

# **Subdivision Standards**



**island health**

**July 2013**

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## **A. Introduction**

In July 2002, the Vancouver Island Health Authority (VIHA) reviewed and amalgamated the previous standards for subdivision of lots serviced by onsite sewerage systems.

These standards are applicable to proposed subdivisions referred to the Health Authority from the Ministry of Transportation And Infrastructure. Approving Officers of local governments, in consultation with the VIHA may adopt these standards or if special considerations or concerns within the municipality are warranted, may adopt their own local subdivision bylaws.

It is the purpose of these standards to ensure that new lots created within the boundaries of VIHA will support a primary and reserve sewerage system. The intent is to provide a viable long-term solution for onsite wastewater, thereby eliminating the need for costly extension of municipal sewer systems.

These standards are designed to address concerns of detrimental cumulative impact associated with increased density using onsite sewerage systems. The intent is to prolong the expected life of sewerage systems and safeguard the environment and public health.

These are considered to be a minimum standard for the Vancouver Island Health Authority; however, local governments and other agencies may have additional requirements.

These standards are a public reference for guidance and information in the subdivision process and will undergo periodic review and update. Please contact the local Health Officer in your area if you have comments or questions.

This standard will not guarantee that this assessment process will secure future development on parcel with sewage flows in excess of that generated by a single three-bedroom dwelling (300 imperial gallons/day). When zoning allows second dwellings or when sewage flows beyond the 300 igpd are anticipated, the applicant may be asked to provide further assessment data in order to demonstrate additional absorption field sites. Otherwise, the assessment will be based on a primary and reserve site for a single three bedroom dwelling.

Vancouver Island Health Authority is a referral agency. The final decision on preliminary layout approval (PLA) and final approval rests with the Subdivision Approving Officer. For more information on the subdivision process, refer to Section C; Overview of Subdivision Process (page 4).

## **B. Overview of Subdivision Process**

### **1. Pre-Application Stage:**

Applicant meets with Approving Authority: either Ministry of Transportation and Infrastructure or Municipality. Applicant obtains application forms and VIHA Subdivision Standards.



### **2. Application & Referral Review:**

Approving Officer reviews application and sends acknowledgment letter to applicant and referral to relevant agencies, including VIHA.



### **3. Evaluation:**

VIHA reviews the application and data submitted. A response letter is sent within 30 days if information is incomplete, requesting data. VIHA invoices applicant for relevant subdivision fees. If the application is complete, VIHA will typically complete the assessment within 30 days.



### **4. Site Inspection**

EHO completes site inspection of property and sends letter of response to Approving Officer. Copy sent to applicant or applicant's agent.



### **5. Approving Officer Decision**

Approving Officer reviews agencies comments and sends applicant letter advising of Preliminary Layout Approval (PLA), Preliminary Layout Non-Approval (PLNA) or rejection.



#### **Rejection**

Decision to reject; Letter sent to applicant and referral agencies.



#### **PLNA**

Decision to reject subject to revisions; Letter sent to applicant and referral agencies.



#### **PLA**

Decision to grant PLA subject to completing conditions; Letter sent to applicant and referral agencies.



### **6. Final Approval**

Applicant completes work according to conditions of PLA and submits final application package to Approving Officer. If all requirements are met the Approving Officer will grant final approval. Subdivision plans are then registered with the Land Title Office

## **C. EXPLANATION of TERMS**

**Approving Officer** Means an approving officer defined in the Land Title Act.

**Authorized Person** is a registered practitioner or professional as defined in the Sewerage System Regulation (BC Reg. 326/2004).

### **Breakout Point**

A location that is downslope of a discharge area, where effluent may surface onto the land or into a roadside ditch, embankment, curtain drain, interceptor drain, or relief drain.

### **Community/Strata Sewerage Systems**

A community sewerage system is a sewerage system subject to the Sewerage System Regulation and which services more than one lot, or more than one dwelling in a strata plan on common property and has a design daily domestic sewage flow of less than 22.7m<sup>3</sup>/day. Proposed community sewerage systems with design daily domestic sewage flows of 22.7m<sup>3</sup>/day or more will be referred to the Ministry of Environment.

### **Cumulative Effect**

The combined environmental impact that can occur over time from a series of similar or related actions, contaminates, or projects. Although each action may seem to have a negligible impact, the combined effect can be detrimental.

Increasing density increases the risk for sewage effluent to surface, migrate to neighbouring properties, or contaminate ground water. Hydrogeological assessment requirements are included in this standard to address cumulative risks associated with sloping properties, lands with rapidly draining soils or ground water.

### **Dimension of Discharge Area**

Absorption trenches or mounds are installed across the slope to provide maximum area of absorption. Increasing the length (dimension across slope) reduces the number of overall trenches required and reduces the potential of downslope breakout.

### **Discharge Area**

The area required on each proposed lot to accommodate an absorption field, seepage bed or sand mound for an estimated daily sewage flow of at least 1363 litres per day (3 bedroom home). The area specified in **Tables A and B** includes both the Primary Area and a 100% Reserve Area. If necessary, a 15 metre buffer area to a breakout point must be included. The size of the area is determined by slope, undisturbed native mineral soil depth, percolation rate, and downslope breakout potential.

**Drinking Water Officer** (DWO) is a Medical Health Officer, Public Health Inspector or Environmental Health Officer appointed under the authority of the Drinking Water Protection Act.

**Environmental Health Officer** (EHO) is an Environmental Health Officer or Public Health Inspector certified to work in Canada and delegated authority by the Medical Health Officer.

### **Ground Water Table Assessment**

All subdivision proposals must address the seasonal or permanent ground water table. A hydrogeological assessment may be required when the drainage of surface water, permeability of the soil, density of the development or any other condition indicates further study is necessary. Assessments must also provide data concerning the impact of the proposed development on the quality of the ground water.

**Health Official** is an Environmental Health Officer, Drinking Water Officer, or Medical Health Officer

### **High Water Mark**

A point on the shoreline, which corresponds to;

- a). For a controlled lake, to the highest water level within the normal operating range.
- b). For any other body of tidal or non-tidal water, to the average highest water level calculated from measurements taken over a sufficient number of years to enable a reasonable estimate.

### **Minimum Natural Mineral Soil Depth**

That portion of the native soil profile which **DOES NOT** include: forest litter, humus, prolonged saturated zones, highest seasonal water table, pans, crusts, alternating material stratification, cemented layers, bedrock, large cobbles, boulders, shale, fill material, reworked soil, and disturbed native soil. Soil depth requirements are shown in **Table A and B**.

### **Overall Lot Slope**

The natural slope of a proposed lot measured from the highest to lowest elevation and recorded in percentage. Areas of excessive slope may be excluded from this calculation provided that these areas are not included when determining the minimum lot size requirements.

A Land Surveyor or Professional Engineer may have to verify this slope or provide topographical maps.

### **Restrictive Covenants**

VIHA will not routinely require Restrictive Covenants on proposed lots for the purposes of protecting the primary and reserve discharge areas.

VIHA will recommend that restrictive covenants be placed on primary and reserve discharge areas when it is clear that these are the only discharge areas on the lot that meet the minimum soil depth and site criteria. VIHA will recommend that the Approving Officer be the Grantee of that covenant.

A restrictive covenant will only be granted by VIHA where there is a site-specific need to protect public health or to prevent a potential health hazard from occurring. For example, a covenant might be required to specify a minimum setback from a public water supply or to protect a primary contact recreation area (bathing beach).

VIHA will provide the rationale to the Approving Officer for the recommendation for granting of covenants on the subdivision application in question.

### **Water Supply System**

A water supply system, permitted pursuant to the requirements of the Drinking Water Protection Act and applicable local government servicing by-laws. A water system includes its source, treatment, storage, transmission and distribution facilities, but does not include a domestic water supply servicing only one single-family residence. The system must be owned, operated and maintained by a Municipality, Regional District, Strata Corporation, Improvement District or a Utility Corporation.

### **Wet Season Assessment**

Some Subdivision proposals may be held in abeyance pending wet season assessment. This will enable a thorough evaluation of drainage, water table and porosity of soils. The coastal wet season is generally from November 1<sup>st</sup> to March 31<sup>st</sup>.

Some geographical areas may require special consideration, (i.e. varying annual rainfall may require assessments in different months).

## **D. Assessment Requirements**

### **1. Soil Testing**

- a) To demonstrate consistency of soil conditions and depth within each primary and reserve discharge area, provide:
  - A **minimum** of two – four-foot observation holes per area
  - A **minimum** of one percolation test hole in the centre of each area.
- b) To demonstrate conditions and depth of soil on sloping lots, which have a potential breakout area, provide:
  - A **minimum** of two - four foot observation holes at least 15 metres apart, in addition to the test holes noted in 1 a).
- c) If zoning permits more than one dwelling per lot, additional observation holes may be required.
- d) Observation holes must be at least .6 metres in width and should be covered to prevent injury.

### **2. Flagging**

Flag the location of all observation holes, percolation holes, the corners of each discharge area, and the corners of each proposed lot. All flags must be numbered and accurately correspond to the subdivision plan.

### **3. Subdivision Plan (A Sample Plot Plan is Shown on Page 10)**

A proposed subdivision plan must be submitted to the Environmental Health Officer and must be to scale and must clearly include:

- a) The location of all observation holes and percolation test holes with numbering or coding corresponding accurately to the onsite flagging.
- b) All proposed lot boundaries and lot areas drawn to scale.
- c) The slope within the discharge areas (measured in %).
- d) **Scale plan** showing the location and dimension of the discharge areas.
- e) Location and area of all surface water, wet areas, marshland, existing and proposed ditches and drainage work.
- f) Location of all existing and proposed well sites, including wells on neighbouring properties.
- g) Location of all existing buildings and roadways.
- h) Location of easements or covenants and note their purpose.
- i) Location of all exposed bedrock within 15 metres (50 feet) of a proposed discharge area.
- j) North arrow.



4. **Topographical Maps and Slope Confirmation**

Topographical mapping and/or confirmation from a Land Surveyor or Professional Engineer of overall lot slope and/or slope within discharge areas may be required if:

Overall slope exceeds 15%.

The property is covered with dense vegetation.

Requested by an Environmental Health Officer or Approving Officer.

5. **Application Submission and Fee Payment**

Forward the completed application to the Approving Officer; include the **subdivision plot plan** (see Example plot plan on page 10), application for subdivision (**Appendix A, pg. 22**), site assessment form (**Appendix B, pg. 23**), topographical maps and slope confirmation, and all other relevant data.

The referral will then be sent to the Vancouver Island Health Authority for review.

VIHA does charge an assessment fee which must be submitted at the time of application. The application will not be considered without confirmation of payment. Please refer to the below Subdivision Fee Schedule for more information.

6. **VIHA Subdivision Fee Schedule**

**Fee Simple Lots:** VIHA charges a non refundable assessment fee of \$250 plus \$100 per lot.

Example; Five lot subdivision is \$250 plus \$100 for each lot

$$\$250 + (5 \times \$100) = \$750 \text{ Total}$$

This also applies to strata subdivisions where each lot has individual sewerage systems.

**Community/Strata Sewerage Systems;** VIHA charges a \$250 assessment fee plus \$200 for every 4546 litres per day (1000 igpd) sewage flow.

Example; A 10 lot strata where each lot is designed for a max of 1363 litres/day of sewage flow

Application fee is \$250.00

10 lots x 1363 lpd per lot = 13630 lpd

13630 lpd/4546 = 3

3 x \$200 = \$600

\$600 + \$250 = \$850 Total

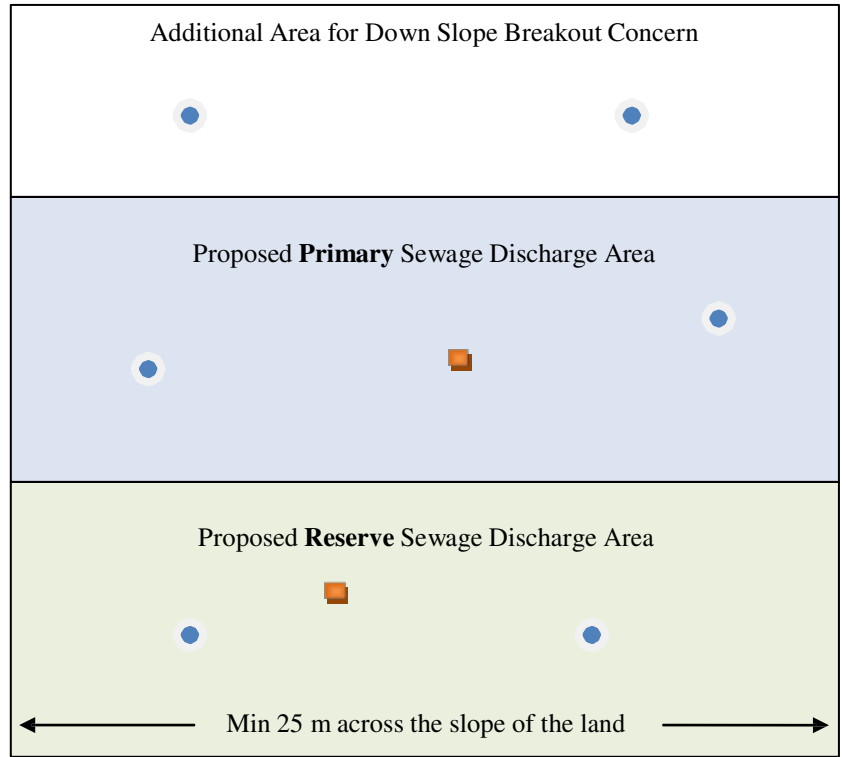
# VIHA Subdivision Standards - Example Plot Plan

## Discharge Area Setback Distances

- Min 3 m from a parcel boundary
- Min 3 m from a building
- Min 3 m from a domestic water line
- Min 30.5 m from a well
- Min 3 m from an upslope interceptor ditch
- Min 30.5 m from a high watermark
- Min 15 m from a breakout point

## Septic Tank Setback Distances

- Min 30.5 m from a well
- Min 3 m from a water line
- Min 3 m from a building
- Min 3 m from a parcel boundary
- Min 15 m from a surface water body



● Observation Hole

■ Percolation Test Hole

↑ Land Slope %

↗ Property Line

Minimum 30.5 m from well to discharge area or septic tank



Rectangular symbol: Septic Tank

Red trapezoidal symbol: Dwelling

## **E. Site and Design Requirements**

The following minimum site and design requirements apply to each proposed lot in a subdivision application:

1. Each proposed lot must meet the requirements in **Table A (pg. 12)**, for properties serviced by an approved waterworks system or **Table B (pg. 13)**, for properties serviced by individual wells.
2. The percolation rate of the soil in the proposed discharge area must not exceed 30 minutes per 2.5 cm. (one inch).
3. The discharge areas must be set back at least 15 metres from an existing or potential breakout point.
4. The discharge areas must be at least 30.5 metres from the natural boundary of tidal and non-tidal water. The elevation of the discharge area shall be 1 metre above the 20-year flood level.
5. The minimum dimension of a discharge area across the slope is 25 metres.
6. The natural slope of the proposed discharge area shall not exceed 30%.
7. For existing houses in a proposed subdivision:

Proposed lots with existing dwellings shall have an approved onsite sewerage system and/or one that meets acceptable standards, and a reserve area in accordance with this standard. If, during the subdivision assessment the existing system is determined to be unacceptable, upgrading will be necessary.

If the existing sewage discharge area is less than 30.5 metres from a body of non-tidal water or source of drinking water, the well or discharge area may have to be relocated.

8. A wet season assessment may be required. The wet season is typically from November to March.
9. Some latitude may be given to the minimum soil depth in the table to the corresponding minimum lot size, if a proposed parcel has uniform and continuous soil coverage throughout the entire parcel, overall lot slope of 15% or less, and no apparent breakout points, seepage areas, or other risks, or limiting factors. The absolute minimum parcel size shall be .2 hectares. The soil depths indicated in Table A, Column 3 may be considered for this section.
10. Applicants must provide reasonable and safe access to proposed discharge areas to facilitate assessments by EHO's.

**Table "A"**

**D.1 Minimum Lot Size and Discharge Areas for Properties on Water Supply Systems**

| Slope Within Discharge Area (%) | Minimum Native Mineral Soil Depth m.(in.) | Min. Native Mineral Soil Depth m. (in.)<br>Overall lot slope 15% or less<br>*See #9 above | Minimum Lot Size     | Minimum Discharge Area Based On Percolation Rate and Field Length<br>1363 litres Estimated daily flow |  |  |
|---------------------------------|---|---|----------------------|---|--|--|
|                                 |   |   |                      | Sands-Gravels<br>1-5<br>Min/inch  | Loams<br>6-15<br>Min/inch                      | Silts<br>16-30<br>Min/inch                     |
| Up to 15%                       | 1.2 m.<br>(48")                           | .9 m.<br>(36")  | .2 ha<br>(0.5 acre)  | 535 m <sup>2</sup><br><br>120m<br>field length  | 715 m <sup>2</sup><br><br>182m<br>field length | 890 m <sup>2</sup><br><br>240m<br>field length |
|                                 | .9 m.<br>(36")                            | .76 m.<br>(30")   | .3 ha<br>(0.75 acre) |   |  |  |
|                                 | .76 m.<br>(30")                           | .61 m.<br>(24")   | .4 ha<br>(1 acre)    |   |  |  |
|                                 | .61 m.<br>(24")                           | .46 m.<br>(18")   | 1 ha<br>(2.5 acre)   |   |  |  |
|                                 | .46 m.<br>(18")                           | .46 m.<br>(18")   | 2 ha<br>(5 acre)     |   |  |  |
| 16 to 30%                       | 1.2 m.<br>(48")                           | 1.2 m.<br>(48")   | .2 ha<br>(0.5 acre)  |   |  |  |
|                                 | .9<br>(36")                               | .9 m.<br>(36")  | .4 ha<br>(1 acre)    |   |  |  |

**Table "B"**

**D. 2 Minimum Lot Size and Discharge Areas for Properties Serviced by Private (Individual Well) Water Supplies**

| Slope Within Discharge Area (%) | Minimum Native Mineral Soil Depth<br>Metres<br>(inches) | Minimum Lot Size       | Minimum Discharge Area Based On Percolation Rate and field length<br>1363 litres Estimated daily flow |   |   |
|---------------------------------|---|------------------------|---|---|---|
|                                 |   |                        | Sands-Gravels<br>1 – 5 Min/Inch   | Loams<br>6 – 15 Min/Inch  | Silts<br>16 – 30 Min/Inch   |
| Up to 15%                       | .9 m.<br>(36")  | 1 ha<br>(2.5 acres)    | 535 m <sup>2</sup><br>5700 ft <sup>2</sup><br>400'/120m<br>field length                               | 715 m <sup>2</sup><br>7700 ft <sup>2</sup><br>600'/180m<br>field length | 890 m <sup>2</sup><br>9680 ft <sup>2</sup><br>800'/240m<br>field length |
|                                 | .61 m.<br>(24")   | 1.5 ha<br>(3.75 acres) |   |   |   |
|                                 | .46 m.<br>(18")   | 2 ha<br>(5 acres)      |   |   |   |
| 15 to 30%                       | 1.2 m.<br>(48")   | 1 ha<br>(2.5 acre)     |   |   |   |
|                                 | .9 m.<br>(36")  | 2.0 ha<br>(5 acres)    |   |   |   |

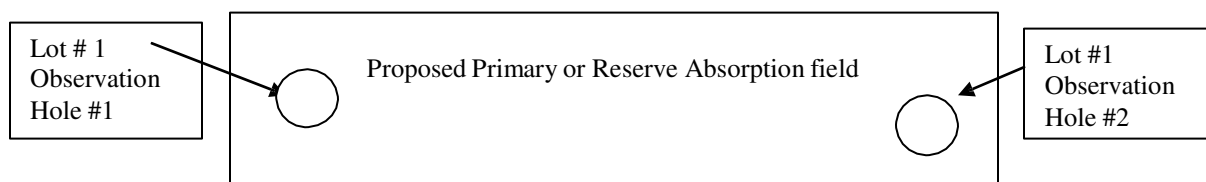
## F. Completing the Site Investigation

### 1. Background

In order to complete the application and submit the necessary data to VIHA, the applicant is required to undertake a site investigation and complete soil suitability tests (observation holes and soil permeability holes), record slope, and complete a detailed drawing of the property.

Subsurface soil conditions are demonstrated by observation holes and soil permeability test holes. The observation holes define the soil texture, soil characteristics, and establish the presence of bedrock, limiting layers and water table. Soil permeability tests determine the suitability of the soil to absorb sewage effluent.

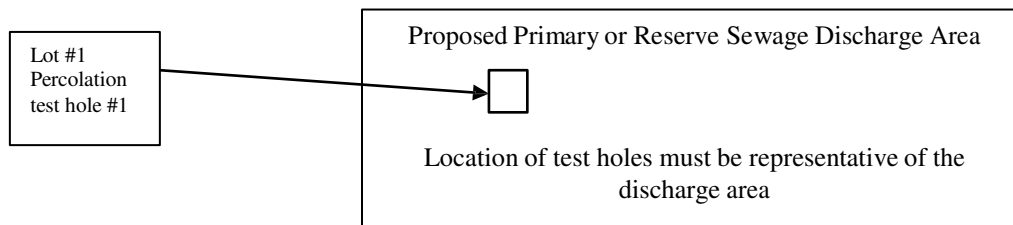
### 2. Observation Holes



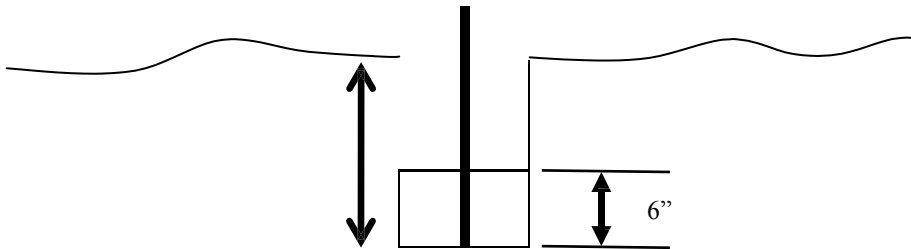
- (a) To demonstrate soil conditions and depth within each primary and reserve absorption field site, dig or bore at least two observation holes in each area to a minimum of 48 inches (1.2 m). Locate the observation holes at each end of the site to represent soil conditions. Further holes may be required depending on the nature of the soil and the size of the proposed absorption field or at the discretion of the EHO.
- (b) If there is a potential breakout point below the proposed primary/reserve absorption field site (such as bedrock, exposed bank with hardpan layer, etc) then dig or bore at least 2 additional holes to represent the soil conditions 50' (15 m) downslope of the site. Refer to the sample plot plan on Page 10.
- (c) The observation holes must be a minimum diameter of 2 feet so the EHO can clearly see the sides and bottom of the holes.
- (d) Describe the conditions in the observation holes on the Site Assessment Report (Appendix B, page 23). Leave the excavated material beside the observation holes for the EHO inspection. Cover the holes to prevent injury.

- (e) Describing soil conditions should include soil texture, soil colour and indicators of the impervious layer.
  - Example; loam, sand, clay, silt.
  - Example; red, grey, tan, reddish grey
  - Example; roots to (x number) of centimetres, hardpan at (x number) of centimetres
  
- (f) Clearly flag each observation hole using fluorescent surveyors tape with numbers that correspond to the lot and to the Site Assessment Report (Appendix B, page 23).
  
- (g) An EHO may request additional observation holes or testing.
  
- (h) For sites with variable soils or inconsistent depths of soil, additional observation holes and permeability testing may be necessary.

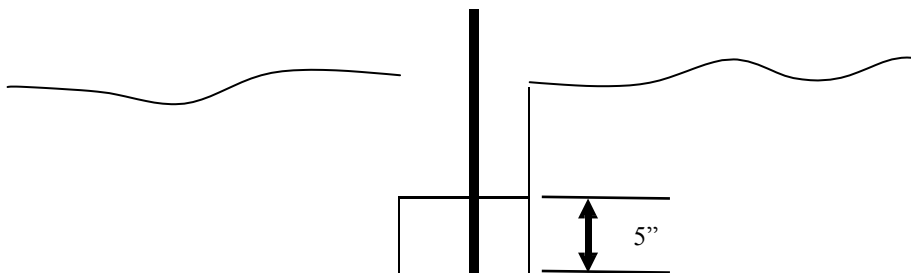
### 3. Percolation Test Holes



1. Dig a minimum of two percolation test holes 12" (30 cm) square to a depth of 22" – 32" (56-81 cm). One in the proposed primary discharge area and one in the proposed reserve discharge area. The location of the percolation holes must be representative of the site.
2. Remove any smeared soil from the walls and bottom of the holes.
3. If the soil contains considerable amounts of silt or clay the holes must be presoaked by keeping the holes full of water for a minimum of four hours. Proceed to step 4 if the holes do not have silt or clay.
4. To complete the test; fill the hole with water. When the water level is 5" (13 cm) or less from the bottom of the test hole, refill the hole to the top. No recording of time is necessary at this stage.
5. When the water level drops below 5" (12.5 cm) after the second filling, add water to bring the level to 6" (15 cm) or more.



6. Observe the water level until it drops to the 6" (15 cm) depth and begin recording at precisely 6" until the water drops to the 5" (12.5 cm). Stop timing and record the time in minutes.



7. Repeat procedures 5 and 6 above until the last 2 tests do not vary more than two minutes per inch (per 2.5 cm).
8. Determine the percolation rate for the proposed discharge area by averaging the slowest rate for each of the test holes.
9. Cover the percolation test holes to prevent injury and flag the location for the EHO inspection. Number the holes such that the numbers correspond to the Subdivision Plot Plan and Site Report.
10. Complete the Site Assessment Report form with the relevant permeability or percolation test data. Appendix B, page 23.
11. For sites with variable soils or inconsistent depths of soil additional observation holes and permeability testing is necessary.



## **G. Hydrogeological Requirements**

Hydrogeological assessments may be required under the following conditions or circumstances:

1. Potential for ground water contamination.
  - Rapidly draining soils and location/status of aquifer.
  - Area not serviced by an approved waterworks system.
2. Concern for cumulative effects on sloping and/or neighbouring properties and the related potential for ground water or surface water contamination.
3. Historical or existing concerns in the area of the proposed subdivision, i.e. malfunctioning sewerage systems, drainage problems, contaminated ground water table or aquifers.
4. Increased density, i.e. developments greater than 10 parcels, phased developments exceeding a total of 10 parcels, or average parcel density of less than 1.0 ha.
5. Assessment of community sewage disposal systems – Section J, page 19-21.

A hydrogeological assessment must be completed by a qualified hydrogeologist or hydrogeological engineer, registered as a Geoscientist or Professional Engineer in British Columbia.

## **H. Water Supply System Approval (Including Main Extensions)**

All community water supply systems must comply with the Drinking Water Protection Act and Regulations.

Alterations or extensions to an existing water supply system servicing a proposed subdivision will require a construction permit from VIHA prior to commencing work. Refer to the VIHA Guidelines for Approval of Waterworks for further details. The VIHA Guidelines for the Approval of Waterworks can be found by contacting your local Environmental Health office.

A water supply system must be owned, operated, and maintained by:

- ❑ An Improvement District,
- ❑ Local Government,
- ❑ A Strata Corporation, or
- ❑ A Utility under the Utilities Act

Subdivision proposals that do not meet this requirement will require individual private water supplies for each lot.

Before the installation of any waterworks the VIHA Public Health Engineer must issue a construction permit. Plans and specifications for consideration of a construction permits must be forwarded to:

|   |        |              |
|---|--------|--------------|
| Regional Public Health Engineer           | Phone: | 250-755-6215 |
| Vancouver Island Health Authority         | Fax:   | 250-755-3372 |
| 3 <sup>rd</sup> Floor – 6475 Metral Drive |        |              |
| Nanaimo, B.C. V9T 2L9                     |        |              |

The Medical Health Officer, Drinking Water Officer, or designate must approve the water quality of water supply systems. Parameters and requirements for water testing are available at your local Environmental Health office. A valid operating permit must be obtained prior to putting a waterworks system into use.

## **I. Private Water Supplies – Wells**

The Drinking Water Protection Act does not apply to a domestic water supply system that serves only one single-family residence.

Local governments may have subdivision or servicing bylaws that address water quality and/or quantity for individual dwellings at the time of subdivision.

Health Authority staff may comment on high levels of chemical parameters with potentially adverse health effects.

Surface water sources do not provide water of reliable quality. Water from surface sources, including springs and shallow wells, may require additional treatment such as filtration and disinfection.

## **J. Community/Strata Sewerage Systems – Public Health Act**

For all subdivision proposals that include sewage treatment and discharge on common property, the assessment process should include Steps 1-6 on pages 8-10 in Section D. Assessment Requirements” previously mentioned in this document and the following conditions:

- a) All community sewerage systems with flows less than 22.7m<sup>3</sup>/day must comply with the Sewerage System Regulation (Public Health Act).
- b) A primary and reserve discharge area must demonstrate minimum native mineral soil at depths specified in **Tables C and D on page 21**.
- c) A hydrogeological assessment may be required for all community sewerage systems. A professional geoscientist, licensed to practice in British Columbia, must complete this assessment. The following are minimum concerns the hydrogeologist must address:
  - Ability of the site to treat and dispose of the effluent.
  - Protection of groundwater aquifers must meet standards for well separation as specified in legislation such as the Sewerage System Regulation, Public Health Act, Municipal Sewage Regulation, Water Act or Groundwater Protection Regulation
  - The groundwater mounding effect and its implications.
  - The cumulative impact the sewerage system will have on neighbouring properties and the receiving environment.
- d) A Professional Engineer must design the system and provide working drawings. The design engineer shall supervise the installation of the sewerage system and provides certification of the completed works.
- e) All community sewerage systems must be owned and operated by a Regional District, Municipality, or a Strata Corporation (Local government may have additional requirements).
- f) All proposed water sources for drinking water must meet the requirements previously mentioned on **page 18** of this document.

The process outlined below illustrates how a proposed subdivision, utilizing common property for sewage treatment and discharge, will be processed:

1. Once the VIHA subdivision assessment fee has been paid, the EHO will arrange to visit the subdivision and assess the proposed common sewage discharge site for compliance with these Subdivision Standards.
2. If the site conditions are not acceptable, the EHO will contact the applicant for more information or send an objection letter to the approving officer with a copy to the applicant.
3. If the common sewage discharge site meets the requirements of **Tables C or D, page 21**, in these Subdivision Standards then the EHO will contact the applicant to inform them that a Sewerage Filing as per the Sewerage System Regulation is required.
4. The Sewerage Filing documents for the development will be reviewed by the EHO to ensure that the design is appropriate for the number of proposed strata lots and indicated flows.
5. If the above information is acceptable, a comment letter will be sent to the approving officer stating that conditional acceptance of the proposed strata subdivision is given provided:
  - a. The sewerage system is installed and certified by the Authorized Person (AP) prior to final subdivision approval and,
  - b. The sewerage system is maintained and operated by the property owner until such time as the strata corporation is formed.
6. Once the Sewerage System is installed and certified by the AP, the documents will be reviewed by the EHO to confirm that the sewerage system was constructed in accordance with the original design. The district EHO will confirm that the developer has provided a letter accepting responsibility for the sewerage system until the Strata Corporation is established.
7. The EHO will follow-up by correspondence to the approving office that the sewerage system is complete and that VIHA has no further objections or concerns regarding the subdivision.
8. A Notice will be sent to the owner/developer of the Strata Subdivision informing them of the limitations that the size of the sewerage system places on future development within the Strata.

## Community Sewage System Standards

**Table "C" – Community Sewage System Septic Tank Effluent**

| <b>Septic Tank Treatment<br/>Servicing Community Sewage System</b>   |  |   |  |  |
|--|--|---|--|--|
| <b>Minimum natural porous soil depths and discharge field length requirements for<br/>every 4500 litres of estimated daily sewage flow</b> |  |   |  |  |
| <b>Slope within<br/>Absorption<br/>Field Area</b>  | <b>Minimum Depth of<br/>Native Mineral Soil<br/>m.</b> | <b>Sands &amp;<br/>Gravels<br/>Min/2.5 cm.<br/>1-5 Min/Inch</b> | <b>Loams<br/>Min/2.5 cm.<br/>6-15 Min/Inch</b> | <b>Silts<br/>Min. 2.5 cm.<br/>16-30 Min/Inch</b> |
| <b>0% - 10%</b>  | <b>.9 m.<br/>(36")</b>                                 | <b>390 m<br/>(1300')</b>  | <b>600 m<br/>(2000')</b>                       | <b>900 m<br/>(3000')</b>                         |
| <b>11 – 30 %</b>   | <b>1.2 m.<br/>(48")</b>                                |   |  |  |
| <b>All discharge areas are to be at least 15 m. from a possible breakout point.<br/>The length requirements include 100% reserve</b>       |  |   |  |  |

**Table "D" – Community Sewage System Package Treatment Plant Effluent**

| <b>Package Treatment Plant or Extended Treatment (Type 2 and 3)<br/>Servicing Community Sewerage System</b>  |   |                              |                         |                          |
|--|---|------------------------------|-------------------------|--------------------------|
| <b>Minimum natural porous soil depths and discharge field length requirements<br/>for every 4500 litres of estimated daily sewage flow<br/>package treatment plant effluent – Maximum 45/45 mg/l (B O D/T S S)</b> |   |                              |                         |                          |
| <b>Slope within<br/>Absorption<br/>Field areas</b>   | <b>Minimum Depth of<br/>Native Mineral<br/>Soil m</b> | <b>Sands and<br/>Gravels</b> | <b>Loams</b>            | <b>Silts</b>             |
| <b>0 - 10%</b>   | <b>.9 m.<br/>(36")</b>                                | <b>150 m<br/>(500')</b>      | <b>215 m<br/>(700')</b> | <b>305 m<br/>(1000')</b> |
| <b>11- 30%</b>   | <b>1.2 m.<br/>(48")</b>                               |                              |                         |                          |
| <b>All discharge areas are to be at least 15 m. from a<br/>possible breakout point. The length requirements include 100% reserve.<br/>Type 3 Level Treatment may be required.</b>                                  |   |                              |                         |                          |

## Appendix A: Application for Subdivision

|   |  |          |
|---|--|----------|
| <b>Owner Information</b>                                  | Name Of Owner: (Please Print)  | Phone: # |
|   | Mailing Address:   |          |
| <b>Applicant Information</b><br>(if different from above) | Name Of Applicant (Surveyor/Agent) As Above: <input type="checkbox"/> OR:  | Phone: # |
|   | Mailing Address:   |          |
| <b>Property Information</b>                               | Legal Description Of Property:   |          |
|   | Street Address/General Location:   |          |
| <b>Site Information</b>                                   | <p><b>A plot plan and site assessment information form must be submitted with this application.</b></p> Are all existing dwellings and sewage disposal systems indicated on the subdivision plan? <input type="checkbox"/> YES <input type="checkbox"/> NO   |          |
| <b>Number of Proposed Lots</b>                            | Number of lots proposed (including the remainder): _____   |          |
| <b>Water Information</b>                                  | Proposed domestic water supply:<br><input type="checkbox"/> Individual wells<br><input type="checkbox"/> Connection to an existing community water system. Name of system- _____<br><input type="checkbox"/> Water system to be constructed, if yes, contact Regional Public Health Engineer for more information<br><input type="checkbox"/> Other (explain): _____ |          |
| <b>Zoning</b>   | Zoning classification: _____ Number of dwellings permitted per lot: _____ Other development permitted: _____<br>Is a zoning change proposed: _____   |          |
| <b>Restrictive Covenants</b>                              | Are there any restrictive covenants/easements on any of the proposed lots, which could affect the design or location of a sewerage system? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>If Yes, please explain:<br>_____  |          |
| <b>Signature</b>  | The information on this application and other information provided by me in support of this application are accurate and true to the best of my knowledge.<br><input type="checkbox"/> Owner <input type="checkbox"/> Applicant or Agent<br><br>  _____ Signature _____ Print Name _____ Date _____  |          |

- **Attach the Site Assessment Information form (Appendix B) to this application.**
- **See Sections D through F (pages 8-16) for a list of site assessment requirements. Incomplete applications will not be processed.**

## Appendix B: Site Assessment

### Site Assessment Information

| Site Information                        | Lot Number ____ |                | Lot Number ____ |                | Soil Texture |
|---|-----------------|----------------|-----------------|----------------|--------------|
| Lot Size (ha)                           |                 |                |                 |                |              |
| Overall Lot Slope (%)                   |                 |                |                 |                |              |
| Lot Dimension (m)                       |                 |                |                 |                |              |
| <b>COVENANT INFO</b>                    | <b>PRIMARY</b>  | <b>RESERVE</b> | <b>PRIMARY</b>  | <b>RESERVE</b> |              |
| Slope Within Covenant Area (%)          |                 |                |                 |                |              |
| Sewage Discharge Area (m <sup>2</sup> ) |                 |                |                 |                |              |
| Sewage Discharge Area Dimensions (m)    |                 |                |                 |                |              |
| <b>DEPTH OF NATIVE MINERAL SOIL</b>     | <b>PRIMARY</b>  | <b>RESERVE</b> | <b>PRIMARY</b>  | <b>RESERVE</b> |              |
| Observation Hole #1                     |                 |                |                 |                |              |
| #2                                      |                 |                |                 |                |              |
| <b>PERCOLATION TEST RESULTS</b>         | <b>PRIMARY</b>  | <b>RESERVE</b> | <b>PRIMARY</b>  | <b>RESERVE</b> |              |
| Test Hole                               |                 |                |                 |                |              |

Date(s) of Observations/Tests: \_\_\_\_\_

Test Performed by: \_\_\_\_\_

Signature of Applicant or Agent or Qualified Professional: \_\_\_\_\_

Date: \_\_\_\_\_