacent land in order to provide for the continued capacity of the system serving the drainage basin in which the lot to be subdivided is located.
- E.1.9.3** Every surface system must be connected to an arterial drainage system that must be located in statutory rights-of-way granted to the Crown or in dedicated highways.
- E.1.9.4** Every surface drainage system developed on the lot to be subdivided must be designed so that the inlet flow line elevations and the capacity of the system are such that it will be capable or will be capable of conveying the 100 year storm peak rate of runoff for the entire fully developed drainage basin which the lot to be subdivided is located.
- E.1.9.5** The surface drainage system must be designed and constructed so as to minimise scouring and the erosion of ditch banks.
- E.1.9.6** In the case where storm water is discharged from a surface drainage system to the sea or a watercourse on or adjacent to the lot to be subdivided, the system must be constructed and designed such that storm water is retained in storage basins for the period of time necessary to allow for the setting out of silt and other suspended solids.
- E.1.9.7** No watercourse or water body may be diverted, altered or used for the purpose of conveying storm water from the lot to be subdivided except in accordance with applicable provincial statutes.

- 13.18 No roadway may be located so as to divert the flow of a surface watercourse or divert or contaminate in any way a groundwater aquifer, but this section does not prohibit the culverting of a surface watercourse for a roadway crossing or the construction of a stormwater retention facility provided that such culverting or construction is in accordance with the Land Development Guidelines.
- 13.19 The design of roadways must to the greatest extent possible follow the natural contours of the land as to minimize the extent of cutting and filling required to construct the roadway, and utility lines must follow highway rights of way indicated on the Road Network Plan of the Galiano Island Official Community Plan.
- 13.20 Native vegetation must be reinstated in all portions of a highway not comprising the roadway, following the completion of construction of a roadway and any associated utilities.
- 13.21 No roadway may be located or constructed so as to connect Galiano Island to any other island.

Appendix 5(e)  
Galiano Island  
Local Trust Area

**Standards for Potable Water Supply**

- BL209 13.22 A new building permit shall not be issued for a building to be used as a dwelling including a cottage, in the water management area depicted on Schedule C or in an area zoned Community Housing 1, unless the building is equipped with a cistern for the storage of rainwater having a capacity of at least 16,000 litres.
- BL 243  
BL 234
- BL130; 20913.23 If a well is proposed as a source of potable water for a proposed subdivision, the applicant for subdivision must provide the written certification under seal of an Engineer or Professional Hydrologist with experience in groundwater hydrology that there is in respect of each building, structure, or use of land permitted by this bylaw on each proposed lot an available supply of potable water in the amounts set out in Table 1 and meeting or exceeding the Guidelines for Canadian Drinking Water Quality, and that the extraction from the groundwater table of that amount of water in respect of each permitted building, structure or use will not adversely affect the quantity or quality of water obtainable from any existing well or surface water then used as a source of potable water.

TABLE 1: Potable Water Supply Standards	
USE	VOLUME (litres per day)
Residential including cottage	2275
Agriculture	2275
Forest	2275
Commercial	3640
Visitor Accommodation	3185
Industry	3640
All other uses	2275

- 13.24 If the certification referred to in section 13.23 cannot be made, the approving officer may nonetheless approve the subdivision in the following circumstances:
- 13.24.1 where the applicant provides a community water system complying with the requirements of this bylaw; or
- 13.24.2 where the applicant grants a covenant restricting the development of the subdivision to the buildings, structures and uses in respect of which a certification can be made under section 13.23.

- BL209 13.25 For the purposes of the certification referred to in section 13.23, the Engineer or Professional Hydrologist must supply supporting pump test documentation indicating that the test was of sufficient duration to establish in accordance with generally accepted hydrological engineering practice the long term reliability of the water supply, and the pump test must be conducted so as not to adversely affect the quantity or quality of water obtainable from any existing well used as a source of potable water.
- BL209 13.26 If an Engineer or Professional Hydrologist provides a certification under section 13.23 as to the quality of a proposed source of potable water, the certification must include a plan of the proposed subdivision indicating the location where each pump test was conducted and each water sample was taken, and a statement that the water samples upon which the water quality analysis was performed were unadulterated samples taken from the locations indicated on the plan.
- 13.27 If a community water system is proposed, the water system must comply in all respects with applicable provincial enactments and the applicant must provide the written certification of an Engineer with experience in groundwater hydrology that the proposed community water system will not adversely affect the quantity or quality of water obtainable from any existing well or surface water supply then used as a source of potable water. No community water system may be supplied with water other than that which is obtained on the island on which the system is located.
- BL209 13.28 An applicant is not required to fulfill the requirements of section 13.23 for boundary adjustment subdivisions provided that: there would be no increase in density or intensity of use beyond what was permitted before the boundary adjustment took place; and that all of the lots subject to the boundary adjustment have an established supply of water.

BL130

### **Standards for Sewage Disposal**

- BL209 13.29 Each lot that is proposed to be created by subdivision must be demonstrated by the applicant to contain an area or areas of sufficient size and appropriate characteristics to satisfy the requirements of the Vancouver Island Health Authority Subdivision Standards in respect of the buildings, structures and uses that are permitted on the lot by this bylaw.
- 13.30 The information referred to in section 13.28 must be provided to the building inspector where an application for a building permit is made and the information has not previously been provided in respect of the subdivision of the lot on which the building is proposed to be constructed, except that the information need only be provided in respect of the building or structure that is the subject of the permit application and no information need be provided if the application is made pursuant to B.C. Regulation 406/95 in respect of an owner-built dwelling.

- (4) If a proposed panhandle lot is capable of being further subdivided under this bylaw, the minimum width of the access strip at any point is 20.0 metres.

Appendix 5(f)

#### 6.7 Split Zoned Lots

Hornby Island  
Local Trust Area

- (1) The creation of additional lots lying within two or more zones is prohibited.

#### 6.8 Split or Hooked Lots

- (1) No additional lot which is divided into two or more portions by a highway or another lot may be created by subdivision.

#### 6.9 Double Frontage Lots

- (1) No additional lot having frontage on more than one highway other than a corner lot may be created by subdivision.

#### 6.11 Highway Standards

**Information Note:** For information on road standards see the Letter of Agreement between the Islands Trust and the Ministry of Transportation and Infrastructure, dated October 20, 1992 and as subsequently amended July 18, 1996.

#### 6.12 Water Supply Standards

**Information Note:** For information on water quantity (volume) and quality (potability) requirements for proposed lots served by individual wells, contact the Provincial Approving Officer, Ministry of Transportation and Infrastructure, and for proposed lots served by a community water system contact the Vancouver Island Health Authority.

#### 6.13 Onsite Disposal

**Information Note:** All uses of property which produce waste water require the installation a waste disposal system installed in compliance with the Sewerage System Regulation. Contact the Vancouver Island Health Authority for information.

## 7.6 COVENANTS AGAINST FURTHER SUBDIVISION AND DEVELOPMENT

- .1 If a proposed subdivision is to yield the maximum number of lots permitted by the applicable minimum and average lot areas specified in Part 4, and one or more of the lots being created is equal to or greater than twice the applicable average lot size, the applicant shall grant a covenant complying with Subsection 1.2.4 in respect of every such lot, prohibiting further subdivision of the lot, the construction, erection, or occupancy on the lot of more than the applicable zone's permitted number of single family residential dwelling units and, if an accessory guest cottage or sleeping cabin is a permitted use of the lot, more than that zone's permitted number of such accessory guest cottages or sleeping cabins.
- .2 If a subdivision is proposed that is to yield fewer than the maximum number of lots permitted by the applicable minimum and average lot sizes specified by this bylaw, and:
- one or more of the lots being created has an area equal to or greater than twice the applicable average lot size; and
  - one or more of the lots being created has an area less than the applicable average lot size;
- the applicant shall grant a covenant complying with Subsection 1.2.4 prohibiting:
- the subdivision of the lot so as to create a greater total number of lots by subdivision and re-subdivision of the original lot than would have been created had the first subdivision created the maximum number of lots permitted by the applicable minimum and average lot sizes specified by this bylaw; and
  - the construction, erection, or occupancy on the lot of single family residential dwelling units and, if permitted by this bylaw, sleeping cabins or accessory guest cottages so as to create greater density of such development on the original lot than would have been created had the original lot been developed to the greatest density permitted by this bylaw.
- .3 If the approval of a bare land strata plan would create common property on which this bylaw would permit the construction of a residential dwelling unit, sleeping cabin or accessory guest cottage if the common property were a lot, the applicant shall grant a covenant complying with Subsection 1.2.4 in respect of the common property prohibiting the further subdivision of the common property, the construction of any residential dwelling unit, sleeping cabin or accessory guest cottage on the common property, and the disposition of the common property separately from the strata lots.

Appendix 5(g)

Keats Island

## 7.7 WATER SUPPLY

- .1 Where a community water supply system is proposed to serve a subdivision:
- the water system must comply in all respects with provincial enactments;
  - no community water supply system must be supplied with water that is not obtained on the island on which the system is located; and
  - if the community water system is to be supplied by a well, the immediate catchment area of the well, as defined by an engineer, is to be protected from pollution by a covenant complying with Subsection 1.2.4 prohibiting the installation of sewage disposal fields or other sanitary facilities.

## 7.8 SEWAGE DISPOSAL

- .1 Each lot that is proposed to be created by subdivision shall be demonstrated by the applicant to contain an area or areas of sufficient size and appropriate characteristics to satisfy the requirements of the Sewage Disposal Regulation under the *Health Act* for conventional septic tank or package treatment plan sewage disposal systems in respect of the buildings, structures and uses that are permitted on the lot by this bylaw.
- .2 No sewage may be disposed of by means of discharge to a watercourse or the sea or on a lot other than that on which it was generated, except where that lot is used only for the purpose of sewage disposal, then sewage may be disposed of on that lot, provided that there is no discharge to a watercourse or the sea.



- (6) A guest cabin may only be used as a commercial short-term rental of less than 30 days provided the appropriate Commercial 3 zoning is in place.

Appendix 5(h)

Lasqueti Island  
Local Trust Area

### 3.9. Dwellings and Guest Cabins Per Lot

- (1) Unless otherwise regulated in this Bylaw, any upland lot is permitted to have one (1) dwelling per lot.
- (2) Unless otherwise regulated in this Bylaw, the following number of dwellings are permitted per lot.
- (a) Subdivision District A: one (1) dwelling per four (4) hectares (9.88 acres) of lot area.
  - (b) Subdivision District B: one (1) dwelling per eight (8) hectares (19.76 acres) of lot area.
  - (c) Subdivision District C: one (1) dwelling per 65 hectares (160.61 acres) of lot area.
- (3) For each permitted dwelling, a guest cabin not exceeding 56 square metres (602.7 square feet) in floor area is permitted.
- (4) For the purpose of calculating density, six (6) tenting sites are considered equivalent to one dwelling density.

### 3.10. Lots Divided by a Zone Boundary

- (1) On a lot located within more than one zone, the dwelling density shall not exceed one dwelling or six (6) tenting sites per four (4) hectares (9.88 acres) of land area.

### 3.11. Subdivision Regulations

**INFORMATION NOTE:** *Subdivision of land in the Agricultural Land Reserve (ALR) in any subdivision district is subject to approval by the provincial Agricultural Land Commission.*

#### Parcel Area and Frontage

- (1) The minimum area of a parcel that is created by subdivision is:
- (a) in Subdivision District A designated in Schedule C: 4 hectares.
  - (b) in Subdivision District B designated in Schedule C: 8 hectares.
  - (c) in Subdivision District C designated in Schedule C: 65 hectares.
- (2) The minimum parcel areas specified in 3.11(1) do not apply:
- (a) to the consolidation of two or more parcels into a single parcel;
  - (b) to a subdivision that adjusts the boundary between two parcels, and if a boundary adjustment subdivision would increase the area of any parcel to the point where the new parcels created could, taken together, be subdivided into more parcels than would be permitted under this Bylaw without the boundary adjustment, the applicant must grant a covenant complying with Section 2.6 in respect of every such parcel, prohibiting further subdivision of the parcel;
  - (c) if the parcel is being dedicated to the Crown or designated as an ecological reserve under the Ecological Reserve Act; or
  - (d) if the parcel being created is to be used as a park; for ambulance or fire protection facilities; or solely for the unattended equipment necessary for the operation of a community water system or a community sewer system, and the applicant grants a covenant complying with Section 2.6 limiting the use of the parcel to the specific use that makes it eligible for this exception.
- (3) No *parcel* having an area less than 4 hectares may be subdivided under Section 514 of the *Local Government Act* to provide a *residence* for a relative of the owner.

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(5) The frontage on a highway of any parcel created by subdivision must be at least 10 percent of its perimeter, and in no case may the frontage be less than 20 metres.

**Information Note:** *The Local Trust Committee has jurisdiction to exempt a lot or a subdivision from the minimum highway frontage requirement.*

### **Highway Standards**

*Information Note: For information on the standards for roads in new subdivisions, see the Letter of Agreement between the Islands Trust and the Ministry of Transportation and Highways, dated October 20, 1992 and amended July 18, 1996.*

### **Parcel Shape**

(6) No parcel having a depth greater than five times its width may be created by subdivision, and for this purpose the width of a panhandle parcel shall be measured at the point where the panhandle connects with the main portion of the parcel.

### **Boundary Adjustment Subdivisions**

(7) A subdivision that adjusts the boundary between two parcels and thereby creates a *parcel* lying in two or more *zones* is prohibited.”

**8.8 Double Frontage Lots**

- (1) No lot having frontage on more than one highway, other than a corner subdivision.

Appendix 5(i)  
Mayne Island  
Local Trust Area

**8.9 Water Access Subdivisions**

- (1) If a subdivision with water access only is approved on an island other than Mayne Island within the Mayne Island Local Trust Area, the owner of land being subdivided must provide motor vehicle parking spaces in accordance with Part 7 of this Bylaw in respect of each dwelling and cottage permitted in this Bylaw in respect of each lot being created. Such parking spaces must be located at the most reasonable location on Mayne Island giving access by water to the subdivision. Highway access must be provided to every lot created by subdivision on Mayne Island.

**8.10 Highway Standards**

**Information Note:** For information on road standards see the Letter of Agreement between the Islands Trust and the Ministry of Transportation and Highways, dated October 20, 1992 and amended July 18, 1996.

**8.11 Water Supply Standards**

- (1) Where a well is proposed as a source of potable water for a proposed subdivision, the applicant for subdivision must provide the written certification under seal of an Engineer or a professional hydrogeologist with experience in groundwater hydrology that there is in respect of each building, structure, or use of land permitted by this bylaw on or to each proposed lot an available supply of potable water that meets or exceeds the Guidelines for Canadian Drinking Water Quality in the amounts set out in Table 1.

<b>TABLE 1: Potable Water Supply Standards</b>	
<u>Use</u>	<u>Volume (per day/lot)</u>
Residential	2275 litres
Agricultural	2275 litres
Commercial	3640 litres
Industrial	3640 litres
All other uses	2275 litres

If it is proposed to provide potable water to a lot from a well on another lot, the applicant must concurrently with the registration of the subdivision plan register against title to the lot on which the well is located:

- (a) an easement in favour of each lot to which water is provided; and
- (b) a s. 219 covenant in favour of the Mayne Island Local Trust Committee for water supply purposes,

each of which must be in terms satisfactory to the Mayne Island Local Trust Committee.

- (2) Where the certification referred to in subsection 8.11(1) cannot be made, the approving officer may nonetheless approve the subdivision in the following circumstances:

- (a) where the applicant provides a community water system complying with the requirements of this bylaw; or
  - (b) where the applicant grants a s. 219 covenant to the LTC and to the CRD restricting the development of the subdivision to the buildings, structures and uses in respect of which a certification has been made under subsection 8.11(1).
- (3) Where applicant has provided a report by a professional engineer or hydrogeologist with experience in groundwater hydrology, and the report indicates that the water from a well does not meet the standards of potability as set in 8.11(1) and the report states that with specific treatment systems the well can be certified as to potability, the approving officer may nonetheless approve the subdivision provided that:
- (a) the applicant grants a s. 219 covenant to the LTC and to the CRD restricting use and occupancy of the land and any building or structure on the land until the owner installs a water treatment system which is effective in making the water from the well potable to no less a standard than that specified in this Bylaw.
- (4) For the purposes of the certification referred to in 8.11(1), the engineer or hydrogeologist must supply supporting documentation and if a pump test has been conducted the engineer or hydrogeologist must indicate that the test was of sufficient duration to establish in accordance with generally accepted hydrological engineering practice the long term reliability of the water supply.
- (5) Where an engineer or hydrogeologist provides a certification under 8.11(1) as to the quality of a proposed source of potable water, the certification must include a plan of the proposed subdivision indicating the location where each water sample was taken, and a statement that the water samples upon which the water quality analysis was performed were unadulterated samples taken from the locations indicated on the plan.
- (6) No community water system may be supplied with water other than that which is obtained on the island on which the system is located.
- BL 158 (7) An applicant is not required to fulfill the requirements of subsections 8.11(1) for boundary adjustment subdivisions provided that: there would be no increase in density or intensity of use beyond what was permitted before the boundary adjustment took place; and that all of the lots subject to the boundary adjustment have an established supply of water.

**8.12 Sewage Disposal Standards**

**Information Note:** all new lots must satisfy the requirements of the Sewage Disposal Regulation under the *Health Act*.

**8.13 Drainage Standards**

**Information Note:** the Approving Officer has the authority under s. 86(1) of the *Land Title Act* to refuse to approve a subdivision that the Approving Officer considers has inadequate drainage.

## PART 4

### SUBDIVISION REGULATIONS

Appendix 5(j)

North Pender Island  
Local Trust Area

#### 4.1 Lot Area

4.1.1 The average and minimum lot sizes specified in Part 8 do not apply:

- (1) if the lot being created is to be used solely for the unattended equipment necessary for the operation of facilities referred to in Article 3.1.1(4) or (5) of this Bylaw or for ambulance or fire protection facilities, a community sewer system, a community gas distribution system, a community radio or telephone receiving antenna, a radio or television broadcasting antenna, a telecommunication relay, an automatic telephone exchange, an air or marine navigational aid, or an electrical substation or generating station, and the owner grants a covenant complying with Section 3.11 of this Bylaw restricting the use of the lot to that use and prohibiting residential and manufacturing uses on that lot;
- BL 139 (2) if the lot being created is for park use, and ecological reserve, or dedication to the Crown;
- BL 139 (3) to the consolidation of two or more lots into a single parcel; or
- BL 139 (4) to a boundary adjustment subdivision, provided that the subdivision would not increase the area of any lot to the point where the new lots created could be subdivided into more lots than would be permitted under this Bylaw without the boundary adjustment.

#### 4.2 Boundary Adjustments

- BL 194 4.2.1 The Approving Officer must not approve a boundary adjustment, which would increase the area of any lot to the point where the new lots created could be subdivided into more lots than would be permitted under this Bylaw without the boundary adjustment unless the applicant grants a covenant complying with Section 3.11 of this Bylaw in respect of every such lot, prohibiting further subdivision of the lot.

#### 4.3 Lot Frontage

4.3.1 The frontage of any lot in a proposed subdivision must be at least 10 percent of its perimeter, provided that in no case may the frontage be less than 20 metres .

#### 4.4 Potable Water

- 4.4.1 Where a subdivision is not served by a community water system, each proposed lot must be proven by the applicant to have a source of potable water of sufficient quantity in accordance with Table 1 in Subsection 4.4.3.
- 4.4.2 A community water system must be provided for subdivisions where there is not a proven source of potable water of sufficient quantity in respect of each lot.
- BL176 4.4.3 If a well is proposed as a source of potable water for a proposed subdivision, the applicant for subdivision must provide the written certification under seal of an Engineer or Professional Hydrogeologist with experience in groundwater hydrology that there is, in respect of each building, structure, or use of land permitted by this Bylaw, on or to each proposed lot, an available supply of potable water that meets or exceeds the Guidelines for Canadian Drinking Water Quality in the amounts set out in Table 1, and that the extraction from the groundwater table of that amount of water in respect of each permitted building, structure or use will not adversely affect the quantity or quality of water

obtainable from any existing well or surface water then used as a source of potable water. The extraction and treatment of saline ground water (as outlined in the Guidelines for Canadian Drinking Water Quality) into potable water is not permitted.

<b>TABLE 1: Potable Water Supply Standards</b>	
<b>Use</b>	<b>Volume (per day per lot)</b>
Residential	2275 litres
Agricultural	3640 litres
Commercial	3640 litres
Commercial Guest Accommodation	6000 litres
Industrial	3640 litres
All other uses	2275 litres

4.4.4 If the certification referred to in Subsection 4.4.3 cannot be made, the Approving Officer may nonetheless approve the subdivision in the following circumstances:

- (1) if the applicant provides a community water system complying with the requirements of this Bylaw; or
- (2) if the applicant grants a covenant restricting the development of the subdivision to the buildings, structures and uses in respect of which a certification has been made under Subsection 4.4.3.

BL176 4.4.5 For the purposes of the certification referred to in Subsection 4.4.3, the Engineer or Professional Hydrogeologist must supply supporting documentation, and if a pump test has been conducted, the Engineer must indicate that the test was of sufficient duration to establish in accordance with generally accepted hydrological engineering practice the long term reliability of the water supply.

BL176 4.4.6 If an Engineer or Professional Hydrogeologist provides a certification under Subsection 4.4.3 as to the quality of a proposed source of potable water, the certificate must include a plan of the proposed subdivision indicating the location where each water sample was taken, and a statement that the water samples upon which the water quality analysis was performed were unadulterated samples taken from the locations indicated on the plan.

4.4.7 If a community water system is proposed, the water system must comply with applicable provincial enactments and must be designed with sufficient capacity to serve all the lots that may be created by further subdivision. No community water system may be supplied with water other than that which is obtained on the island on which the system is located. The water intake of a community water system must not be closer than 300 metres to public accesses to lakes.

BL 140 4.4.8 *(Repealed)*

BL 176 4.4.9 An applicant is not required to fulfil the requirements of subsections 4.4.1, 4.4.2 and 4.4.3 for boundary adjustment subdivisions provided that: there would be no increase in density or intensity of use beyond what was permitted before the boundary adjustment took place; and that all of the lots subject to the boundary adjustment have an established supply of water.

## PART 12

### SUBDIVISION REGULATIONS

Appendix 5(k)  
Saturna Island  
Local Trust Area

#### Compliance with Minimum and Average Lot Area

- 12.1 The average *lot* area of every subdivision must equal or exceed the applicable minimum and average *lot* area specified by this Bylaw and for that purpose the average *lot* area of the proposed subdivision is the sum of the areas of the proposed lots divided by the number of proposed lots.

#### Covenant Against Further Subdivision and Development

- 12.2 When a subdivision is proposed that yields the maximum number of lots permitted by the applicable minimum and average *lot* sizes specified by this Bylaw, and one or more of the lots being created has an area equal to or greater than twice the applicable average *lot* size, the applicant must grant a covenant complying with s. 2.7 of this bylaw in respect of such *lot* prohibiting further subdivision of the *lot* and prohibiting the construction, erection, or occupancy on the *lot* of more than one *residence* and where a *cottage* is a permitted use, more than one such *cottage*.
- 12.3 When a subdivision is proposed that yields fewer than the maximum number of lots permitted by the applicable average *lot* sizes specified by this Bylaw, and:
- 12.3.1 one or more of the lots being created has an area equal to or greater than twice the applicable average *lot* size; and
- 12.3.2 one or more of the lots being created has an area less than the applicable average *lot* size;

The applicant must grant a covenant complying with s. 2.7 of this Bylaw in respect of every *lot* referred to above prohibiting:

- 12.3.3 the subdivision of the *lot* so as to create a greater total number of lots by subdivision and re-subdivision of the original *lot* than would have been created had the first subdivision created the maximum number of lots permitted by the applicable minimum and average *lot* sizes specified by this Bylaw; and
- 12.3.4 the construction, erection, or occupancy on the *lot* of *residences* and, where permitted by this Bylaw, *cottages* so as to create a greater density of such development on the original *lot* than would have been created had the original *lot* been developed to the greatest density permitted by this Bylaw.

#### Parcel Size calculations

- 12.4 For the purpose of the Bare Land Strata Regulation, the average *parcel* size shall be the average parcel size specified in the *zone* where the *parcel* proposed to be subdivided is located. within two or more *zones* the average *parcel* size shall be the area of the original *lot* divided by the number of lots authorized by the *zones*.
- 12.5 Where a *parcel* proposed to be subdivided is subject to a registered covenant in favour

of the Saturna Island Local Trust Committee limiting the number of *parcels* into which it may be subdivided, the average *parcel* size for the purpose of the Strata Property Regulations shall be as specified in the covenant.

### Lot Size Exemptions

- 12.6 The average and minimum *lot* sizes specified in the *zones* shall not apply as described in sections 12.6.1 to 12.6.6:
- 12.6.1 Where the *parcel* being created is to be used solely for the unattended equipment necessary for the operation of:
- 12.6.1(1) a community water or sewer system;
  - 12.6.1(2) a community gas distribution system;
  - 12.6.1(3) a community radio or television receiving antenna;
  - 12.6.1(4) a telecommunication relay station;
  - 12.6.1(5) an automatic telephone exchange;
  - 12.6.1(6) an air or marine navigational aid;
  - 12.6.1(7) electrical substations or wind or hydro generating stations; and
  - 12.6.1(8) any other similar public service facility or utility.
- 12.6.2 Where the land proposed to be subdivided is entirely within a *zone* in which none of the uses permitted would generate sewage, and the owner registers a covenant in favour of the Saturna Island Local Trust Committee prohibiting any use of the land that would generate sewage;
- 12.6.3 Where a *parcel* being created is for dedicated park use only;
- 12.6.4 To subdivisions for the provision of a residence for a relative under Section 514 of the *Local Government Act* provided the land:
- 12.6.4(1) is not within the Agricultural Land Reserve;
  - 12.6.4(2) has not been subdivided previously under 514 the *Local Government Act*; and
  - 12.6.4(3) has a minimum *lot* size of 8.1 hectares;  
such a subdivision shall be subject to all the requirements of that Section.
- 12.6.5 Where the subdivision will consolidate two or more *parcels* or annex a portion of a *lot* where it is separated from the main portion of the *lot* by a road, *watercourse* or topographical feature so as to render it useless to the main portion.
- 12.6.6 Where the subdivision:
- 12.6.6(1) adjusts the boundary between two or more *parcels*,
  - 12.6.6(2) no additional *parcels* are created, and
  - 12.6.6(3) no *parcel* is increased in area such that it may be further subdivided under this Bylaw.

### Lot Width

- 12.7 No lot may have a width less than one third of its depth.



## **Panhandle Lots**

- 12.8 The minimum width of the access strip of a panhandle lot is:
- 12.8.1 6 metres in the case of a lot that has insufficient area to be further subdivided under the provisions of this bylaw; and
  - 12.8.2 20 metres in the case of a lot that has sufficient area to be further subdivided under the provisions of this bylaw.

## **Lots in More than One Zone**

- 12.9 If a lot is located in two or more zones, for the purposes only of the minimum and average lots size regulations of Parts 4 through 11 of this bylaw the portions of the lot that have different zoning designations must be considered as if they were separate lots unless specific regulations pertaining to split zoned lots apply.

## **Subdivision Capacity of Split Zoned Lots**

- 12.10 **Rural together with Farmland, Forest or Watershed**  
Where a lot contains areas of Rural zoned land together with any, Farmland, Forest or Watershed zoned lands the subdivision capacity from these zones, if any, may be transferred to the Rural zoned portion of the lot. The Saturna Island Local Trust Committee will require the placing of a restrictive covenant reflecting the reduction in subdivision capacity and residential building density on the contributing areas.
- 12.11 **Forest together with Farmland or Watershed**  
Where a lot contains areas of Forest zoned land together with any Farmland, or Watershed zoned lands the subdivision capacity from these designations, if any, may be transferred to the Forest designated portion of the lot. The Saturna Island Local Trust Committee will require the placing of a restrictive covenant reflecting the reduction in subdivision capacity and residential building density on the contributing areas.

**8.12 Water Supply**

Appendix 5(l)  
South Pender Island  
Local Trust Area

- (1) Where a subdivision is not served by a community water system must be proven by the applicant to have a source of potable water of sufficient quantity in accordance with Table 1 in Subsection 8.12(3).
- (2) A community water system must be provided for subdivisions where there is not a proven source of potable water of sufficient quantity in respect of each lot.
- (3) Where a well is proposed as a source of potable water for a proposed subdivision, the applicant for subdivision must provide written certification under seal of an Professional Engineer or Hydrogeologist with experience in groundwater hydrology that there is, in respect of each building, structure, or use of land permitted by this Bylaw, on or to each proposed lot, an available supply of potable water that meets or exceeds the Guidelines for Canadian Drinking Water Quality in the amounts set out in Table 1, and that the extraction from the groundwater table of that amount of water in respect of each permitted building, structure or use will not adversely affect the quantity or quality of water obtainable from any existing well or surface water then used as a source of potable water. The extraction and treatment of saline ground water (as outlined in the Guidelines for Canadian Drinking Water Quality) into potable water is not permitted.

Use	Volume (per day per lot)
Residential	2275 litres (per permitted dwelling)
Agricultural	3640 litres
Commercial	3640 litres
Commercial Guest Accommodation	6000 litres
Industrial	3640 litres
All other uses	2275 litres

- (4) If the certification referred to in Subsection 8.12(3) cannot be made, the *Approving Officer* may nonetheless approve the subdivision in the following circumstances:
  - (a) if the applicant provides a community water system complying with the requirements of this Bylaw; or
  - (b) if the applicant grants a covenant restricting the development of the subdivision to the buildings, structures and uses in respect of which a certification has been made under Subsection 4.4.3.
- (5) Where applicant has provided a report by a Professional Engineer or Hydrogeologist with experience in groundwater hydrology, and the report indicates that the water from a well does not meet the standards of potability as set in 8.12(3) and the report states that with specific treatment systems the well can be certified as to potability, the *Approving Officer* may nonetheless approve the subdivision provided that:
  - (a) the applicant grants a s. 219 covenant to the LTC and to the CRD restricting use and occupancy of the land and any building or structure on the land until the

owner installs a water treatment system which is effective in making the water from the well potable to no less a standard than that specified in this Bylaw.

- (6) For the purposes of the certification referred to in Subsection 8.12(3), the Professional Engineer or Hydrogeologist must supply supporting documentation, and if a pump test has been conducted, the Professional Engineer or Hydrogeologist must indicate that the test was of sufficient duration to establish in accordance with generally accepted hydrological engineering practice the long term reliability of the water supply.
- (7) If a Professional Engineer or Hydrogeologist provides a certification under Subsection 8.12(3) as to the quality of a proposed source of potable water, the certificate must include a plan of the proposed subdivision indicating the location where each water sample was taken, and a statement that the water samples upon which the water quality analysis was performed were unadulterated samples taken from the locations indicated on the plan.
- (8) If a community water system is proposed, the water system must comply with applicable provincial enactments and must be designed with sufficient capacity to serve all the lots that may be created by further subdivision. No community water system may be supplied with water other than that which is obtained on the island on which the system is located. The water intake of a community water system must not be closer than 300 metres to public accesses to lakes.
- (9) An applicant is not required to fulfil the requirements of subsections 8.12(1), 8.12(2) and 8.12(3) for boundary adjustment subdivisions provided that: there would be no increase in density or intensity of use beyond what was permitted before the boundary adjustment took place; and that all of the lots subject to the boundary adjustment have an established supply of water.

**Community Services**

- One per 40 square metres of gross *floor area* for a *building* or *structure*, hall, medical health clinic, or church.
- One per employee plus 5 additional parking spaces for a *school*.

**Agricultural**

- One per 300 square metres of gross *floor area* for a *campus housing* use

2.5.3. The minimum number of bicycle parking spaces for any use is as follows:

- a) Four, or one per 150 square metres of gross *floor area* for a commercial use, whichever is greater
- b) Four, per classroom in a *school*
- c) Four, or one per 150 square metres of gross *floor area* for all uses permitted in the Community Services (S-1) zone except for a *school* use, whichever is greatest,
- d) Four, or one per 300 square metres of gross *floor area* for a *campus housing* use accessory to a *college* or *camp facility* use in an Institutional *zone* or an Agriculture *zone*, whichever is greatest.

2.5.4. Of the number of off-street automobile parking spaces required in subsection 2.5.2, a minimum of one, or one per 50 required parking spaces, whichever is greatest, must be provided for disabled persons and this parking space must be located adjacent to the main entrance of a *building*.

**Standards for Parking Spaces**

2.5.5. Every required automobile off-street parking space must have minimum dimensions of 2.7 metres by 6.1 metres and must have at all times convenient vehicular access to a *highway*.

2.5.6. Required off-street parking for residential and institutional uses and *resort* use must be on the *lot* on which that use is located.

2.5.7. Required off-street automobile parking for uses other than those referred to in subsection 2.5.2 must be on or within 152.5 metres of the *lot* on which the use is located.

**2.6. SUBDIVISION REGULATIONS****Lot Area and Dimensions**

2.6.1. Except as provided for in subsection 2.6.6 of this section, no *lot* may be created by subdivision that renders an existing use, *building* or *structure* non-conforming with respect to a siting or density provision of this Bylaw.

**Parcels Divided by a Zone Boundary**

2.6.2. If a *lot* lies within two or more *zones*, the minimum and average *lot* area requirements specified in this Bylaw apply to the portions of the *lot* lying within each *zone* as if the portions were separate *lots* and no new *lots* lying within two or more *zones* may be created.

**Exceptions**

2.6.3. The minimum and average *lot* area requirements specified in Part 3 of this Bylaw do not apply to:

- a) a *lot* described in section 11(1)(b) of B.C. Reg. 334/79, being an access *lot* for a subdivision containing *lots* not fronting on a *highway*;
- b) a *lot* being created for park use only;

- c) a *lot* being created to be used solely for the unattended equipment necessary for the operation of facilities referred to in subsection 2.1.1 or for a community water system, community sewer system, gas distribution system, radio or television antenna, telecommunication relay station, air or marine navigational aid, electrical substation or generating station; and
  - d) boundary adjustments provided no additional *lots* are created, no *lot* is increased in area such that it would be subdividable into more *lots* than would be permitted under this Bylaw without a boundary adjustment and no *lot* already at or below the minimum lot size for the *zone* is reduced in size by more than five per cent of its area.
- 2.6.4. The consolidation and resubdivision of lots smaller than those permitted by this Bylaw is permitted provided that the consolidation and resubdivision does not result in a *lot* already at or below the minimum lot size for the *zone* to be reduced in size by more than five per cent of its area.
- 2.6.5. If a *lot* is divided into two or more portions by other land other than a *highway*, the minimum and average lot area requirements specified in this Bylaw apply to the portions as if they were separate *lots* and no new *lots* divided into two or more portions may be created except when the net result of the subdivision would be a reduction in the number of lots
- 2.6.6. The minimum size for a *lot* that may be subdivided under section 946 of the *Local Government Act* is 20.2 hectares unless the *lot* is within the Agricultural Land Reserve.

#### **Lot Configuration Regulations**

- 2.6.7. The frontage of any *lot* in a proposed subdivision must be at least 10% of its perimeter.
- 2.6.8. The access strip of a panhandle *lot* must be at least 10.0 metres in width and no part of the access strip shall be included in the calculation of the area of the *lot*.

#### **Covenant Against Further Subdivision and Development**

- 2.6.9. When a subdivision is proposed that yields the maximum number of *lots* permitted by the applicable minimum and average *lot* sizes specified by this Bylaw, and one or more of the *lots* being created has an area equal to or greater than twice the applicable average lot size, the owner must grant a s. 219 covenant in respect of every such *lot* prohibiting further subdivision of the *lot* and prohibiting the construction, erection, or occupancy on the *lot* of more than the applicable *zone's* permitted number of single family *dwelling units* and *accessory buildings*.
- 2.6.10. When a subdivision is proposed that yields fewer than the maximum number of *lots* permitted by the applicable minimum and average lot sizes specified by this Bylaw, and:
- a) one or more of the *lots* being created has an area equal to or greater than twice the applicable average lot size; and
  - b) one or more of the *lots* being created has an area less than the applicable average lot size;
- the owner must grant a s. 219 covenant in respect of every lot referred to in (a) prohibiting:
- c) the subdivision of the *lot* so as to create a greater total number of *lots* by subdivision and resubdivision of the original *lot* than would have been created had the first subdivision created the maximum number of *lots* permitted by the applicable minimum and average lot sizes specified by this Bylaw; and
  - d) the construction, erection, or occupancy on the lot of single family residential *dwelling units* and *accessory buildings* so as to create a greater density of such development on the original *lot* than would have been created had the original lot been developed to the greatest density permitted by this Bylaw.

2.6.11. Where the approval of a bare land strata plan creates common property on which this Bylaw would allow a residential use if the common property was a *lot*, the owner must grant a covenant in respect of the common property prohibiting such use and prohibiting further subdivision of the common property and the disposition of the common property separately from the strata lots.