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REPORT TO REGIONAL PARKS COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 22, 2023

SUBJECT **Island View Beach Regional Park – Ditch Maintenance**

ISSUE SUMMARY

To report on the 2022 ditch maintenance activities at Island View Beach Regional Park (IVBRP).

BACKGROUND

Since 1989, the District of Central Saanich (Central Saanich), the Tsawout First Nation and the Capital Regional District (CRD) have partnered in an annual Mosquito Population Management and Control Program (MPMCP). This work is done under a provincially-approved Integrated Pest Management Plan. The program operates from February 1 to October 31 and focuses on the monitoring and treatment of more than 165 mosquito breeding sites on lands across Central Saanich, including sites in and around IVBRP. The MPMCP is implemented under a contract with Duka Environmental Services Limited – paid for by Central Saanich, the Tsawout First Nation and the CRD.

At its November 10, 2021 meeting, the CRD Board approved the recommendation that staff undertake a drainage study of the ditches at IVBRP, share the results with Central Saanich and Tsawout First Nation, and report back. The purpose of this study was to characterize the drainage system to better understand its function, influences and identify ways to improve drainage. Great Pacific Engineering and Environment was retained to complete the drainage study and a final report was received on June 30, 2022. The report was shared with Central Saanich and the Tsawout First Nation. The report and a summary of the findings were delivered to the CRD Board on August 10, 2022 (Appendix A).

In 2022, CRD staff began implementing recommendations in the Great Pacific Engineering and Environment report. To improve the drainage within the ditches, the report recommended a phased, incremental approach of addressing the most severely restricted areas by removing dense overgrowth obstructions and vegetation. Due to ground conditions and to reduce the environmental impact of using heavy equipment, staff spent 420 hours hand clearing and removing vegetation on 1.9 kms of ditches. Another 1.1 km of ditches were cleared using heavy equipment on the drier and less sensitive areas (Appendix B).

Water levels in the ditches at IVBRP are influenced by the function of Tsawout First Nation flapper gate and the Central Saanich flapper gate, located on the Lamont Road right of way, as well as precipitation, groundwater levels, surface water levels in adjacent properties, and vegetation in the ditches. The ditches drain water throughout the year and the CRD contracts Aqua-Tex Scientific Consulting Limited (Aqua-Tex) to conduct an annual survey of the ditches. In July 2022, Aqua-Tex surveyed the ditches at IVBRP and found the vegetation growth in the ditches to be minimal, with positive drainage flow evident. No impediments to water flow were observed and there was no evidence of sediment build up in the ditches that prevented water flow (Appendix C). A ditch system that continually conveys water minimizes suitable breeding habitat for mosquitos.

IMPLICATIONS

Intergovernmental Implications

The CRD continues to partner with Central Saanich and the Tsawout First Nation under the MPMCP. The Pest Management Plan is led by Central Saanich and partners with the Tsawout First Nation and the CRD. The CRD continues to fund the portion of the program that treats mosquito breeding sites within IVBRP. The CRD, Central Saanich, and Tsawout First Nation staff are developing updated public information on the partnership and MPMCP.

The CRD also works with Central Saanich and the Tsawout First Nation on maintaining and improving drainage infrastructure to help manage nuisance mosquitoes within the IVB area. Central Saanich has reported that the Lamont Road flapper gate is functioning and is being monitored regularly. In July 2022, the Tsawout flapper gate was repaired as much as possible. The Tsawout First Nation are planning to replace the flapper gate in conjunction with other work planned for the road that contains the flapper gate.

Social Implications

The IVB area provides significant cultural, residential, recreational and agricultural opportunities. Adult mosquito annoyance can have a significant impact on residents, visitors and workers in the area, negatively impacting lifestyles and the ability of people to enjoy being outdoors.

Financial Implications

In 2022, expenses for the MPMCP and work associated with the maintenance of the ditch system at IVBRP totalled $57,273. Expenses can be itemized as follows:

- Duka Environmental Services Ltd – $14,436
- Aqua-Tex Scientific Consulting – $1,260
- CRD contribution to repairs of the Tsawout First Nation flapper gate – $15,000
- Great Pacific Engineering and Environment drainage assessment – $26,577

Alignment with Existing Plans & Strategies

The actions taken to manage mosquito populations and drainage within Island View Beach Regional Park are consistent with the direction provided in the approved 1989 Island View Beach Regional Park Management Plan.

CONCLUSION

In 2021, Great Pacific Engineering and Environment was retained to undertake a study of the Island View Beach Regional Park ditch system and to make recommendations to improve drainage and advice on maintaining the ditch systems functionality over the next 10 to 20 years. CRD staff spent 420 staff hours implementing the recommendations, which included hand clearing 1.9 km of ditches and mechanically clearing another 1.1 km. The CRD will retain Great Pacific Engineering and Environment to do a follow-up assessment of the recent ditch work in the spring of 2023 and will share the report with Tsawout and Central Saanich. The CRD, Tsawout First Nation and the District of Central Saanich will continue to meet on a regular basis to discuss mosquito management and develop updated and consistent public information.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Jeff Leahy, Senior Manager, Regional Parks
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Island View Beach Regional Park – Drainage Ditch Study Staff Report to the CRD Board – August 10, 2022
Appendix B: Ditch Maintenance 2022 – Island View Beach Regional Park
Appendix C: Aqua-Tex Ditch Maintenance Assessment

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REPORT TO CAPITAL REGIONAL DISTRICT BOARD
MEETING OF WEDNESDAY, AUGUST 10, 2022

SUBJECT **Island View Beach Regional Park – Drainage Ditch Study**

ISSUE SUMMARY

To report back on the results of a drainage ditch study for Island View Beach Regional Park.

BACKGROUND

At its October 27, 2021 meeting, the Regional Parks Committee received a staff report providing an update on the delivery of the annual Mosquito Population Management and Control Program (control program) at Island View Beach Regional Park (IVBRP). The control program is a partnership with the District of Central Saanich (Central Saanich), the Tsawout First Nation and the Capital Regional District (CRD). The CRD covers control program costs for IVBRP.

The October 2021 staff report noted that the flapper gate on the Tsawout First Nation lands was not working properly in 2021 due to a log jam, which allowed seawater to flood the Tsawout salt marsh through its system of drainage ditches. Concurrently, in 2021, there was an increase in reported nuisance mosquitos in and around IVBRP. On September 21, 2021, Central Saanich sent a letter to the CRD Board stating that Council passed a motion at its September 20 meeting requesting the CRD contribute $15,000 towards a feasibility study for the replacement of the Tsawout flapper gate.

The Central Saanich letter also stated that “the management of Island View Beach ditches resulted in (a) situation which did not adequately control and abate mosquito breeding in the engineered ditches within the Regional Park” and it tied the inflow and infiltration of sea water into the IVBRP ditch system to the condition of the Tsawout First Nation flapper gate.

As a result, staff recommended to the Regional Parks Committee that $15,000 be allocated to the District of Central Saanich towards the feasibility study and that staff undertake a study of the IVBRP drainage ditch system and share the results with Central Saanich and the Tsawout First Nation. The recommendation was approved at the November 10, 2021 CRD Board meeting.

The CRD subsequently made $15,000 of funding available to Central Saanich to apply towards the Tsawout First Nation flapper gate replacement feasibility study. Staff also proceeded to award a contract to GreatPacific Engineering & Environment (GreatPacific) to undertake the IVBRP drainage ditch study (Appendix A).

CRD staff identified that the purpose of the study was to characterize and assess the drainage ditch system and to provide advice on maintaining the system over the next 10 to 20 years to maintain its functionality, while also taking into account climate change and key park values.

The project timelines necessitated GreatPacific to complete a compressed field work program during April 2022. GreatPacific’s final report (June 30, 2022) recognizes that the collected data and observations provide a snapshot in time of park conditions. The report conclusions identify that there are opportunities to improve the ditch network to reduce standing water and drainage; that the Central Saanich tidal gate located in IVBRP does not consistently prevent seawater from

entering the ditching network; that regrading of specific areas of the ditching system would prevent some isolated ponding at low tides; and that some vegetation management would benefit accessibility and reduce restrictions within the ditching system. Additionally, it was noted that the adjacent Tsawout lands include some large inundated areas containing saline water and that some overland flow was observed between the two ditching systems during periods of high tides.

The GreatPacific report also noted that based on a time period over the next 20 years, sea level rise is predicted to be in the order of 0.15 m, which could pose an incremental reduction in the hydraulic performance of the drainage system under its existing configuration/size. Changes to the ditch system function and associated ditch maintenance have the potential to change the existing wetland ecology, including for species at risk. The report advises that the potential effects of future actions should be assessed and evaluated as part of the decision-making process.

IMPLICATIONS

Operational Implications

CRD staff have been implementing recommendations in the GreatPacific report as a part of the annual ditch maintenance activities (Appendix B). As of mid-July, 168 hours of staff time have been spent on removing logs, debris and vegetation blocking ditch sections, cutting back overhanging branches, and clearing one side of the ditches to increase access for mosquito control contractor staff. In August, staff will utilize heavy equipment to complete the ditch clearing activities. Completion of the 2022 ditch maintenance program will require a second round of vegetation management before the end of the growing season. It is estimated that over 300 hours of staff time will be spent on IVBRP ditch maintenance activities in 2022.

Duka Environmental Services (Duka) has prepared a summary document of the 2022 mosquito control program (Appendix C). The document includes a graphic portraying the total volumes of VectoBac applied annually for each of the partners between 2019 and 2021. The total volume of VectoBac required at IVBRP has ranged from 10 to 25% of the total treatments required for all three partner areas. The nuisance mosquito *Aedes dorsalis* develops in saltwater habitats, the predominant habitat of the Tsawout First Nation salt marsh. The majority of adult mosquitos collected at IVBRP and adjacent properties over the past several years has been *Aedes dorsalis*, but the predominant species of mosquito larvae collected at IVBRP is *Aedes sticticus*. The data indicates that based on the predominant habitat type and areal extent, the *Aedes dorsalis* mosquito primarily originates from the Tsawout salt marsh.

Intergovernmental Implications

The CRD prioritizes maintenance of good relationships with adjacent landowners. It regularly works with Central Saanich and the Tsawout First Nation to address nuisance mosquitos and to maintain the drainage ditch system. The CRD will collaborate with Central Saanich and the Tsawout First Nation to address priority action items in the GreatPacific report.

Alignment with Existing Plans & Strategies

IVBRP operates under a 1989 management plan that provides direction on maintaining the ditch system and the mosquito control program. A planning process was undertaken between 2011 and 2017 to update the 1989 management plan. During the management planning process, the CRD Board approved policy direction to monitor the effectiveness of the control program and the ditches in reducing mosquito habitat and to assess their impact on the coastal wetland habitat.

Financial Implications

Costs for the annual mosquito control program, contracted ditch monitoring/reporting activities and yearly ditch maintenance by staff and contractors is included in the CRD's Regional Park core budget. Costs for implementing any approved actions arising out of the GreatPacific drainage ditch study will be considered during annual budgeting and capital planning cycles.

Environmental & Climate Implications

IVBRP is home to several species at risk. These species have developed to exploit the characteristics of a dune ecosystem and natural coastal wetland. As inundation by saltwater has been reduced over the years by ditching and drainage, the ecosystem now supports freshwater wetland species. Any changes to the ditch system function and ongoing maintenance may affect ecosystem functions and associated species. An environmental assessment will be needed to fully understand the implications of any proposed changes.

CONCLUSION

In November 2021, the CRD Board approved a recommendation to provide $15,000 towards a feasibility study to replace the Tsawout First Nation flapper gate, to undertake a study of the IVBPR drainage ditch system and report back on it, and to share the results with the District of Central Saanich and the Tsawout First Nation. The CRD provided the requested funding to the District of Central Saanich for the feasibility study and staff contracted with GreatPacific to assess the IVBRP drainage ditch system. The GreatPacific report characterizes and assesses the ditch system and provides management advice for maintaining its functionality over the next 10 to 20 years. The report has been provided to the District of Central Saanich and Tsawout First Nation, and the CRD will work with these partners to address priority actions identified in the report. CRD staff will spend more than 300 hours at IVBRP in 2022 completing ditch maintenance activities.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Mike MacIntyre, Manager, Planning & Development, Regional Parks
Concurrence:	Larisa Hutcheson, General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

ATTACHMENTS

Appendix A: GreatPacific Engineering & Environment – 2022 IVBRP Drainage Ditch Study
Appendix B: CRD Regional Parks – 2022 IVBRP Drainage Ditch Maintenance Activities
Appendix C: Duka Environmental Services – 2022 IVBRP Summary of Conditions

GREATPACIFIC
ENGINEERING & ENVIRONMENT

DRAINAGE DITCH ASSESSMENT

Island View Beach Regional Park

June 30, 2022

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1 Introduction

GreatPacific Consulting Ltd. (GreatPacific) was retained by the Capital Region District (the CRD) to complete an assessment of the drainage infrastructure located at Island View Beach Regional Park (the Park; Figure 1) located in the District of Central Saanich in the Greater Victoria Area.

In addition to this drainage study, GreatPacific was also required to complete an assessment of the coastal berm located along the shoreline of the Park. The results of the berm assessment are detailed under separate cover entitled *Coastal Berm Assessment– Island View Beach Regional Park* (GreatPacific, May 2022). It is noted that facets of the drainage network and the coastal berm are interrelated, and the reader is directed to both reports for a fuller understanding of the infrastructure assessment completed by GreatPacific.

Figure 1 Island View Beach Regional Park – Context Map

2 Background

The Park is a well utilized public recreational area administered and operated by the CRD which also contains of a variety of ecologically valuable spaces, and a series of trails in addition to other Park amenities such as a campground, picnic areas, and marine shoreline.

The Park is a low lying area, partially protected from coastal flooding by an elevated coastal berm. The park also contains a series of drainage ditches intended to drain the Park lands through a tidal gate structure located in the berm. Offshore of the tidal gate, the drainage network discharges through a culvert and second tidal gate at the culvert terminus to the marine environment of Haro Strait.

The ditching system is understood to have been completed circa 1930's, although earlier ditching systems existed in the area including ditching within the adjacent Tsawout First Nation (Tsawout) (refer to Appendix A for air photo circa 1920's showing ditching on Tsawout Lands.). The modern adjacent Tsawout ditching system is not directly connected to the Park's ditching system, and is intended to convey water from the Tsawout lands northward to the marine environment through another tidal gate.

An ongoing issue in the vicinity of the Park has been nuisance mosquitos. A mosquito management plan is implemented within the Park to attempt to manage these insects. Known to thrive in areas of stagnant water, large numbers of mosquitos may be indicative of drainage issues.

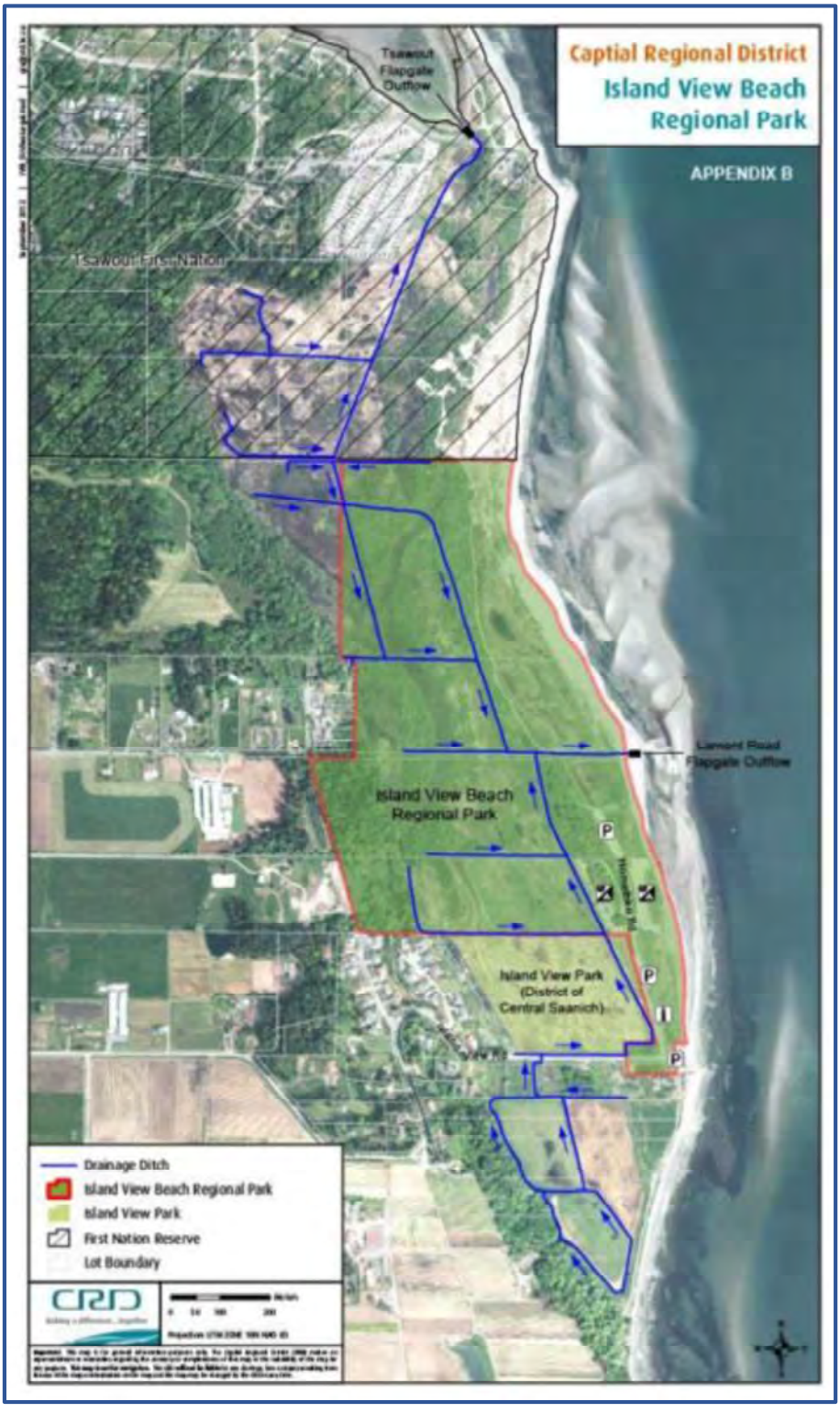

Figure 2 Island View Beach Regional Park – General Configuration of Ditch Drainage System

3 Study Purpose

This study was focussed on the ditch drainage system, of which the following objectives were established:

1. To characterize the drainage system and the key components influencing its functionality (e.g. hydrological, biophysical, structural).
2. Complete a condition assessment and identify factors that could affect future performance
3. Provide advice for maintaining the system for its intended purpose of adequate drainage and flood prevention over the next 10 to 20 years
4. Consider a variety of factors as part of the overall assessment such as government regulatory directives, CRD's sustainable service delivery model, ecological function, climate change, reduction of nuisance mosquitos, park visitor user experience, and relationships with adjacent land owners.

4 Previous Studies

There have been several previous studies directed towards understanding various aspects of the ecological and hydrotechnical characteristics of the Park. This study is intended to supplement previous work, and to provide an updated assessment of the drainage conditions.

A multitude of historical information was reviewed as part of this study. Some of the most pertinent previously completed studies are listed below:

- Hydrologic and Hydrogeologic Site Assessment (Lowen Hydrogeology Consulting Ltd., March 2012)
- Island View Ditch System – CRD Parks Lands (Aquatex Scientific Consulting Ltd., Feb 22, 2013)
- Island View Beach Ditch Maintenance– CRD Parks Lands (Aquatex Scientific Consulting Ltd., Apr 25, 2013)
- Island View Beach Ditch Maintenance– CRD Parks Lands (Aquatex Scientific Consulting Ltd., June 7, 2018)
- Hydrology Characterization of Island View Beach Saltmarsh (Camosun College 208B Project Report, Spring 2013)
- Island View Beach Regional Park Site Visit and Coastal Berm Review (Golder Associates Ltd., January 2013)

The above reports contained useful information and data relating to the hydrotechnical characteristics of the Park. Data and information from the above reports supplemented additional site information collected directly by GreatPacific.

5 Field Investigation Scope

A field investigation was completed to gather pertinent information and data which informed the drainage assessment. Tasks included:

- Topographic survey of the ditch elevations;
- Drilling of shallow monitoring wells in select locations to monitor groundwater water levels;
- Monitoring of water levels within the ditch network to evaluate ditch water elevation levels to tide levels;
- Salinity measurements within the ditch network, at other surface water areas in the Park, and at groundwater monitoring wells;
- Visual inspection of drainage conditions and categorization of observed deficiencies.

Due to the condensed nature of the timeline for this project, field work was completed on an expedited basis, resulting in data being collected over a timeline of a just a few weeks. It is common for these studies to incorporate a substantially longer period of field data collection to further qualify and quantify the hydrotechnical regime of these lands. Of particular value would be the collection of data capturing seasonally variant weather and precipitation conditions in combination with the range of tidal cycles.

6 Results and Discussion

6.1.1 Drainage Survey

6.1.1.1 Ditch System

A topographic survey of accessible areas of the ditch system was completed utilizing a Real-Time Kinematic (RTK) survey instrument on April 22, 2022. The collected data from this survey was supplemented by topographic data previously collected by Andy Blaine Consulting (2011) provided by the CRD.

Based on the topographic survey collected by GreatPacific, there were several areas of poorly graded ditch, where invert/ center of ditch elevations did not exhibit a positive downhill grade towards the outlet.[1] As a result; when downstream sections of the ditch are fully drained, upstream segments would be left with isolated sections of ponded water. These sections would be unable to drain via surface runoff, and would either remain stagnant, or would infiltrate into the underlying substrates. Evaluation of infiltrative capacity within the ditch cross section exceeded the scope of this program. The extent of the surveyed ditches, and profiles of each ditch are presented in Drawings C000 to C002 (Appendix 1).

It was noted that the ditching system was frequently inundated. The main channel (Ditch 5) was inundated at all observed times during the field investigation, which occurred during a time period which was generally absent of significant periods of precipitation. Photos within Appendix 2 illustrate observed conditions.

[1] It is noted that while evaluation based on surveyed inverts provides appropriate insight into ditch conveyance, better accuracy and qualification of flow capacity would be ascertained were the ditch to be surveyed/ evaluated in the dry, which is not currently feasible due to the inflow of tidal waters spoken to in other sections of this report.

Reverse flow (i.e., downstream to upstream, or east to west), was observed during rising tide conditions in the main channel. Flow was directly observed to be entering the ditch from offshore, presumably through the Park's tidal gate structure, which resulted in tidal waters entering the ditch from offshore. Access to the tidal gate for visual inspection could not be arranged during the short duration of this study.

Overgrowth in and around the ditch prevented access to the ditching system in multiple areas, and as such, these areas were unable to be evaluated. Also, in many areas, vegetation and debris within the flow channel was observed to presents an impedance to ditch hydraulics. Areas of substantial overgrowth precluding assessment are summarized in Drawing C000 (Appendix 1)) and within the site photos (Appendix 2).

It is also noteworthy that certain areas of the ditching system contained substantial quantities of sediments, silts, etc. This was most significant in the ditching networks at the southern extremity of the Park.

6.1.1.2 Other Park Lands

During field operations, it was noted that multiple areas of the Park were inundated and did not demonstrate positive drainage connectivity to the ditch system. Some of these areas consisted of substantial surface water area. Poor surface water drainage connectivity from these ponded areas to the drainage ditches may contribute to these areas acting as stagnation ponds suitable for certain mosquito breeding. Refer to Appendix B for photos of these conditions.

Ultimately these areas may be able to drain through the underlying ground substrates and into the drainage ditching system under proper drainage conditions. This is further discussed in Section 6.1.2

6.1.1.3 External Lands

Although outside of the scope of this project, it was noted that hydraulic linkages exist to adjacent properties which impact the overall water regime and characteristics of the Park.

At the northwest of the property, the Park's ditch system conveys water through private property in an area colloquially known as "Puckle Farm". It is noted that this is a low-lying area which appears to have substantial standing water for extended periods of time (evidenced by historic imagery).

Additionally, and perhaps more significantly, is the interconnection of water systems between the Park and the adjacent Tsawout lands. Although it was understood that there is no direct connectivity (i.e., open ditches) between the Tsawout and Park ditching systems, overland flow was observed during the field program from the inundated Tsawout lands (adjacent to the Tsawout ditch) into the Park's ditches at the northern Park boundary (Refer to Photo 23 in Appendix 2). The areal extent of the Tsawout lands draining towards the Park was not evaluated.

It was also understood that the current tidal gate structure at the mouth of the Tsawout ditch network was in a state of malfunction, allowing the Tsawout ditches to flood with seawater. Field observations indicated that during high tide conditions, the Tsawout Nation ditches overtop, flooding adjacent lands,

and spilling over into the Park lands. Groundwater flow pathways may also exist between the flooded lands / ditches on Tsawout lands and the adjacent CRD ditches. High salinity measurements in the ditches near the boundary of the Park and Tsawout lands also indicated hydraulic connectivity of the Tsawout lands and Park ditches (discussed in Section 6.1.3), and seawater intrusion.

6.1.2 Groundwater and Surface Water Level Monitoring

Water levels in select locations for both groundwater and surface waters of the ditch system were monitored utilizing level loggers (Hobo Loggers U20-001-04-02/ U20-001-01-07) placed within perforated monitoring wells. One monitoring well was placed immediately upstream of the CRD tidal gate chamber in the coastal berm (maintained by Central Saanich), and seven groundwater monitoring wells were installed throughout the Park. An onsite logger of atmospheric pressure was installed to provide for barometric correction of all installed level loggers. shows the locations of monitoring equipment. shows the observed variation in water level elevation and corresponding tide heights, both relative to geodetic datum (CGVD28) [2].

[2] It is noted that the precise correlation between Geodetic (CGVD28) and local Chart Datum at this location is unknown. For practical purposes, tidal data evaluated within this report is taken from the Sidney tidal predications. (Sidney (07260) (tides.gc.ca)). In Sidney, the conversation from Geodetic to Chart datum is +2.129 based on Benchmark 16-198: 53C9501, which is located approximately 8 km from the Park's ditch outlet.

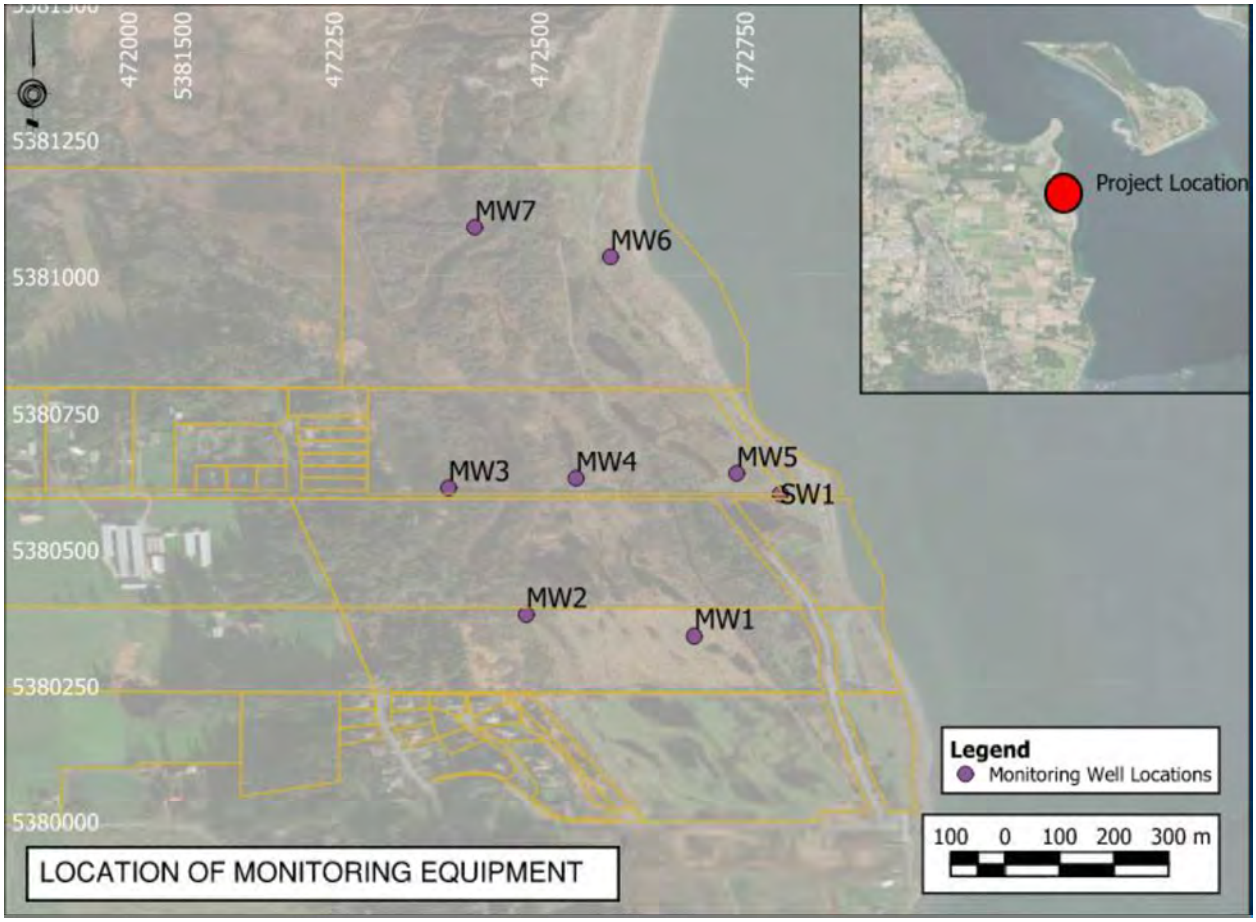

Figure 3 Location of Monitoring Equipment

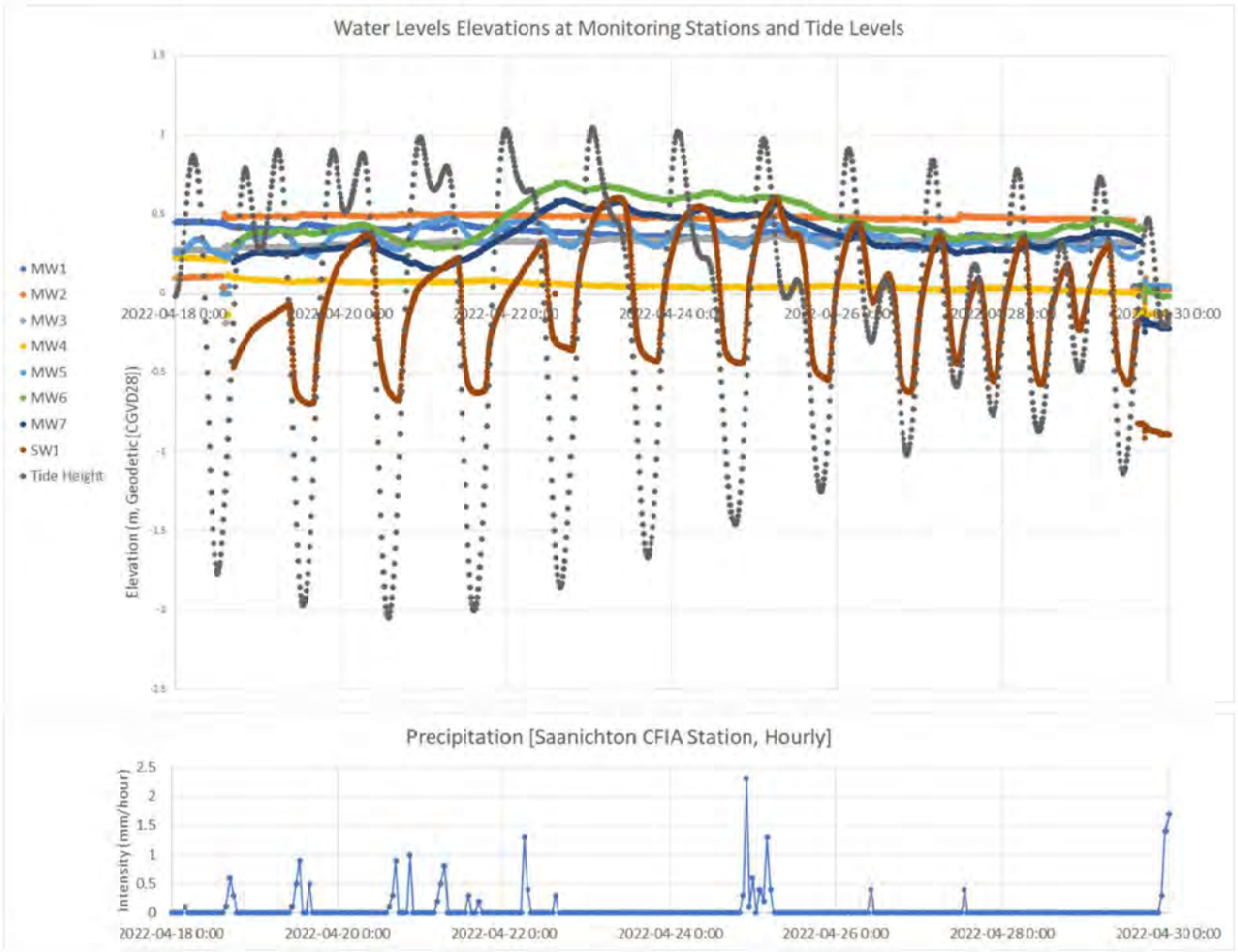

Figure 4 Observed Water Level Elevations at Monitoring Points

Surface Water:

The level logger SW1 monitored water levels in the ditch near the Park's tidal gate between April 18, 2022 and April 29, 2022. It was noted that the levels within the ditch varied in a diurnal pattern, corresponding to the daily tidal pattern. The daily fluctuation of ditch level reached as high as 110 cm crest-to-trough over a single tide cycle. Salinity levels confirmed that the rising water levels were caused by ingress of seawater and not fresh water accumulating behind a closed gate (See section 6.1.3). This water level variation and corresponding salinity suggests that the water levels in the ditch are in direct response to the tide gate allowing the ingress of seawater into the ditch system. During the monitoring period, GreatPacific field staff observed and documented discernable flow moving upstream from the outfall culvert inland into the ditch system during a rising tide.

The maximum elevation of water at SW1 (the surface water monitoring well near the outlet through the coastal berm) was approximately 0.51 m geodetic, which occurred shortly after a tide height of 1.04 m geodetic (3.16 Chart Datum). The peak water level within the ditch was lower than the peak tide level suggesting that the tidal gate/ outfall culvert partially restricts ingress of seawater, while still allowing large quantities through. Also notable is that when observing the geodetic elevations of water level at SW1 is that the troughs of the logged data do not return to the same elevation over the course of the study period. This suggested that the ditching is unable, in some cases, to fully drain the accumulated water over the course of a tide cycle.

The highest observed ditch water level (0.51 m geodetic) was higher than some of the surveyed top of bank elevations of the ditching. Assuming the water level was reached throughout the ditching system, it is possible that ditch banks in some areas may be overtopped as a result of seawater ingress, although this was not directly observed in the field. The highest tides occur during the summer and winter solstices and tides could be as much as 0.4 m higher than tides experienced during the monitoring period (excluding storm surge and based on a Large Tide Higher High Water level of 3.5 m CD, or 1.4 m geodetic). Accordingly, higher tides could further impede drainage resulting in transient overtopping of the upstream ditches.

Groundwater:

Based on visual interpretation of the measurements presented in , groundwater level monitors installed throughout the Park indicated variable levels of correlation between groundwater levels and tide levels. MW5 and MW 7 experienced the highest correlation of tidal influence. MW1, MW2 and MW4 demonstrated little to no correlation, while MW3 and MW6 demonstrated more moderated influence from tidal cycles.

Of note was the correlation between MW7 and SW1. MW7 was placed very near to Ditch 10, and the rising of MW7 in congruence (both in time and peak height) with the rising of SW1 peaks indicated that the groundwater level was affected by the rising water of the ditch system, and as such, seawater ingress was occurring in further upstream reaches of the ditches.

Overall groundwater levels from the monitoring wells were observed to be higher than the ditch bottom elevations across most of the ditching system. This suggested that the groundwater in the vicinity of the ditching will gradually discharge into the ditches when the ditch water level is lower than the nearby groundwater level. The zone of effective influence of the ditching (i.e. the areal extent of adjacent groundwater that the ditches are able to influence) is dependant on multiple factors including the hydraulic conductivity/transmissivity of the substrate material, determination of which was beyond the scope of this investigation.

The process of groundwater draining into the ditching system may play an important role in the reduction of standing water in areas without direct surface connectivity to the ditching system. When the water surface elevation in the ditch is below groundwater level, groundwater may discharge into the ditch, allowing overlying ponded surface water to infiltrate into the substrates. If the water levels in the ditch are too full due to segments of the ditch filling with seawater, this may prevent the discharge of groundwater to the ditches, and in turn preclude infiltration of ponded surface water into the substrates.

6.1.3 Groundwater and Surface Water Salinity

Salinity measurements of groundwater and surface water were conducted at select locations throughout the Park. These measurements were collected in-situ using a multi-sensor Pro DSS YSI Sonde throughout the ditch system, at the installed groundwater monitoring wells, and at select additional locations where surface water expressions were evident, and where additional shallow boreholes were cored to groundwater. Salinity readings for surface water and groundwater is presented in Figure 3 below. In summary, the following observations were found:

- For context, the salinity of nearby ambient seawater was measured to be 29.85 Sal/ PSU
- Salinity measurements within the ditch system ranged from 0.22 SAL/PSU to 29.49 SAL/PSU**.**
- With the exception of SW1 on rising tide**,** the ditch water salinity was highest in the northwest of the Park (close to Tsawout lands), and decreased towards the south.[4]
- Surface water salinity in offline ponding (i.e., surface water not part of the ditches) was substantially lower than the salinity within the ditches. Salinity in “non-ditch” surface water ranged from 0.15 to 0.64 SAL/PSU.
- Groundwater salinity ranged from 0.5 to 11.06. The highest value of 11.06 SAL/PSU was a significant deviation from the mean (2.6 SAL/PSU across 13 measurements), and was located in the northwest of the Park (near Tsawout lands).
- High salinity water (in excess of 20 SAL/PSU) was found within the Tsawout ditches and inundated areas on the Tsawout lands at the Park boundary.

[4] Salinity measurements within a ditch were taken on rising tides on April 29th (15:30, ~0.0 m tide height [Geodetic]), and May 3rd (15:30 to 16:40, ~-1.1 m to -0.7 m tide height [Geodetic]). Only one ditch salinity reading was taken on April 29th, at the surface water monitoring station SW1, which produced a reading of 29.49 SAL/PSU. A subsequent reading in the ditch near this location provided a reading of 4.45 SAL/PSU. It is believed that is effect may be due to tide levels at which measurements were taken, or that salt wedging may have played a factor.

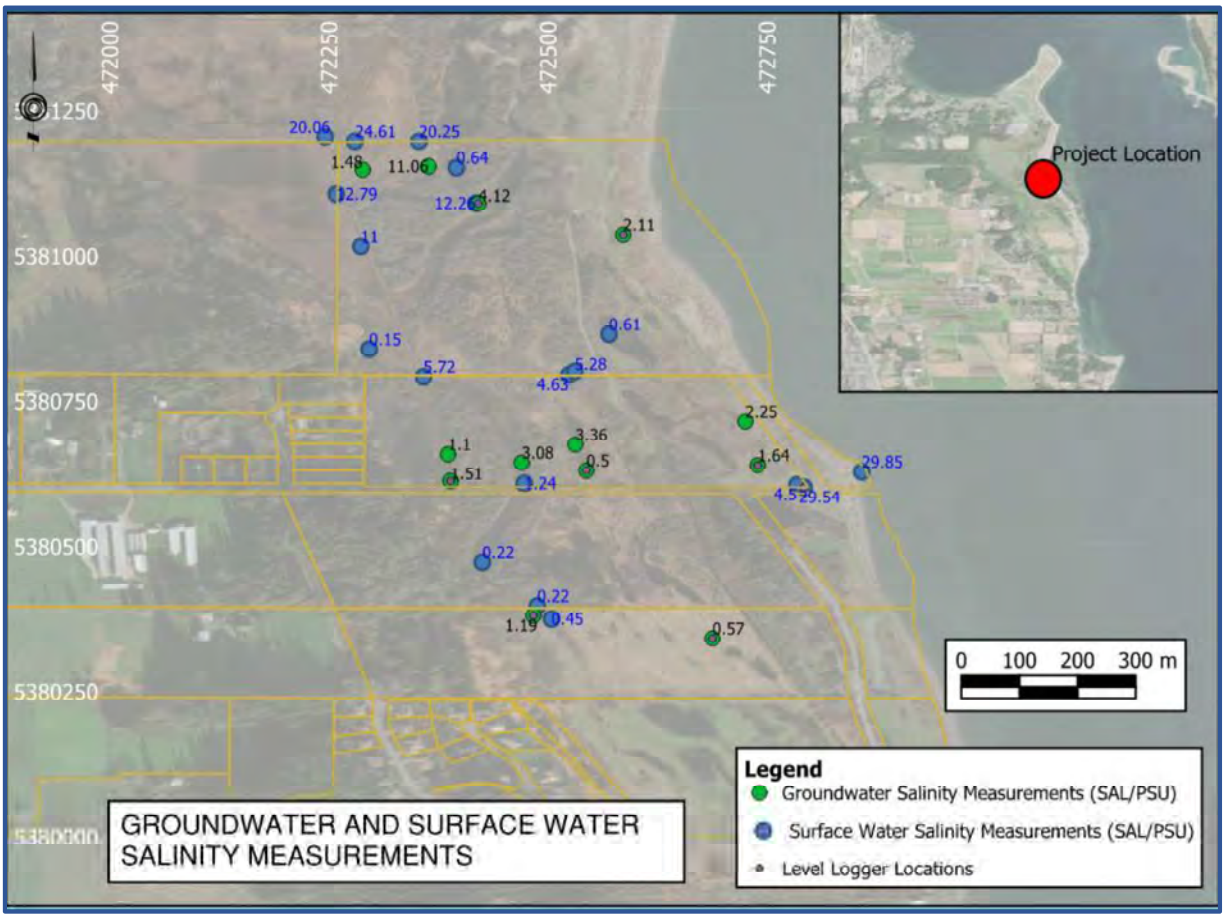

Figure 5 Salinity Measurements of Groundwater and Surface Water

The saline water encountered within the ditching system, generally exceeded groundwater and other disconnected surface ponding, suggesting that marine-origin saline water is entering the ditches. The higher salinity waters recorded within the northwest indicated that in addition to the observed ingress of seawater into the ditching from the malfunctioning tide gate at Island View Beach, seawater ingress is also occurring from the Tsawout ditching network, and adjacent Tsawout flooded lands. These observations were supplemented by field observations of active drainage from the inundated Tsawout lands into the Park ditch during the field program.

The overall observations (high salinity groundwater and surface water in the north of the site, with decreasing salinity trending southwards) correlated with data previously collected in the 2013 Camosun College Study; "*Hydrology Characterization of Island View Beach Saltmarsh"*. The Camosun study by others did not observe as high salinity water near the Central Saanich Tidal Gate during flood tide/high tide conditions, however a minor increase in salinity was observed near this tide gate under the high

tide condition. This suggested that the CRD tidal gate may have functioned more effectively at the time of the 2013 data collection.

It is important to consider the density difference between fresh water and sea water. Not only is sea water more salty, it is heavier than fresh water. This is important because when seawater is introduced into fresh water, it sinks and will settle into the lowest depressions. For example, if seawater is allowed to flood inland, it may do so very quickly, within a few hours during one tide cycle. When the tide drops and allows water to drain seaward, the upper layer of waters in the ditches is what is transported most effectively. Since fresh water "floats" over seawater, assuming no significant mixing, the upper layer of fresh water may drain out, but the deeper saline water may remain inland. It may take weeks or months to mix and drain saline water from just one short term sea water flood event. Later in the summer, when fresh water runoff dries up, what may be left behind in the low lying depressions is the deeper, saline water. This is the type of water tolerated by salt water mosquitos.

7 Ecological Context

The intention of this report has not been to provide a detailed ecological investigation of the ecosystems and interactions in this area, rather, the focus of this report is on drainage. Notwithstanding this, it is recognized that the drainage regime could have significant effects to the ecological systems within the Park. The subsections below provide an ecological context for drainage management.

7.1 Geomorphic Setting

Golder provided a geomorphic setting of the park in their 2013 report to CRD (Golder 2013). In summary, the park is situated on the western shore of Haro Straight. The shoreline of the park is part of a littoral system that transports sediments from eroding coastal bluffs south of the park, northward to Cordova Spit. Winds in Haro Strait are typically from the southeast in winter, which drives the transport of sands and gravels northward.

The natural shoreline formed from a balance of tidal water levels, waves and sediment supply. The position of the shoreline likely developed from a spit that was initiated near the source of the sediment supply (south of the park) and elongated northward as these sediments were dragged by wind and wave energies. As the spit advanced northward (to present location of Cordova Spit) it would have gradually enclosed a low lying area between the steeper upland slope and the shoreline, creating a wetland. The wetland would have been forced to drain further and further northward towards the tip of the spit.

Coastal dunes form behind the shoreline where wave transport of sands and gravels decreases and onshore wind transport of sand dominates. The accumulation of driftwood at the shoreline would have helped trap wind-blown sands on shore, enabling plants to establish and aiding in the dune formation.

7.2 General Habitat

Island View Beach Park is located within the Cordova Shore, a unique coastal landscape composed of rich intertidal and subtidal marine areas including a sandspit, dunes, eroding bluffs, coastal wetlands and rock outcrops. This area supports species at risk, as well as abundant marine bird and shellfish

populations. The Cordova Shore is part of the Sidney Channel Important Bird Area (IBA) and is recognized internationally for its diverse bird populations (Raincoast Applied Ecology, 2010).

Island View Beach is dominated by dune, coastal marsh and old field habitats (CRD, n.d (a)). The dune habitat dominates the foreshore at Island View Beach, however most of the park is low lying wetland and fields. Under the current drainage regime at Island View Beach most of the landscape is wet meadow habitat. Wet meadows occur on the land between shallow marshes and upland areas and often have high plant diversity (CRD, n.d.(a)).

7.3 Unique Biological Features

Island View Beach Park supports a complex of habitats that are in limited supply across the region. These habitats are important for rare species and species at risk, and a wide range of resident and migratory species (CRD, n.d. (b)). Species at risk documented at Island View Beach and surrounding areas are identified in Table 1.

Table 1 Species at Risk Confirmed within Island View Beach Park Boundaries and/or in Adjacent Habitat (current or historic).

Common Name	Scientific Name	Habitat Type	Provincial Status (CDC[1])	Federal Status (COSEWIC[2])
Plants				
Beach Bindweed	*Calystegia soldanella*	Coastal Sand	Blue	
Black Knotweed	*Polygonun paronychia*	Coastal Sand	Blue	
Contorted-pod Evening-primrose	*Camissonia contorta*	Coastal Sand	Red	Endangered
Yellow Sand-verbena	*Abronia latifolia*	Coastal Sand	Blue	
Invertebrates				
Common Ringlet	*Coenonympha tullia insulana*	Moist Meadow	Red	
Georgia Basin Bog Spider	*Gnaphosa Snohomish*	Wetland	Red	Special Concern
Sand-verbena Moth	*Copablepharonfuscum*	Coastal Sand	Red	Endangered
Western Branded Skipper	*Hesperia colorada oregonia*	Dry meadow	Red	Endangered
Birds				
Barn Swallow	*Hirundo rustica*	Generalist	Blue	Threatened
Common Nighthawk	*Chordeiles minor*	Coastal Sand	Yellow	Threatened
Great Blue Heron.	*Ardea herodias fannini*	Generalist	Blue	Special Concern
Short-eared Owl	*Asion flammeus*	Moist Meadow	Blue	Threatened
Other Vertebrates				
Red-legged Frog	*Rana aurora*	Wetland	Blue	Special Concern

Reference: BC CDC (2022), Raincoast Applied Ecology 2010.
1. CDC – British Columbia Conservation Data Center
2. COSEWIC – Committee on the Status of Endangered Wildlife in Canada

Beach bindweed (beach morning glory) is a sprawling, long-lived perennial plant found on sand beaches and dunes (Raincoast Applied Ecology, 2010). The documented locations of beach bindweed at Island View Beach are illustrated in Figure 6.

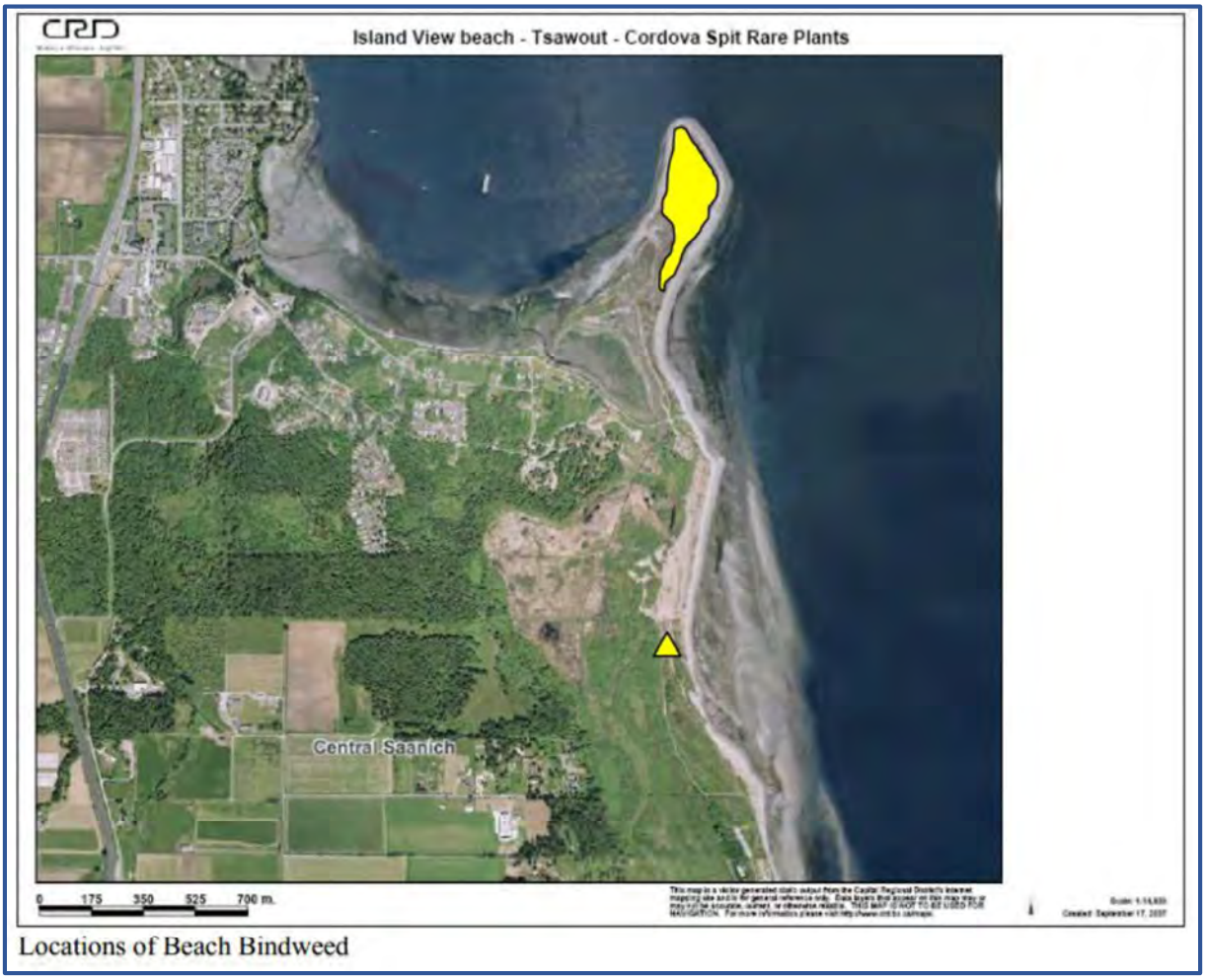

Figure 6 Locations of Beach Bindweed at Island View Beach (Raincoast Applied Ecology, 2010)

Black knotweed (Polygonum paronychia): long-lived low shrub is a characteristic species in dunes both in Georgia Basin and west coast (Raincoast Applied Ecology, 2010). The documented locations of black knotweed at Island View Beach are illustrated in Figure 7.

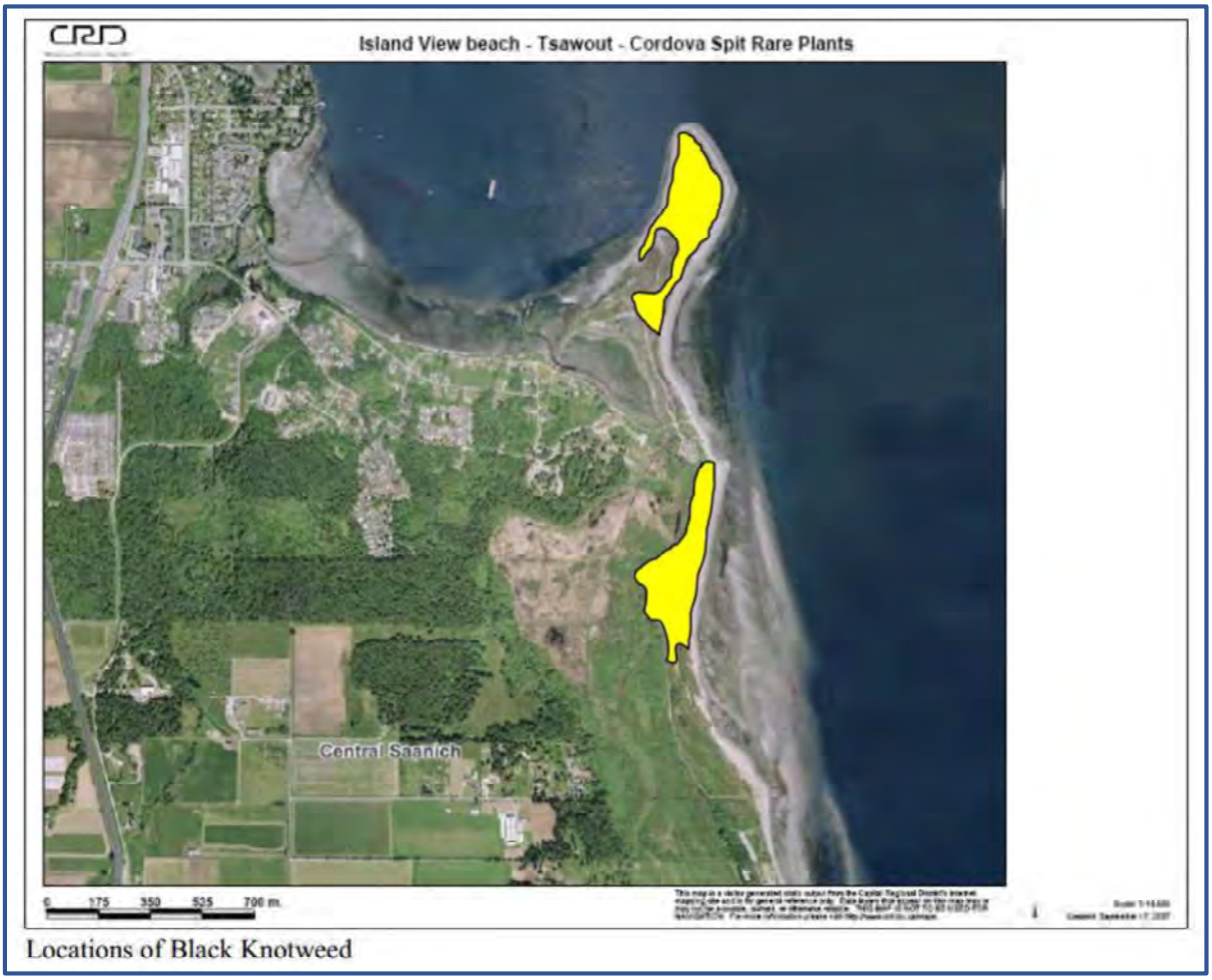

Figure 7 Locations of Black Knotweed at Island View Beach (Raincoast Applied Ecology, 2010)

Contorted – pod evening -primrose (*Camissonia contorta*) is a plant found on open, dry, sandy sites. Within the Province it is restricted to seven small patches on the coastal sand dunes of Southern Vancouver Island and Savary Island. There is one small population of contorted pod evening primrose documented on Island View Beach (CRD, n.d.(c)). The location is illustrated in Figure 8.

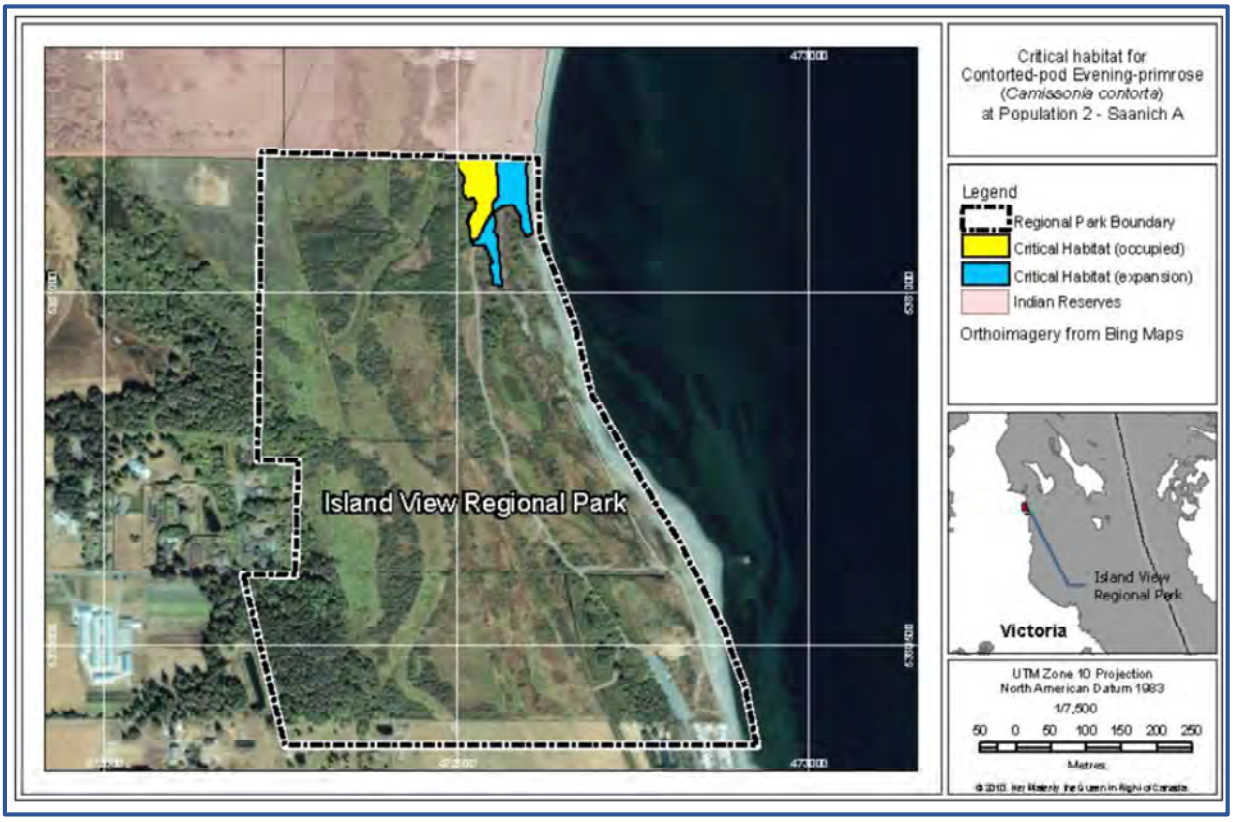

Figure 8 Locations of Contorted-pod Evening Primrose at Island View Beach (Parks Canada 2011)

Yellow sand verbena is a plant that is important for the survival of the sand-verbena moth. Only coastal sand features, such as dunes, beaches and spits along the Pacific Coast support this plant (CRD, n.d.(c)). The sand- verbena moth is dependent on the yellow sand verbena for several life stages. Adult moths feed on the nectar and lay eggs on the flowers (CRD, n.d.(c)). Documented locations of yellow sand verbena at Island View Beach are illustrated in Figure 9.

Locations of Yellow Sand Verbena

Figure 9 Locations of Yellow Sand Verbena at Island View Beach (Raincoast Applied Ecology, 2010)

Invertebrates, birds and other vertebrates identified in Table 1 were historically observed at Island View Beach or adjacent habitats (Raincoast Applied Ecology, 2010). These species are mobile and mapped locations have not been identified for Island View Beach.

7.4 Nuisance Mosquitos

Mosquitos can be a nuisance in that their bites are irritating, and they can transmit disease. Mosquitos also provide food sources for many birds, fish, amphibians and other species. To provide context for how drainage effects mosquito populations, two specialists in mosquito biology and management were contacted, Ms. Cheryl Phippen and Mr. Curtis Fediuk. There is also an Integrated Pest Management Plan for Central Saanich, CRD and Tsawout First Nation that is implemented for controlling mosquito populations (Duca 2021).

1. Over 10 different species of mosquitos have been found at Island View Beach due to the range of water salinities present. Salt water tolerant mosquitos are the most aggressive biters.

2. Mosquitos prefer stagnant, standing water, with no flow, and prefer water depths of less than 0.3 m (1 ft).
3. There were noticeable reductions in the need to deploy VectoBac® (because of fewer mosquito larvae) after ditch cleanings in 2011, 2017.
4. When woody debris was lodged in the Tsawout flag gate, the wetland was flooded to a greater degree and more VectoBac® was needed.
5. The salt tolerant mosquito *Aedes dorsalis* can lay eggs on moist soil near water, the eggs will remain viable for many years, triggered by a flood event to hatch.
6. The salt tolerant mosquito can tolerate salinities of full strength seawater.

The offline ponded waters within the Park during this field program were generally found to be non-saline.[5] Given this finding, these areas of fresh water may not be the worst offenders contributing to the issue of the most aggressive, salt tolerant, nuisance mosquitos.

Salinity measurements along the boundary of the inundated Tsawout lands indicated a large area of high salinity water, which may be well suited to the propagation of salt tolerant mosquitos. It is speculated that the flooded Tsawout lands may be a significant source of saline water and contributor to nuisance mosquitos, as evidenced by mosquito larvae counts and associated higher levels of VectoBac® that has been applied to that area by the mosquito management contractor (pers comm Fediuk 2022).

7.5 Linkages With Drainage

Drainage management is a multifaceted topic, which in some cases requires a balance of interests between different disciplines and stakeholders. Certain approaches which may be ecologically beneficial may have detrimental effects on other aspect. For example, the presence of vegetation within the channels may provide ecological benefits such as augmenting aquatic habitat, providing shade to reduce algae and grasses growth, and providing water quality improvements via sedimentation and filtration caused by slower flow. These ecological benefits may compromise efficient and effective drainage, leading to other unintended problems.

The specific unique biological features and associated plant species at risk described above are primarily associated with the coastal sand dune ecosystem along the shoreline. These locations are generally not located directly within the inland ditching system nor closely associated with inland wetland areas. Changes to the landscape of the park, including the drainage management may have the potential to affect the coastal sand dune ecosystem if interactions and linkages with the open ocean coastal processes along the foreshore are changed.

Prior to non-indigenous settlement, modification of the landscape (ditching, berming, farming) and creation of the park, inland areas may have functioned more dominantly as a coastal wetland rather

[5] The limitation of this observation needs to be recognized in that salinity measurements of offline pools were taken on a single day given the scope and compressed schedule of the field program. It is recognized that this provides a snapshot in time, which may not be representative of conditions across seasons, tide cycles or other temporally variable parameters.

than a freshwater wetland. Historic photos reported large inland areas having been inundated by high ocean water levels from combined tide and storm surge (Friends of Island View Beach 2022). A natural coastal wetland relies on episodic flooding by saltwater plus tidally induced variation in water levels to create the unique conditions suitable for coastal wetland flora and fauna (Golder 2013). Since the start of modifications to the landscape over a century ago, including the installation of drainage ditching, coastal wetland areas have likely been primarily converted to freshwater wetlands and or non flooded ground. In consideration of species at risk that are associated with the present day wetland habitats, namely the northern red-legged frog and the Georgia basin bog spider, neither species was reported to be tolerant of saline conditions (Environment Canada 2016; Environment and Climate Change Canada 2021); therefore seawater intrusion inland, into the existing wetland habitats, potentially poses a threat to these species.

Changes to the ditch system function and associated ditch maintenance activities (e.g. new, reduced or increased maintenance practices) have the potential to change the existing species assemblage that presently occupy the park area. To fully understand the implications of proposed actions, an assessment of potential environmental effects should be conducted.

8 Climate Change Sea Level Rise and Seismic Events

The Park will be affected by climate change, and in particular sea level rise given that some inland areas are below present day high water sea levels. Over the next 20 years, relative sea level rise was estimated to be 0.15 m (AECOM 2015) for the Victoria coastline, including Island View Beach. The future extreme high water sea levels for the Victoria coastline were estimated to be 3.25 m, 3.69 m, and 4.58 m GD for the years 2050, 2100 and 2200 respectively (AECOM 2015).

Seismic events can also affect the flood risk of upland areas. Earthquakes can cause liquefaction of ground substrates, causing subsidence of the ground, which if the shoreline, or portions of the shoreline of the Park suddenly drop as a result of a locally based earthquake, this could pose a flood risk to the Park. Also, tsunamis can be generated from earthquakes and can travel great distances, affecting areas several hundreds of km away. A report prepared for the CRD presented potential tsunami scenarios where Island View Beach Park lands could be inundated with 2 m to 4 m of water depth (Associated *et al* 2021).

As a long-term planning decision, the CRD in conjunction with its partners, will need to determine whether the management strategy will be to continue to attempt to protect this area from inundation, or to allow nature to run its course which may result in more frequent inundation of the Park lands and associated effects (eg. Alteration/elimination of habitats and species to those tolerant of higher salinities, greater numbers of salt tolerant mosquitos). Sea level rise is further discussed under separate cover within the coastal berm assessment completed by GreatPacific.

9 Summary Conclusions

Island View Beach Regional Park is host to a complex hydrodynamic system which has been investigated, in part, by other previous studies. The conclusions derived from this study of the drainage network include the following:

- The drainage network demonstrated deficiencies and there are opportunities for improvement to reduce standing water and improve drainage conveyance from the low-lying Park areas to the marine environment.
- The tide gate located within the coastal berm at Island View Beach was not functioning effectively to prevent substantial quantities of seawater from entering the ditching network.
- The grading of the ditch network was not positively sloped downhill from all upstream areas to the ditch's outfall. This condition will result in hydraulically isolated (ponded) areas of the ditch when downstream areas are drained. In the current condition (non-functional tide gate at Island View Beach), dependant on tide heights, certain (but not all) areas may be prevented from becoming hydraulically isolated due to the daily inflow and outflow of tidal water.
- The ditches exhibited substantial areas of vegetation overgrowth and debris extending into the channel, preventing accessibility, and resulting in restrictions to hydraulic ditch conveyance capacity.
- Adjacent to the site, on the Tsawout lands, is a large, inundated area containing saline water. The Park ditches had indirect connectivity to portions of these areas as observed by overland flow from the Tsawout Lands into the Park. Furthermore, the high salinity values of water in the Park's ditching immediately adjacent to the Tsawout lands corresponds to the high salinity values also observed within the Tsawout ditching.
- There were multiple areas of the Park (and external lands i.e. Puckle Farm) which do not exhibit positive drainage connectivity to the Park ditching system. It may be the case that these areas infiltrate into the substrates and eventually discharge into the Park's ditch system as groundwater when the ditch is in a low water state.
- Due to the heavier nature of seawater over freshwater, seawater intrusion inland will tend to occupy the lowest lying areas and may take a prolonged period of time to evacuate the salts. The saline waters are linked to the most aggressive biting mosquito species.
- Based on a time period over the next 20 years, sea level rise was predicted to be on the order of 0.15 m, which could pose an incremental reduction in hydraulic performance of the drainage system under its existing configuration/size.
- Changes to the ditch system function and associated ditch maintenance, whether it be new practices, increased frequency or reduced efforts or actions, have the potential to change the existing wetland ecology, including Species At Risk.

10 Management Advice

With the objective of maintaining the functionality of the drainage system to provide effective drainage of the Park lands, the following items are presented for consideration by the CRD, in conjunction with

their partners in drainage management for the Park (e.g. District of Central Saanich, Tsawout First Nation, other stakeholders). It is recognized that the responsibility for addressing drainage involves multiple organizations, and as such remedial actions would likely require communications amongst multiple interest groups. Also, new actions have the potential to affect the ecology within the park, and the potential effects of future actions should be assessed and evaluated. The items below are generally presented in a suggested order of priority.

1. Improve the effectiveness and reliability of the tidal gate at Island View Beach Park such that it precludes the ingress of seawater into the ditching system. To accomplish this, consideration of the following potential aspects should be given:
    a. A change to the type or frequency of routine maintenance activities may be needed
    b. The gate may be damaged and repairs to the gate may be needed
    c. There may be excessive debris transported downstream by the ditch system that is fouling the tidal gate and preventing it from sealing
    d. The style and/or installed configuration of the current tidal gate may have inherent issues and alternative devices should be considered.
2. Preclude ingress of seawater from the Tsawout lands into the Park ditches via the repair/ replacement of the Tsawout tidal gate.
3. Improve the conveyance of waters within the ditch and provide for access along the full ditch network to facilitate effective maintenance and to allow for future monitoring / assessment of the system. This could be achieved by removing dense overgrowth, vegetation and/or debris from within the conveyance area of the ditch, as well as areas along at one side of the ditch bank. This could likely be implemented in spot locations balanced with an objective of causing minimal disturbance and maintaining as much vegetation as practicable. A phased, incremental approach of addressing the most severely restricted areas first should also be considered.
4. If, subsequent to the above, unwanted ponding is occurring in hydraulically isolated areas of the ditching system, the ditch inverts could be reconditioned/regraded such that positive (downhill) conveyance is provided to the ditch outlet, such that reverse grades and/or unwanted ponding within the ditch is avoided.
5. In the event that large areas of unwanted surface water ponding (offline of the ditches) remain without direct connectivity to the ditching system, and there are adverse issues with these areas (e.g. high mosquito production), consider the installation of additional lateral ditches and/or a tile drainage system to drawdown standing surface water in these areas.

11 Potential Future Activities

Additional studies could be completed to further describe and document the water and drainage regime with greater precision. The following future activities are offered for consideration as they would lead to a more informed understanding of the factors affecting the park drainage infrastructure and ecology within the park. This is intended to be a list of options that could be completed as budgets allow.

1. Investigate technologies (alternatives to the existing tidal gate) for effectively preventing seawater intrusion into the ditching system and complete a more detailed assessment of the existing flap gate.
2. Collect drainage system data over an extended period of time to further qualify and quantify the hydrotechnical regime of these lands. Collect data to capture seasonally variant weather and precipitation conditions in combination with the range of tidal cycles.
3. Survey and evaluate the infiltrative capacity of the ditches to drain surface waters. Extend this study into the dry season to improve understanding of flow capacity.
4. Evaluate the areal extent of the Tsawout lands draining towards the park, hydraulic linkages, and seawater intrusion, and compare before and after results in relation to the condition of the tidal gate on Tsawout lands.
5. Monitor and evaluate the ingress of seawater through the Park tidal gate into the ditch system during a rising tide, and ability of ditching system to fully drain the accumulated water over the course of a tidal cycle. Compare before and after results in relation to the condition of the tidal gate/outfall culvert.
6. Monitor and evaluate if/how high tides may impede drainage resulting in transient overtopping of the upstream ditches.
7. Characterize the zone of effective influence of the ditching (i.e. the areal extent of adjacent groundwater that the ditches are able to influence), taking into account multiple factors including the hydraulic conductivity/transmissivity of the substrate material.
8. Collect data on salinity measurements in low-laying, non-draining ditch depressions to document whether seawater is trapped in these sections of ditches, and correlate to saltwater mosquito habitat.
9. Investigate if a correlation exists between the presence of *Aedes dorsalis* saltwater mosquitos and areas of high salinity measurements, particularly along the boundary of the inundated Tsawout lands and other areas near the Park tidal gate.
10. Undertake an environmental assessment to identify and evaluate the potential effects of a changed ditch management regime on Species at Risk identified in the park, and on current ecosystem function and species assemblages.

12 References

AECOM. 2015. Coastal Sea Level Rise Risk Assessment. Prepared for the Capital Regional District.

Andy Blaine Consulting. 2011. Topographic survey data of Island View Beach Regional Park. Collected for Capital Regional District.

Aquatex Scientific Consulting Ltd. 2013a. Island View Ditch System – CRD Parks Lands. Prepared for Capital Regional District Feb 22, 2013.

Aquatex Scientific Consulting Ltd. 2013b. Island View Beach Ditch Maintenance– CRD Parks Lands. Prepared for Capital Regional District Apr 25, 2013.

Aquatex Scientific Consulting Ltd. 2018. Island View Beach Ditch Maintenance– CRD Parks Lands. Prepared for Capital Regional District June 7, 2018.

Associated Engineering, DHI, Westmar Advisors. 2021. Task 3 – Tsunami Modelling and Mapping Report. Prepared for Capital Regional District.

Camosun College. 2013. Hydrology Characterization of Island View Beach Saltmarsh. Camosun College 208B Project Report, Spring 2013.

Capital Regional District (CRD). n.d. (a). Ecosystems and Habitats at Island View Beach Regional Park. No date.

Capital Regional District (CRD). n.d. (b). Island View Beach Regional Park: Executive Summary of the Natural History and Ecology. No date.

Capital Regional District (CRD). n.d.(c). Species of Interest and their Habitats at Island View Beach. No date.

Duca Environmental Services Ltd. (Duca). 2021. District of Central Saanich, Tsawout First Nation and Capital Regional District Integrated Pest Management Plan PMP # 825-0004-21/26 Mosquito Population Management and Control Program 2021-2026. Prepared for District of Central Saanich, Tsawout First Nation and Capital Regional District.

Environment Canada. 2016. Management Plan for the northern red-legged frog (*Rana aurora*) in Canada [Proposed]. Species at Risk Act Management Plan Series. Env Can Ottawa.

Environment and Climate Change Canada. 2021. Management Plan for the Georgia Basin bog spider (*Gnaphosa snohomish*) in Canada [Proposed]. Species at Risk Act Management Plan Series. Env and Climate Chanage Can Ottawa.

Fairbarns, M. (Aruncus Consulting). 2007. Island View Beach Central Saanich Tsawout Reservation Cordova Spit Municipal Park Inventory and Management Recommendations for Rare Plants. Dated August 2007.

Friends of Island View Beach. 2022. Historical photos accessed online at http://www.friendsofislandviewbeach.com/imagesovertime.html

Golder Associates. 2013. Island View Beach Regional Park Site Visit and Coastal Berm Review. Prepared for Capital Regional District.

GreatPacific Consulting Ltd. 2022. Coastal Berm Assessment– Island View Beach Regional Park. Prepared for Capital Regional District.

Lowen Hydrogeology Consulting Ltd. 2012. Hydrologic and Hydrogeologic Site Assessment. Prepared for Capital Regional District.

Parks Canada Agency. 2011. Recovery Strategy for the Contorted-pod Evening-primrose (*Camissonia contorta*) in Canada. Species at Risk Act Recovery Strategy Series. Parks Canada Agency. Ottawa. vi + 30 pp.

Raincoast Applied Ecology. 2010. Cordova Shore Conservation Strategy: Prepared for CRD Regional Parks, Tsawout First Nation and Canadian Wildlife Service. Dated August 2010.

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Cheryl Phippen, 2022. Field Coordinator. BWP Consulting Inc.

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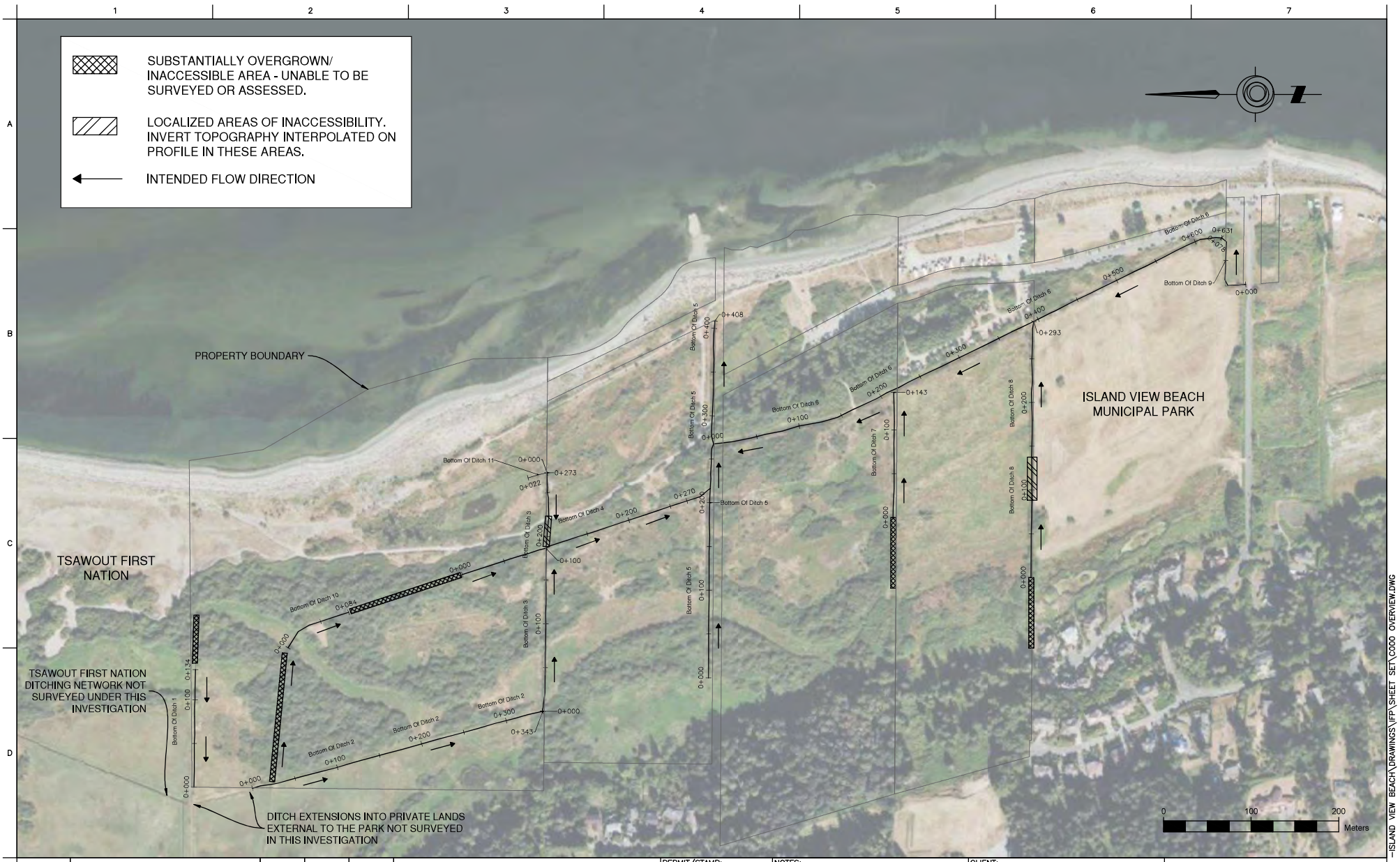
Appendix 1 Drawings C000 – C002



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NOTES:
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2. ALL ELEVATIONS MEASURED IN METERS FROM GEODETIC (CGVD 28) DATUM.

CLIENT:
CAPITAL REGIONAL DISTRICT

PROJECT NUMBER: 1039–004

ISLAND VIEW BEACH SURVEY DATA OVERVIEW

DRAWING NUMBER: C000

SCALE: 1:2000

REV: REVA

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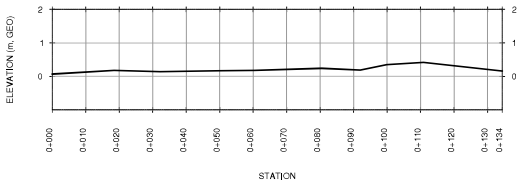

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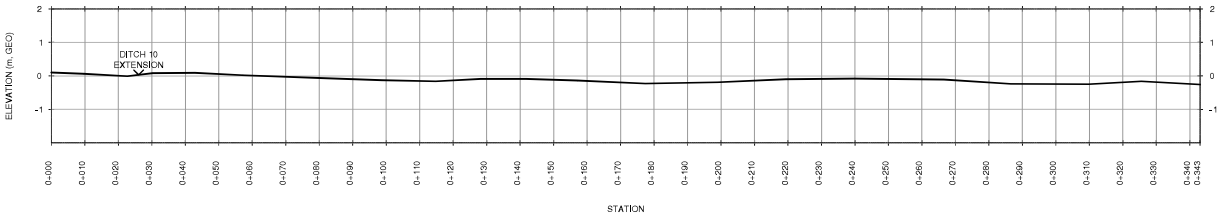

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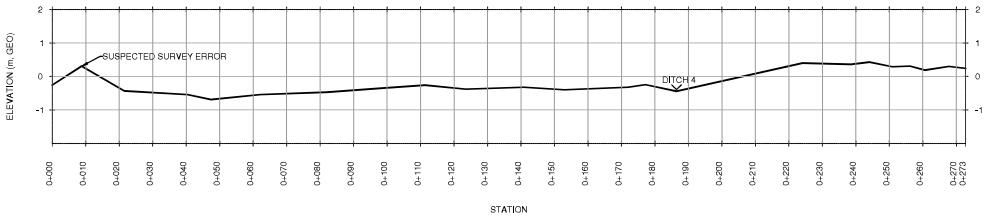

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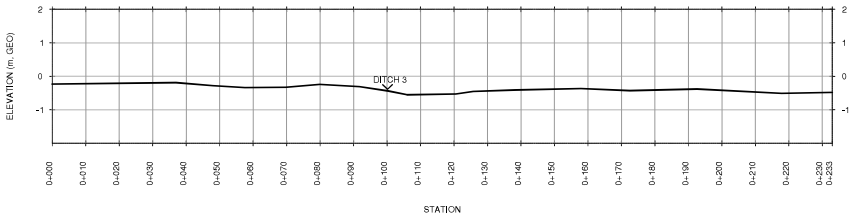

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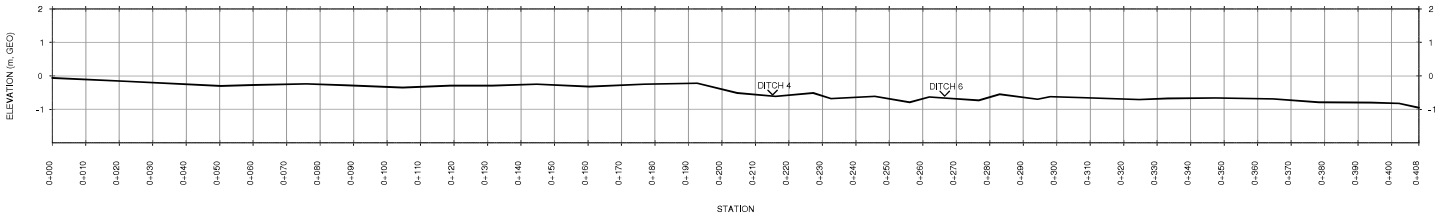

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2. ALL ELEVATIONS MEASURED IN METERS FROM GEODETIC (CGVD 28) DATUM.

CLIENT: CAPITAL REGIONAL DISTRICT

PROJECT NUMBER: 1039–004

ISLAND VIEW BEACH
SURVEY DATA
PROFILE VIEWS 1

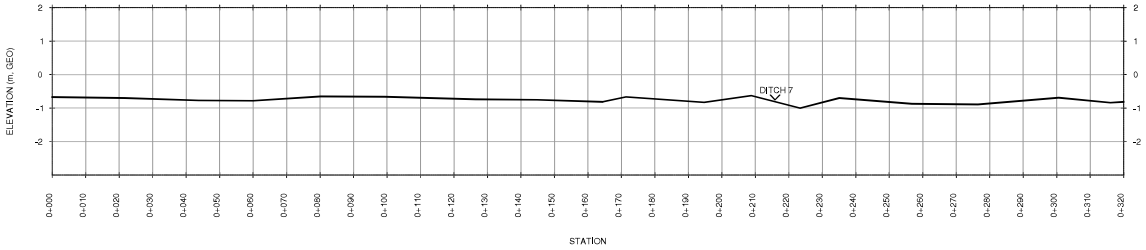
DRAWING NUMBER: C001

SCALE: 1:750, 10V:1H

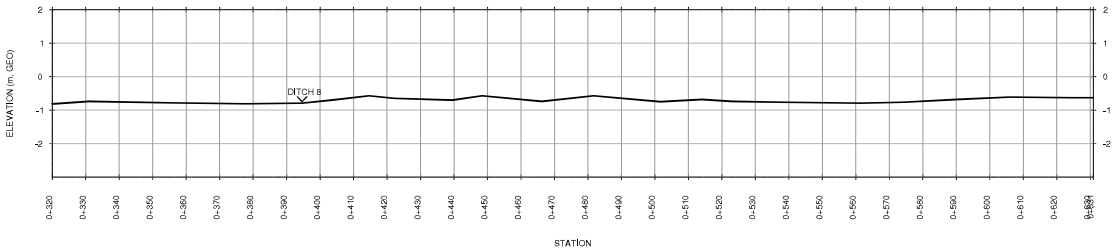
REV: REVA

FILE: W:\1039-004-CRD -ISLAND VIEW BEACH\DRAWINGS\FP\SHEET SET\M001 PROFILE VIEWS 1.DWG

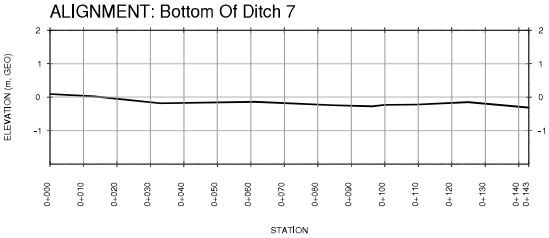
ALIGNMENT: Bottom Of Ditch 6



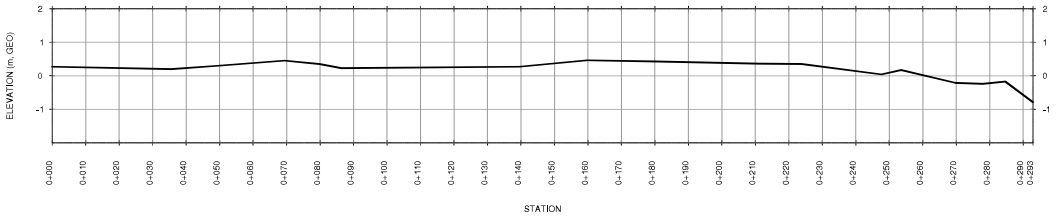
ALIGNMENT: Bottom Of Ditch 6



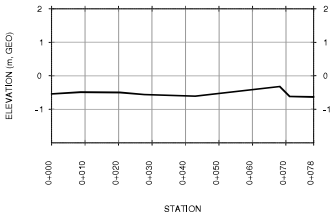
ALIGNMENT: Bottom Of Ditch 7



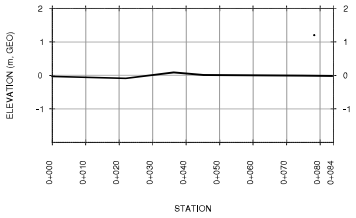
ALIGNMENT: Bottom Of Ditch 8



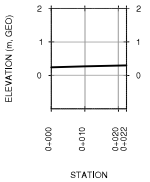
ALIGNMENT: Bottom Of Ditch 9



ALIGNMENT: Bottom Of Ditch 10



ALIGNMENT: Bottom Of Ditch 11



DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
22-05-13	PRELIMINARY	ECL		

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2. ALL ELEVATIONS MEASURED IN METERS FROM GEODETIC (CGVD 28) DATUM.

CLIENT:
CAPITAL REGIONAL DISTRICT

PROJECT NUMBER: 1039–004

ISLAND VIEW BEACH
SURVEY DATA – DITCHING SYSTEM
PROFILE VIEWS 2

DRAWING NUMBER: C002

SCALE: 1:750, 10V:1H

REV: REVA

FILE: W:\1039-004-CRD -ISLAND VIEW BEACH\DRAWINGS\FP\SHEET SET\C002 PROFILE VIEWS 2.DWG

Appendix 2 Site Photos

Photo 1:

Description: Terminus of ditch network outfall. Outfall culvert terminates in an antiquated flap gate. Approximately 115 m upstream of this point, a separate tidal gate is understood to lie within a chamber in a coastal berm.

Photo 2:

Description: Inlet to storm culvert at coastal berm. Valve chamber is approximately 10 m downstream of this location.

A substantial quantity of debris is present on the inlet cage of this culvert (to approximately pipe springline) resulting in reduced hydraulic capacity.

During high/flood tide conditions, noticeable flow through the culvert from downstream to upstream (i.e. from the marine environment to upland) was observed

Photo taken on the rising limb of a low tide. Tide: ~0.55 m Chart Datum (CD)

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
PROJECT NAME: IVBRP DRAINAGE ASSESSMENT	**ISLAND VIEW BEACH REGIONAL PARK**
PROJECT No. 1039-004 / PREPARED BY: BP	**DRAINAGE ASSESSMENT**
DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 1 and 2	

Photo 3:

Description: Section of ditch line within Ditch Section 9.

Photo 4:

Description: Top of ditch bank along portion of Ditch Section 9. Top of bank is elevated above adjacent lands.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
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DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 3 and 4	

Photo 5:

Description: View of Section 8 ditch, demonstrating generally shallow/ poorly defined swale with vegetated grasses within depression.

Photo 6:

Description: Ponded water in an up-stream segment of Section 8 ditching.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
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DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 5 and 6	

Photo 7:

Description: Overgrowth of vegetation in along Section 5 ditch. Ponded water visible in foreground.

Photo 8:

Description: Upstream extent of Ditch 7 extending into overgrown vegetation.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
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DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 7 and 8	

Photo 9:

Description: View of Section 6 ditching.

Photo 10:

Description: Debris obstruction within ditching at intersection of Sections 5 and 6.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
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DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 9 and 10	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

Photo 11:

Description: Substantial ponded water without direct surface discharge linkage to ditching, located in the west of the Park between Section 5 and 7 ditches.

Photo 12:

Description: Main channel of ditch Section 6.

Long grasses are observed within the channel thalweg.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
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DATE: 2022-05-13 / REVIEWED BY: JC	PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03
Photo 11 and 12	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

Photo 13:

Description: Overgrown vegetation with-in upstream areas of Section 5 ditch.

Photo 14:

Description: Large area of standing water located in the western segment of the Park between Section 3 and 5 ditches.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
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DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 13 and 14	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

Photo 15:

Description: Vegetative debris in the area of Section 4 ditch .

Photo 16:

Description: View of Section 4 ditching.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
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Photo 15 and 16	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

Photo 17:

Description: Debris within eastern reach of Ditch Section 3.

Photo 18:

Description: Shallow ditching with long grass growth within the further east reaches of Ditch Section 3.

Ditch appears to be intended to drain a low lying area but does not appear to effectively do so.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
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PROJECT No. 1039-004 / PREPARED BY: BP	DRAINAGE ASSESSMENT
DATE: 2022-05-13 / REVIEWED BY: JC	PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03
Photo 17 and 18	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

Photo 19:

Description: Ditching along Ditch Section 2. Sidecasted materials shown along the ditch.

Photo 20:

Description: Looking east towards Ditch 10 extension near the intersection with Ditch 2. Overgrowth precluded inspection.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
PROJECT NAME: IVBRP DRAINAGE ASSESSMENT	**ISLAND VIEW BEACH REGIONAL PARK**
PROJECT No. 1039-004 / PREPARED BY: BP	**DRAINAGE ASSESSMENT**
DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 19 and 20	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

Photo 21:

Description: Inundated Tsawout lands (at left) in relation to Ditch 1 (at right)

Direct drainage connectivity was observed between the inundated area and Ditch 1, although the extent/contributary area draining to the ditch was not ascertained.

Photo 22:

Description: Looking northwest towards Tsawout lands from Ditch 1. Significant extend of inundation is observable.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
PROJECT NAME: IVBRP DRAINAGE ASSESSMENT	**ISLAND VIEW BEACH REGIONAL PARK**
PROJECT No. 1039-004 / PREPARED BY: BP	**DRAINAGE ASSESSMENT**
DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 21 and 22	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

Photo 23:

Description: Observed overland flow from the inundated Tsawout lands (left) to Ditch 1.

Photo was taken on the afternoon of April 22, during low tide conditions approximately 14.5 hours after a tidal high of 3.16 m Chart Datum (Sidney Predictions).

A subsequent visit did not observe a similar magnitude of surface drainage to the Park ditches, and it is believed that at the 3.16 m high tide, the Tsawout ditch overtopped its banks, resulting in inundation and flow to the Parks ditches.

Photo 24:

Description: Upstream reaches of Ditch 1, showing generally poor conveyance to downstream.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
PROJECT NAME: IVBRP DRAINAGE ASSESSMENT	ISLAND VIEW BEACH REGIONAL PARK
PROJECT No. 1039-004 / PREPARED BY: BP	DRAINAGE ASSESSMENT
DATE: 2022-05-13 / REVIEWED BY: JC	PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03
Photo 23 and 24	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

Photo 25:

Description: Ditching system of Ditch Section 1.

GREATPACIFIC ENGINEERING & ENVIRONMENT	CLIENT: CRD
PROJECT NAME: IVBRP DRAINAGE ASSESSMENT	**ISLAND VIEW BEACH REGIONAL PARK**
PROJECT No. 1039-004 / PREPARED BY: BP	**DRAINAGE ASSESSMENT**
DATE: 2022-05-13 / REVIEWED BY: JC	**PHOTOS: 2022.04.14/18/22/28/30, 2022.05.03**
Photo 25	"This Figure is prepared solely for the use of our customer as specified in the accompanying report. GreatPacific Consulting Ltd. assumes no liability to any other party for any representations contained in this Figure."

GREATPACIFIC
ENGINEERING & ENVIRONMENT

Appendix 3 Aerial Photo (circa 1920's)

1926

CRD Regional Parks

2022 Island View Beach Regional Park Drainage Ditch Maintenance

Status as of July 13, 2022

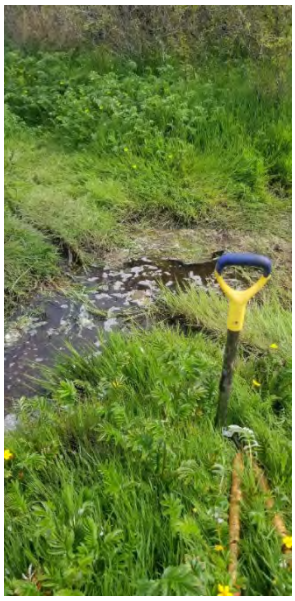
Activities:

- Ditch maintenance activities at Island View Beach Regional Park (IVBRP) began on June 7, 2022.
- As of July 13, 2022, 168 hours has been spent hand clearing ditches in sections not accessible by heavy equipment due to soft soils (see photos next page). The work being completed includes:
    - the removal of logs placed by park users to cross the ditches
    - the removal of clumps of grass and horsetail that are slowing the movement of the water through the ditches
    - cutting back branches that are overhanging the ditches
    - clearing a one-metre-wide section of vegetation adjacent to the ditches to provide full access to mosquito contractor staff; this vegetation is being piled by staff elsewhere on site
    - all work is being completed by hand using pole saws, loppers, shovels, rakes and pitch forks
- Another 42 hours is needed to complete the ditching work in areas too wet for heavy equipment.
- Another pass will be required during the growing season in order to control vegetative regrowth. This will require another 100 hours of labour.
- 310 hours of labour will be required to complete the IVBRP project.
- Observations on the condition of the drainage ditch system include:
    - Water in the ditches moving in all sections prior to the drainage work
    - No significant increase in flow after debris was removed
    - No blockages in the ditches resulting in water backing up and/or overflowing
- Aqua-Tex Scientific Consulting Ltd.'s (Aqua-Tex) annual ditch survey is scheduled for July. This survey includes two days of field work, which is summarized into a report. The CRD will receive the report in August and will begin to implement the ditch maintenance recommendations identified in the report.
- If Aqua-Tex recommends using heavy equipment to clear the ditches, a contractor will be hired to conduct this work; depending on availability this could happen as early as August.

- Duka Environmental Services Ltd. (Duka), the contractor for the annual mosquito control program, started its work at Island View Beach in late January 2022 and will continue into late October. Duka provides a monthly summary of the control program to the CRD

Before and After Photos of Ditch Clearing


Example 1

Example 2


Example 3

Example 4

Typical view of unimpeded IVBRP drainage ditch

Challenges:

- The ditch system starts on CRD land but one section of the ditch extends under a fence to private land. The photo to the right shows debris in the ditch on the private property (see also map on next page – black line indicates the location of this private property).
- Staff have observed what are believed to be stickleback fry in the ditches. This hinders further work being done in the ditches until a Section 11 permit from the Ministry of Environment and a permit from the Department of Fisheries and Oceans is obtained.

Status of IVBRP Drainage Ditch Maintenance Activities as of July 13, 2022

Ditch Colour

- Blue – completed
- Black – located on private property
- Red – not completed

Duka Environmental Services Ltd.

Central Saanich, Capital Regional District and Tsawout First Nation
Mosquito Surveillance and Control Program

Island View Beach Regional Park Summary 2022

The annual Nuisance Mosquito Surveillance and Control Program is provided for the benefit of all District of Central Saanich residents, businesses and visitors. It is a partnership between the three agencies above. The CRD control program boundaries are confined to the Island View Beach Regional Park.

The annual control program begins each January and extends through to late August and early September depending on conditions. The extent of development habitats, the magnitude of populations and the diversity of species is greatest between February and April, when water accumulations are also typically at their greatest. Larval mosquitos require non-flowing, standing waters for development. Mosquitos are able to development in salt water and freshwater habitats, and in waters with any range of salinity between these.

Mosquito development at Island View Beach (IVB) old field habitats and the adjacent Municipal Park and Tsawout First Nations salt marsh is initiated by snowmelt, precipitation and fluctuating tidal heights. The predominant habitat at the CRD IVB is temporary, variable and fluctuating water bodies created by surface water accumulations in depressions and low-lying areas located throughout the old, no longer active, farm fields. Their depths, size and persistence are affected by tidal heights, precipitation, seepage, surface water runoff and weather, including day time temperatures, humidity and winds etc. Seepage from the adjacent, western "bluff" maintains several permanent ponds and marshes along the base of this ridge. These fluctuate in response to the impacts of weather (precipitation, temperatures) on runoff and seepage.

In a typical season, these old field temporary sites have evaporated/drained by late May and early June. The more permanent ponds at the base of the bluffs tend to become reduced in size as the season progresses, but they continue to produce recurrent larval mosquito development. Extreme, or several days of precipitation can cause both temporary and permanent habitats to temporarily increase in size with a concomitant surge in larval development.

Field staff visit the Regional and Municipal parks at IVB, and the adjacent Tsawout First Nations salt marsh weekly, beginning in late January. Larval populations are monitored, samples collected for taxonomic identification and treatment/control of larvae is completed using a bio rational, bacterial larvicide (VectoBac 200G) containing *Bacillus thuringiensis* var. *israelensis*, *Serotype H-14, Strain AM 65-52*.

20619-91A Ave, Langley, B.C. Canada V1M 2X2 Tel: 1 604 881 4565 Fax: 1 866 759 5902
Email: duka@telus.net Website: www.duka.consulting

Since we cannot definitively determine the exact source of a mobile, active insect pest such as mosquitos, the magnitude, or contribution to the adult mosquito populations and localized nuisance would likely be a reflection of the predominant habitat type and its area.

The attached graph presents the total volumes of VectoBac 200G applied annually for each of the partners at island View Beach. A review of the past four seasons, 2019-2021 confirms that the total volume of treatment required at CRD IVB has ranged from 10-25% of the total treatments required for all three (partners) areas.

The great majority of adult mosquitos collected from within the boundaries of the IVB, at the Tsawout salt marsh and at adjacent properties over the past several years have been *Aedes dorsalis*. These mosquitos develop in salt water habitats, the predominant habitat of the Tsawout salt marsh. The predominant species of *Aedes* larvae collected at CRD IVB sites is *Aedes sticticus*.

I trust this provides you with the summary information you require.

Yours truly,

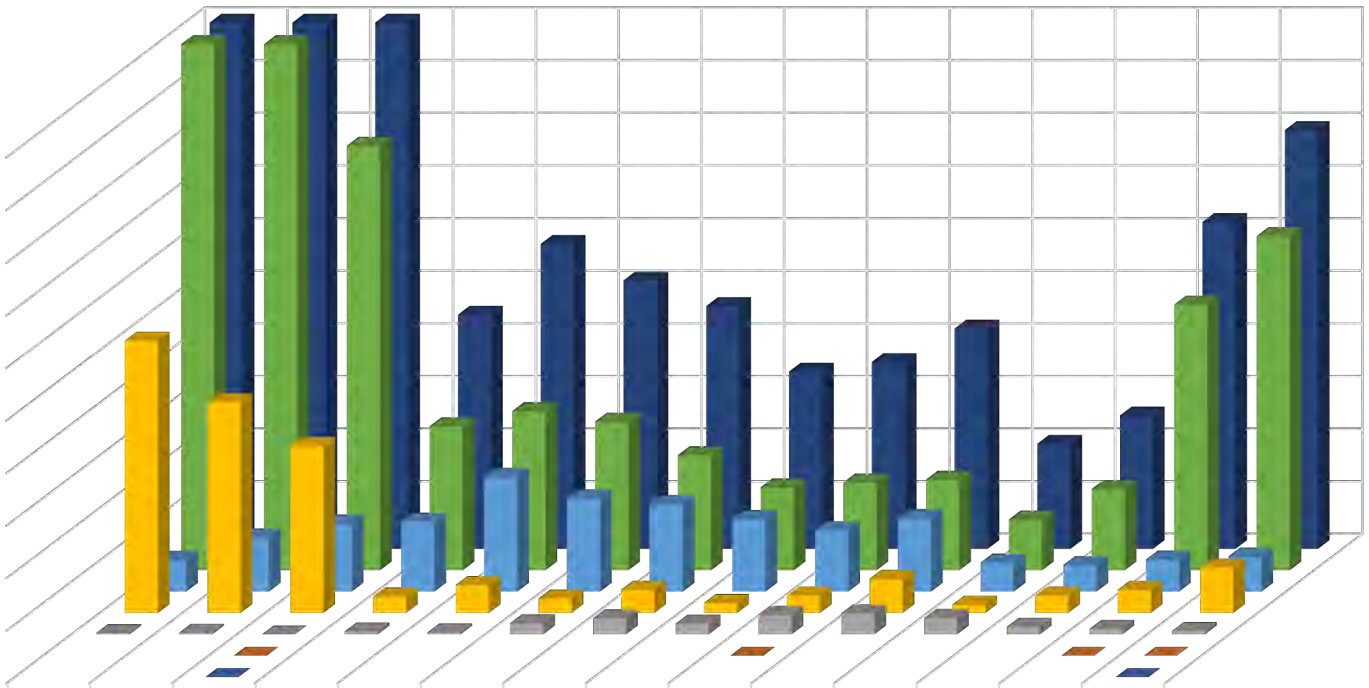
Curtis Fediuk BSc., RPBio.,
President

Duka Environmental Services Ltd.
19732 – 68th Avenue
Langley, B.C. V2Y 1H6

Tel: 604 881 4565
Email: duka@telus.net
Website: duka.consulting

Providing communities with safe, effective and sustainable mosquito and biting fly control services for over 35 years.

Central Saanich - Island View Beach Area - VectoBac 200G Applications
Summary 2009 - 2022 (12 July*)



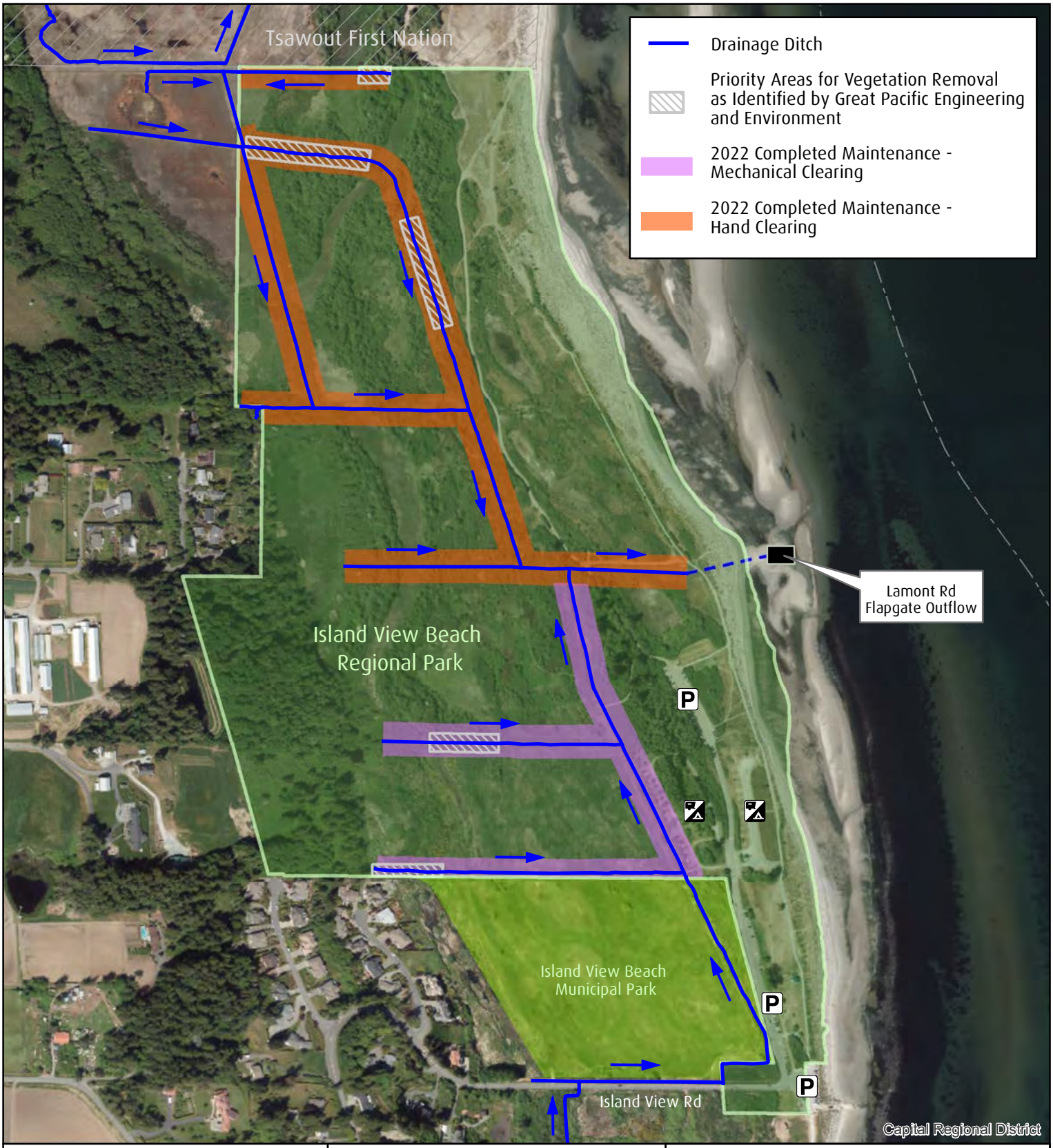
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Tsawout Flapper gate repair			XX											XX
Ditch cleaning /Maintenance			X						X				X	X
Central Saanich, sites #69 A,B	3.00	3.30	0.00	5.70	3.90	21.50	30.80	20.70	37.50	40.30	31.57	14.40	10.55	6.55
Central Saanich, sites #123	518.00	402.00	319.05	31.80	53.60	27.77	44.55	19.60	33.40	65.30	16.10	33.65	44.40	86.8
CRD, sites #66, #68	61.00	103.50	130.20	133.70	219.20	178.01	167.01	138.70	117.01	140.52	55.61	50.95	61.31	67.23
Tsawout, site #34	1063.00	1017.80	807.00	274.10	303.10	283.12	219.39	158.21	167.56	172.91	96.92	154.90	505.20	635.45
Totals	1645.00	1526.60	1256.25	445.30	579.80	510.40	461.75	337.21	355.47	419.03	200.20	253.90	621.46	796.03

APPENDIX B

DITCH MAINTENANCE 2022
ISLAND VIEW BEACH REGIONAL PARK

Hand Clearing and Vegetation Removal (Images 1-4): Mechanical Clearing (Image 5):

Before and After Photos (Images 6-8):



0 150 300

Metres

N W E S

UTM Zone 10N NAD 1983

Important This map is for general information purposes only. The Capital Regional District (**CRD**) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

2023-02-22-SR-RPC-IVB-Mosquitos-AppendixC.mxd I January 2023

- Island View Beach Regional Park
- Island View Beach Municipal Park
- Tsawout First Nation
- Parking Area
- Campground

Appendix B

2022 Annual Ditch Maintenance Activities
Island View Beach Regional Park

Regional Parks Committee
Staff Report
February 22, 2023

CRD
Making a difference...together

Aqua-Tex
Scientific Consulting Ltd. (1993)

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Tel: (250) 427-0260
Fax: (250) 427-0280
e-mail: aqua-tex@islandnet.com

201-3690 Shelbourne St
Victoria, B.C. V8R 4H2
Tel: (250) 598-0266
Fax: (250) 598-0263

MEMO

To: Marc Solomon, CRD Regional Park Operations Supervisor – North District

From: Cori Barraclough, M.Sc., R.P. Bio., PMP, Freshwater Ecologist
Patrick Lucey, M.Sc., R.P. Bio, Sr. Aquatic Ecologist

Re: Island View Beach Ditch Maintenance 2022

Date: September 15, 2022

This memo outlines the findings of the most recent site visit to Island View Beach Regional Park on Monday July 16, 2022 (11:30 a.m. – 1:30 p.m.) by Aqua-Tex staff members Cori Barraclough (RP Bio, PAg) and Patrick Lucey (RP Bio). This memo is a supplement to an email summary and .kmz file provided to CRD on July 16 following the field assessment.

At the time of assessment, the tide was 0.58 m and falling, with low tide occurring at 1:06 p.m. and high tide occurring at 9:10 p.m. at Saanichton Bay (Figure 1). The tide was low enough to observe the tide gate and low water levels in the ditch network.

Figure 1. Tidal cycle for Saanichton Bay, July 16, 2022

The channel conditions were significantly improved over the 2021 assessment due to the extensive ditch maintenance work that was completed July 14-15, 2021. The remains of sidecast material from this work was evident, but was well spread out and did not appear to be impeding drainage from the fields into the ditches.

Vegetation growth in the channels was very minimal and positive drainage (flow) was evident in many places as the tide went out. There were no impediments to flow that were observed. Trails were generally very accessible.

There was no evidence of sediment building up in the channels and many ditches were dry. The tide was still falling upon our arrival so we expected water to be present.

The ditches did not appear to be over-excavated, which would lead to standing water, but grading these channels is very difficult because the land is so flat. Some observed isolated pockets of water, which were very few, may have been slightly lower than the rest of the channel. Surrounding soils in the fields were damp in the wettest areas, but the main part of the site, including the depression through the middle of the site, which is often wetted, was dry at the surface.

Very few mosquitos were observed. The majority were present along the fenced private property in the northwest part of the site. Numbers were low enough that they were not bothersome during the assessment. There was an iron-bacteria film on some sections of ditches, but its presence was markedly reduced over 2021. These bacteria are natural and harmless but often concern observers who think they are a sign of pollution.

The tide was low enough to observe the trash rack on the Lamont ROW and the tide gate very clearly. Both appeared in good condition though a small amount of debris was noted on the trash rack.

Invasive teasels (*Dipsacus fullonum)* were observed this year along Ditch 4. This is the first time we have noted this plant, but it is becoming common in much of the CRD. It produces thousands of seeds, so controlling this plant before it takes over a larger area is essential.

Selected photos, most with comparisons to last year, are provided in the following pages. As much as possible, photos remain in the same order as previous years which generally follows the path walked during the field assessment. Comments on channel conditions are described below the photos.

A .kmz file of the track that was walked, as well as associated GPS-referenced photos, was provided as a supplement to this report. The .kmz file includes many more photos than are included in this memo.

In summary, the ditches were clear of impeding vegetation and sediment and no maintenance was recommended this year, other than control of invasive plants, especially teasels.

After assessing these ditches every year for 12 years, it is evident that variations in the water levels in the ditches are closely tied to weather patterns. Wet, cold or late spring weather raises groundwater tables and delays the drying of soils. Hot, dry summers raise evaporation rates and reduce water levels. While maintenance of the channels to remove ingrowth of vegetation is important, the variation year-to-year appears driven by weather. Fluctuations in groundwater levels and the timing of the same could be tracked using self-contained in-ground water level dataloggers. Similarly, it may be possible to use datalogging conductivity/salinity sensors to track variations in salinity which may be influenced by the contributions of groundwater or rainfall. Camosun College students installed piezometers to assess groundwater levels for a brief time several years ago. The data from this program may be useful in determining if a data collection program is practical. If so, we recommend installing a small number of sensors at strategic locations to test the methods and refine a data collection program before expending significant funds. Localized meteorological data may also be helpful in interpreting the water level and salinity data.

Figure 2. Overview aerial photograph showing the location of the ditches at Island View Beach

Campground ditch looking south from the trail crossing July 16, 2022. Channel is clear with no impediments to flow.

Campground ditch July 5, 2021 prior to 2021 maintenance.

Campground ditch looking north from the trail crossing July 16, 2022. There is minor ingrowth of vegetation but still a clear open channel.

Campground ditch looking north July 5, 2021 prior to 2021 maintenance.

Ditch behind the tenting area of the campground July 16, 2022.

Lamont ROW ditch looking west, downstream end July 16, 2022. There was a very small amount of water in the channel and positive drainage was observed.

Lamont ROW ditch looking west, downstream end July 5, 2021.

Confluence of Lamont Road ROW and Ditch 4 July 16, 2022. Note the clear open channel as a result of last year's maintenance.

Confluence of Lamont Road ROW and Ditch 4 July 5, 2021.

Ditch 4 at confluence with Lamont Rd ROW July 16, 2022.

Ditch 4 at confluence with Lamont Rd ROW July 5, 2021.

Downstream end of Ditch 1 July 16, 2022.

Downstream end of Ditch 1 July 5, 2021.

Above: Ditch 1 looking west from the mid-point of the ditch toward the confluence with Ditch 2 July 16, 2022. The channel was clear of vegetation.

Right: Ditch 1 at the midpoint of the ditch July 5, 2021. These bulrushes were removed during 2021 maintenance.

Confluence of Ditch 1 and Ditch 3 July 16, 2022.

Confluence of Ditch 1 and Ditch 3 July 5, 2021.

Looking east down Ditch 1 from the confluence of Ditch 1 and Ditch 2 July 16, 2022.

Downstream end of Ditch 2 looking northwest July 16, 2022. The channel is clear. The trail of bubbles were flowing south as expected. Iron bacteria were significantly reduced over last year.

Downstream end of Ditch 2 looking northwest July 5, 2021.

Ditch 2 from middle of the channel looking northwest July 16, 2022. The channel is more open and was draining well.

Ditch 2 from middle of the channel looking northwest July 5, 2021.

Above: Ditch 2 looking southwest July 16, 2022.

Right: Ditch 2 looking southwest July 5, 2021.

Confluence of Ditch 2 and Ditch 3 July 16, 2022.

Confluence of Ditch 2 and Ditch 3 July 5, 2021.

Ditch on Tsawout land running east-west along chainlink fence (looking west) July 16, 2022.

Ditch on Tsawout land running east-west along chainlink fence (looking west) July 5, 2021.

Above: Ditch running northeast on Tsawout land July 16, 2022.

Above: Ditch running northeast on Tsawout land July 5, 2021.

Ditch 5 July 16, 2022. Taken from mid-point of channel looking east.

Ditch 5 from the western end of the ditch looking east July 16, 2022.

Ditch 5 from the western end of the ditch looking east July 5, 2021.

Above: Ditch 3 near north end of the wet depression looking southeast July 16, 2022.

Right: Ditch 3 near north end of the wet depression looking southeast July 5, 2021.

Photo taken from Ditch 3 looking southwest across the wet depression. The dominant plant is silverweed (*Potentilla*). Soils were dry on the surface.

Looking north from trail crossing over intersection of Ditches 3 & 4 looking north up Ditch 3, July 16, 2022. The lack of vegetation along the channel may encourage new growth in the channel as light is no longer limited.

Looking south from trail crossing over intersection of Ditches 3 & 4 looking south down Ditch 4, July 16, 2022.

Ditch 4 near the midpoint. July 16, 2022. Note the extensive English ivy carpet (*Hedera helix*).

Ditch 4 about 6 m north of the Lamont ROW where old waterlines cross the creek July 16, 2022.

Invasive teasels (*Dipsacus fullonum*) along Ditch 4 about 60 m north of the Lamont ROW July 15, 2022.

Lamont ROW looking east toward the tide gate July 16, 2022. Water was actively flowing toward the trash rack (seaward).

Lamont ROW at the trash rack upstream of the tide gate July 16, 2022.

Trash rack upstream of the tide gate July 16, 2022.

Trash rack upstream of the tide gate July 5, 2021.

Tide gate at close to low tide 1:00 p.m. July 16, 2022.

Making a difference...together

RWSC 23-01

REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, FEBRUARY 15, 2023

SUBJECT **2023-2027 Regional Water Supply Service Capital Plan Update**

ISSUE SUMMARY

To update the 2023 Capital Plan balances carried forward from 2022 and adjust the budget for Project 20-27 Greater Victoria Water Supply Area (GVWSA) Forest Resilience – wildfire/forest modelling and forest management field trials.

BACKGROUND

On September 28, 2022, the Regional Water Supply Commission (Commission) recommended to the Capital Regional District (CRD) Board, approval of the 2023 Operating and Capital Budget and the Five Year Capital Plan.

Project 20-27 GVWSA Forest Resilience Capital Budget Update

Progress has been made to develop ecological restoration thinning trials in the GVWSA that, if successful, are expected to lead to an ecological restoration thinning program that will run for a number of years.

Ecological restoration thinning in the GVWSA involves reducing the tree density within planted forest stands to achieve the following goals:

1. Improve the forest fuel profile – fewer, more widely spaced, bigger trees with thicker bark rather than many, dense, thin trees with thin bark that are more susceptible to wildfire.
2. Reduce density prior to self thinning - avoid large volumes of downed wood and ladder fuels that would result from the natural succession of dense forest stands.
3. Improve forest health and resilience – improve tree health by reducing competition between trees and reducing tree moisture stress, looking ahead to increasingly longer and drier summers with climate change.
4. Enhance biodiversity/wildlife values – open up stands to allow more species diversity and habitat; achieve old forest stand characteristics sooner.
5. Determine the most effective thinning methods and increase awareness of the benefits of this technique – trial thinning at different densities to observe and monitor benefits and drawbacks of thinning treatment; thin near the existing public tour route to provide a stop to look at and discuss the treatment.

In some stands, the thinned trees may be merchantable, which would offset the cost of thinning to achieve these goals. Chips from woody debris generated by the thinning may also have value. Removal of these forest fuels is part of the goal of the thinning treatments.

In consultation with CRD Finance and Procurement staff, the best method to achieve the ecological restoration thinning trials and offset costs from merchantable timber thinned is to

procure the ecological thinning services separately from conducting a sale of logs/chips. The capital plan therefore requires updating to show both the cost of the treatment and funding from the sale of any logs or chips, which will make the thinning treatment more affordable.

The existing 2023 capital budget (excerpt shown below) provides $120,000 in carry forward funds for project 20-27 GVWSA Forest Resilience – wildfire/forest modelling and forest management field trials. Of the carry forward funding, $35,000 is reserved for the project Modelling Effects of Climate Change on Forests and Wildfire in the GVWSA in partnership with University of Victoria, leaving $85,000 for ecological restoration thinning trial development and implementation.

The capital plan budget update request is to add $365,000 in ecological restoration thinning trials development and implementation costs with an expected revenue to the project of $365,000 from thinned stems and/or chips, which creates no impact on the bottom line of the 2023 capital plan. Both the treatment cost and revenue budgets are approximate estimates including contingencies. There is no financial impact anticipated on the water rates with the addition of this project.

SECTION 1: PROJECT DESCRIPTION AND BUDGET												
Project Number	Capital Expenditure Type	Capital Project Title	Total Project Budget	Asset Class	Funding Source	Carryforward from 2022	2023	2024	2025	2026	2027	5 - Year Total
WATERSHED PROTECTION												
Planning												
20-27	Study	GVWSA Forest Resilience - wildfire/forest modelling and forest management field trials	**$625,000**	L	WU	$120,000	$120,000	$50,000	-	-	-	$170,000
20-27				**L**	**Other**		**$365,000**					$365,000

Carry Forward Update to the 2023-2027 Capital Plan

The 2023 – 2027 Capital Plan was approved prior to end of 2022. As part of year end close, authorized projects not yet complete are carried forward and updated on the Capital Plan ahead of CRD Board final approval in March. Appendix A contains the final 2023 – 2027 Capital Plan with updated balances carried forward from 2022.

ALTERNATIVES

Alternative 1
The Regional Water Supply Commission recommends to the Capital Regional District Board:

That the 2023 Regional Water Supply Service Capital Budget and Five Year Capital Plan be updated to include $365,000 for Project 20-27 GVWSA Forest Resilience, for ecological restoration thinning trials development and implementation costs and $365,000 in revenue from the project.

Alternative 2
That this report be referred back to staff for additional information.

IMPLICATIONS

Financial Implications
There are no net impacts on the capital budget for 2023 or on the 2023 water rates It is expected that the additionally requested funds to complete the ecological restoration thinning treatment will be offset by the revenue generated from the sale of any resulting merchantable logs and/or chips.

Service Delivery Implications
The 2017 Regional Water Supply Strategic Plan provided a goal of more active forest management to protect and enhance forest health and resilience. The proposed capital plan update allows the ecological restoration thinning trials and program to move forward in 2023.

CONCLUSION

A capital plan update is required to trial ecological thinning in the Greater Victoria Water Supply Area in 2023. The updated expenditures are fully funded and therefore will not increase the 2023 capital funding requirements or affect the 2023 water rates.

RECOMMENDATION

The Regional Water Supply Commission recommends to the Capital Regional District Board:

That the 2023 Regional Water Supply Service Capital Budget and Five Year Capital Plan be updated to include $365,000 for Project 20-27 GVWSA Forest Resilience, for ecological restoration thinning trials development and implementation costs and $365,000 in revenue from the project.

Submitted by:	Annette Constabel, M.Sc., RPF., Senior Manager, Watershed Protection
Concurrence:	Ian Jesney, P. Eng., Acting General Manager, Integrated Water Services
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer
Concurrence:	Ted Robbins, B.Sc., C.Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Updated 2023-2027 Regional Water Supply Service Capital Plan – including the proposed update to Project 20-27

CAPITAL REGIONAL DISTRICT
5 YEAR CAPITAL PLAN
2023 - 2027

Project Number
Project number format is "yy-##"
"yy" is the last two digits of the year the project is planned to start.
"##" is a numberical value. For example, 23-01 is a project planned to start in 2023.

For projects in previous capital plans, use the same project numbers previously

Capital Expenditure Type
Study - Expenditure for feasibility and business case report.
New - Expenditure for new asset only
Renewal - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service
Replacement - Expenditure replaces an existing asset

Capital Project Title
Input title of project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

Capital Project Description
Briefly describe project scope and service benefits.
For example: *"Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system meets current energy standards with an expected service life of 35 years".*

Total Project Budget
Provide the total project budget, even if it extends beyond the 5 years of this capital plan.

Asset Class
L - Land
S - Engineering Structure
B - Buildings
V - Vehicles

Funding Source Codes
Debt = Debenture Debt (new debt only)
ERF = Equipment Replacement Fund
Grant = Grants (Federal, Provincial)
Cap = Capital Funds on Hand
Other = Donations / Third Party Funding
Res = Reserve Fund
STLoan = Short Term Loans
WU - Water Utility
If there is more than one funding source, use additional rows for the project.

Carryforward from 2022
Input the carryforward amount from the 2022 capital plan that is remaining to be spent. Forecast this spending in 2023 to 2027.

Project Drivers
Maintain Level of Service = Project maintains existing or improved level of service.
Advance Board or Corporate Priority = Project is a Board or Corporate priority.
Emergency = Project is required for health or safety reasons.
Cost Benefit = Project provide economic benefit to the organization.

Long-term Planning
Master Plan / Servicing Plan = Plan that identifies new assets required to meet future needs.
Asset Management Plan / Sustainable Service Delivery Plan = Integrated plan that identifies asset replacements based on level of service, criticality, condition, risk, replacement costs as well as external impacts.
Replacement Plan = Plan that identifies asset replacements based primarily on asset age and/or asset material/type.

Cost Estimate Class
Class A (±10-15%) = Estimate based on final drawings and specifications; used to evaluate tenders.
Class B (±15-25%) = Estimate based on investigations, studies or prelimminary design; used for budget planning.
Class C (±25-40%) = Estimate based on limited site information; used for program planning.
Class D (±50%) = Estimate based on little/no site information; used for long-term planning.

Service #: **2.670**
Service Name: **Regional Water Supply**

SECTION 1: PROJECT DESCRIPTION AND BUDGET

Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2022	2023	2024	2025	2026	2027	5 - Year Total
WATERSHED PROTECTION													
Planning													
17-01	Renewal	Historic Goldstream Powerhouse Building	Repairs of historic Goldstream Powerhouse building and work toward making the site accessible to the public	**$120,000**	B	WU	-	$20,000	-	**$50,000**	-	-	$70,000
17-01				**$376,000**	**B**	**Grant**	-	-	-	**$300,000**	-	-	$300,000
18-10	Study	Species-at-Risk Wildlife Habitat	Assessments (office and field) and planning for managing wildlife habitat, in particular species-at-risk habitat, in the GVWSA.	$185,000	L	WU	-	$50,000	-	-	-	-	$50,000
19-30	Study	Leech WSA Lakes/Tributaries Assessment	Classification and mapping of terrestrial ecosystems and wetlands and integration with Sooke and Goldstream data.	$75,000	L	WU	$38,000	$38,000	-	-	-	-	$38,000
20-05	Renewal	Leech WSA Terrestrial Ecosystem Mapping & Wetland Classification/Mapping		$180,000	L	WU	$180,000	$180,000	-	-	-	-	$180,000
20-06	Study	Addressing mining in Leech WSA (impacts, agreements)	Funding to support work to reduce the impact of mining claims in the Leech WSA	$60,000	L	WU	-	$10,000	$10,000	$10,000	$10,000	-	$40,000
20-27	Study	GVWSA Forest Resilience - wildfire/forest modelling and forest management field trials	Modelling forest and wildfire risk under climate change scenarios & forest/fuel management field trials.	**$625,000**	L	WU	$120,000	$120,000	**$50,000**	-	-	-	$170,000
20-27					**L**	**Other**		**$365,000**	-	-	-	-	**$365,000**
20-28	Study	GVWSA Forest Resilience - Assessments of forest health and resilience	Field assessments to better understand current forest health and resilience.	$230,000	L	WU	$110,000	$110,000	**$60,000**	-	-	-	$170,000
21-19	Study	Lakes Assessment Sooke and Goldstream WSAs	An assessment of the physical, chemical and biological parameters of the natural lakes in Sooke and Goldstream WSAs	$75,000	L	WU	$15,000	$15,000	-	-	-	-	$15,000
21-20	Study	West Leech Road	Plan followed by construction of a road to access the western portion of the Leech WSA.	$320,000	L	WU	$50,000	$150,000	$100,000	-	-	-	$250,000
23-02	Renewal	GVWSA LiDAR Mapping	Detailed contour mapping of ground, vegetation and tree cover (3D scanning)	**$250,000**	L	WU	-	**$200,000**	**$50,000**	-	-	-	$250,000
22-04	Renewal	GVWSA Orthophotography	Annual contribution to capture of regional digital orthophotography for baseline mapping and monitoring.	$95,000	L	WU	$15,000	$30,000	-	**$35,000**	-	**$40,000**	**$105,000**
22-09	Study	GVWSA Powerlines Wildfire Risk Mitigation Plan	A detailed assessment, options and plan to reduce the risk of wildfire start from tree fall onto CRD powerlines in the GVWSA.	$50,000	L	WU	$40,000	$40,000	-	-	-	-	$40,000
22-10	New	GVWSA/RWS Educational Videos	Development of educational videos to address Regional Water Supply issues of interest to the public such as: wildfire risk and mitigation; climate change; water supply master plan update.	$60,000	L	WU	$30,000	$30,000	**$30,000**	-	-	-	$60,000
23-05	Study	Spill Management Plan and Implementation	Review, assessment and re-development of a spill management plan for the GVWSA along with potential procurement of additional equipment or supplies.	$50,000	L	WU	$25,000	$25,000	-	-	-	-	$25,000
24-03	**Study**	**Biosecurity Risk Assessment & Procedures**	**Assess GVWSA biosecurity risks and develop mitigating protocols/procedures**	**$50,000**	L	WU	-	-	**$50,000**	-	-	-	**$50,000**

Service #: 2.670

Service Name: Regional Water Supply

SECTION 1: PROJECT DESCRIPTION AND BUDGET

Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2022	2023	2024	2025	2026	2027	5 - Year Total
Capital													
09-01	Renewal	Leech River Watershed Restoration	A 17 year project to restore the Leech WSA lands for water supply.	$5,756,000	L	WU	$125,000	$325,000	$200,000	$200,000	-	-	$725,000
16-01	Renewal	Replace Gatehouse at Goldstream Entrance	The GVWSA entry gatehouse at Goldstream is past end of life and is to be replaced with a purpose built structure with improved vehicle flow and security function	$1,800,000	B	WU	$1,280,000	$1,280,000	-	-	-	-	**$1,280,000**
16-06	Renewal	Goldstream IWS Field Office1	Renewal of Water Quality field office/lab and equipment storage and Watershed Protection office, yard, training space and equipment storage, replacing longstanding temporary facilities.	**$3,200,000**	B	WU	$450,000	$950,000	**$1,700,000**	-	-	-	**$2,650,000**
16-06				$5,000,000	B	Other	$2,500,000	**$3,000,000**	**$1,000,000**	**$1,000,000**	-	-	$5,000,000
17-02	New	Leech River HydroMet System	Installation of a network of hydrometeorological stations to collect water quantity and quality information for the Leech WSA.	**$540,000**	E	WU	$40,000	**$80,000**	-	-	-	-	$80,000
18-05	New	GVWSA Forest Fuel Management/FireSmart Activities	Implementation of forest fuel management and FireSmart actions in strategic locations for wildfire risk management in the GVWSA.	$850,000	L	WU	$10,000	$110,000	$100,000	$100,000	$100,000	**$100,000**	$510,000
19-02	New	Whiskey Creek Bridge Replacement (Sooke WSA)	Replacement of the existing undersized bridge with a longer and higher concrete structure.	**$330,000**	S	WU	-	**$30,000**	**$300,000**	-	-	-	$330,000
19-19	New	Hydromet Upgrades Sooke and Goldstream	Install additional hydrology monitoring sites on Sooke Lake Reservoir inflow streams and increase instrumentation on meteorological stations in Sooke and Goldstream watersheds.	**$230,000**	E	WU	-	**$60,000**	-	-	-	-	$60,000
20-01	Replacement	Kapoor Main Mile 1 Bridge and Asphalt Upgrade	Replacement of the existing undersized culvert with a large bridge as well as subsequent 500 m road asphalt replacement.	**$610,000**	S	WU	$390,000	**$440,000**	**$160,000**	-	-	-	**$600,000**
20-29	Renewal	GVWSA Gravel Crushing	Production of gravel at existing quarries in Sooke and Goldstream WSAs.	$650,000	S	WU	-	-	**$100,000**	-	$200,000	-	$300,000
21-26	New	Road Deactivation/Rehabilitation in the GVWSA	Deactivate or rehabilitate unneeded roads in the Sooke and Goldstream WSAs.	$520,000	L	WU	$60,000	$100,000	$100,000	$100,000	$100,000	-	$400,000
21-27	New	Autogate Installations on Primary Access Routes	Install autogates on the main access routes where the Sooke Hills Wilderness Trail and E&N rail line cross to improve security	**$850,000**	S	WU	-	**-**	**$350,000**	-	-	-	$350,000
22-02	New	Muckpile Bridge Supply and Install (Deception)	Replacement of undersized culverts with bridge which will allow for fish and western toad migration.	**$340,000**	S	WU	-	**$15,000**	-	$325,000	-	-	$340,000
23-04	Renewal	17S/Sooke Main Bridge Replacement	Undersized bridge replacement	**$315,000**	S	WU	-	-	**$15,000**	-	$300,000	-	$315,000
22-11	New	Additional Boom Anchors for Sooke Lake Reservoir debris boom	The log boom protecting the Sooke Lake Reservoir Intake Tower from floating woody debris is inadequately anchored and requiring two additional anchors.	$60,000	E	WU	$30,000	**$50,000**	-	-	-	-	$50,000
23-10	New	Work platform for Sooke Lake Reservoir	A towable work platform for conducting stationary on-water work activities such as boom and intake tower maintenance and spill response.	$30,000	E	WU	-	$30,000	-	-	-	-	$30,000
23-11	New	**Purchase and deployment of Second Wildfire Camera for Leech WSA, and analytic software**	A secondary wildfire camera to monitor for heat and smoke signatures in the Leech WSA during fire season.	**$100,000**	E	WU	-	$50,000	**$50,000**	-	-	-	**$100,000**
23-23	**Replacement**	**Brushcutting head for Excavator**	**The existing brushcutting head from the excavator used in roadside maintenance has reached end of life and requires replacement.**	**$30,000**	**V**	**WU**	**-**	**$30,000**	**-**	**-**	**-**	**-**	**$30,000**
WaterShed Protection Sub-Total				**$24,012,000**			**$5,508,000**	**$7,933,000**	**$4,425,000**	**$2,120,000**	**$710,000**	**$140,000**	**$15,328,000**
INFRASTRUCTURE ENGINEERING AND OPERATIONS													
Planning													
16-10	New	Post Disaster Emergency Water Supply	Identify and procure emergency systems for post disaster preparedness.	**$2,250,000**	S	WU	$423,000	$623,000	$200,000	$200,000	$200,000	**$200,000**	$1,423,000
17-13	New	Asset Management Plan	Development of a plan to inform future areas of study and highlight critical infrastructure improvements.	$400,000	S	WU	$200,000	$200,000	-	-	-	-	$200,000
19-15	New	Hydraulic Capacity Assessment and Transient Pressure Analysis	Determine the existing level-of-service for the RWSC transmission system and conduct a transient pressure analysis	$250,000	S	WU	$100,000	$100,000	-	-	-	-	$100,000
20-08	Study	Regional Water DCC Program	Design of a Regional DCC Program	$200,000	S	WU	$50,000	$50,000	-	-	-	-	$50,000
20-10	Study	Condition & Vulnerability Assessment	Conduct a condition assessment of critical supply infrastructure and assess its possibility of risk.	$200,000	S	WU	$50,000	$50,000	-	-	-	-	$50,000
21-05	Study	Level of Service Agreement	From #19-15 & #20-11, develop level-of-service agreements for participating municipalities to address hydraulic capacity of infrastructure.	$150,000	S	WU	$150,000	$150,000	-	-	-	-	$150,000
23-12	**Study**	**Project Delivery Strategy**	**Develop a strategy to deliver the identified projects from the 2022 RWS Master Plan.**	**$200,000**	**S**	**WU**	-	**$200,000**	-	-	-	-	$200,000
23-13	**Study**	**Filtration Plant Planning & Design**	**Conduct a siting, conceptual design and detailed design for a filtration plant**	**$16,300,000**	**S**	**WU**	-	**$300,000**	**$500,000**	**$500,000**	**$5,000,000**	**$10,000,000**	$16,300,000
23-14	**Study**	**Council Creek Crossing Hydrology Review**	**Conduct a hydrology review of the Council Creek crossing of water mains to ensure pipe resilience during high rainfall events.**	**$100,000**	**S**	**WU**	-	**$100,000**	-	-	-	-	$100,000
23-24	**New**	**East-West Connector (Filtration Plant to District of Sooke)**	**Planning and Conceptual Design of the East- West Supply Main from the proposed filtration plant to the District of Sooke (identified in the 2022 Master Plan)**	**$400,000**	**S**	**WU**	-	-	-	-	**$200,000**	**$200,000**	**$400,000**
23-25	**New**	**Deep Northern Intake and Sooke Lake Pump Station**	**Planning and Design of the Deep Northern Intake and Sooke Lake Pump Station (identified in the 2022 Master Plan)**	**$12,200,000**	**S**	**WU**	-	**$600,000**	**$600,000**	**$3,000,000**	**$4,000,000**	**$4,000,000**	**$12,200,000**
23-26	**New**	**Transmission Main - Sooke Lake Pump Station to Head Tank**	**Planning and Design of the Transmission Main from the Sooke Lake Pump Station to Head Tank (identified in the 2022 Master Plan)**	**$3,400,000**	**S**	**WU**	-	**$200,000**	**$200,000**	**$1,000,000**	**$1,000,000**	**$1,000,000**	**$3,400,000**
23-27	**New**	**Gravity Main - Sooke Lake to Head Tank**	**Planning and Design of a Gravity Transmission Main (redundancy) from Sooke Lake to Head Tank (identified in the 2022 Master Plan)**	**$1,400,000**	**S**	**WU**	-	**$100,000**	**$300,000**	**$500,000**	**$500,000**	-	**$1,400,000**
23-28	**New**	**Goldstream Reservoir Connector**	**Planning and Design of the Goldstream Reservoir Connector transmission main**	**$4,600,000**	**S**	**WU**	-	**$100,000**	**$500,000**	**$2,000,000**	**$2,000,000**	-	**$4,600,000**
Capital													$0
18-07	New	Replacement of UV System	Replacement of the UV system at the Goldstream Water Treatment Plant	**$8,730,000**	E	WU	$2,850,000	**$8,300,000**	-	-	-	-	**$8,300,000**
18-08	Replacement	Bulk Supply Meter Replacement Program	Planned replacement of aging bulk meter replacement based upon a condition assessment and water audit.	$2,050,000	E	WU	$600,000	$600,000	-	**$200,000**	**$200,000**	**$150,000**	$1,150,000

Service #: 2.670

Service Name: Regional Water Supply

SECTION 1: PROJECT DESCRIPTION AND BUDGET

Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2022	2023	2024	2025	2026	2027	5 - Year Total
18-15	Renewal	Corrosion Protection Program	Study deficiencies in the current material protection and implement recommendations.	$1,150,000	S	WU	-	$150,000	$150,000	$150,000	$150,000	-	$600,000
18-18	Replacement	Main No.3 Segment Replacement	Replacement of segments of Main No. 3 based upon previous studies.	$15,600,000	S	WU	$800,000	$800,000	**$4,900,000**	**$4,900,000**	**$4,900,000**	-	$15,500,000
19-05	Renewal	Repairs - Kapoor Shutdown	Repair items such as defects in the Kapoor tunnel, replacement of critical valves, intake exterior inspection and actuator replacement while the Kapoor tunnel is shutdown.	$600,000	S	WU	$375,000	$375,000	-	**$100,000**	-	-	$475,000
19-23	New	Critical Spare Equipment Storage & Pipe Yard	Plan, design and construct a critical equipment storage building.	$1,100,000	S	WU	$200,000	$200,000	**$1,000,000**	-	-	-	**$1,200,000**
20-16	Replacement	Cecelia Meter Replacement	Replacement of the Cecelia billing meter as well as its enclosure.	$1,000,000	S	WU	$50,000	$450,000	-	-	-	-	$450,000
20-17	Replacement	Decommission & Conceptual Design of the Smith Hill Site	Plan for decommission the conceptual design for the replacement of the Smith Hill reservoir site.	**$1,300,000**	S	WU	$300,000	$300,000	**$1,000,000**	-	-	-	**$1,300,000**
21-06	Replacement	Sooke Lake Dam Spillway Hoist and Stop Log Replacement	Replacement of the sluice gate spillway hoist and stop logs at Sooke Lake Dam.	**$775,000**	E	WU	$260,000	**$510,000**	**$250,000**	-	-	-	$760,000
21-09	New	Goldstream Water Chlorination Gas System Removal	Plan and construct provisions for removal of chlorination system	$200,000	S	WU	$100,000	$100,000	-	-	-	-	$100,000
21-10	Replacement	SCADA Masterplan and System Upgrades	Update the SCADA Master Plan in conjunction with the Juan de Fuca Water Distribution, Saanich Peninsula Water and Wastewater, and Core Area Wastewater Services.	**$2,150,000**	E	WU	$500,000	**$800,000**	**$300,000**	**$300,000**	**$300,000**	**$300,000**	$2,000,000
21-11	Replacement	RWS Supply Main No. 4 Upgrade	Upgrade vulnerable sections of the RWS Supply Main No. 4 and Main No. 1 to a resilient system to better able to withstand a seismic event. Vulnerable sections are Concrete Cylinder pipe material which is susceptible to failure during a seismic event. This is part of project partnered with the Saanich Peninsula Water system.	$33,900,000	S	WU	$1,500,000	$3,300,000	$4,500,000	$11,400,000	$13,500,000	$1,200,000	$33,900,000
21-11			DMAF Grant portion, grant submitted November 2021.	**$14,800,000**	**S**	**Grant**	-	-	**$1,200,000**	**$2,000,000**	**$3,600,000**	**$6,000,000**	**$12,800,000**
22-14	New	Sooke River Intake Feasibility	A feasibility study for an intake from Sooke River to replace the Main No. 15 salmon fishery contribution, for a variety of reasons.	$50,000	S	WU	$50,000	$50,000	-	-	-	-	$50,000
22-15	New	Microwave Radio Upgrades	To provide a high bandwidth communications backbone to the RWS system, a microwave communications system will be installed.	**$1,100,000**	S	WU	$200,000	**$400,000**	**$200,000**	**$200,000**	**$200,000**	-	$1,000,000
22-16	Renewal	Goldstream WTP Drainage Improvements	Construct drainage improvements for the Goldstream Water Treatment Plant and assess	$200,000	S	WU	$100,000	$100,000	-	-	-	-	$100,000
22-17	New	Goldstream WTP Safety Improvements	Construct employee and public safety improvements such as a trail notification system if there was an ammonia spill.	$200,000	E	WU	$50,000	$50,000	-	-	-	-	$50,000
23-15	**New**	**Mt Tolmie Reservoir Security**	**Conduct public consultation with conceptual designs for site security required at the Mt Tolmie Reservoir**	**$60,000**	**S**	**WU**	-	**$10,000**	**$50,000**	-	-	-	**$60,000**
23-16	**Renewal**	**Humpback Channel Assessment and Upgrades**	**Hydraulicly assess the Humpback Overflow channel and conduct a condition assessment of the culverts at the Gatehouse.**	**$200,000**	**S**	**WU**	-	**$200,000**	-	-	-	-	**$200,000**
23-17	**Replacement**	**Main No. 4 - Mt Newton to Highway 17**	**Replacement of a approximately 1.9km of the Main No. 4 concrete pipe from Mt Newton and Central Saanich Road south to where it crosses Highway 17. A Strategic Priorities Fund grant has been applied to fund a portion of the works.**	**$2,800,000**	**S**	**WU**	-	**$2,800,000**	-	-	-	-	**$2,800,000**
23-17				**$6,000,000**	**S**	**Grant**	-	-	**$6,000,000**	-	-	-	**$6,000,000**
25-03	**Renewal**	**Transmission Main Upgrade Program**	**Identify, conceptually design, detail design and construct transmission main upgrades.**	**$30,000,000**	**S**	WU	-	-	-	**$10,000,000**	**$10,000,000**	**$10,000,000**	**$30,000,000**
23-29	**Renewal**	**Mt. Tolmie Control Valve Replacement**	**Supply and installation of the Mt. Tolmie Reservoir Control Valve**	**$300,000**	**E**	WU	-	**$300,000**	-	-	-	-	**$300,000**
													$0
Infrastructure Engineering and Operations Sub-Total				**$166,315,000**			**$8,908,000**	**$22,568,000**	**$21,850,000**	**$36,450,000**	**$45,750,000**	**$33,050,000**	**$159,668,000**
DAM SAFETY PROGRAM			**Database)**										
16-16	Renewal	Implications from Goldstream Dam Safety Review	Conduct dam improvements at the Goldstream dams that resulted for the Dam Safety Review and routine inspections (refer to the Dam Safety Database).	$825,000	S	WU	$200,000	$275,000	$75,000	-	-	-	$350,000
16-17	Renewal	Butchart Dam No. 5 Remediation Planning & Construction	Phase 1 Rehabilitation (grouting) of Butchart Dam No. 5 and planning for Phase 2.	$3,550,000	S	WU	$2,000,000	$50,000	$1,950,000	-	-	-	$2,000,000
17-25	Renewal	Implications from Sooke Lake Dam Safety Review	Conduct dam improvments at the Sookel Lake Dam that resulted from the Dam Safety Review and routine inspections (refer to the Dam Safety Database)	$1,210,000	S	WU	$400,000	$400,000	-	-	-	-	$400,000
18-19	New	Sooke Lake Dam - Instrumentation System Improvements	Complete dam performance instrumentation system/surveillance improvements for the Sooke Lake Dam.	**$1,800,000**	S	WU	$850,000	$950,000	**$600,000**	-	-	-	$1,550,000
18-20	New	Sooke Lake Dam - Breach Risk Reduction Measures	Implement measures to reduce Sooke Lake Dam breach implications in the unlikely event of dam failure (refer to the NHC Consulting study).	$600,000	S	WU	$500,000	$250,000	$250,000	-	-	-	$500,000
19-07	New	Integrate Dam Performance and Hydromet to SCADA	Integrate the dam safety instrumentation/surveillance (i.e. piezometers and weirs) and HydroMet stations to report to WIO through the existing SCADA system.	**$1,300,000**	E	WU	**$400,000**	**$600,000**	**$200,000**	**$200,000**	**$200,000**	-	$1,200,000
19-09	New	Cabin Pond Dams Decommissioning	The Cabin Pond Dams (x2) have been retired from drinking water service, plan to decommission.	$100,000	S	WU	-	-	$100,000	-	-	-	$100,000
19-12	New	Goldstream Dams Instrumentation Improvements	Conduct dam safety instrumentation/surveillance improvements (refer to report from Thurber Engineering).	$600,000	S	WU	$75,000	$175,000	$400,000	-	-	-	$575,000
19-13	New	Dam Safety Instrumentation	The existing dam safety instrumentation/surveillance equipment is getting older and will need to be replaced/rehabilitated (does not include pending SCADA effort).	$300,000	E	WU	$150,000	$250,000	$50,000	-	-	-	$300,000
20-19	Replacement	Goldstream System High Level Outlet Valve Replacements	The Goldstream and Butchart high level outlet valves have been identified as requiring replacement.	**$300,000**	S	WU	$150,000	**$250,000**	-	-	-	-	$250,000
21-03	New	Deception Dam - Dam Safety Review 2021 & Improvements	Conduct a Dam Safety Review and improvements for the Deception Dam.	**$1,800,000**	S	WU	$175,000	**$375,000**	**$200,000**	**$100,000**	**$500,000**	**$500,000**	$1,675,000
21-04	New	Saddle Dam - Dam Safety Review 2021 & Improvements	Conduct a Dam Safety Review and improvements for the Saddle Dam.	**$800,000**	S	WU	$100,000	**$200,000**	**$150,000**	**$200,000**	**$75,000**	**$75,000**	$700,000
21-21	Replacement	Goldstream Dams - 4 Low Level Gate Improvements	Logistics planning in 2022, installation in 2023	$150,000	S	WU	$150,000	$150,000	-	-	-	-	$150,000
22-08	New	Deception Dam Surveillance Improvements	Replace and supplement the Dam Safety Instrumentation at Deception Dam.	$450,000	S	WU	$150,000	$150,000	**$300,000**	-	-	-	$450,000

Service #: 2.670

Service Name: Regional Water Supply

SECTION 1: PROJECT DESCRIPTION AND BUDGET

Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2022	2023	2024	2025	2026	2027	5 - Year Total
23-07	Renewal	Sooke Lake Dam Spillway and Gates Retrofit	Detail and construct seismic retrofits for the existing structures initially focusing on the spillway and gates structures.	$450,000	S	WU	-	$150,000	$300,000	-	-	-	$450,000
23-08	Study	Regional Watershed Dams – Flood Forecasting System	Update the existing flood forecasting system (WD4Cast) to a modern version including Standard Operating Procedures and training for staff.	$300,000	S	WU	-	$150,000	$150,000	-	-	-	$300,000
23-09	Study	Sooke Lake Dam - Dam Safety Review 2023	Conduct a Dam Safety Review to meet regulatory requirement.	$200,000	S	WU	-	$200,000	-	-	-	-	$200,000
23-18	**Renewal**	**Sooke Lake Dam Spillway Channel Improvements**	**Construct bank protection for the Sooke Spillway Channel and clear the seepage weir blockage.**	**$700,000**	**S**	**WU**	-	**$200,000**	**$500,000**	-	-	-	**$700,000**
23-19	**Renewal**	**Charters Dam - Implications from Dam Safety Review**	**Carry out recommendations from the 2022 Dam Safety Review for Charters Dam**	**$200,000**	**S**	**WU**	-	**$100,000**	**$100,000**	-	-	-	**$200,000**
25-01	Study	Goldstream Dam - Dam Safety Review 2025 & Addressing Implications	Conduct a Dam Safety Review to meet regulatory requirement.	$200,000	S	WU	-	-	-	$200,000	-	-	$200,000
25-02	Study	Probable Maximum Flood and Inflow Design Flood Updates	Update the previous edition from 2015 (recommended 10 year review cycle).	$150,000	S	WU	-	-	-	$150,000	-	-	$150,000
													$0
Dam Safety Program Sub-Total				**$15,985,000**			**$5,300,000**	**$4,875,000**	**$5,325,000**	**$850,000**	**$775,000**	**$575,000**	**$12,400,000**
WATER QUALITY													
20-04	New	Sooke Lake HyDy Model Development	Critical data collection, model building+calibration, model utilization for 3 different scenarios	$520,000	E	WU	-	**$120,000**	**$120,000**	-	-		$240,000
22-06	Study	Sooke Lake Food Web Study	Assess the aquatic food web structure and create an inventory of fish and invertebrate species and distribution in Sooke Lake Reservoir - to be used as indicators of stream health	$100,000	S	WU	$50,000	$50,000	-	-	-		$50,000
23-06	Study	GVDWS Nitrification Study	Investigate nitrification occurrence and potential impacts on drinking water quality	$50,000	S	WU	-	$50,000	-	-	-		$50,000
24-02	Replacement	Boat Motor Replacement with Electric Outboards (Sooke and Goldstream Boats)	50hp and 15hp motor replacement due to age and water quality concerns, large electric outboards are already available from Torqeedo for instance	$60,000	E	WU	$60,000	$60,000	-	-	-		$60,000
24-04	Study	Sooke Lake Drawdown Study	Investigate drawdown effects on Sooke Lake water quality and ecosystem impacts with max drawdown and determine a safe max drawdown level for SOL.	$100,000	S	WU	-	-	$100,000	-	-	-	$100,000
25-04	Replacement	4 x multi-parameter field analyzers (SL1000)	Replace 4 multi-parameter (total/free/mono/ammonia) field analyzers	$20,000	E	WU	-	-	-	$20,000	-	-	$20,000
26-01	New	2 x Floating Water Quality Sensor Platforms	To support and confirm water quality data in SOL for Deep Norther Intake, install 2 floating sensor platforms	$200,000	E	WU	-	-	-	-	$200,000		$200,000
27-01	Study	Drinking Water Safety Plan Update	Review and update existing DWSP spreadsheet and risk registry. Consider planned system expansions/upgrades.	$80,000	S	WU	-	-	-	-	-	$80,000	$80,000
													$0
Water Quality Sub-Total				**$1,130,000**			**$110,000**	**$280,000**	**$220,000**	**$20,000**	**$200,000**	**$80,000**	**$800,000**
ANNUAL PROVISIONAL													
17-27	Replacement	Watershed Bridge and Culvert Replacement	Replacement of small culverts and bridges throughout the GVWSA.	$1,000,000	S	WU	-	$200,000	$200,000	$200,000	$200,000	**$200,000**	$1,000,000
17-28	Replacement	Watershed Security Infrastructure Upgrade and Replacement	New, upgrade and replacement of security infrastructure in the GVWSA.	$600,000	E	WU	-	$150,000	$150,000	$100,000	$100,000	**$100,000**	$600,000
17-29	Replacement	Water Supply Area Equipment Replacement	Hydrometeorological, fireweather and wildfire suppression equipment replacement.	**$575,000**	E	WU	-	**$115,000**	**$115,000**	**$115,000**	**$115,000**	**$115,000**	**$575,000**
17-30	Replacement	Transmission Main Repairs	Emergency repairs to the transmission mains.	$1,000,000	S	WU	-	$200,000	$200,000	$200,000	$200,000	**$200,000**	$1,000,000
17-31	Replacement	Transmission System Components Replacement	Replacement and repair of transmission components.	$400,000	S	WU	-	$80,000	$80,000	$80,000	$80,000	**$80,000**	$400,000
17-33	Replacement	Disinfection Equipment Parts Replacement	Replacement of incidental equipment and parts associated with the disinfection system.	$1,000,000	E	WU	-	$200,000	$200,000	$200,000	$200,000	**$200,000**	$1,000,000
17-34	Renewal	Supply System Computer Model Update	Annual update of the regional hydraulic model.	$100,000	S	WU	-	$20,000	$20,000	$20,000	$20,000	**$20,000**	$100,000
19-16	Replacement	Dam Improvements	Items not covered by Dam Safety Reviews, but brought up in Dam Safety Inspections and Dam Safety Reviews and address itesm in the dam safety database/risk registry	$1,500,000	S	WU	-	$300,000	$300,000	$300,000	$300,000	**$300,000**	$1,500,000
19-22	Replacement	SCADA Repairs & Equipment Replacement	Items not covered by the SCADA Replacement and SCADA Master Plan, but integral in maintaining the SCADA System and revenue meter system.	$750,000	E	WU	-	$150,000	$150,000	$150,000	$150,000	**$150,000**	$750,000
21-15	Replacement	Corrosion Protection	Replace corrosion protection assets, such as coatings, for the transmission system when identified.	$250,000	S	WU	-	$50,000	$50,000	$50,000	$50,000	**$50,000**	$250,000
21-16	Replacement	Valve Chamber Upgrades	Replace failing valves and appurtenances along the RWS supply system.	$1,000,000	S	WU	-	$200,000	$200,000	$200,000	$200,000	**$200,000**	$1,000,000
21-17	Replacement	Water Quality Equipment Replacement	Replacement of water quality equipment for the water quality lab and water quality operations	$250,000	E	WU	-	$50,000	$50,000	$50,000	$50,000	**$50,000**	$250,000
21-18	Renewal	LIMS support	Support for LIMS database	$125,000	E	WU	-	$25,000	$25,000	$25,000	$25,000	**$25,000**	$125,000
23-20	**Study**	**Land Exchange/Acquisition**	**Land surveys, appraisals to support decisions regarding land exchange to increase catchment area, buffer water supply areas and other possible land exchange and acquisition within the RWS system.**	**$400,000**	L	WU	-	**$80,000**	**$80,000**	**$80,000**	**$80,000**	**$80,000**	$400,000
Annual Provisional Sub-Total				**$8,950,000**			**$0**	**$1,820,000**	**$1,820,000**	**$1,770,000**	**$1,770,000**	**$1,770,000**	**$8,950,000**
CUSTOMER AND TECHNICAL SERVICES													
17-35	Replacement	Vehicle & Equipment Replacement (Funding from Replacement Fund)	This is for replacement of vehicles and equipment used by CRD Water Services for the day-to-day operation and maintenance of the supply system.	$2,873,000	V	ERF	$885,250	$995,000	$843,000	$630,000	$775,000	$855,000	$4,098,000
20-22	New	Vehicle for the Dam Safety Program	New Transit Van	$100,000	V	WU	$80,000	$100,000	-	-	-	-	$100,000
20-23	New	Vehicle for the CSE Support Program	New Transit Van	$100,000	V	WU	$62,000	$100,000	-	-	-	-	$100,000
21-30	New	Vehicle for Warehouse Operations	New pick up	$90,000	V	WU	$62,000	$90,000	-	-	-	-	$90,000
22-18	New	Electric Vehicle Charging Stations	7 Dual charging stations at 479 Island Hwy and 1 Dual charging station at the Watershed Protection FOC	$80,000	E	WU	$40,000	$40,000	-	-	-	-	$40,000
22-18					E	Grant	$40,000	$40,000	-	-	-	-	$40,000

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23-21	New	EV Charging Stations Electrical Infrastructure	Electrical System upgrades at 479 Island Hwy to power up 44 charging stations	$855,000	E	WU	-	$680,000	-	-	$175,000	-	$855,000
23-22	New	Fuel Truck	Fuel tender truck	$200,000	E	WU	-	$200,000	-	-	-	-	$200,000
23-30	New	Fleet Shop Hoist	Heavy Capacity Hoist for fleet maintenance	$35,000	E	WU	-	$35,000	-	-	-	-	$35,000
23-31	New	Purchase of land	Purchasing of land near 479 for future office space	$1,500,000	L	WU	-	$1,500,000				-	$1,500,000
													$0
Customer and Technical Services Sub-Total				$5,833,000			$1,169,250	$3,780,000	$843,000	$630,000	$950,000	$855,000	$7,058,000
			GRAND TOTAL	$222,225,000			$20,995,250	$41,256,000	$34,483,000	$41,840,000	$50,155,000	$36,470,000	$204,204,000

Making a difference...together

REPORT TO THE SOOKE & ELECTORAL AREA PARKS AND RECREATION COMMISSION MEETING OF TUESDAY, MARCH 07, 2023

SUBJECT **Capital Project Update – Arena Chiller**

ISSUE SUMMARY

To provide the Commission with an update on the arena chiller and request approval to proceed with the project for its replacement.

BACKGROUND

The chiller is a critical element in the arena refrigeration system. It is now 20 years old, which is deemed to be the end of serviceable life and is therefore a high priority for replacement. The project was originally approved in the 2022 SEAPARC budget as a capital item, with a project cost of $85,000. At its January 3, 2023 meeting, the SEAPARC Commission was informed that the capital project for the chiller should be adjusted to update the project to a Plate and Frame type chiller, which was estimated at $175,000. The updated project was approved by the Commission for the 2023 capital budget and was given preliminary approval by the Capital Regional District (CRD) Board. This is in addition to the $32,190 that was previously approved to reroute the ammonia lines from inside the Zamboni bay to an exterior location along the roof line.

In January, a consultant was hired to provide replacement options and detailed drawings and specifications for a replacement chiller and ammonia lines. During the initial assessment, the consultant confirmed that the chiller is at its end of life. Based on its age, Technical Safety BC requires the chiller to be inspected this year to either assess its condition or replace the chiller. The inspection will cost approximately $10,000, and if the condition of the chiller is deemed to be not acceptable, a new chiller will be required before the system can be restarted and continue to cool the ice sheet.

An upgraded style of chiller is proposed for this application for several reasons. The proposed chiller is a Plate and Frame style, which requires a much smaller footprint and allows for a significant reduction in total ammonia required, but it will require changes to the brine and ammonia piping. Furthermore, the heat exchanger within the chiller will be constructed of titanium, which has a higher resistance to corrosion and hence a much longer life in comparison to the existing carbon steel chiller.

The project manager and consultant have completed the tender package to expedite the project. In order to submit/receive bid submissions, the budget needs to be in place to support the project. If approved, the proposed schedule is to complete the chiller installation and rerouting of the ammonia lines by August 2023, prior to the start of the 2023-2024 ice season.

Based on recommendations from the consultant and industry best practices for chillers (carbon steel versus titanium), the estimated total budget to complete the work is approximately $314,593-$365,000. This includes:

- chiller replacement
- new brine pump
- ammonia and brine piping replacement/rerouting
- permit and design fees
- project management
- project contingency of 15%

Staff will pursue any grant application options that might be available to support this project.

ALTERNATIVES

Alternative 1
The Sooke & Electoral Area Parks and Recreation Commission recommends to the CRD Board: That the 2023 capital budget be amended to include $365,000 for replacement of the arena chiller.

Alternative 2
The Sooke & Electoral Area Parks and Recreation Commission directs staff to proceed with the required inspection to assess the chiller's condition and provide the report and resulting recommendations to the Commission as soon as possible.

IMPLICATIONS

Financial Implications

This project budget of $365,000 can be funded by the capital reserve with minimal impact to future capital requirements.

Regulatory Implications

Technical Safety BC regulates the design, construction, installation and operation of refrigeration equipment throughout BC. Since the ammonia incident in Fernie, BC, there is increased regulation of refrigeration plants and a focus on ensuring equipment is in good working order to protect the safety of staff and public. The proposed new chiller will meet all the new requirements set by Technical Safety BC, which reduce the risk of an ammonia leak in the future.

Service Delivery Implications

If a chiller is not available to cool the ice sheet, there will be significant implications for SEAPARC to be able to deliver the 2023-2024 ice season, and the long-term ability to provide a safe and reliable arena facility.

Approval of Alternative 1 presents the lowest risk to ensuring continual service delivery for SEAPARC's 2023-2024 ice season. The project schedule provides ample time for delivery and installation of the new chiller.

Approval of Alternative 2 presents a significant risk that the chiller may be deemed unusable, thereby causing the refrigeration system to be inoperable for a large portion of the 2023-2024 ice season while a replacement chiller is sourced and installed. If the inspection deems the chiller to be acceptable, the consultant indicated that it would need to be inspected every one to two years, but that significant extension of its useful life would not be expected.

CONCLUSION

The arena chiller is 20 years old and has reached the end of its useful life. Technical Safety BC has mandated that the chiller either be replaced or thoroughly inspected to confirm it does not present an imminent risk of an ammonia leak. Staff recommend that the chiller be replaced with a new style and upgraded materials to ensure continuous operation of the refrigeration system through the 2023-2024 ice season. If approved, staff will commence with the competitive

procurement of a contractor to supply and install the new chiller during the annual shutdown in the summer of 2023.

RECOMMENDATION

The Sooke & Electoral Area Parks and Recreation Commission recommends to the Capital Regional District Board:
That the 2023 capital budget be amended to include $365,000 for replacement of the arena chiller.

Submitted by:	Colleen Hoglund, Acting Senior Manager, SEAPARC
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

Making a difference...together

REPORT TO CAPITAL REGIONAL DISTRICT BOARD
MEETING OF WEDNESDAY, MARCH 08, 2023

SUBJECT **2023-2026 Board Priorities**

ISSUE SUMMARY

To approve the Capital Regional District (CRD) 2023-2026 Board Priorities.

BACKGROUND

The CRD undertakes a planning process at the outset of each new Board term of office. The objective of the planning process is for the Board to confirm the long-term vision and set priorities for supporting organizational activities.

PROCESS

On May 11, 2022, the previous CRD Board directed staff to initiate the 2023-2026 Board planning process. Staff secured Spur Communication as the facilitator and undertook background research.

In November 2022, the planning process started with Director orientation. Orientation provides Directors with procedural and operational information about their duties and responsibilities. Directors also received information about existing CRD services and previously approved Board strategies.

From November 2022 to February 2023, Board Directors participated in facilitated workshops to identify priorities for this term and confirm the revised vision.

On November 30, 2022, Directors shared their input on the vision and were invited to identify areas of greatest focus for the region. Directors generated a long list of ideas, which were subsequently themed and summarized. Following this workshop, staff assessed these ideas across a wide range of considerations including how priorities advanced regional sustainability, livability, and equity. Staff also identified whether these ideas are reflected in operational activities to support work already planned or underway, or if the ideas would accelerate work over-and-above existing mandates, requiring new policy or governance exploration.

On January 25, 2023, Directors received the assessment of their long list of ideas and directed staff to advance 17 initiatives across five high-level priorities:

1) Transportation
2) Housing
3) Climate action & environment
4) First Nations
5) Governance

The Board also directed staff to include 10 priorities in the Corporate Plan.

On February 8, 2023, the Board approved a revised vision statement.

Appendix A presents the Board Priorities and the revised vision. Appendix B provides a list of the 10 priorities to include in the Corporate Plan.

PLANNING FOR ELECTORAL AREAS

Before the first Board planning session, the Directors from the three Electoral Areas—Juan de Fuca, Salt Spring Island and the Southern Gulf Islands—met to discuss priority issues specific to their constituents. Issues that were common to the region were brought forward to the planning sessions with the Board. After the second Board-wide session, Electoral Area Directors and staff met to confirm how they will work to advance regional priorities, while also advancing work on the local issues specific to their respective residents.

NEXT STEPS

Upon approval of the Board Priorities, the Executive Leadership Team will develop an accompanying Corporate Plan. The Corporate Plan and divisional service plans align CRD services, programs and initiatives with Board Priorities and captures key operational and corporate-driven activities needed to guide the organization during the term. The Board will consider the Corporate Plan for approval in April 2023. The Board approves divisional service plans annually in the fall.

ALTERNATIVES

Alternative 1
That the 2023-2026 Board Priorities be approved.

Alternative 2
That the 2023-2026 Board Priorities be approved as amended.

IMPLICATIONS

Environmental & Climate Implications
The Board has identified Climate Action & Environment as one of its five Board Priorities.

Staff applied a climate action lens to the assessment of all priorities, including Transportation, during the assessment part of the process.

Intergovernmental Implications
The CRD will work cooperatively with First Nations, provincial agencies, local governments, and electoral areas to achieve the priorities set by the Board throughout the term.

In addition, the Board has identified reconciliation as one of its five Board Priorities. The Board's commitment to reconciliation is encapsulated in the desired outcome statement: "Strong relationships with First Nations based on trust and mutual respect, partnerships and working together on shared goals".

Service Delivery and Financial Implications
Staff will prepare divisional service plans and budgets for consideration by the Board. These plans, prepared annually, will identify actions to advance Board priorities and associated financial implications.

Alignment with Board & Corporate Priorities
Reporting on Board Priorities will take place through the Quarterly Board Priorities Dashboard as they are progressed.

CONCLUSION

The Board has identified five high-level priorities to address over its four-year term. The priorities will require ongoing focus throughout the term and progress will be reviewed annually. The Corporate Plan along with divisional service plans will align CRD services, programs and initiatives with Board Priorities and set the stage for developing future budget submissions.

RECOMMENDATION

That the 2023-2026 Board Priorities be approved.

Submitted by:	Emily Sinclair, MCIP, RPP, Senior Manager, Regional and Strategic Planning
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: 2023-2026 Board Priorities
Appendix B: Board-Directed Initiatives to be Included in CRD Corporate Plan

Appendix A

Capital Regional District

2023–2026 Board Priorities

Making a difference...together

Table of Contents

2023–2026 Board Priorities

Message from the Board

As the 2023–2026 Capital Regional District (CRD) Board of Directors, we are mayors and councillors in each municipality and elected representatives of the electoral areas. In our roles, we hear the concerns of our constituents, we identify opportunities, risks and problems that need to be solved, and we work together as the CRD Board for the benefit of the region.

The continued growth of the region requires decisive and collaborative action to set the strategic course for the CRD over the next four years and beyond. As a Board, we are committed to embracing new opportunities and solving emerging challenges to support our communities. For our term, we have agreed to focus on five regional priority areas, and have reaffirmed our commitments, towards climate action and reconciliation with First Nations.

We invite you to read this plan to see how we will work together to build a livable, affordable and equitable region.

Board Priorities and Initiatives

We carefully selected strategic priorities and associated initiatives that can be addressed within the CRD's legislative mandate, that are new, or that require more intense or urgent effort than has previously been applied.

We acknowledge the extensive work the CRD is already doing for the region and will continue to do. Through the CRD's established service planning and budget processes, we will determine how best to fund our priorities and initiatives, with a focus on affordability and delivering value to taxpayers.

Connecting Board Priorities to Actions

The Corporate Plan, developed by the Executive Leadership Team and approved by the Board, sets out the strategic priorities, community needs, essential services and corporate obligations. This plan guides service delivery over the Board's four-year mandate.

Actions in the Corporate Plan are implemented through annual Board approval of service plans and budgets. Service plans detail service levels, actions, measurable targets and resources required to advance Board and corporate priorities. Board approval of the financial plan provides the resources for implementation.

Staff report quarterly and annually on progress towards achieving Board Priorities and Corporate Plan initiatives, and on budget variances and emerging risks.

Board of Directors (2023–2026)

Our 24-member Board is composed of one or more elected officials from each of the local governments and electoral areas within the CRD boundaries. Each local government and electoral area holds one director position on the Board for every 25,000 people (or portion thereof).

(front row, left to right)

- Peter **JONES**, North Saanich
- Doug **KOBAYASHI**, Colwood
- Colin **PLANT**, Saanich (*2023 Chair*)
- Gary **HOLMAN**, Salt Spring Island Electoral Area
- Marie-Térèse **LITTLE**, Metchosin
- Maja **TAIT**, Sooke

(centre row, left to right)

- Kevin **MURDOCH**, Oak Bay
- Barbara **DESJARDINS**, Esquimalt
- Cliff **MCNEIL-SMITH**, Sidney
- Al **WICKHEIM,** Juan de Fuca Electoral Area
- Marianne **ALTO**, Victoria
- Susan **BRICE**, Saanich
- Judy **BROWNOFF**, Saanich
- Lillian **SZPAK**, Langford
- Chris **COLEMAN**, Victoria

(back row, left to right)

- Paul **BRENT,** Southern Gulf Islands Electoral Area
- Ken **WILLIAMS**, Highlands
- Scott **GOODMANSON**, Langford
- Sid **TOBIAS**, View Royal
- Zac **DE VRIES**, Saanich
- Ryan **WINDSOR**, Central Saanich
- Dave **THOMPSON**, Victoria
- Dean **MURDOCK**, Saanich
- Jeremy **CARADONNA**, Victoria

CRD Mission and Board Vision

CRD Mission

We are diverse communities working together to serve the public good and build a vibrant, livable and sustainable region, through an effective, efficient and open organization.

Board Vision

The CRD embraces cooperation, innovation, and bold leadership in the delivery of services that contribute to a livable, sustainable and resilient region. We are a region where all residents are included and have access to a quality of life that is fulfilling for them; and where there is a healthy environment for current and future generations.

Priority Setting

Priorities

For our 2023–2026 mandate, we agreed to focus on the following regional priorities:

Transportation

Housing

Climate Action & Environment

First Nations

Governance

To ensure the Board priorities and initiatives continue to respond to the needs of our communities, we will review the priorities on an annual basis to confirm or revise the agreed-upon initiatives.

Strategic Planning Process

Through a series of facilitated Board meetings, beginning in November 2022 and ending in February 2023, we set the strategic priorities for our 2023–2026 mandate. Our priorities complement and build on previous Board actions, existing plans and budgets developed over many years.

We, the Board, approved the 2023–2026 priorities on March 8, 2023.

Transportation

Residents have access to convenient, green and affordable multi-modal transportation systems that enhance livability.

Why?

On-road transportation is responsible for almost 40% of greenhouse gases emitted by the region annually. In addition, while we have a multi-modal regional connectivity plan in place, the region currently experiences lengthy and costly travel times. These issues do not meet the long-term needs of our communities.

Initiatives

1a	Improve regional connectivity and safety across transportation modes
1b	Support investments, expansion and equitable access to active and low carbon transportation
1c	Present options for changes in governance for transportation in the region, including the Electoral Areas

Housing

Residents have access to affordable housing that enhances livability.

Why?

The region currently faces issues of low supply and unaffordable housing. These issues negatively impact livability.

Initiatives

2a Increase supply of affordable, inclusive and adequate housing in the region

Climate Action & Environment

Progress on adaptation, reduced greenhouse gas emissions and triple-bottom line solutions that consider social, environmental and economic impacts.

Why?

The impacts of climate change are being felt globally and locally, and these impacts will continue to intensify and affect our communities and the natural environment for decades to come. It is urgent that we do our part to stabilize the climate and adapt our service planning and delivery.

Initiatives

3a	Maximize solid waste diversion and resource recovery from waste materials
3b	Explore options for a regional approach to biodiversity and the protection of ecological assets
3c	Increase resilience, community and adaptation planning to address climate related risks and disasters
3d	Support energy efficient and low carbon buildings across the region

First Nations

Strong relationships with First Nations based on trust and mutual respect, partnerships and working together on shared goals.

Why?

It is important to acknowledge historic harms, overcome current inequities, and respect local Indigenous laws and culture.

Initiatives

4a	Develop mechanisms to hear more from First Nations' governments as to how they would like the CRD to approach reconciliation
4b	Collaborate with First Nations to build and strengthen new processes for respectful, reciprocal government-to-government decision-making and service delivery that uplift Indigenous self-determination
4c	Invite, respect and incorporate Indigenous leadership and traditional knowledge to enhance initiatives and strategies that support other priorities in the plan
4d	Support shared prosperity by enhancing economic opportunities, in partnership with First Nations

Governance

Effective advocacy, coordinated and collaborative governance, and leadership in organizational performance and service delivery.

Why?

As a Board, we want to strengthen and elevate our deliberations and decisions in a manner that cultivates greater transparency, accountability and engagement with the work of the CRD. There are issues that require regional action outside the CRD's service mandate. Where the CRD does not have a direct mandate, the Board can advocate on behalf of the region.

Initiatives

5a	Influence regional issues and advocate in a consistent, focused way that aligns with the Board strategic priorities
5b	Strengthen Board decision-making frameworks to include First Nations reconciliation, equity, diversity and inclusion, and climate action lenses
5c	Develop understanding of, and accountability for, equity, diversity and inclusion across CRD decision-making bodies
5d	Foster greater civic participation among diverse community members
5e	Explore changes to growth management approaches and identify implementation actions appropriate for local, regional and provincial implementation

Next Steps

To achieve our priorities, we commit to work collaboratively with each other and to direct the CRD with clarity and accountability. CRD staff will undertake specific actions that will be outlined in the 2023–2026 Corporate Plan and staff will report back on the progress of these actions at regular intervals. In turn, progress on our priorities and initiatives will be regularly updated to reflect our commitment to continually evolve and adapt.

We invite staff to plan and advance implementation in a manner that makes best use of internal capacity, phasing the work as needed to ensure risks are mitigated and engaging the public on key initiatives over the term.

The 2023–2026 Board Priorities are available at **www.crd.bc.ca/plans**.

Key Documents

The following plans relate to the Board's priorities and guide CRD operations.

Please visit our website at **www.crd.bc.ca/plans** to view all plans.

- Regional Transportation Plan
- Regional Growth Strategy
- Regional Parks & Trails Strategic Plan
- Regional Housing Affordability Strategy
- First Nations Task Force Report
- CRD Statement of Reconciliation
- Solid Waste Management Plan
- Climate Action Strategy
- Board Advocacy Strategy
- Regional Water Supply Strategic Plan
- Liquid Waste Management Plans

Quick Reference

CRD 2023–2026 Board Priorities on a Page

Priorities	Transportation	Housing	Climate Action & Environment	First Nations	Governance
Desired Outcomes	Residents have access to convenient, green and affordable multi-modal transportation systems that enhance livability.	Residents have access to affordable housing that enhances livability.	Progress on adaptation, reduced greenhouse gas emissions and triple-bottom line solutions that consider social, environmental and economic impacts.	Strong relationships with First Nations based on trust and mutual respect, partnerships and working together on shared goals.	Effective advocacy, coordinated and collaborative governance, and leadership in organizational performance and service delivery.
Initiatives	Improve regional connectivity and safety across transportation modes Support investments, expansion and equitable access to active and low carbon transportation Present options for changes in governance for transportation in the region, including the Electoral Areas	Increase supply of affordable, inclusive and adequate housing in the region	Maximize solid waste diversion and resource recovery from waste materials Explore options for a regional approach to biodiversity and the protection of ecological assets Increase resilience, community and adaptation planning to address climate related risks and disasters Support energy efficient and low carbon buildings across the region	Develop mechanisms to hear more from First Nations' governments as to how they would like the CRD to approach reconciliation Collaborate with First Nations to build and strengthen new processes for respectful, reciprocal government-to-government decision-making and service delivery that uplift Indigenous self-determination Invite, respect and incorporate Indigenous leadership and traditional knowledge to enhance initiatives and strategies that support other priorities in the plan Support shared prosperity by enhancing economic opportunities, in partnership with First Nations	Influence regional issues and advocate in a consistent, focused way that aligns with the Board strategic priorities Strengthen Board decision-making frameworks to include First Nations reconciliation, equity, diversity and inclusion, and climate action lenses Develop understanding of, and accountability for, equity, diversity and inclusion across CRD decision-making bodies Foster greater civic participation among diverse community members Explore changes to growth management approaches and identify implementation actions appropriate for local, regional and provincial implementation

Appendix B

Board-directed initiatives to be included in the CRD Corporate Plan:

- Shift travel behaviour through education, encouragement, and information
- Better regional housing data to support evidence-based decision-making
- Enhance the protection of biodiversity, ecological integrity and natural assets in Regional Parks
- Promote community capacity building on climate action
- Expand access to green space and outdoor recreation
- Protect and enhance local agriculture to support long-term food systems security
- Improve and streamline communications and public engagement to foster trust and understanding
- Achieve sustainable budgets through innovation and streamlining while recognizing the need for infrastructure investments and accountability to taxpayers
- Scale up regional participation in the CRD Arts & Culture Support Service
- Scale up regional support for performing art facilities within the region

2023 Appointments

Board and Committee Membership

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Capital Regional District | 2023

Capital Regional District Board

Chair: Director Plant

Vice-Chair: Director Tait

Capital Regional Hospital District Board

Chair: Director Murdoch

Acting Chair: Director McNeil-Smith

Capital Region Housing Corporation Board

Chair: Director de Vries

Vice-Chair: Director Tait

Board of Directors

Participant	Director	Alternate Director
Central Saanich	R. Windsor	S. Riddell
Colwood	D. Kobayashi	I. Ward
Esquimalt	B. Desjardins	K. Armour
Highlands	K. Williams	K. Roessingh
JDF EA	A. Wickheim	J. Grant
Langford	S. Goodmanson	C. Harder, M. Wagner
Langford	L. Szpak	C. Harder, M. Wagner
Metchosin	M. Little	S. Gray
North Saanich	P. Jones	C. Stock
Oak Bay	K. Murdoch	H. Braithwaite
Saanich	S. Brice	M. Westhaver/ N. Chambers / K. Harper / T. Phelps Bondaroff
Saanich	J. Brownoff	T. Phelps Bondaroff / M. Westhaver / N. Chambers / K. Harper
Saanich	Z. de Vries	K. Harper / T. Phelps Bondaroff / M. Westhaver / N. Chambers
Saanich	D. Murdock	M. Westhaver / N. Chambers / K. Harper / T. Phelps Bondaroff
Saanich	C. Plant	N. Chambers / K. Harper / T. Phelps Bondaroff / M. Westhaver
SGI EA	P. Brent	R. Fenton
Sidney	C. McNeil-Smith	C. Rintoul
Sooke	M. Tait	J. Bateman
SSI EA	G. Holman	M. Richardson
Victoria	M. Alto	S. Hammond / M. Gardiner/ S. Kim / M. Dell / K. Loughton
Victoria	J. Caradonna	S. Hammond / M. Gardiner/ S. Kim / M. Dell / K. Loughton
Victoria	C. Coleman	S. Hammond / M. Gardiner/ S. Kim / M. Dell / K. Loughton
Victoria	D. Thompson	S. Hammond / M. Gardiner/ S. Kim / M. Dell / K. Loughton
View Royal	S. Tobias	J. Rogers

2023 Appointments

Board and Committee Membership

Capital Regional District | 2023

Standing Committees

Core Area Liquid Waste Management

Membership consists of all 15 Board members from the seven municipal participants in the Core Area Liquid Waste Management Plan.

Chair: Director Coleman
Director Alto
Director Brice
Director Brownoff
Director Caradonna
Director de Vries
Director Desjardins
Director Goodmanson
Vice Chair: Director Kobayashi
Director K. Murdoch
Director D. Murdock
Director Plant
Director Szpak
Director Thompson
Director Tobias

Electoral Areas Committee

Membership consists of all 3 Electoral Area Directors.

Chair: Director Brent
Vice-Chair: Director Holman
Director Wickheim
Board Chair (ex-officio)

Environmental Services Committee

Chair: Director Desjardins
3. Director Brownoff
4. Director Caradonna
5. Director Holman
6. Director Kobayashi
7. Director Murdock

Vice-Chair: Director Tobias
8. Director Tait
9. Director Thompson
10. Director Wickheim

Board Chair (ex-officio)

Finance Committee

Chair: Director Brice
3. Director Brent
4. Director Coleman
5. Director Goodmanson
6. Director Kobayashi

Vice-Chair: Director Jones
7. Director Little
8. Director Williams
9. Director Windsor

Board Chair (ex-officio)

2023 Appointments

Board and Committee Membership

Making a difference...together

Capital Regional District | 2023

First Nations Relations Committee

Chair: Director Tait
3. Director Alto
4. Director Brent
5. Director Desjardins
6. Director Goodmanson

Vice-Chair: Director Windsor
7. Director Little
8. Director K. Murdoch
9. Director Williams

Board Chair (ex-officio)

Governance Committee

Chair: Director Little
3. Director Brice
4. Director Coleman
5. Director Desjardins
6. Director Holman
7. Director Jones

Vice-Chair: Director Goodmanson
8. Director K. Murdoch
9. Director D. Murdock
10. Director Tobias

Board Chair (ex-officio)

Hospitals and Housing Committee

Chair: Director Murdoch
3. Director Alto
4. Director Brent
5. Director Brice
6. Director de Vries
7. Director Holman

Vice-Chair: Director Caradonna
8. Director Jones
9. Director Kobayashi
10. Director McNeil-Smith
11. Director Szpak

Board Chair (ex-officio)

Planning & Protective Services

Chair: Director de Vries
3. Director Desjardins
4. Director Little
5. Director McNeil-Smith
6. Director Thompson

Vice-Chair: Director Williams
7. Director Wickheim
8. Director Windsor

Board Chair (ex-officio)

Regional Parks Committee

Chair: Director McNeil-Smith
3. Director Coleman
4. Director Goodmanson
5. Director Holman
6. Director Szpak
7. Director Tait

Vice-Chair: Director Brownoff
8. Director Tobias
9. Director Williams
10. Director Windsor

Board Chair (ex-officio)

Transportation Committee

Chair: Director Murdock
3. Director Brent
4. Director Brice
5. Director Caradonna
6. Director de Vries
7. Director Desjardins
8. Director Goodmanson

Vice-Chair: Director Szpak
9. Director Kobayashi
10. Director McNeil-Smith
11. Director Tait
12. Director Thompson

Board Chair (ex-officio)

Select & Sub-Committees

Royal and McPherson Theatres Services Advisory Committee

(reporting to the Finance Committee). Term is for one year.

Participant	Board Member
Saanich	Colin Plant
	Susan Brice
Victoria	Jeremy Caradonna
	Krista Loughton
Oak Bay	Kevin Murdoch

Solid Waste Advisory Committee

(reporting to the Environmental Services Committee).

Chair: Director Desjardins	Vice-Chair: Elected from amongst the membership
	Board Chair (ex-officio)

Other CRD Committees & Commissions

Arts Commission

Members from each of the participants. Term is four years for Directors, two years for Non-Directors.

Participant	Representative	Alternate
Esquimalt	Duncan Cavens	Andrea Boardman
Highlands	Karel Roessingh	None
Metchosin	Sharie Epp	None
Oak Bay	Carrie Smart	Cairine Green
Saanich	Colin Plant	Nathalie Chambers
Sooke	Dana Lajeunesse	Jeff Bateman
Southern Gulf Islands	Paul Brent	None
Victoria	Marianne Alto (Chair)	None
View Royal	Gery Lemon	None

2023 Appointments

Board and Committee Membership

Making a difference...together

Capital Regional District | 2023

Climate Action Inter-Municipal Task Force

Task Force consists of one elected representative of each municipality and the three electoral areas. Term is for four years unless otherwise noted.

Local Government	Representative	Alternate
Central Saanich	Sarah Riddell	None
Colwood	David Grove	Cynthia Day
Esquimalt	Duncan Cavens	None
Highlands	Ann Baird	None
Langford	Mary Wagner	None
Metchosin	Steve Gray	None
North Saanich	Peter Jones	All Councillors
Oak Bay	Carrie Smart	Lesley Watson
Saanich	Judy Brownoff	None
Sidney	Steve Duck	Sara Duncan
Sooke	Tony St-Pierre	None
Victoria	Marg Gardiner	None
View Royal	Alison MacKenzie	Gery Lemon
Salt Spring Island	Gary Holman	None
Southern Gulf Islands	Paul Brent	None
Juan de Fuca	Al Wickheim	None

Emergency Management Committee

Board appointment of the 3 EA Directors, ELT & Senior Manager, Protective Services. Term is for four years.

Electoral Areas	Representative	ELT + Management		
Juan de Fuca	Al Wickheim	Ted Robbins	Larisa Hutcheson	Shawn Carby
Southern Gulf Islands	Paul Brent	Kevin Lorette	Ian Jesney (Interim)	
Salt Spring Island	Gary Holman	Nelson Chan	Kristen Morley	

Juan de Fuca Water Distribution Commission

Members from each of the participants. Appointed by each of the member councils. Term is for four years.

Participant	Commissioner	Alternate
Colwood	David Grove	Misty Olsen
Highlands	Gord Baird	Karel Roessingh
Juan de Fuca EA	Al Wickheim	Jeri Grant
Langford	Colby Harder	Keith Yacucha, Mark Morley
Langford	Mary Wagner	Keith Yacucha, Mark Morley
Metchosin	Shelly Donaldson	Steve Gray
Sooke	Kevin Pearson	Dana Lajeunesse
View Royal	John Rogers	Ron Mattson

2023 Appointments

Board and Committee Membership

Making a difference...together

Capital Regional District | 2023

Peninsula Recreation Commission

Appointed by member Councils. Term is for two years.

Participants	Commissioner	Alternate
Central Saanich	Niall Paltiel	Gord Newton
Central Saanich	Ryan Windsor	Sarah Riddell
North Saanich	Phil DiBattista	Brett Smyth
North Saanich	Peter Jones	Celia Stock
Sidney	Scott Garnett	Steve Duck
Sidney	Cliff McNeil-Smith	Chad Rintoul

Regional Housing Trust Fund Commission

One Council member is appointed by each participating municipality. Appointments come forward to the Board Chair from the Senior Manager, Regional Housing and are included with appointments made by Board Chair. The Salt Spring Island and Southern Gulf Islands Electoral Area Directors are also members. Term is for two years.

Participant	Commissioner	Alternate
Central Saanich	Bob Thompson	Sarah Riddell
Esquimalt	Ken Armour	None
Highlands	Ann Baird	None
Metchosin	Shelly Donaldson	None
North Saanich	Celia Stock	Irene McConkey
Oak Bay	Lesley Watson	Carrie Smart
Saanich	Zac de Vries	None
Salt Spring Island	Gary Holman	None
Sidney	Richard Novek	Terri O'Keeffe
Sooke	Tony St. Pierre	None
Southern Gulf Islands	Paul Brent	None
Victoria	Krista Loughton	None
View Royal	Sid Tobias	None

Regional Water Supply Commission

Members from each of the participants. Term is for four years.

Participant	Commissioner	Alternate
Central Saanich	Chris Graham	Zeb King
Colwood	Kim Jordison	Misty Olsen
Esquimalt	Tim Morrison	Duncan Cavens
Highlands	Gord Baird	Karel Roessingh
Juan de Fuca EA	Al Wickheim	Jeri Grant

Langford	Kimberly Guiry	Colby Harder, Keith Yacucha
	Mary Wagner	Colby Harder, Keith Yacucha
Metchosin	Steve Gray	Shelly Donaldson
North Saanich	Celia Stock	Irene McConkey
Oak Bay	Cairine Green	Esther Paterson
Saanich	Teale Phelps Bondaroff	None
	Nathalie Chambers*	Colin Plant, Susan Brice, Judy Brownoff
	Zac de Vries*	Judy Brownoff, Colin Plant, Susan Brice
	Karen Harper*	Susan Brice, Judy Brownoff, Colin Plant
	Mena Westhaver*	Susan Brice, Judy Brownoff, Colin Plant
Sidney	Sara Duncan	Steve Duck
Sooke	Dana Lajeunesse	Kevin Pearson
Victoria	Jeremy Caradonna	TBC
	Chris Coleman	TBC
	Stephen Hammond	TBC
	Susan Kim	TBC
View Royal	John Rogers	Ron Mattson

**Assignment of one additional vote*

Saanich Peninsula Wastewater Commission

Members from each of the participants. Appointed by each of the member councils. Term is for two years.

Participant	Commissioner	Alternate
Central Saanich	Zeb King	Chris Graham
Central Saanich	Ryan Windsor	Sarah Riddell
North Saanich	Peter Jones	Celia Stock
North Saanich	Sanjiv Shrivastava	Brett Smyth
Sidney	Cliff McNeil-Smith	Chad Rintoul
Sidney	Sara Duncan	Steve Duck

Saanich Peninsula Water Commission

Members from each of the participants. Appointed by each of the member councils. Term is for one year, except CRD Directors term being four years.

Participant	Commissioner	Alternate
Central Saanich	Zeb King	Chris Graham
Central Saanich	Ryan Windsor	Sarah Riddell
North Saanich	Peter Jones	Celia Stock
North Saanich	Sanjiv Shrivastava	Brett Smyth
Sidney	Cliff McNeil-Smith	Chad Rintoul
Sidney	Sara Duncan	Steve Duck

Traffic Safety Commission

Board appoints one Director as a Representative, and one Director as an Alternate. Term is for two years.

Representative	Alternate
Director D. Murdock	Director de Vries

Appointments to External Boards

CREST (Capital Region Emergency Service Telecommunications)

The CRD appoints the 3 Directors representing the Electoral Areas for shareholder votes (proxies are appointed on an annual basis).

Appointed CRD Shareholder	Proxy
Al Wickheim	Jeri Grant
Gary Holman	John Wakefield
Paul Brent	TBC

Greater Victoria Coalition to End Homelessness

For the Society Board, 3 Directors from the CRD who are also Mayors representing municipalities in the Core, Peninsula, and Westshore, with one to be nominated as the CRD Co-Chair on the Board. Corporate representation will include up to 4 others including staff. Term is for two years.

Appointed Directors:	Corporate Member Representative:
Director McNeil-Smith	Kevin Lorette, GM, Planning & Protective Services
Director K. Murdoch	Don Elliott, Senior Manager, Regional Housing
Director Tait	Nadine Kawata, Manager, Housing Initiatives & Programs

Greater Victoria Harbour Authority Board

Board Chair nominates up to three Directors of CRD Board to be nominated as GVHA Director. Board to also appoint Member representative annually.

Member Representative (One Year Term)	Member Representative Alternate (One Year Term)	Board Nominee (Four Year Term)
Director Goodmanson	Director Plant	Director Brice

Community Liaison Committee - Greater Victoria Harbour Authority

GVHA Member Representative to be appointed.

Member Representative	Member Representative - Alternate
Director Goodmanson	Director Plant

Greater Victoria Labour Relations Association

Annually the Board appoints one Director as its representative and one Director as alternate.

Representative & AGM Delegate	Alternate
Director Coleman	Director Goodmanson

2023 Appointments

Board and Committee Membership

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Capital Regional District | 2023

ICET - Central South Island Regional Advisory Committee

Annually the Board appoints either the CRD Board Chair or Juan de Fuca Electoral Area Director as representative.

Member Representative
Director Brent

Island Corridor Foundation

Board appoints one Director as Local Government Designated Representative annually. Board nominates one Director for election to the Foundation Board (could be the same person as the Member Representative) at its AGM, held in April, for a two-year term.

Member Representative	Nominee
Barb Desjardins	None

Municipal Finance Authority

Board appoints two Directors as representatives and two Directors as alternates. Term is for one year.

Director	Alternate
Director Brent	None
Director Kobayashi	None

Regional Representative to the Te'mexw Treaty Advisory Committee

Annual appointment.

Representative	Alternate
Director Wickheim	None

Royal and McPherson Theatres Society Board

Appointed by member Councils. Term is for one year.

Participants	Board Member	Alternate
Oak Bay	Hazel Braithwaite	Andrew Appleton
Saanich	Teale Phelps Bondaroff	None
Victoria	Matt Dell	None

Sooke and Electoral Area Parks and Recreation Commission

Appointed by member Councils. Term is for one year.

Participants	Commissioner	Alternate
Juan de Fuca	Al Wickheim	Jeri Grant
Sooke	Maja Tait	Jeff Bateman
Sooke	Al Beddows	Kevin Pearson

2023 Appointments

Board and Committee Membership

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Vancouver Island and Coastal Communities Climate Leadership Plan (VICC-CLP) Steering Committee

Elected Official(s) to be appointed for a four-year term.

Representative	Alternate
Director Thompson	None

Victoria Family Court and Youth Justice Committee

Members from each of the participants. Term is two years.

Participant	Member
Central Saanich	Zeb King
Colwood	Cynthia Day
Esquimalt	Darlene Rotchford
Highlands	Marcie McLean
Langford	Kimberley Guiry
Metchosin	Marie-Térèse Little
North Saanich	Jack McClintock
Oak Bay	Esther Paterson
Saanich	Mena Westhaver
Sidney	Terri O'Keeffe
Sooke	Jeff Bateman
Victoria	Krista Loughton
View Royal	Ron Mattson

Vancouver Island Regional Library Board

Board appoints. Only Juan de Fuca Area participates in this service function. Term is for one year.

Representative	Alternate
Al Wickheim	Jeri Grant

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REPORT TO ELECTORAL AREAS COMMITTEE
MEETING OF WEDNESDAY, MARCH 08, 2023

SUBJECT **UBCM Community Emergency Preparedness Fund: Emergency Support Services Grant 2023**

ISSUE SUMMARY

Protective Services has applied (Appendix A) to the Union of British Columbia Municipalities (UBCM) Community Emergency Preparedness Fund (CEPF) grant stream for funding to build a cross-Electoral Area (EA) team to provide Emergency Support Services (ESS) virtually when required. UBCM requires that all grant applications be accompanied by a motion of support from the local government and so a motion is required to move forward with the grant.

BACKGROUND

Under the *Emergency Program Act* (*EPA*), the Capital Regional District (CRD) is responsible for the provision of ESS in three EAs: Salt Spring Island, Juan de Fuca, and Southern Gulf Islands. CRD EA ESS delivery models vary widely amongst the 14 EA communities based on geography and independently developed local delivery practices in the existing ESS programs.

Over the last five years, the Province has phased in an online registration tool called the Evacuee Registration and Assistance (ERA) tool, which allows virtual support to be provided to people displaced by emergencies. The tool provides the opportunity for volunteers and staff from outside of EA communities to reinforce the local ESS teams when required and provide business continuity for those services if they are overwhelmed, or unable to respond due to event impacts. Currently, the tool has not been adopted in the existing programs, so this grant will allow those interested volunteers to learn on the new system, while allowing those who want to remain with the existing systems to do so, as this team will supplement existing volunteers, not displace them.

The grant funding will benefit the three CRD EA Emergency Programs equally, as all three have volunteers interested in participating and the new service will be available to all. The grant request totals $18,000.

ALTERNATIVES

Alternative 1
The Electoral Areas Committee recommends to the Capital Regional District Board:
That the Capital Regional District Board support an application to the Union of British Columbia Municipalities Community Emergency Preparedness for the Emergency Support Services Grant 2023 and direct staff to provide overall grant management.

Alternative 2
That staff be directed to not submit a grant application to the Community Emergency Preparedness Fund for Juan de Fuca, Southern Gulf Islands, and Salt Spring Island Emergency programs for the Emergency Support Services funding stream.

IMPLICATIONS

Financial Implications
The grant will have no impact on annual Emergency Program budgets and will allow greater community resilience during emergency events.

CONCLUSION

An approved CRD Board motion will allow Protective Services to apply for grant funding in order to strengthen ESS capacity in the CRD EAs with no additional cost to the CRD beyond staff time.

RECOMMENDATION

The Electoral Areas Committee recommends to the Capital Regional District Board:
That the Capital Regional District Board support an application to the Union of British Columbia Municipalities Community Emergency Preparedness for the Emergency Support Services Grant 2023 and direct staff to provide overall grant management.

Submitted by:	Shawn Carby, CD, BHSc, MAL, Senior Manager, Protective Services
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Ted Robbins, Chief Administrative Officer

ATTACHMENT

Appendix A – UBCM Emergency Support Services 2023 Application Form

UBCM

Community Emergency Preparedness Fund

Emergency Support Services

2023 Application Form

Please complete and return the application form by **January 27, 2023**. All questions are required to be answered by typing directly in this form. If you have any questions, contact cepf@ubcm.ca or (250) 387-4470.

SECTION 1: Applicant Information	**AP** *(for administrative use only)*
Local Government or First Nation Applicant: Capital Regional District	Date of Application: January 26, 2023
Contact Person*: Jane O'Higgins-Wilson	Position: Electoral Area Emergency Services Coordinator
Phone: 250-626-7235	E-mail: johigginswilson@crd.bc.ca

** Contact person must be an authorized representative of the applicant (i.e. staff member or elected official).*

SECTION 2: For Regional Projects Only

1. **Identification of Partnering Applicants.** For all regional projects, please list all of the partnering eligible applicants included in this application. Refer to Section 4 in the Program & Application Guide for eligibility.

2. **Rationale for Regional Projects.** Please provide a rationale for submitting a regional application and describe how this approach will support cost-efficiencies in the total grant request.

SECTION 3: Project Information

3. **Project Information**
   A. Project Title: CRD EA ERA Team
   B. Proposed start and end dates. Start: June 1, 2023 End: June 1, 2024

4. Project Cost & Grant Request:

A. Total proposed project cost: $18,000.00

B. Total proposed grant request: $18,000.00

C. Have you applied for or received funding for this project from other sources? If yes, please indicate the source and the amount of funding received or applied for.

No, this is a new initiative for the Capital Regional District and three electoral areas.

5. Project Summary. Provide a brief summary of your project in 150 words or less.

This project will develop an All Electoral Area ERA team in order to provide support between ESS teams in the three electoral areas.

6. Emergency Plan. Describe the extent to which the proposed project will specifically support recommendations or requirements identified in the local Emergency Plan.

This project meets the requirements of Section 4.12 of the CRD Corporate Emergency plan that the CRD EA EPCs provide the Emergency Support Services (ESS) role in the Electoral Areas, and also Section 4.9 which requires continued and updated ESS training for the EA volunteers.

SECTION 4: Detailed Project Information

7. Proposed Activities. What specific activities will be undertaken as part of the proposed project? Refer to Section 6 of the Program & Application Guide for eligibility.

The project activities will include the development of team governance documents, group training for the emergency program volunteers and CRD staff on the ERA tool and Emergency Support Services procedures. It will also involve Cultural Perspectives Training with an exteral provider, as the volunteers may now be providing ESS assistance outside of their own communities. Finally, it will conclude with a one-day exercise to test and refine the new procedures.

8. Modernization of local ESS programs. How will the proposed activities support the modernization of the local ESS program? Will the Evacuee Registration & Assistance (ERA) Tool be implemented?

The project will modernize the three programs by increasing capacity to use the ERA system, as well as supporting mutual aid between the Electoral Areas and increasing awareness of cultural safety practices.

9. Capacity Building. Describe how the proposed project will increase emergency response capacity (i.e. having the physical resources and the skills to respond to emergencies) in your community.

This project will build a shared team between the three electoral areas to lend support to each of the area's existing ESS teams and provide business continuity capability.

10. **Host Community Capacity.** Describe how the proposed project will increase emergency response capacity as a host community?

    It will improve the Electoral Area ESS teams capacity to act as a virtual host community, by preparing and training for virtual responses inside and outside of their own communities.

11. **Transferability**. Describe the extent to which the proposed project may offer transferable resources and supplies and knowledge sharing with other local governments and/or First Nations (e.g. ESS volunteers/responders, training resources, cots, blankets, etc.).

    By increasing the ability of the EA emergency Programs to provide mutual aid support to each other, it will also increase the ability of those teams to support other municipalities and First Nations within the Greater Victoria area.

12. **Partnerships.** In addition to Question 1, if applicable, identify any partners you will collaborate with on the proposed project and specifically outline how you intend to work together and enhance mutual aid.

    This project represents a partnership between the three electoral areas and the CRD Protective Services division, in order to strengthen the ESS capacity of the EAs, and build capacity within Protective Services.

13. **Evaluation.** How will the project be evaluated? How will performance measures and/or benchmarks be used to measure outcomes? (e.g. tracking the number of training events and recruitments, external evaluators, etc.)

    The project will be evaluated on the outcome of the final exercise, to determine if the EAs were able to provide ESS support to each other with assistance from Protective Services.

14. **Progress to Date.** If you received funding under prior CEPF intakes for the Emergency Support Services funding stream, please describe the progress you have made in increasing ESS capacity through prior projects.

    The CRD currently has a review in progress to detemine how best to provide ESS across the Electoral Areas and create a ESS vendors list for the areas, the funding for the project was provided under the 2022 CEPF intake. The review will be completed in May 2023, and so those findings will be completed and folded into the new ERA Team procedures. Funding was also received in earlier intakes which provided laptops/Ipads to use the ERA system, which volunteers will now be better placed to use.

15. **Additional Information.** Please share any other information you think may help support your submission.

    The Capital Regional District is the Local Authority for the three electoral areas, and so may apply for this grant on their behalf. However, the Emergency Program Coordinators in the areas are also very supportive of the request. Current ESS volunteers will not be pressured into joining this team, however, as the ERA tool has not yet been fully embraced by the volunteers, this will allow those who are interested in using it to do so.

SECTION 5: Required Attachments
Only complete applications will be considered for funding. The following separate attachments are required to be submitted as part of the application: ☐ Council or Board resolution, Band Council resolution or First Nation resolution, indicating support for the current proposed activities and willingness to provide overall grant management. ☐ Detailed budget for each component identified in the application. This must clearly identify the CEPF funding request, applicant contribution, and/or other grant funding. ☐ For regional projects only: Council or Board resolution, Band Council resolution or First Nation resolution from each partnering applicant that clearly states their approval for the primary applicant to apply for, receive and manage the grant funding on their behalf.

SECTION 6: Signature Applications are required to be signed by an authorized representative of the applicant. Please note all application materials will be shared with the Province of BC.	
I certify that: (1) to the best of my knowledge, all information is accurate, (2) the area covered by the proposed project is within the applicant's jurisdiction (or appropriate approvals are in place) and (3) we understand that this project may be subject to a compliance audit under the program.	
Name: Jane O'Higgins-Wilson	Title: Electoral Area Emergency Services Coordinator
Signature*:  *A certified electronic or original signature is required.*	Date: 26 January 2023

** Signatory must be an authorized representative of the applicant (i.e. staff member or elected official).*

Submit applications to:

Local Government Program Services, Union of BC Municipalities

E-mail: cepf@ubcm.ca

Proposed 2023 UBCM ESS Budget - CRD EA ERA Team	
Labour @$35/hr	
Creation of EA ERA Team Charter and Terms of Reference - 25 hours	
Admin for 5 x 2-hour introductory meetings - 10 hours	
Creation of EA ERA Team Procedures 65 hours	
Total = 100 hours	$3,500
External Training	
JIBC In person training (includes instructor cost, travel and per diem for participants)	$4,000
Delivery of one-day all EA ESS Exercise with contracted support	$5,000
Cultural Perspectives Training $500 x 10 participants	$5,000
Materials	
Supplies for team (binders, printing)	$500.00
Total	$18,000

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REPORT TO CAPITAL REGIONAL DISTRICT BOARD
MEETING OF WEDNESDAY, MARCH 08, 2023

SUBJECT 2023 Provincial Budget Highlights

ISSUE SUMMARY

To provide the Capital Regional District (CRD) Board with a high-level review of potential impacts on CRD services in the 2023 Provincial Budget.

BACKGROUND

On February 28, 2023, Finance Minister Katrine Conroy introduced the 2023 Provincial Budget in the Legislature. This information report is intended to provide highlights on items relating to the CRD, Capital Regional Hospital District (CRHD), and Capital Region Housing Corporation (CRHC). While these highlights have been focused on organizational impacts, there was an attempt to include potential implications for member municipalities and electoral areas.

This is not intended to be a comprehensive budget review.

IMPLICATIONS

Refer to Appendix A for a CRD, CRHD, and CRHC perspective on the Provincial Budget including potential impacts to member municipalities and electoral areas. Highlights also include potential services that may be impacted by provincial initiatives.

The Provincial Budget and Fiscal Plan[1] is the main budget document from the Ministry of Finance that lays out the province's three-year fiscal plan, including economic outlook, revenues, spending, tax measures and forecasting risks and assumptions.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT

Appendix A: 2023 Provincial Budget Highlights

[1] https://www.bcbudget.gov.bc.ca/2023/pdf/2023_Budget_and_Fiscal_Plan.pdf

Appendix A – 2023 Provincial Budget Highlights

Highlights of 2023 BC Provincial Budget

The 2023 budget now estimates 2022-23 fiscal year surplus to be $3.6B compared to an earlier forecast of nearly $6B. The changes are related to recent announcements in spending for local government infrastructure, BC Ferries, rental housing preservation and rebates direct to residents.

For the next three years the province is projecting the following deficits:

- 2023/24 $4.2B deficit (including $6.2B in contingencies)
- 2024/25 $3.8B deficit (including $5.3B in contingencies)
- 2025/26 $3.0B deficit (including $4.4B in contingencies)

Forecasted debt at the end of this three-year budget is $134B (nearly triple pre-pandemic levels).

Other 2023/24 key economic metrics:

- Nominal gross domestic product (GDP) growth is forecasted to be 2.8% (compared to 11.0% in 2022)
- Provincial unemployment rate of 5.7% (compared to 4.6% in 2022)
- Consumer Price Index (CPI) forecasted to be 3.9% (compared to 6.6% in 2022)

Provincial Budget Highlights Impacting Capital Regional District & Member Municipalities

1. Affordable and Attainable Housing

- Budget 2023 also introduces a new property transfer tax incentive to encourage the construction of new purpose-built rentals. This builds on the revitalization property tax exemption from Budget 2018 as part of the 30-point housing plan **[CRD/CRHC/municipalities]**
- As part of Budget 2018, the government introduced the 30-Point Plan for Housing Affordability, and has since committed $7B in capital and operating funding in addition to $2B in borrowing to support new affordable homes over 10 years **[CRD/CRHC]**
- Budget 2023 commits an additional $4.2B over three years; $2.2B in operating and $2B in capital funding, to support Building BC (including grants for non-profit partners through the Housing Priority Initiatives program) and supports to reduce homelessness **[CRD/CRHC]**
  - Supporting transit-oriented development through Building BC and BC Housing programs, including targeted new investments for the Community Housing Fund and the Indigenous Housing Fund **[CRD/CRHC/transportation]**
  - $394M in new capital to acquire lands for future affordable and market housing development projects along main transit corridors **[CRD/CRHC/transportation]**
  - $575M over three years (or $1.1B over 10 years) to enable post-secondary institutions to create student housing spaces **[CRHC]**
  - $66M in operating funding to the Rapid Housing Initiative **[CRHC]**
  - A new Renter's Tax Credit estimated to save renters up to $400 a year **[community]**
  - $230M in operating and capital funding over the next 10 years to help revitalize and expand BC Housing's aging rental stock. This funding is in addition to the new $500M Rental Protection Fund (announced in January 2023) that will provide capital grants to non-profit housing organizations to purchase affordable residential rental buildings **[CRHC]**
  - $7M to support the BC Rent Bank that provides financial support to prevent eviction and homelessness **[CRHC/community]**

- $15.6M over three years for Residential Tenancy to support landlord/tenant disputes **[CRHC/community]**
- $11M over three years to support implementing the new Housing Supply Act which allows the province to set housing targets for communities **[CRHC/building inspection/municipalities]**
- $57M over three years to support new residential zoning measures and reduce the time and costs associated with local government approval processes **[CRHC/building inspection/municipalities]**
- $91M over three years for a pilot project providing incentives encouraging homeowners to develop new secondary rental suites on their principal residence **[building inspection/municipalities]**
- $440M over three years for the Supportive Housing Fund to deliver more supportive homes **[CRHC/municipalities]**
- $109M over three years for BC Housing to provide shelter and low-income assist programs **[CRHC/municipalities]**
- $169M over three years in capital to create additional complex care housing units **[CRHD/ CRHC/municipalities]**
- $228M over three years to establish new regional multi-disciplinary teams to support rapid response to substantive encampments. There is also $44M to support people living in encampments to access temporary modular housing **[CRD/municipalities]**

2. Helping British Columbians to Reduce Costs (also know as affordability)

- Budget 2023 will provide temporary targeted increases to the Affordability Credit in January and April 2023, as well as increases to the BC Family Benefit from January to March 2023 **[other]**
- Budget 2023 will provide new permanent investments including $1.3B in new spending including $119M over three years to provide universal access to free prescription contraception **[community health]**
- An additional $3.2B over three years in new and enhanced tax credits including increases to Climate Action Tax Credit, BC Family Benefit and the Renter's Tax Credit **[CRHC/other]**
- $214M over three years through Feed BC to address food insecurity and supply healthy options to schools using locally produced food **[other/community]**
- $558M over three years to increase supports to income and disability assistance clients including:
  - Increasing the shelter rate by $125 per month **[CRHC]**
  - Increase in earnings exemption by $100 per month
- $388M over three years to support growth in clients served by Community Living BC **[other/community]**
- Doubling student loan maximums for both individuals and students with dependents (the first increase since 2006) **[other/community]**
- Significant change to student loan repayment aligning to the federal Repayment Assistance Program, where lower income students do not have to repay their loans **[other/community]**
- $264M over three years to increase support for caregivers of those with support needs **[recreation/community]**

3. Safe and Healthy Communities for Everyone

- $462M over three years to the Safer Communities Action Plan where there are two main streams, enforcement and intervention services:
  - $230M over three years to enhance provincial police particularly in rural, remote and Indigenous communities **[FNR/municipalities]**
  - $87M over three years to support BC Corrections including funding new enforcement programs: repeat violent and the Special Investigation and Targeted Enforcement Program **[municipalities]**
  - $25M over three years to support the first phase of modernization of the Police Act **[municipalities]**
  - $7M annually to support cannabis operations including licensing, compliance and enforcement, upgrades to existing systems and processes **[FNR/municipalities]**
  - $19M over three years to change, train and provide resources to support decriminalization simple possession of illicit drugs for personal use **[municipalities]**
  - $44M over three years to add 10 additional Indigenous Justice Centres (in addition to those currently in Prince George, Prince Rupert, Merritt and one virtual centre) **[FNR]**
  - $4.5M more annually to improve services at the BC Human Rights Tribunal including free legal services and onboarding Indigenous navigators who will provide support through the Tribunal's Process **[FNR/EDI]**
  - $2M more annually for the Independent Investigations Office, a civilian-led police oversight agency **[EDI]**
  - $16M over three years for virtual and after-hours hearings to help expedite court hearings and reduce community displacement, particularly in rural and remote communities **[EDI]**

4. Sustainable and Clean Economy

- $1.4B over three years in new operating and capital funding to support
  - Future Skills and Inclusive Growth
    - $480M over three years to support the Future Ready Plan – focused on closing labour supply gaps **[CRD/CRHD/CRHC/municipalities]**
      - $39M over three years for a new short-term training grant **[CRD/CRHD/CRHC/municipalities]**
      - Designed to maximize workforce participation
      - Includes funding to assist small and medium-sized businesses
      - Funding to increase the number of trained early childhood educators plus healthcare and technology workers
      - Support innovative and clean growth
    - $58M over three years to support newcomers and speed up foreign credential recognition of qualified professionals **[CRD/CRHD/CRHC/municipalities]**
    - Additional support for students and refugees from Afghanistan and Ukraine
    - $9M over three years to implement the Anti-Racism Data Act including policy development and engagement that will lead to the introduction of a new anti-racism act **[EDI]**
  - Clean and Sustainable Economic Development
    - Forest Landscape Planning
      - $21M over three years to initiate eight more regional Forest Landscape Planning tables, expanding on the existing four, which supports implementation of the Old Growth Strategic Review and helps defer $2.6 million hectares of old growth **[FNR]**
    - Natural Resource Permitting

- $77M over three years to speed up and modernize permitting including a dedicated, cross-ministry team (200 full-time equivalents) prioritizing provincial authorizations required for housing. Improvements to policy, legislation and information management systems will enable co-management and decision-making with Indigenous Peoples, in alignment with United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) **[CRHC/FNR/bylaw/building inspection/municipalities]**

▪ B.C. Critical Minerals Strategy
- $6M over three years to develop the BC Critical Minerals Strategy which aims to drive clean economic development through geoscience, exploration and assessing the mineral value chain **[FNR]**

▪ CleanBC Enhancements
- $44M over three years to continue to support transition to zero-emission economy **[environment/fleet]**
- includes $40M more for the CleanBC Go Electric Commercial Vehicle Pilots (CVP) Program supporting businesses, non-profits and public entities deploying commercial zero-emission vehicles, rail, marine, aircraft and supporting infrastructure **[environment/fleet/ transportation/municipalities]**
- Increasing BC's carbon tax – where the current rate is $50 per tonne, this will increase to $170 per tonne by 2030 **[CRD/environment]**

Table 1 Carbon Tax Rates - 2023 to 2030

Effective Date	BC Carbon Tax Rate ($/tonne CO_2e)
Prior to 2023	$50
April 1, 2023	$65
April 1, 2024	$80
April 1, 2025	$95
April 1, 2026	$110
April 1, 2027	$125
April 1, 2028	$140
April 1, 2029	$155
April 1, 2030	$170

o Enhancing Outdoor and Community Infrastructure

▪ Active Transportation (AT)
- $100M in capital over three years to support AT infrastructure including connecting sidewalks, bike lanes and multi-use paths **[transportation]**

▪ Enhancing Forest Service Roads
- $35M in operating and $14M in capital to maintain and upgrade service roads to support recreation, safe and reliable access **[recreation/FNR]**

▪ BC Parks and Recreation Sites and Trails
- $70M in operating and $31M in capital over three years at provincial parks and other outdoor recreation for improved maintenance and upgrading accessibility **[recreation]**

▪ Climate Resiliency and Emergency Response
- More than $1B in operating and capital funding over three years for ongoing disaster response and recovery. Funding will support programs including the Disaster Financial Assistance which provides local governments, individuals, small businesses, farms and charitable organizations with assistance to recover **[emergency/climate]**
- $100M annually in capital to support repair or replacement of public-sector infrastructure damaged from climate emergencies **[emergency]**

- Through the new Ministry of Emergency Management and Climate, $85M over three years to increase capacity and provide new investments in disaster risk assessment, preparedness and mitigation **[emergency/ climate]**
- Through a provincial-federal cost share agreement, BC Wildfire Service will receive $64M in capital over five years for firefighting equipment **[emergency/climate]**

5. Improved Health and Mental Health Care

- $6.4B over three years in new investment into the public healthcare system including:
  - $2.6B over three years to services across the system including $270M for cancer care **[municipalities/community]**
  - $1B over three years for a new workforce strategy focused on retention, redesign, recruitment and training **[municipalities/community]**
  - Nearly $1.1B over three years for a new compensation model including incentives to attract recent graduates into family practice and to retain those approaching retirement **[municipalities/community]**
  - $867M for mental health, addictions and treatment services **[municipalities/community]**
  - $875M for ongoing COVID-19 health response measures **[municipalities/community]**
- Operating funding to the Ministry of Health is now $30B compared to $19B five years ago

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EEP 23-12

REPORT TO CAPITAL REGIONAL DISTRICT BOARD
MEETING OF WEDNESDAY, MARCH 08, 2023

SUBJECT **Biosolids Update – March 2023**

ISSUE SUMMARY

To update the Capital Regional District (CRD) Board on developing contingency short-term biosolids management options.

BACKGROUND

The CRD's primary option for beneficial use of the CRD's Class A biosolids has been incineration as an alternative fuel at LaFarge's cement manufacturing facility in Richmond, BC. However, the facility was unable to receive biosolids for much of 2022 and early 2023; the current shutdown is now estimated to extend to April 1, 2023. The contingency plan to develop biosolids growing medium (BGM) for use as final landfill cover is exhausted and, as a result of these challenges, the biosolids are currently being landfilled.

In early Q4 2022, staff engaged the consultant assisting with the long-term biosolids planning to evaluate all possible short-term options to alleviate the current issues associated with landfilling. These options included direct land application, land reclamation, composting, BGM, fuel, thermal treatment, pyrolysis and material handling and storage. Given the urgency to finding an alternative to landfilling, only direct land application was considered viable as an immediate short-term contingency option. Staff then reached out to Sylvis Environmental Services Inc. (Sylvis) in early December for a technical memo to investigate local options and they emphasized that flexibility to use a range of options was the best strategy for managing biosolids in the short term. Those options also needed to fit within existing approved and active land application programs and with agreement from landowners. Sylvis identified that the only regulatory requirement would be a letter submitted to the regulator to identify a new generator, or source of biosolids, under these existing plans, which are held by the private landowners.

There are four distinct direct land application options for the CRD to consider when shipping biosolids to LaFarge is not available. The preferred option is to apply CRD biosolids under a land application plan held by a private forest company for its own lands and includes mixing with Regional District of Nanaimo (RDN) biosolids for forest fertilization. This option is the most readily available and least expensive and can also accommodate additional contingency volumes, as may be required through the year. Discussions and the development of operational details are now underway with RDN and Sylvis.

As the CRD Board has been advised, prior to the Environmental Services Committee meeting of January 18, 2023, and the February 8, 2023 CRD Board meeting, regrettably, staff did not formally reach out to RDN. As a result, information presented at these meetings was based on the assumption that the communication had occurred as directed. Once Board approval was received on February 8, 2023, staff and stakeholders could proceed with next steps to implement the amended short-term plan. With the Board's direction, staff have also requested a written technical proposal from Sylvis. This will form the basis of a contract and allow staff to proceed with

managing biosolids within existing land application plans in the Nanaimo region. The private forest company mentioned above has a Memorandum of Understanding with the local First Nation to engage and collaborate on a range of environmental and land use issues and has previously engaged with the First Nation on the existing biosolids land application plan. Additional meetings have been established to discuss the plan amendment. Staff from the CRD, RDN and Sylvis have also met to initiate the discussions related to mixing CRD and RDN biosolids. Sylvis and the forest company have met to amend the land application plan. The other direct land application options do not include mixing with RDN biosolids, and Sylvis will manage the land application plans on behalf of the landowners and in direct collaboration with the CRD. Staff at the RDN will be kept apprised on all options as they are developed. Any change in direction based on the ongoing stakeholder discussions will be brought back to the Environmental Services Committee (ESC) for consideration. Regular operational updates will also be provided to the ESC.

CONCLUSION

The Capital Regional District is moving forward with an amended short-term biosolids management plan to include land application of Class A biosolids to non-agricultural lands. Staff have now formally engaged all stakeholders, including the Regional District of Nanaimo and the landowner has engaged with the local First Nation. Staff are also procuring consulting services to coordinate the amendment of existing land application plans with a goal of having the land application option available as soon as possible.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

Making a difference...together

EEP 23-11

REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 15, 2023

SUBJECT **Bylaw No. 2922 – Sewer Use Bylaw Amendments**

ISSUE SUMMARY

Capital Regional District (CRD) Bylaw No. 2922 requires an amendment to update definitions and to reflect changes to business practice and a subsequent amendment to CRD Bylaw No. 1857 is required to update ticketing provisions related to the changes.

BACKGROUND

The CRD Regional Source Control Program regulates sanitary sewer discharge through Bylaw No. 2922, *Capital Regional District Sewer Use Bylaw No. 5, 2001*. The Sewer Use Bylaw contains language and regulatory tools such as Waste Discharge Permits, Authorizations and Codes of Practice to control what is discharged to the CRD sewer system and treatment facilities before reaching the environment.

Since the last major bylaw update in 2006, staff have identified definitions that must be changed or added to the bylaw and Codes of Practice (regulations specific to certain business sectors) that need updating due to changing business practices and new requirements or standards for treatment works.

These updates were developed by staff and, where necessary, sector consultation occurred. The changes to the Code of Practice for Food Services Operations were discussed with business stakeholders and plumbing and engineering contacts involved in supporting the sector. Other changes are minor, and consultation was through discussion with business representatives during inspections.

Four Codes of Practice (Food Services, Dental, Dry Cleaning and Photo sectors) are being replaced with this amendment and one code (Recreation sector) is being rescinded, as those facilities will be managed more efficiently under a different level of regulation. The amended bylaw content is indicated in the attached blackline version of the Sewer Use Bylaw (Appendix A). Amendment Bylaw No. 4530 (Appendix B) updates Bylaw No. 2922 to reflect these changes.

Bylaw No. 1857, *Capital Regional District Ticket Information Authorization Bylaw, 1990* (MTI), provides for the enforcement of bylaws through ticketing by CRD Bylaw Enforcement Officers. The MTI requires updating to allow the issuing of tickets for failure to comply with the new and updated sections. Amendment Bylaw No. 4531 (Appendix C) updates CRD Bylaw No. 1857 by replacing Schedule 21 with a new schedule corresponding to the bylaw amendments.

ALTERNATIVES

Alternative 1

The Environmental Services Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4530, “Capital Regional District Sewer Use Bylaw No. 5, 2001, Amendment Bylaw No. 7, 2023”, be introduced and read a first, second, and third time; and

2. That Bylaw No. 4530 be adopted.

3. That Bylaw No. 4531, "Capital Regional District Ticket Information Authorization Bylaw 1990, Amendment Bylaw No. 75, 2023", be introduced and read a first, second, and third time; and

4. That Bylaw No. 4531 be adopted.

Alternative 2

That Bylaw No. 4530, "Capital Regional District Sewer Use Bylaw No. 5, 2001, Amendment Bylaw No. 7, 2023" be referred to staff for changes.

IMPLICATIONS

Environmental & Climate Implications

Some types of non-domestic waste can be discharged to the sanitary sewer when the appropriate source control and pre-treatment practices are in place. The Sewer Use Bylaw is used to manage contaminants discharged to the CRD sewer system (through collaborative efforts and regulation, when necessary), thereby protecting wastewater infrastructure, treatment works, worker health and safety, and the marine receiving environment.

Financial Implications

There is no financial impact associated with these amendments, as no fines are being adjusted. Periodic updating of Bylaw No. 2922 to improve service delivery and make other necessary changes is a Regional Source Control Program core service plan item.

CONCLUSION

The CRD Bylaw No. 2922, *Capital Regional District Sewer Use Bylaw No. 5, 2001* needs to be amended to update definitions and modify codes of practice based on regulatory and business practice changes since the last major update in 2006; and Bylaw No. 1857, *Capital Regional District Ticket Information Authorization Bylaw, 1990* requires a corresponding amendment to allow the issuing of tickets, when required, to ensure compliance with the Sewer Use Bylaw.

RECOMMENDATION

The Environmental Services Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4530, "Capital Regional District Sewer Use Bylaw No. 5, 2001, Amendment Bylaw No. 7, 2023", be introduced and read a first, second, and third time; and

2. That Bylaw No. 4530 be adopted.

3. That Bylaw No. 4531, "Capital Regional District Ticket Information Authorization Bylaw 1990, Amendment Bylaw No. 75, 2023", be introduced and read a first, second, and third time; and

4. That Bylaw No. 4531 be adopted.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Bylaw No. 2922 – Unofficial Consolidated Bylaw with Blacklined Amendments (January 10, 2018)
Appendix B: Bylaw No. 4530 - Capital Regional District Sewer Use Bylaw, No. 5, 2001, Amendment Bylaw No. 7, 2023
Appendix C: Bylaw No. 4531 - Capital Regional District Ticket Information Authorization Bylaw, 1990, Amendment Bylaw No. 75, 2023

CAPITAL REGIONAL DISTRICT

BYLAW NO. 2922

****

A BYLAW TO REGULATE THE DISCHARGE OF WASTE INTO SEWERS CONNECTED TO A SEWAGE FACILITY OPERATED BY THE CAPITAL REGIONAL DISTRICT

****

WHEREAS:

A. The Regional Board has established by Bylaw No. 2402, "Source Control Local Service Establishment Bylaw No. 1, 1996", a local service for the control of the direct or indirect discharge of contamination into or through facilities connected to sewage facilities under the regulatory authority of the Capital Regional District (CRD);

B. Under Section 30 of the Environmental Management Act, where a regional district exercises a power to provide a service related to the disposal or treatment of sewage, the Board of the Regional District may make bylaws respecting the direct or indirect discharge of wastes into any sewer or drain connected to a sewage facility operated by the District;

(Bylaw 3350)

C. The Lieutenant Governor in Council has designated the CRD as a Sewage Control Area under Section 29 of the Environmental Management Act and the Capital Regional District has appointed a sewage control manager and municipal sewage control officers;

(*Bylaw 3350)*

NOW THEREFORE the Board of the Capital Regional District in open meeting assembled hereby enacts as follows:

1.0 DEFINITIONS

The following terms, words and phrases when used in this bylaw have the meanings set forth in this section, whether appearing in capital or lowercase form. If not defined below, the words and phrases used in this bylaw have their common and ordinary meanings to the degree consistent with the technical subjects in this bylaw.

"Above Ground Storage Tank Containment Area" means the area within a containment wall or barrier containing above ground storage tanks, but does not include the roof or other covering of the area.

"Activated Carbon" means treated or prepared granular carbon capable of removing organic compounds and other substances from waste or wastewater through the processes of adsorption and absorption.

(Bylaw 3016)
(Bylaw 3105)

"Air" means the atmosphere but, except in a sewer or a sewage facility or as the context may otherwise require, does not include the atmosphere inside a constructed enclosure that is not open to the weather.

"Air Contaminant" means any substance or odour whether gaseous, liquid, and solid or a combination that is emitted into the air and that:

(a) injures or is capable of injuring the health or safety of a person;

(b) injures or is capable of injuring property or any life form;

(c) interferes or is capable of interfering with visibility;

(d) interferes or is capable of interfering with the normal conduct of business;

(e) causes or is capable of causing material physical discomfort to a person; or

(f) damages or is capable of damaging the environment.

"Amalgam Separator" means any technology, or combination of technologies, designed to separate amalgam particles from dental operation wastewater using a process involving sedimentation, filtration or centrifugation.

"Application" means a request for one of the following:

(a) a waste discharge permit;

(b) to amend, add or delete a term or condition of a waste discharge permit;

(c) to change the activity that is the subject of a waste discharge permit;

(d) to renew a waste discharge permit; or

(e) an authorization.

"Authorized" or "Authorization" means the authorization in writing by a manager upon such terms and conditions as specified therein.

"Automotive Repair Operation" means the repair or maintenance of vehicles, engines, transmissions or other mechanical devices that use any oil or grease for lubrication by any commercial, industrial or institutional operation or by a public authority including, but not limited to: mechanical repair shops, collision repair shops, fuelling stations, vehicle maintenance facilities, radiator repair shops, engine washing activities, oil change operations, vehicle dealerships, vehicle recycling operations, towing businesses and automotive detailing operations but does not include vehicle wash operations.

(Bylaw 3016)
(Bylaw 3350)

"Bed and Breakfast Operation" means a private residence occupied by the owner or operator in which overnight accommodation and breakfast food service are provided to guests for compensation.

"Biomedical Waste" means biomedical waste as defined in the Hazardous Waste Regulation, B.C. Reg. 63/88.

(Bylaw 3350)

"Biosolids" means stabilized wastewater sludge resulting from a local government wastewater treatment process which has been sufficiently treated to reduce pathogen densities and vector attraction to allow the sludge to be beneficially recycled in accordance with the requirements of the Organic Matter Recycling Regulation of British Columbia, B.C. Reg. 18/2002.

(Bylaw 3350)

"Board" means the Board of the District.

"BOD" means biochemical oxygen demand, being the quantity of oxygen utilized in the biochemical oxidation of organic substances under standard laboratory procedures in five days at 20 degrees Celsius expressed in milligrams per litre, as determined by the appropriate procedure in standard methods.

"Brewing Kettle" means a large cooking vessel used for boiling.

(Bylaw 3016)

"Carpet Cleaning Operation" means any commercial, industrial or institutional operation or a public authority engaged in the cleaning of hard and soft surfaces using liquid extraction, bonnet, absorbent compound, shampoo or dry foam method equipment and procedures.

(Bylaw 3016)
(Bylaw 3105)

"Carpet Cleaning Waste" means a combination of water carried liquid and solid wastes generated by a carpet cleaning operation.

(Bylaw 3016)

"Certified Amalgam Separator" means any amalgam separator that is certified in accordance with ISO Standard ISO/FDIS 11143: (1999) for "Dental equipment – Amalgam separators" or its amendments as established by the International Organization for Standardization.

(Bylaw 3350)

"Chemical Recovery Cartridge" means a cartridge filled with steel wool, iron mesh, iron particles or iron-impregnated resin capable of removing silver from silver-bearing waste through the principle of metallic replacement.

"Chlorinated Phenols" means the chlorinated derivatives of phenols specified in Schedule "B" and as determined by the appropriate procedure described in standard methods or in procedures authorized by the manager.

~~**"Cleaned Out"** means to have the settled and floating material collected in an oil-water separator, vehicle wash interceptor or trade waste interceptor removed by a pump-out service. *(Bylaw 3016)* *(Bylaw 3105)*~~

"Cleaned Out" means to have the settled and floating material collected in a grease interceptor removed by a waste hauler for off-site waste management, disposal at a septage disposal facility or to have the material removed and disposed of in accordance with a plan approved by the manager.

"COD" means chemical oxygen demand, being a measure of the oxygen equivalent of the organic matter content of a sample that is susceptible to oxidation by a strong chemical oxidant, as determined by the appropriate procedure in standard methods.

"Code of Practice" means a code of practice attached to this bylaw and listed in Schedule “D” for the discharge of waste by a discharging operation.

"Collecting Container" means that part of an amalgam separator designed for retention of separated amalgam waste for the purpose of disposal.

"Combined Sewer" means a sewer designed for the collection and transmission of uncontaminated water, wastewater and stormwater.

"Commercial Kitchen" means a kitchen equipped with any of the following fixtures: a multi-compartment pot sink, a commercial dishwasher, a pre-rinse sink or a self-cleaning exhaust hood; and which is not located on a premises used solely as a private residence.

"Composite Sample" means a sample of waste which is composed of equivalent portions of a specified number of grab samples collected manually or automatically at the same sampling point, at specified times or flow intervals during a specified sampling period.

"Condensed Water" means water which is produced through the process of condensation and includes condensate drainage from refrigeration equipment, air conditioning equipment and steam heating systems.

"Confined Space" means an area that meets all four of the following conditions, as specified by WorkSafe BC:

(a) is enclosed or partially enclosed;
(b) is not designed or intended for continuous human occupancy;
(c) has limited or restricted means for entry or exit that may complicate the provision of first aid, evacuation, rescue, or other emergency response service; and
(d) is large enough and so configured that a worker could enter to perform work.

"Contaminant" means any substance, whether gaseous, liquid or solid, whether dissolved or suspended, or any wastewater quality parameter that, when present above a certain concentration in wastewater:

(a) injures or is capable of injuring the health or safety of a person;

(b) injures or is capable of injuring property or any life form;

(c) interferes or is capable of interfering with the proper operation of a sewer or sewage facility;

(d) causes or is capable of causing material physical discomfort to a person; or

(e) damages or is capable of damaging the environment.

"Contaminated Sites Regulation" means the Contaminated Sites Regulation of British Columbia (B.C. Reg. 705/95) as amended from time to time pursuant to the Environmental Management Act.
(Bylaw 3350)

"Cumulative Flow" means the total flow over a known period of time.

"Cumulative Flow Meter" means a device used for measuring cumulative flow.

"Dental Amalgam" means a dental filling material consisting of an amalgam of mercury, silver and other materials such as copper, tin or zinc.

"Dental Operation" means any operation that carries out dental care, dental hygiene or dental laboratory activities and which produces liquid waste containing mercury or silver.

"Dioxin TEQ" means the dioxin toxicity equivalent value as defined in the Hazardous Waste Regulation.
(Bylaw 3105)
(Bylaw 3350)

"Discharge" means to directly or indirectly introduce a substance into a sewer or sewage facility by spilling, disposing, abandoning, depositing, leaking, seeping, pouring, draining, emptying or by any other means.

"Discharging Operation" means an industrial, commercial, institutional or other undertaking listed in Schedule "D".

(Bylaw 3350)

"District" means the Capital Regional District.

"Domestic Sewage" means sanitary waste produced on a residential property.

"Domestic Waste" means sanitary waste or grey water generated from a residential or personal recreational use of land that is discharged directly or indirectly into a sewer connected to a sewage facility operated by the District.

"Dry Cleaning Operation" means any commercial, industrial or institutional operation or a public authority engaged in the cleaning of textile and apparel goods, rugs, furs, leathers and other similar articles using tetrachloroethylene.

(Bylaw 3105)

"Electrolytic Recovery" means a method of recovering silver from silver-bearing liquid waste by passing a direct electrical current between electrodes suspended in the waste.

"Enactment" means any applicable act, regulation, bylaw, order or authorization, by a federal, provincial, regional or municipal government or their authorized representatives.

"Environmental Management Act" means the Environmental Management Act of the Province of British Columbia.

(Bylaw 3350)

"Fat, Oil and Grease" or "FOG" means insoluble organic fats, oils and grease from animal or vegetable sources."

"Fermentation Operation" means any operation where alcoholic beverages are produced for sale to any person or through the use of facilities or equipment for a fee, including brew pubs, brew clubs, micro-breweries, cottage breweries, wineries, brew-on-premises operations, vint-on-premises operations and distilleries.

(Bylaw 3016)

"Filter Cloth" means a fabric material, such as landscape fabric or any other material that will remove total suspended solids from wastewater such that the effluent will meet the restricted waste criteria set out in Schedule "B".

(Bylaw 3105)

"Flow Control Fitting" means a device used to limit the flow of:

(a) wastewater into a grease interceptor to its rated flow capacity; or

(b) water into a wet vacuum system to a rate which does not exceed the maximum inlet flow rate of a certified amalgam separator installed downstream.

"Food Grinder" means a mechanical device that is connected to a sewer and is used to reduce the particle size of food waste disposed into a sewer."

~~**"Food Services Operation"** means any operation where food is prepared or made ready for eating and served to the public, including a restaurant, health or residential care facility, delicatessen, grocery store, bakery, butcher shop, fast-food outlet, cafeteria, bar or similar place. *(Bylaw 3350)*~~

"Food Services Operation" means any operation where food is prepared, processed, packaged, served, sold, dispensed or otherwise handled, including washing of utensils, in a manner that results in the discharge of fat, oil and grease or solids to a sewer; but not including mobile food services operations and bed and breakfast operations without commercial kitchens.

"Food Waste Collector" means a mechanical device, including a scrap collector, a trough collector and a pot and pan collector, which uses high pressure water to wash utensils, capturing particle size waste and other food waste in a basket or a filter prior to discharging wastewater into a sewer.

"Fueling Station Area" means the area in which vehicle fueling is conducted and which is contained within strip drains or other means of containment, but does not include drainage from the roof or other covering of the area.

"Garburator" means a mechanical device that is connected to a sewer and is used to reduce the particle size of food waste disposed to a sewer.

"Grab Sample" means a sample of waste collected at a particular time and place.

"Gravity Grease Interceptor" means a device that uses gravity and interior baffling to separate and retain fat, oil and grease and solids from wastewater.

~~**"Grease Interceptor"** means a device designed and installed to separate and retain oil and grease from wastewater for physical removal, while permitting wastewater to discharge to a sewer. *(Bylaw 3350)*~~

"Grease Interceptor" means a hydromechanical grease interceptor or a gravity grease interceptor designed and installed to separate and retain fat, oil and grease and solids from wastewater for physical removal, while permitting wastewater to discharge to a sewer.

"Grey Water" means wastewater from food preparation and washing, bathing, dishwashing and laundering.

"Halogenated Solvent" means any liquid organic compound containing chlorine, fluorine, bromine or iodine.

(Bylaw 3105)

"Hazardous Waste" means hazardous waste as defined in the Environmental Management Act.

(Bylaw 3350)

"Hazardous Waste Regulation" means the Hazardous Waste Regulation, B.C. Reg. 63/88, enacted pursuant to the Environmental Management Act.

(Bylaw 3350)

"Hazardous Waste Regulation Leachate Quality Standards" means the contaminant concentrations for leachate as set out in Table 1, Schedule 4 of the Hazardous Waste Regulation.

(Bylaw 3350)

"High Volume Discharge" means any discharge of non-domestic waste into a sewer in excess of 10 cubic metres per day or 300 cubic metres over any consecutive 30-day period but not including water from a pool.

"Hydromechanical Grease Interceptor" means a device that uses hydromechanical separation, interior baffling and air entrainment barriers, whether in combination or independently, to separate and retain fat, oil and grease and solids from wastewater.

"Kitchen Equipment" means equipment that includes, but is not limited to exhaust systems, stoves, ovens, broilers, woks, fryers and the surfaces in the vicinity of the kitchen equipment.

(Bylaw 3350)

"Kitchen Equipment Cleaning Operation" means any commercial, industrial, institutional operation or a public authority engaged in the cleaning of kitchen equipment using grease-removing chemicals and water under high pressure.

(Bylaw 3350)

"Kitchen Equipment Cleaning Waste" means a combination of water and water carried liquid and solid wastes generated by a kitchen equipment cleaning operation.

(Bylaw 3350)

"Ice Cooling Refrigeration System" means a cooling system used in ice making.

(Bylaw 3105)

"Ice Melting Operation" means removal of the ice playing surface and ice paint using ice resurfacing equipment and allowing the removed ice to melt.

(Bylaw 3105)

"Ice Paint" means paint or other material used to provide colour to an ice playing surface.

(Bylaw 3105)

"Impervious" means having a permeability not greater than $1x10^{-7}$ cm per second when subjected to a head of 0.305 m of water. Permeability is not to be affected by the liquid it is meant to contain.

"Improvement District" means an improvement district incorporated under the Local Government Act.

~~**"ISO Standard"** means standard ISO/FDIS 11143: (1999) for "Dental equipment – Amalgam separators" or its amendments as established by the International Organization for Standardization. *(Bylaw 3350)*~~

"ISO Standard for Amalgam Separators" means standard ISO 11143:2008 for "Dental equipment – Amalgam separators" and its amendments as established by the International Organization for Standardization (ISO).

"Laboratory Operation" means any commercial, industrial or institutional laboratory or a laboratory operated by a public authority that generates liquid waste in association with activities including, but not limited to: agriculture, analytical service, aquaculture, chemical manufacturing, education, forestry, health care, industrial hygiene, materials testing, pharmaceutical manufacturing, research, tissue culture and veterinary medicine.

(Bylaw 3105)

"Manager" means the sewage control manager of the District.

"Manual Wash" means vehicle wash operations wherein the customer or operator provides manual labour and where no self-propelled wash racks or conveyor equipment is used.

(Bylaw 3105)

"Mash Tun" means a vessel in which sugars are extracted from malt by enzymes on the addition of water to produce sweet wort.

(Bylaw 3016)

"Mechanical Wash" means vehicle wash operations where vehicles are washed by equipment operated mechanically including, but not limited to, brush, soft cloth, tunnel and touchless systems.

(Bylaw 3105)

"Metering Pump" means a pump designed to deliver waste at a calibrated flow rate.

"Monitoring Point" means an access point to a sewer, private drainage system or other sewer system for the purpose of:

(a) measuring the rate of flow or volume of wastewater being discharged from a premises;

(b) collecting representative samples of wastewater being discharged from a premises.

"Municipality" means any participating member city, town, district or other incorporated area of the Capital Regional District incorporated as a municipality or the Capital Regional District itself.

"Non-domestic Waste" means all waste except domestic waste, sanitary waste, stormwater and uncontaminated water.

"Officer" means a municipal sewage control officer appointed by the Board.

"Off-site Waste Management" means removal of waste to a facility licensed by a province, state or federal government for treatment and disposal in accordance with applicable enactments.

"Oil-adsorbing Filter" means a filter capable of removing oil and grease and oil and grease (hydrocarbons) from printing operation effluent.

(Bylaw 3016)

"Oil and Grease" means an organic substance or substances recoverable by the partition-gravimetric procedure set out in standard methods or a procedure authorized by the manager and includes, but is not limited to, hydrocarbons, esters, fats, oils, waxes and high molecular weight carboxylic acids.

(Bylaw 3105)

"Oil and Grease (Hydrocarbons)" means an organic substance or substances recoverable by the partition-gravimetric silica gel absorption procedure set out in standard methods or a procedure authorized by the manager and includes, but is not limited to, non-polar petroleum hydrocarbons.

(Bylaw 3105)

"Oil-water Separator" means a three-stage oil-water separator that meets the Standard for Oil-Water Separators (ULC-S656-00) prepared by Underwriters' Laboratories of Canada or the equivalent oil-water separation technology able to achieve an effluent quality of 50mg/L of oil and grease (hydrocarbons) or less.

"Operator" includes the person who owns or otherwise has a right to operate a discharging operation or any person who has been authorized by such person to act as his, her or its agent.

(Bylaw 3350)

"Order" means an order issued by the manager.

"Organo-tin compounds" means a group of chemical compounds, containing tin in combination with organic molecules, which are commonly used in anti-fouling paints including, but not limited to tributyltin, dibutyltin, monobutyltin and triethyltin.

(Bylaw 3350)

"Owner" means any person who is registered under the Land Title Act as the owner of land, or any other

person who is in lawful possession of land or who is in lawful possession or occupancy of any buildings situated on the land.

"PCB" means any monochlorinated, dichlorinated or polychlorinated biphenyl or any mixture that contains one or more of these.

"Pesticides" means pesticides regulated under the Integrated Pest Management Act of British Columbia.
(Bylaw 3105)
(Bylaw 3350)

"Petroleum Solvent" means a petroleum distillate, such as Stoddard Solvent, used for dry cleaning purposes.

"pH" means the expression of the acidity or basicity of a solution as defined and determined by the appropriate procedure described in standard methods.

"Phenols" means the hydroxy derivatives of aromatic hydrocarbons as determined by the appropriate procedure described in standard methods.

"Photographic Imaging Operation" means any operation which carries out photographic film processing or printing that uses silver in image forming or creates waste containing silver.

"Polynuclear Aromatic Hydrocarbons (PAH)" means the aromatic hydrocarbons specified in Schedule "B" and as determined by the appropriate procedure described in standard methods or in procedures authorized by the manager.

"Pool" means any water receptacle used for swimming or as a bath or hot tub designed to accommodate more than one bather at a time or designed for decorative purposes.

"Pool Filter Media" means diatomaceous earth, filter sand, or any other material used in a pool filter.
(Bylaw 3105)

"Practical Quantitation Limit" means the practical quantitation limit as specified in Table 2 of Schedule "F".
(Bylaw 3016)

"Pre-filter" means a reusable filter used to remove yeast cells from alcoholic beverages after completion of the fermentation process.
(Bylaw 3016)
(Bylaw 3105)

"Premises" means any land or building or both or any part thereof.

"Printing Operation" means any commercial, industrial or institutional operation or a public authority that involves printing including, but not limited to, the following processes: lithography gravure, rotogravure, flexography, screen printing or letterpress.
(Bylaw 3016)
(Bylaw 3105)

"Private Drainage System" means a privately owned assembly of pipes, fittings, fixtures, traps and appurtenances that is used to convey wastewater, uncontaminated water, stormwater or foundation drainage to a sewer, sewage facility or a private wastewater disposal system.

"Prohibited Waste" means prohibited waste as defined in Schedule "A" to this bylaw.
"Radioactive Materials" means radioactive materials as defined in the Atomic Energy Control Act of Canada and Regulations under that Act.

"Rated Flow Capacity" means the quantity of wastewater per unit of time that will pass through a grease interceptor while allowing for effective service.

"Readily and Easily Accessible" means safe access for work by an officer or manager that complies with Parts 4.54 to 4.63 and Part 13 of the Occupational Health and Safety Regulation without requiring the use of a personal fall protection system as defined in Part 11.

"Recreation Facility Operation" means any local government, educational institution or commercial facility containing one or more of the following: ice arena, curling rink, water park or pool.
(Bylaw 3105)

"Recreational Vehicle Waste" means domestic waste accumulated in a holding tank in a trailer, camper, transportable housing unit, bus or aircraft.

"Residential Property" means a property which is used primarily for the purpose of residence by persons on a permanent, temporary or seasonal basis.

"Restricted Waste" means restricted waste as defined in Schedule "B" to this bylaw.

"Rotisserie" means cooking equipment which is typically used for roasting meat on a rotating spit and which discharges oil and grease or solids to a sewer.

"Sani-dump" means a facility connected to a sewer or sewage facility operating under a waste discharge permit or authorization allowing the discharge of recreational vehicle waste or carpet cleaning waste.
(Bylaw 3016)

"Sanitary Sewer" means a sewer which carries sanitary waste or wastewater but which is not intended to carry stormwater or uncontaminated water.

"Sanitary Waste" means waste that contains human feces, urine, blood or body fluids originating from sanitary conveniences or other sources.

"Seawater" means artificially prepared seawater or natural seawater from the marine environment.
(Bylaw 3105)

"Self-Clean" means to remove settled and floating material collected in a grease interceptor for off-site waste disposal in accordance with a plan approved by the manager.

"Septage Disposal Bylaw" means Bylaw No. 2827, "Capital Regional District Septage Disposal Bylaw No. 2, 2000".

"Septage Disposal Facility" means a facility for receiving waste operating under a waste discharge permit or authorization and designated in Schedule "A" to the Septage Disposal Bylaw.

"Septage Waste" means septage, as defined in the Septage Disposal Bylaw, that meets the quality criteria specified in Schedule "B" of the Septage Disposal Bylaw.

"Sewage Control Manager" means a sewage control manager appointed by the Capital Regional District, or a person appointed by the Board as his or her deputy, under the Environmental Management Act.
(Bylaw 3350)

"Sewage Facility" means works owned or otherwise under the control or jurisdiction of the District that gathers, treats, transports, stores, utilizes or discharges waste.

"Sewer" means all pipes, conduits, drains and other equipment and facilities, owned or otherwise under the control or jurisdiction of the District or one or more municipalities, for collecting, pumping and transporting wastewater either to a sewage facility, or otherwise and includes all such pipes, conduits, drains and other equipment and facilities which connect with those of the District or one or more municipalities.

"Sharps" means hypodermic needles, hypodermic syringes, blades, broken glass and any devices, instruments or other objects which have acute rigid corners, edges or protuberances.

"Ship and Boat Waste" means the sanitary waste and grey water accumulated in a holding tank on a pleasure boat, houseboat, commercial vessel or naval vessel but not including bilge water, ballast water or wastewater sludge.

"Ship and Boat Waste Disposal Facility" means a facility connected to a sewer or sewage facility operating under a waste discharge permit or an authorization allowing the discharge of ship and boat waste.

"Significant Difference" means a statistically determined difference at the 95% confidence level.

"Silver Recovery System" means the combination of holding tanks, metering pumps, plumbing and silver recovery technology which is used to treat liquid waste containing silver produced by photographic imaging operations.

(Bylaw 3105)

"Silver Recovery Technology" means equipment that is designed to recover silver from liquid waste produced by photographic imaging operations using such methods as metallic replacement, electrolysis, ion exchange or chemical precipitation including: electrolytic units, chemical recovery cartridges, chemical precipitation units and ion exchange units.

"Silver Test Kit" means a test kit that is capable of measuring the silver concentration in liquid waste at a minimum level of 100 mg/L.

"Silver Test Paper" means test paper that is capable of indicating the presence of silver in liquid waste at a minimum concentration of 500 mg/L.

"Sludge" means wastewater containing more than 0.5% total solids.

"Solids Interceptor" means a device that separates, and then removes or retains, solids from wastewater, including a basket, screen or other similar device.

"Solvent" means a hydrocarbon-based liquid used to clean equipment or to dissolve other substances.

(Bylaw 3016)
(Bylaw 3350)

"Soup Kettle" means a commercial cooking or warming kettle including tilt kettles.

"Spill Containment" means any impervious structure that surrounds a container or works that is sufficient to hold the larger of:

(a) 110% of the largest volume of free liquid in the container or works, or

(b) 25% of the total volume of free liquid in storage.

"Spill Reporting Regulation" means the Spill Reporting Regulation enacted pursuant to the Environmental Management Act.

(Bylaw 3350)

"Spill Response Plan" means a written plan developed for the operator to respond to any spills of prohibited or restricted waste that defines the rules and responsibilities for a spill response, and includes contact names and numbers for the appropriate agencies and a list of all spill response equipment.

(Bylaw 3016)
(Bylaw 3105)

"Standard Methods" means the latest edition of "Standard Methods for the Examination of Water and Wastewater" jointly prepared and published from time to time by the American Public Health Association, American Water Works Association and the Water Environment Federation.

"Storm Sewer" means a sewer for the collection and transmission of stormwater or uncontaminated water.

"Stormwater" means water resulting from natural precipitation from the atmosphere and which is intended to be transported in a storm sewer, a combined sewer or a watercourse.

"Substance" includes any solid, liquid or gas.

"Suspended Solids" means the portion of total solids retained by a filter, as determined by the appropriate procedure in standard methods.

"Tetrachloroethylene" means an aliphatic halogenated hydrocarbon having the chemical formula $CCl_2=CCl_2$ also referred to as: ethylene tetrachloride, PCE, perc, perchlor, perchlorethylene, perchloroethylene, perk, tetrachloroethene and 1,1,2,2- tetrachloroethylene.

"Tetrachloroethylene-Contaminated Residue" means any solid, liquid or sludge containing tetrachloroethylene, other than wastewater, that is produced by a dry cleaning operation.

(Bylaw 3105)

"Tetrachloroethylene-Water Separator" means equipment used to separate tetrachloroethylene and water by gravity.

(Bylaw 3105)

~~**"Total Volume**", as referred to in Schedule "I", means the sum of the volumes of each compartment of a fixture calculated by multiplying the width of a compartment by the length of a compartment by the height of a compartment measured to the level of the top of the outside sidewall of the fixture.~~

~~(Bylaw 3350)~~

"Total Volume", as referred to in Schedule “I”, means the sum of the volumes of each compartment of a sink calculated by multiplying the width of a compartment by the length of a compartment by the height of a compartment measured to the level of the top of the sidewall of the fixture or other valid method of calculating or measuring the quantity of three-dimensional space, not including drain boards.

"Trade Waste Interceptor" means an interceptor designed to separate and retain settleable solids and floatable material from printing operation wastewater prior to further treatment before discharge to sanitary sewer.

(Bylaw 3016)

"Transportation of Dangerous Goods Regulations" means the Transportation of Dangerous Goods Regulations SOR/2001-266 enacted pursuant to the Transportation of Dangerous Goods Act of Canada.

(Bylaw 3350)

"Treasurer" means the Director of Finance of the District or his or her authorized agent.

(Bylaw 3105)

"Treatment Works" means any works or procedures specified in a code of practice designed for the treatment of waste.

(Bylaw 3016)

"Trub" means waste hops and proteins generated from brewing kettle bottoms.

(Bylaw 3016)

"Trucked Liquid Waste" means any waste that is collected and transported from the site where the waste originated by means other than discharge to a sewer, but does not include septage waste, recreational vehicle waste, carpet cleaning waste or ship and boat waste.

(Bylaw 3016)

"Uncontaminated Water" means any water excluding stormwater but including cooling water, condensed water and water from municipal waterworks or a private water supply to which no contaminant has been added as a consequence of its use, or to modify its use by any person.

"Utensil" means any item that may come into contact with food including but not limited to: kitchenware implements, tableware, glassware, cutlery or other similar items used in the preparation, service, storage or consumption of food.

"Vehicle" means a vehicle as defined under the Motor Vehicle Act as amended from time to time.

"Vehicle Wash Interceptor" means an interceptor equipped with a minimum of three chambers designed to retain suspended solids and oil and grease from vehicle wash wastewater.

(Bylaw 3105)

"Vehicle Wash Operation" means the washing of the exterior of vehicles by any commercial, industrial or institutional operation or by a public authority.

(Bylaw 3016)
(Bylaw 3350)

"Waste Hauler" means a person or company that collects waste from a waste generator for transportation and delivery to a permitted waste management or septage disposal facility.

"Waste Discharge Assessment Form" or "**WDAF**" means a form which may include engineering drawings that show the sizing calculation listing the dimensions and total volume or flow rates, as applicable, of all connected fixtures as well as the peak flow rate and rated flow capacity of the proposed grease interceptor, and otherwise demonstrates the installation requirements under this Code are met.

"Wok Station" means cooking equipment with a water supply and one or more cooking surfaces, typically used for stir frying food and which discharges water, oil and grease or solids to a sanitary sewer.

"Waste" means any substance whether gaseous, liquid or solid, that is or is intended to be discharged or discarded, directly or indirectly, to a sewer or sewage facility.

"Waste Discharge Permit" means a waste discharge permit issued by a manager under this bylaw.

(Bylaw 3350)

"Wastewater" means the composite of water and water-carried wastes from residential, commercial, industrial or institutional premises or any other source.

"Wastewater Sludge" means the removed material resulting from chemical treatment, coagulation, flocculation, sedimentation, flotation or biological oxidation of wastewater.

"Water" includes seawater, surface water, ground water and ice.

"Watercourse" means:

(a) a river, stream, creek, waterway, lagoon, lake, spring, swamp, marsh or other natural body of water; or

(b) a canal, ditch, reservoir or other man-made surface feature;

whether it contains or conveys water continuously or intermittently.

"Waterworks" means any works owned or otherwise under the control or jurisdiction of the District or one or more of its member municipalities or an improvement district that collects, treats, transports or stores drinking water.

"Wetted Height" means the depth from the static water line to the bottom of the grease interceptor, oil-water separator, vehicle wash interceptor or trade waste interceptor.

(Bylaw 3350)

"Wet Vacuum System" means a dental operatory vacuum system that uses water, which is spun and thrown out within the pump mechanism, to create a vacuum.

"Works" includes:

(a) a drain, ditch, sewer or waste disposal system including a sewage treatment plant, pumping station or outfall;

(b) a device, equipment, land or a structure that:

(i) measures, handles, transports, stores, treats or destroys waste or a contaminant; or
(ii) introduces waste or a contaminant into the environment;

(c) an installation, plant, machinery, equipment, land; or a process that causes or may cause a release of a contaminant into the environment, or is designed or used to measure or control the introduction of waste into the environment, or to measure or control a contaminant;

(d) an installation, plant, machinery, equipment, land or a process that monitors or cleans up a contaminant or waste.

"95% Confidence Limit" means that interval or range of values around an observed value which will, in 95% of the cases, include the expected value, where the expected value is defined as the average of an infinite series of such determinations.

2.0 DISCHARGES TO SEWERS

2.1 No person shall directly or indirectly discharge or allow or cause to be discharged into a sewer connected to a sewage facility operated by the District:

(a) Any **prohibited waste**, as described in Schedule "A".

(b) Any **restricted waste**, as described in Schedule "B" unless that person:

(i) has first obtained a waste discharge permit or authorization; or
(ii) complies with a code of practice for that type of waste.

(c) Any **high-volume discharge** unless that person:

(i) has first obtained a waste discharge permit or authorization; or
(ii) complies with a code of practice for that type of waste.

(d) Any waste from a **discharging operation** unless that person:

(Bylaw 3105)

(i) has first obtained a waste discharge permit or authorization; or
(ii) complies with the code of practice for that type of waste.

(e) Any **uncontaminated water** in a volume greater than 2.0 cubic metres per day without prior authorization from the manager.

(f) Any **stormwater** without prior authorization from the manager.

2.2 Subparagraphs 2.1(b)(ii), (c)(ii) and (d)(ii) do not apply to:

(a) waste for which there is no code of practice;

(b) trucked liquid waste or septage waste discharged under Section 2.3 or 2.4.

2.3 No person shall discharge septage other than into a sewer at a septage disposal facility.

2.4 No person shall discharge trucked liquid waste other than at a septage disposal facility or a facility operating under a waste discharge permit or authorization that specifically authorizes such discharges.

2.5 No person shall directly or indirectly discharge or allow or cause to be discharged into a sewer connected to a sewage facility operated by the District any water or other substance for the purpose of diluting any non-domestic waste.

2.6 A municipality is not in violation of subsections 2.1 or 2.5 where there is a discharge contrary to one or more of those subsections by a third party into a sewer or sewage facility connected to a sewage facility operated by the District.

2.7 In order to obtain and maintain the authorization referred to in paragraph 2.1(e), where the uncontaminated water is produced on property other than residential property and is from a source other than a waterworks, a person shall:

(a) install and thereafter maintain at that person's expense, a meter on the water supply generating the authorized discharge; and

(b) supply to the manager, by the 10th of each month, an accurate calculation of the volume of water measured pursuant to paragraph 2.7(a).

2.8 Every person who directly or indirectly discharges waste or substances produced, treated, handled or stored on property other than residential property into a sewer connected to a sewage facility operated by the District shall, as a condition of that discharge:

(a) provide and maintain facilities to prevent accidental discharge or a discharge contrary to this bylaw or a waste discharge permit or authorization such as spill containment, recovery or neutralization facilities for substances which, if accidentally discharged, would constitute prohibited or restricted waste;

(b) post, and keep posted, permanent signs in conspicuous locations on the premises displaying the name, telephone number of the person to call as prescribed in Schedule "C" in the event of accidental discharge of a prohibited or restricted waste; and

(c) inform employees, who may cause or discover the discharge of prohibited or restricted waste, of the notification procedures set out in Section 7 of this bylaw.

2.9 No person shall directly or indirectly discharge, or allow or cause to be discharged, any recreational vehicle waste into a sewer connected to a sewage facility except:

(a) with a waste discharge permit or authorization; or

(b) at a sani-dump connected to a sewer or sewage facility and operating under a waste discharge permit or authorization that specifically authorizes such discharges.

2.10 No person shall directly or indirectly discharge, or allow or cause to be discharged, any carpet cleaning waste into a sewer connected to a sewage facility except under conditions specified in a code of practice, waste discharge permit or authorization.

(Bylaw 3016)

2.11 No person shall directly or indirectly discharge, or allow or cause to be discharged, any ship and boat waste into a sewer connected to a sewage facility except:

(a) with a waste discharge permit or authorization;

(Bylaw 3105)

(b) at a ship and boat waste disposal facility operating under a waste discharge permit or authorization; or

(Bylaw 3105)

(c) at a septage disposal facility.

2.12 No kitchen equipment cleaning operator shall directly or indirectly discharge, or allow or cause to be discharged, any kitchen equipment cleaning waste into a sewer connected to a sewage facility except:

(a) with a waste discharge permit or authorization; or

(b) at a facility operating under a waste discharge permit or authorization that specifically authorizes such discharges.

2.13 As a condition of discharge under Section 2.12, a kitchen equipment cleaning operator must:

a) adjust the pH of the waste to a range between 5.5 and 12.5; and

b) keep a record of all kitchen equipment cleaning performed, including:

i) the date of cleaning; the cleaning location; any pH adjustment; the final pH of waste disposed; and the location and date of disposal.

(Bylaw 3350)

2.14 Sections 2.12 to 2.13 do not apply to discharges of kitchen equipment cleaning waste from self-cleaning exhaust hoods installed over kitchen equipment being operated under the requirements of Schedule "I" of this Bylaw.

(Bylaw 3350)

2.15 Subparagraphs 2.1(b), (c) and 2.4 do not apply to a municipality or agent of a municipality where waste that has been removed from a municipal sanitary sewer, due to maintenance activities, is discharged into a municipal sewer at another location.

(Bylaw 3350)

3.0 WASTE DISCHARGE PERMITS AND AUTHORIZATIONS

3.1 The manager may, by order under Section 29 of the Environmental Management Act, issue a waste discharge permit or authorization to allow a high volume discharge or to allow the discharge of waste other than domestic sewage upon such terms and conditions as the manager considers appropriate for the protection of sewers, sewage facilities, human or animal health and safety, and the environment, and without limiting the generality of the foregoing, may in the waste discharge permit or authorization:

(Bylaw 3350)

(a) place limits and restrictions on the quantity, frequency of discharge and nature of the waste permitted to be discharged;

(b) require the holder of a waste discharge permit or authorization, at his or her expense, to repair, alter, remove or add works, or construct new works to ensure that the discharge will comply with the waste discharge permit or authorization, this bylaw and any enactment;

(c) require the holder of a waste discharge permit or authorization, at his or her expense, to monitor the waste being discharged under the waste discharge permit or authorization in the manner specified by the manager and to provide information concerning the discharge as requested by the manager including, but not limited to, routine maintenance check dates, cleaning and waste removal dates, and the means of disposal of accumulated wastes and waste treatment residuals;

(d) require the holder of the waste discharge permit or authorization to submit to the manager detailed plans and operating procedures for all existing facilities installed on the premises for the purpose of preventing accidental discharge;

(e) require compliance by the holder of the waste discharge permit or authorization with such other enactments as the manager considers necessary or desirable in the circumstances;

(f) make such other requirements as the manager deems necessary or desirable.

3.2 Notwithstanding paragraphs 2.1(b) and (c), a manager may, by order under Section 29 of the Environmental Management Act, require any person or any class of persons to obtain a waste discharge permit or authorization for the discharge by that person or class of persons of any non-domestic waste that is not a high volume discharge or a restricted waste.

(Bylaw 3350)

3.3 Upon receipt of notice under subsection 3.2, the person receiving the notice shall, within 30 days, apply for a waste discharge permit or authorization and shall provide to the manager such information relating to the discharge of non-domestic waste by that person as the manager may require.

3.4 The manager may suspend or revoke a waste discharge permit or authorization for a failure to comply with the terms and conditions of the waste discharge permit or authorization or for any failure to comply with this bylaw, or any enactment applicable to the discharge of waste into a sanitary sewer connected to a sewage facility operated by the District.

(a) A waste discharge permit or an authorization may not be transferred or assigned without a manager's consent in writing.

(b) A manager may withhold consent where there has been a breach of this bylaw or a condition of the waste discharge permit or authorization.

3.5 An application for a waste discharge permit for a new discharge, or an amendment to an existing waste discharge permit, shall be made to a manager on the form attached hereto as Schedule "C" not less than 90 days prior to the date that the waste discharge permit is required, and shall be accompanied by such information, drawings and specifications as may be required under Schedule "C".

3.6 A holder of a waste discharge permit must comply with the terms and conditions as set by the manager in the waste discharge permit.

(Bylaw 4221)

3.7 A holder of a waste discharge authorization must comply with the terms and conditions as set by the manager in the waste discharge authorization.

(Bylaw 4221)

4.0 CODES OF PRACTICE

4.1 A code of practice does not apply to a discharging operation that is subject to a waste discharge permit or authorization, unless otherwise specified in the waste discharge permit or authorization.

4.2 Nothing in a code of practice relieves a person discharging waste from complying with this bylaw, a waste discharge permit or any other applicable enactment.

4.3 A code of practice does not apply to the discharge of domestic waste.

4.4 The manager may require a discharging operation to obtain a waste discharge permit if considered necessary by the manager because of circumstances not covered by a code of practice.

(Bylaw 3105)
(Bylaw 3350)

4.5 If a code of practice establishes a requirement in relation to a specific discharging operation which differs from a provision in this bylaw, the requirement in the code of practice prevails.

(Bylaw 3350)

5.0 MAINTENANCE OF WORKS AND PROCEDURES

5.1 It is a condition of the discharge of waste produced on property other than residential property into a sanitary sewer, by a person who holds a waste discharge permit or authorization or who has received or is subject to an order or who operates a discharging operation or who otherwise discharges waste, that all measures be taken to keep all equipment and facilities maintained and in good repair as may be necessary to ensure compliance with the terms and conditions of this bylaw, a waste discharge permit, authorization, code of practice or order.

5.2 No person shall discharge or allow or cause to be discharged, into a sewage facility or a sewer connected to a sewage facility operated by the District, non-domestic waste, which has bypassed any waste control works or treatment works authorized and required by the manager or which is not otherwise in compliance with this bylaw.

6.0 RECORDS RETENTION AND PROVISION OF INFORMATION

6.1 Holders of a waste discharge permit, authorization, an order or persons operating under a code of practice permitting the discharge of waste produced on property other than residential property:

(a) shall retain and preserve any records, books, documents, memoranda, reports, correspondence and any and all summaries of such documents, relating to monitoring, sampling and chemical analysis required by the manager, a waste discharge permit, authorization or order;

(b) shall retain and preserve all records which pertain to issues which are the subject of administrative action or any other enforcement or litigation activities by the District until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

6.2 Unless specified otherwise in a code of practice, records shall be retained under Section 6.1(a) for not less than six years after their creation.

(Bylaw 3075)

7.0 NOTIFICATION

7.1 Any person who discharges waste or allows the discharge of waste into a sewer or a sewage facility in contravention of any waste discharge permit, authorization, code of practice or order or that is otherwise in contravention of this bylaw, after becoming aware of the discharge, shall stop the discharge, and after reporting the discharge, in accordance with the Spill Reporting Regulation (where applicable), shall immediately notify:

(a) the manager or an officer by telephone and provide the information specified in subsection 7.2;

(b) the owner of the premises; and

(c) any other person whom the person reporting knows, or reasonably should know, may be directly affected by the discharge.

7.2 The manager shall be supplied with the following information:

(a) identification of the premises where the discharge occurred;

(b) location of the discharge;

(c) name of the person reporting the discharge and telephone number, or numbers where that person can be reached;

(d) date, time and duration of the discharge;

(e) type and concentration of all substances discharged and any known associated hazards;

(f) total weight or volume of the material discharged; and

(g) corrective action being taken, or anticipated to be taken, to control the discharge or to prevent similar discharges.

7.3 A person who discharged or allowed a discharge of waste referred to in subsection 7.1 shall, as soon as that person becomes aware, or reasonably should have become aware of the discharge, take all reasonable measures to:

(a) confine, minimize, counteract, mitigate, remedy and repair the effects of the discharge; and

(b) remove or otherwise dispose of the substance discharged in a manner consistent with this bylaw and other applicable enactments.

7.4 A person operating under an existing waste discharge permit or authorization shall notify the manager in writing not less than 90 days prior to:

(Bylaw 3105)

(a) commencing a new activity; or

(b) expanding or changing an existing activity;

which affects or may affect the average composition or the total volume of waste discharged by that person.

8.0 POWERS OF THE MANAGER

8.1 The manager, an officer or a bylaw enforcement officer may enforce the provisions of this bylaw.

8.2 The manager, an officer or a bylaw enforcement officer may at any reasonable time and, upon presentation of proof of his or her identity, enter upon any property or premises in order to ascertain whether the terms of a waste discharge permit, a code of practice, an authorization, or an order have been or are being complied with or the regulations of this bylaw are being observed.

8.3 Nothing in this bylaw shall be interpreted as restricting the powers of a sewage control manager or an officer under the Environmental Management Act and regulations.

(Bylaw 3350)

9.0 MONITORING OF DISCHARGES

9.1 The manager may, pursuant to Section 29 of the Environmental Management Act, require that a person who is discharging any waste other than domestic sewage into a sewer shall, at his or her expense, install one or more monitoring points suitable for inspection, flow monitoring and sample collection at locations determined by the manager, to be constructed in accordance with plans approved by the manager and maintained in good working order by the person.

(Bylaw 3350)

9.2 A monitoring point required under subsection 9.1 shall be installed in a manner so as not to be affected by any discharge of domestic waste from a premise, unless otherwise authorized by the manager.

9.3 A monitoring point required under subsection 9.1 shall, for the purposes of enforcing this bylaw, be deemed to be the point or points at which a discharge into a sewer or sewage facility is made.

9.4 In the absence of a monitoring point under subsection 9.1, the point of discharge into a sewer or sewage facility shall, for the purposes of enforcing this bylaw, be the location determined by the manager where access can be had to the waste for the purpose of sampling and flow monitoring.

9.5 Where a person is required to install a monitoring point under subsection 9.1 and the person cannot comply with such requirement within 60 days of being notified of the requirement by the manager, the person shall, within 60 days of the notice being issued by the manager, inform the manager of his or her inability to install the monitoring point and the District may install or cause to be installed the monitoring point at the person's expense.

9.6 The owner of a premise shall ensure that all monitoring points, flow measuring devices and other devices specified in the waste discharge permit, including water meters, are accessible for inspection by the manager or an officer at all times.

9.7 The manager may require that a person who is discharging waste into a sewer undertake, at that person's expense, sampling and analysis of the waste discharged.

9.8 All sampling and analysis required by a manager shall be carried out in accordance with methods and procedures specified in standard methods or in a manner specified by the manager.

9.9 Samples which have been collected as the result of a requirement of the manager shall be analyzed by an independent agency or by a laboratory authorized by the manager.

10.0 OFFENCES AND PENALTIES

10.1 A person who contravenes this bylaw, a waste discharge permit, authorization or order issued under this bylaw or other requirement, made or imposed under this bylaw, commits an offence and is liable to a fine not exceeding $10,000.

10.2 Where an offence is committed or continues for more than one day, a person shall be deemed to have committed separate offences for each day on or during which an offence occurs or continues, and separate fines, each not exceeding $10,000, may be imposed for each day on or during which an offence occurs or continues.

10.3 Nothing in this bylaw shall limit the District from pursuing any other remedy that would otherwise be available to the District at law.

11.0 REVIEW OF DEPUTY SEWAGE CONTROL MANAGER'S DECISION

11.1 A person affected by a decision, order or requirement of a deputy sewage control manager pursuant to Sections 3.1, 9.1, 9.2, 9.4 or 9.7 may request a review within 21 working days of delivery of the decision, order or requirement by delivery to the manager of the notice of review request in the form attached as Schedule "E".

11.2 The manager may extend the time for requesting a review either before or after the time has elapsed.

11.3 The matter will be reviewed by the manager pursuant to Section 11.7 unless the person seeking the review requests, on the form attached as Schedule "E", that the matter be referred first to mediation.

11.4 Mediation shall be conducted by a party agreeable to the applicant and to the manager and, if the parties cannot agree, then each party shall appoint a representative and the representatives shall jointly select a mediator.

11.5 The costs of mediation shall be borne equally by all parties involved.

11.6 If mediation does not resolve the matter in dispute, the review shall proceed to the manager.

11.7 Upon considering the matter under review and the results of the mediation, if any, the manager may:

(a) confirm, reverse or vary the decision, order or requirement under review; and

(b) make any decision that the manager considers appropriate.

11.8 Any decision made by the manager pursuant to Section 11.7 must be communicated in writing to the applicant within 10 working days of receiving the written review request or the results of the mediation.

11.9 In the event that the manager is absent from the office due to vacation, illness, disability or other reason, a decision of the manager may be delayed until 10 working days following the manager's return.

11.10 The manager may extend the time limits set out in Sections 11.8 and 11.9 for doing any of the things referred to in Section 11.7.

11.11 A request for a review does not operate as a stay or suspend the operation of the decision being reviewed unless the manager orders otherwise.

11.12 A review under this bylaw will not prejudice any right of appeal which a person may have under the Environmental Management Act.

(Bylaw 3350)

12.0 FEES AND CHARGES

12.1 The Board hereby imposes the fees set out in Schedule "F".

12.2 Every person who applies for or who holds a waste discharge permit or authorization or who operates a discharging operation shall pay the applicable fee or fees set out in Schedule "F".

(Bylaw 3075)
(Bylaw 3350)

13.0 GENERAL

13.1 No person shall hinder or prevent the manager, an officer or a bylaw enforcement officer from entering any premises or from carrying out his or her duties with respect to the administration of this bylaw.

13.2 Nothing in this bylaw shall be interpreted as relieving a person discharging waste from complying with federal, provincial and local government enactments governing the discharge of waste into sewers.

13.3 Where the Board has authority to direct that a matter or thing be done by a person, the Board may also direct that, if the person fails to take the required action, the matter or thing shall be done at the expense of the person in default in accordance with Section 794(5) of the Local Government Act. If action in default is taken, the Board may recover the expense from the person, together with costs and interest at the rate prescribed under Section 11(3) of the Taxation (Rural Area) Act, in the same manner as municipal taxes.

13.4 The schedules annexed hereto shall be deemed to be an integral part of this bylaw.

13.5 If any provision of this bylaw is found to be invalid by a court of competent jurisdiction, it may be severed from the bylaw.

13.6 Bylaw No. 2830 cited as "Capital Regional District Sewer Use Bylaw No. 4, 2000" is repealed upon adoption of this bylaw.

13.7 This bylaw may be cited for all purposes as "Capital Regional District Sewer Use Bylaw No. 5, 2001".

READ A FIRST TIME THIS	14th	day of	November	2001
READ A SECOND TIME THIS	14th	day of	November	2001
READ A THIRD TIME THIS	14th	day of	November	2001
ADOPTED THIS	12th	day of	December	2001

Christopher M. Causton
CHAIR

Carmen I. Thiel
SECRETARY

This Bylaw is a copy of Capital Regional District Sewer Use Bylaw No. 5, 2001, consolidated under Section 139 of the Community Charter and is printed on the authority of the Corporate Secretary of the CRD.

Carmen I. Thiel, Corporate Secretary

SCHEDULE "A"

PROHIBITED WASTE
BYLAW NO. 2922

Prohibited waste means:

1. Hazardous Waste

Hazardous waste as defined by the Environmental Management Act.

(Bylaw 3350)

2. Air Contaminant Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of creating, causing or introducing an air contaminant outside any sewer or sewage facility or is capable of creating, causing or introducing an air contaminant within any sewer or sewage facility which would prevent safe entry by authorized personnel.

3. Flammable or Explosive Waste

Any waste, which by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion in any sewer or sewage facility including, but not limited to gasoline, naphtha, propane, diesel, fuel oil, kerosene or alcohol.

4. Obstructive Waste

Any waste which by itself or in combination with another substance, is capable of obstructing the flow of, or interfering with, the operation or performance of any sewer or sewage facility including, but not limited to: earth, sand, sweepings, gardening or agricultural waste, ash, chemicals, paint, metal, glass, sharps, rags, cloth, tar, asphalt, cement-based products, plastic, wood, waste portions of animals, fish or fowl and solidified fat.

5. Corrosive Waste

Any waste with corrosive properties which, by itself or in combination with any other substance, may cause damage to any sewer or sewage facility or which may prevent safe entry by authorized personnel.

6. High Temperature Waste

(a) Any waste which, by itself or in combination with another substance, will create heat in amounts which will interfere with the operation and maintenance of a sewer or sewage facility or with the treatment of waste in a sewage facility;

(b) Any waste which will raise the temperature of waste entering any sewage facility to 40 degrees Celsius (104 degrees Fahrenheit) or more;

(c) Any non-domestic waste with a temperature of 65 degrees Celsius (149 degrees Fahrenheit) or more.

~~7. Biomedical Waste~~

~~Any of the following categories of biomedical waste: human anatomical waste, animal waste, untreated microbiology laboratory waste, clinical and laboratory waste sharps and untreated human blood and body fluids known to contain viruses and agents listed in "Risk Group 4" as defined in the Transportation of Dangerous Goods Regulations. *(Bylaw 3105)* *(Bylaw 3350)*~~

~~8~~7. Miscellaneous Wastes

Any waste, other than sanitary waste, which by itself or in combination with another substance:

(a) constitutes or may constitute a significant health or safety hazard to any person;

(b) may interfere with any sewer or sewage treatment process;

(c) may cause a discharge from a sewage facility to contravene any requirements by or under any permit issued under the Environmental Management Act or any other act, approved Liquid Waste Management Plan, or any other law or regulation governing the quality of the discharge, or may cause the discharge to result in a hazard to people, animals, property or vegetation;

(Bylaw 3350)

(d) may cause biosolids to fail criteria for beneficial land application in British Columbia as set out in the Organic Matter Recycling Regulation (British Columbia) deposited February 2002, or may cause the emissions from a wastewater sludge combustion facility to be out of compliance with appropriate permits, or may cause the ashes from a wastewater sludge combustion facility to be considered a hazardous waste under the Environmental Management Act.

(Bylaw 3105)
(Bylaw 3350)

SCHEDULE "B"

RESTRICTED WASTE
BYLAW NO. 2922

Restricted waste means:

1. Specified Waste

Any waste which, at the point of discharge into a sewer, contains any contaminant at a concentration in excess of the limits set out below. All concentrations are expressed as total concentrations which includes all forms of the contaminant, whether dissolved or undissolved. The concentration limits apply to both grab and composite samples. Contaminant definitions and methods of analysis are outlined in standard methods or methods specified by the manager.

Any of the contaminants listed below in tables (a), (b) or (c) that are present in a waste at dissolved concentrations in excess of the Hazardous Waste Regulation Leachate Quality Standards will qualify that waste, regardless of the sampling method used, as a hazardous waste.

(Bylaw 3350)

a) CONVENTIONAL CONTAMINANTS [mg/L]	
Biochemical Oxygen Demand (BOD)	500
Chemical Oxygen Demand (COD)	1000
Oil and Grease*	100
Suspended Solids	350

Note: *Total oil and grease includes oil and grease (hydrocarbons) (see table (b))

b) ORGANIC CONTAMINANTS [mg/L]	
Benzene	0.1
Ethyl Benzene	0.2
Toluene	0.2
Xylenes	0.2
Polynuclear Aromatic Hydrocarbons (PAH)**	0.05
Phenols	1
Oil and Grease (hydrocarbons)	15

Note: **Polynuclear Aromatic Hydrocarbons (PAH) include:

naphthalene	benzo(a)anthracene
acenaphthylene	chrysene
acenapthene	benzo(b)fluoranthene
fluorene	benzo(k)fluoranthene
phenanthrene	benzo(a)pyrene
anthracene	dibenzo(a,h)anthracene
fluoranthene	indeno(1,2,3-cd)pyrene
pyrene	benzo(g,h,i)perylene

(c) INORGANIC CONTAMINANTS [mg/L]	
Arsenic (As)	0.4
Cadmium (Cd)	0.3
Chloride (Cl)	1500
Chromium (Cr)	4
Cobalt (Co)	5
Copper (Cu)	1
Cyanide (CN)	1
Iron (Fe)	50
Lead (Pb)	1
Manganese (Mn)	5
Mercury (Hg)	0.02
Molybdenum (Mo)	5
Nickel (Ni)	3
Selenium (Se)	0.3
Silver (Ag)	0.5
Sulphate (SO_4)	1500
Sulphide (S)	1
Zinc (Zn)	3

2. Food Waste

Any non-domestic waste from cooking and handling of food that, at the point of discharge into a sewer, contains particles larger than 0.5 centimetres in any dimension.

3. Radioactive Waste

Any waste containing radioactive materials that, at the point of discharge into a sewer, exceeds radioactivity limitations as established by the Canadian Nuclear Safety Commission.

(Bylaw 3016)

4. pH Waste

Any non-domestic waste which, at the point of discharge into a sewer, has a pH lower than 5.5 or higher than 11.0, as determined by either a grab or a composite sample.

5. Dyes and Colouring Material

Dyes or colouring materials which may pass through a sewage facility and discolour the effluent from a sewage facility except where the dye is used by the District, or one or more of its municipalities, as a tracer.

6. Miscellaneous Restricted Wastes

Any of the following wastes as defined in the bylaw.

(a) seawater
(b) PCBs
(c) chlorinated phenols ***
(d) pesticides
(e) tetrachloroethylene
(f) organo-tin compounds

(Bylaw 3350)

*** Chlorinated phenols include:

- chlorophenol (ortho, meta, para)
- dichlorophenol (2,3, 2,4-, 2,5-, 2,6-, 3,4-, 3,5-)
- trichlorophenol (2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6-, 3,4,5-)
- tetrachlorophenol (2,3,4,5-, 2,3,4,6-, 2,3,5,6-)
- pentachlorophenol

SCHEDULE "C"

INFORMATION SHEET

WASTE DISCHARGE PERMIT APPLICATION
BYLAW NO. 2922

This information sheet is provided to assist you in the preparation and submission of an application for a waste discharge permit under the Capital Regional District's (CRD) Sewer Use Bylaw No. 2922. Once the form has been completed, **initial each page and sign the declaration on page 10**. To assist CRD Environmental Services with the processing of the application, please make an accurate, readable and complete submission to the address provided below.

A. APPLICATION FORMS

1. COMPANY INFORMATION

Indicate the company name, incorporation number, type of business and location of the business. If your business or organization has more than one site address, please copy this form and complete a separate application for each site.

2. SUMMARY OF EFFLUENT DISCHARGE CHARACTERISTICS

Complete this section to indicate discharge duration, volume and quality.

3. NUMBER OF CONNECTIONS

List the number and type of connections to sewer.

4. SOURCES OF WASTEWATER

Where non-domestic waste is being discharged to sanitary sewer or storm sewer, list any pre-treatment works and the actual source of the wastewater.

5. SITE PLAN

A site plan must be submitted. Clearly mark the plant boundary, buildings and approximate locations of new and existing works, monitoring points and sewer connections.

6. DECLARATION FORM

The application form must be signed. Please ensure that the first box in the Declaration Section is complete. An application may be filed by an agent of the applicant and, unless the sewage control manager deems otherwise, an obligation imposed by this bylaw on an applicant may be carried out by his agent. If you wish to appoint an agent, please complete the appropriate box in the Declaration Section.

Initials _____

B. ADDITIONAL INFORMATION

1. Specifications and drawings of process equipment and control works associated with the discharge should be submitted to assist the CRD Environmental Services department with the evaluation of the application. The sewage control manager may request submission of additional details relevant to the application. Should additional application forms be required, they may be obtained from:

Sewage Control Manager
Environmental Services Department
Capital Regional District
P.O. Box 1000, 625 Fisgard Street
Victoria, BC V8W 2S6

(Bylaw 3350)

2. In the event of accidental discharge of a prohibited or restricted waste to a sewer (as required under Sections 2.8(b) and 7.1(a) of this bylaw), please call:

Regional Source Control Program
24-Hour Telephone Number
(250) 360-3248

Initials _____

Scientific Programs, CRD Environmental Services Department, Telephone (250) 360-3256, Facsimile (250) 360-3254

(Bylaw 3350)

APPLICATION FOR A WASTE DISCHARGE PERMIT

☐ Application for New Permit ☐ Application to Amend Permit No. _____

Application for a WASTE DISCHARGE PERMIT under the Capital Regional District (CRD) Sewer Use Bylaw No. 2922. This application is to be filed with the sewage control manager, at the address on page 2, not less than 90 days prior to the date for which a permit is required.

1. I,_____
(Full name-if a company, British Columbia Registered Name)

Registered Address:_____

_____

Incorporation Number:_____
hereby apply for a WASTE DISCHARGE PERMIT to discharge non-domestic waste into sanitary sewer from a:

_____
(Type of Business)

Located at: _____

_____

2. Summary of Wastewater Discharge Characteristics

Maximum Duration of Operation: (hours/day) _____
(days/week) _____
(weeks/year) _____

Flow

Is the Discharge greater than 300 m^3 in a 30-day period?: ( ) yes ( ) no

Is the Discharge greater than 10 m^3 in a 24-hour period?: ( ) yes ( ) no

Frequency

Maximum discharge flow rate: _____ (m^3/day)

Average daily discharge flow rate: _____ (m^3/day)

Method of flow rate determination: _____

( ) measured ( ) estimated

(Note: 1m^3 = 220 Imperial gallons, or 264 U.S. gallons)

Initials _____

Type of Discharge

( ) continuous ( ) batch ( ) both

Quality

Use the check boxes to indicate whether any of the following types of wastes are discharged:

Flammable or explosive waste	( ) yes	( ) no
Obstructive waste	( ) yes	( ) no
Air contaminant waste	( ) yes	( ) no
High temperature waste	( ) yes	( ) no
Corrosive waste	( ) yes	( ) no
Biomedical waste	( ) yes	( ) no
Food waste	( ) yes	( ) no
Radioactive waste	( ) yes	( ) no
Seawater	( ) yes	( ) no

Hazardous Waste

Does any process within the plant produce special waste as defined under the Hazardous Waste Regulation of the Environmental Management Act.

(Bylaw 3350)

( ) yes ( ) no ( ) don't know

Wastewater Characteristics

In the space provided below, check the appropriate box for each wastewater contaminant to dictate whether the contaminant listed is "known to be present", "suspected to be present", "suspected to be absent", or "known to be absent" in the wastewater discharge.

If a contaminant is "known to be present" or "suspected to be present", estimate the expected average and maximum daily contaminant concentrations in the spaces provided.

If wastewater discharges have been sampled and analyzed in the past, please attach examples of sampling data.

Initials _____

Wastewater Contaminants	Known to be present	Suspected to be present	Suspected to be absent	Known to be absent	Expected Concentration mg/L (ppm) Average	Maximum
Conventional Contaminants						
Ammonia	( )	( )	( )	( )	_____	_____
Biochemical Oxygen Demand (BOD)	( )	( )	( )	( )	_____	_____
Chemical Oxygen Demand (COD)	( )	( )	( )	( )	_____	_____
Suspended Solids	( )	( )	( )	( )	_____	_____
Oil and Grease (total)	( )	( )	( )	( )	_____	_____
pH max___ min ___	( )	( )	( )	( )	_____	_____
Organic Contaminants						
Oil and Grease (hydrocarbons)	( )	( )	( )	( )	_____	_____
Phenols (total)	( )	( )	( )	( )	_____	_____
Phenols (chlorinated)	( )	( )	( )	( )	_____	_____
Polynuclear Aromatic Hydrocarbons (PAH)	( )	( )	( )	( )	_____	_____
PCBs	( )	( )	( )	( )	_____	_____
Pesticides	( )	( )	( )	( )	_____	_____
Tetrachloroethylene	( )	( )	( )	( )	_____	_____
Organo-tin compounds	( )	( )	( )	( )	_____	_____
Benzene	( )	( )	( )	( )	_____	_____
Ethylbenzene	( )	( )	( )	( )	_____	_____
Toluene	( )	( )	( )	( )	_____	_____
Xylenes	( )	( )	( )	( )	_____	_____
Solvents (specify)	( )	( )	( )	( )	_____	_____

Initials _____
(Bylaw 3350)

Wastewater Contaminants	Known to be present	Suspected to be present	Suspected to be absent	Known to be absent	Expected Concentration mg/L (ppm) Average	Maximum
Inorganic Contaminants						
Arsenic	( )	( )	( )	( )	_____	_____
Cadmium	( )	( )	( )	( )	_____	_____
Chloride	( )	( )	( )	( )	_____	_____
Chromium	( )	( )	( )	( )	_____	_____
Cobalt	( )	( )	( )	( )	_____	_____
Copper	( )	( )	( )	( )	_____	_____
Cyanide	( )	( )	( )	( )	_____	_____
Iron	( )	( )	( )	( )	_____	_____
Lead	( )	( )	( )	( )	_____	_____
Manganese	( )	( )	( )	( )	_____	_____
Mercury	( )	( )	( )	( )	_____	_____
Molybdenum	( )	( )	( )	( )	_____	_____
Nickel	( )	( )	( )	( )	_____	_____
Selenium	( )	( )	( )	( )	_____	_____
Silver	( )	( )	( )	( )	_____	_____
Sulphate	( )	( )	( )	( )	_____	_____
Sulphide	( )	( )	( )	( )	_____	_____
Zinc	( )	( )	( )	( )	_____	_____
Other	( )	( )	( )	( )	_____	_____

Initials _____

3. Number of Connections to Sewer

(a) **Sanitary Sewer**

Domestic waste only _____

Non-domestic waste only _____

Combined domestic and non-domestic waste _____

(Note connection locations on attached site plan.)

Is stormwater discharged to sanitary sewer? yes ( ) volume_____m^3/day
no ( )

Is uncontaminated water discharged to sanitary sewer? yes ( ) volume_____m^3/day
no ( )

(Note connection locations on attached site plan.)

(b) **Storm Sewer**

Stormwater only _____

Uncontaminated water only _____

Combined stormwater and uncontaminated water _____

(Note connection locations on attached site plan.)

Is domestic waste discharged to storm sewer? yes ( ) volume_____m^3/day
no ( )
(Note connection location on attached site plan.)

Is non-domestic waste discharged to storm sewer? yes ( ) volume_____m^3/day
no ( )

Initials _____

4. Sources of Wastewater Discharge to Sewer

(Note location of sources and control works on attached site plan.)

SOURCE OF WASTEWATER (e.g., galvanizing line rinse tank)	CONTROL WORKS TREATING EACH SOURCE PRIOR TO DISCHARGE TO SEWER* (e.g., Trade Waste Interceptor)

(a) **Sanitary Sewer**

(b) **Storm Sewer**

*Control Works include: small drainage, oil/water separators, grease traps, filters, reverse osmosis units, ion exchange units, neutralization facilities and other wastewater pre-treatment works.

Initials _____

5. Site Plan

Sketch a site plan in the area provided below or attach a site plan to this application form. The plan shall include property lines, buildings, pre-treatment works, effluent lines, sanitary and storm sewer connections, flow measuring devices and monitoring points (or available sampling locations).

(Include approximate scale on site plan.)

^North^

Initials _____

6. Declaration

I, _____, declare that the information given on this application form is correct to the best of my knowledge.

_____ _____
(Date) (Signature of Applicant or Agent)

_____ _____
(Title) (Phone Number)

If you elect to appoint an Agent, please complete the following:

I, _____ (_____)
(Print Name) (Title)

_____
(Signature)

hereby authorize _____ _____
(Print Name) (Affiliation)

to deal with you directly on all aspects of the subject application.

The collection of this information is authorized under the Capital Regional District Sewer Use Bylaw and Sections 29 and 30 of the Environmental Management Act and will be used for the purpose of administration, including enforcement, of the Sewer Use Bylaw and orders made pursuant to the Environmental Management Act.

(Bylaw 3350)

Enquiries about the collection or use of information in this form can be directed to the Freedom of Information and Protection of Privacy Contact: (250) 360-3089.

(Bylaw 3016)

Initials _____

SCHEDULE "D"

(Bylaw 3016)
(Bylaw 3075)
(Bylaw 3105)

CODES OF PRACTICE
BYLAW NO. 2922

The following codes of practice have been adopted by the Capital Regional District:

		Column 1
	Codes of Practice	Appended to this Bylaw as Schedule
1.	Food Services Operations	I
2.	Dry Cleaning Operations	J
3.	Photographic Imaging Operations	K
4.	Dental Operations	L
5.	Automotive Repair Operations	M
6.	Vehicle Wash Operations	N
7.	Carpet Cleaning Operations	O
8.	Fermentation Operations	P
9.	Printing Operations	Q
10.	~~Recreation Facility Operations~~Reserved for future use	R
11.	Laboratory Operations	S

SCHEDULE "E"
(Section 11.1)

NOTICE OF REVIEW REQUEST
BYLAW NO. 2922

A person affected by a decision of a deputy sewage control manager made pursuant to Sections 3.1, 9.1, 9.2, 9.4 or 9.7 of Bylaw 2922 may request a review by completing and submitting this form within 21 working days after the decision being appealed is given.

(Bylaw 3350)

Business Name: _____ Date: _____

Address: _____

Contact Person: _____ Phone No.: _____ Fax No.: _____

Describe decision to be reviewed (and attach copy of decision): _____

Reasons for Review Request: _____

Check one of the following:
☐ Request for Review by Sewage Control Manager ☐ Request for Third Party Mediation

List any documentation attached.

Send to: Sewage Control Manager, Environmental Services Department, Capital Regional District
P.O. Box 1000, 625 Fisgard Street, Victoria, B.C. V8W 2S6

(Bylaw 3350)

Received by: _____ Date: _____ File No: _____

NOTE: YOU MAY BE ENTITLED TO A TIME-LIMITED STATUTORY RIGHT OF APPEAL TO THE ENVIRONMENTAL APPEAL BOARD UNDER THE ENVIRONMENTAL MANAGEMENT ACT. PLEASE CONSULT A COPY OF THAT ACT FOR FURTHER DETAILS.

(Bylaw 3350)

SCHEDULE "F"

FEES
BYLAW NO. 2922

1.0 WASTE DISCHARGE PERMIT FEES

1.1 Application Fee

(a) A person who applies for a waste discharge permit shall pay an application fee of $500.

(b) The application fee is payable on submission to the manager of a completed application form as provided in Schedule "C".

(c) The District will not process an application for a waste discharge permit until the application fee has been paid.

(d) The application fee will not be refunded if the manager does not issue a waste discharge permit. However, if the manager issues a waste discharge permit, $250 of the application fee will be applied toward the base fee portion of the permit administration fee for the calendar year for which the permit is issued.

1.2 Permit Administration Fees

1.2.1 Base Fee

(a) A person to whom a waste discharge permit is issued shall pay an annual base fee of $250.

(b) The base fee shall be paid upon issuance of the waste discharge permit. A base fee of $250 is payable for each waste discharge permit issued.

(c) The annual base fee of $250 will be invoiced once per year during the first billing period of each calendar year for that business.

1.2.2 Discharge Fee

1.2.2.1 Overview *(Bylaw 3105)*

(a) In addition to the base fee, the holder of a waste discharge permit shall pay a discharge fee based on the volume of discharge and the amount or loading of specified parameters in the non-domestic wastewater discharged from the premises covered by the waste discharge permit to a sanitary sewer during a continuous three (3) month period (or quarter).

(b) The discharge fee will be calculated in accordance with the formulae outlined in Sections 1.2.2.3 and 1.2.2.4.

(c) The discharge fee will be invoiced quarterly.

1.2.2.2 Flow Measurement

(a) Permit holders must measure and record non-domestic waste flow to sanitary sewer from their premises:

(i) using a flow measuring device able to measure or provide an estimate of daily and monthly flow; or
(ii) provide an estimate of daily and monthly flow based on the municipal water meter readings for the premises using a method approved by the manager.

(b) If the flow contains water not originating from a municipal water supply, this portion of the flow must be estimated or measured, as outlined under paragraph (a), and reported separately.

1.2.2.3 Loading Calculation

The calculation of the monthly loading for each parameter listed in Table 1, other than flow oil and grease and the parameters listed in Table 2, is described by the following formula:

$$L_a = \frac{C_a \times F}{1000}$$

Where:
L_a = loading for parameter "a" for a one month period, in kg.
C_a = concentration of parameter "a", in mg/L.
F = total non-domestic waste flow for the same month as above, in cubic meters (m^3).

The total loading for the quarter is the sum of the three monthly loadings for each parameter listed in Table 1. If a parameter is measured only once per quarter, the total loading for the quarter will be based on the parameter concentration and the total flow per quarter.

1.2.2.4 Loading Calculation for Oil and Grease

The calculation of the monthly loading for oil and grease is described by the following formula:

$$L = \frac{(C - H) \times F}{1000}$$

Where:
L = loading for oil and grease for a one month period, in kg.
C = concentration of oil and grease, in mg/L.
H = concentration of oil and grease (hydrocarbons), in mg/L. (H = 0, where there is no result reported for oil and grease (hydrocarbons)).
F = total non-domestic waste flow for the same month as above, in cubic meters (m^3).

The total loading for the quarter is the sum of the three monthly loadings for oil and grease. If oil and grease is measured only once per quarter, the total loading for the quarter will be based on the oil and grease concentration and the total flow per quarter.

1.2.2.5 Loading Calculation for Metals

The calculation of the monthly loading for each of the metal parameters listed in Table 2 is described by the following formula:

$$L_a = \frac{(C_a - P_a) \times F}{1000}$$

Where:
L_a = loading for parameter "a" for a one month period, in kg.
C_a = concentration of parameter "a", in mg/L.
P_a = practical quantitation limit of parameter "a", as listed in Table 2, in mg/L.
F = total non-domestic waste flow for the same month as above, in cubic meters (m^3).

The total loading for the quarter is the sum of the three monthly loadings for each parameter listed in Table 2. If a parameter is measured only once per quarter, the total loading for the quarter will be based on the parameter concentration and the total flow per quarter.

1.2.2.6 Discharge Fee Calculation

The total discharge fee payable for a quarter is the sum of the quarterly discharge fees for the individual parameters described in Table 1 and the quarterly discharge fee for flow using the calculations described below.

The quarterly discharge fee for each parameter, other than flow, is described by the following formula:

$$D_a = L_a \times R_a$$

Where:
D_a = discharge fee for parameter "a" for a quarterly period, in dollars ($).
L_a = total loading for parameter "a" for a quarterly period, in kg.
R_a = unit rate for parameter "a" as listed in Table 1, in $/kg.

The quarterly discharge fee for flow is described by the following formula:

$$D = F_q \times R$$

Where:
D = discharge fee for total quarterly flow, in dollars ($).
F_q = total non-domestic waste flow for the quarter, in cubic meters (m^3).
R = unit rate for flow as listed in Table 1, in dollars ($).

1.2.2.7 Audit Sampling

(a) The District will carry out audit sampling to verify the self-monitoring data submitted by a permittee.

(b) If there is no significant difference between the District audit data and the permittees self-monitoring data, the self-monitoring data will be used to calculate the discharge fee.

(c) If the District audit sampling data reveals that the self-monitoring results are significantly different than the District results, the higher of the two sampling results will be used to calculate the discharge fee.

(Bylaw 3016)

(d) In the absence of any monitoring data from a permitted site at the end of a quarter, the limit specified in the waste discharge permit for that site will be used to calculate the discharge fee for each applicable parameter listed in Table 1.

(Bylaw 3016)

1.3 Amendment Fee

(a) Each time the holder of a waste discharge permit requests an amendment to the waste discharge permit held by him, he shall pay an amendment fee. Completion of an application form as provided in Schedule "C" is required. The amendment fee is payable upon issuance of the amended permit.

(b) A person who applies for an amendment, requiring less than three hours of staff time to review and prepare, shall pay a fee of $60.

(c) A person who applies for an amendment that would result in reduced non-domestic waste loadings to sanitary sewer shall pay a fee of $60.

(d) A person applying for an amendment, requiring more than three hours of staff time to prepare, shall pay $360.

(e) No amendment fee will be charged for waste discharge permit amendments that have been initiated by the CRD.

2.0 SAMPLING AND ANALYSIS CHARGES

The holder of a waste discharge permit or a person operating under a code of practice shall pay to the District sampling and analysis charges, being the cost incurred by the District to carry out more than two audits or sample analyses of the waste being discharged from any premises within one calendar year.

3.0 AUTHORIZATION FEE

There is no fee charged for the preparation of an authorization under the bylaw.

4.0 CODE OF PRACTICE FEE

There is no fee charged for operation of a discharging operation under a code of practice.

(Bylaw 3350)

5.0 GENERAL

5.1 Payment of Fees

Fees are due and payable within 30 days and a monthly interest of 1.5%, compounded monthly, applies on all outstanding balances over 30 days.

(Bylaw 3350)

All payments received will be applied firstly against arrears, and then to current balances.

5.2 Credit Application

Any person required to pay fees and charges under this bylaw must apply to the District for credit and if the treasurer is satisfied of the credit worthiness of the person, he or she may grant credit to that person, in which case payment of the fees and charges imposed under Section 12 shall be made and the credit extended on the following conditions:

(a) the person receiving credit shall pay to the District all fees and charges in full within thirty (30) days of the last day of the month for which an invoice has been submitted; and

(Bylaw 3105)

(b) late payment(s) will be subject to an interest charge of 1.5% (one and one half per cent) per month.

(Bylaw 3105)

TABLE 1
RATES FOR DISCHARGE FEES

Parameter	Bylaw Limit (mg/L)	Discharge Fee Rate*
COD	1,000	$ 0.025/kg
Flow	--	0.01/m^3
Flow (not from a Waterworks)	--	0.06/m^3
Oil and Grease	100	0.25/kg
Suspended Solids	350	0.07/kg
Arsenic (As)	0.4	61.25/kg
Cadmium (Cd)	0.3	81.67/kg
Chromium (Cr)	4	6.13/kg
Copper (Cu)	1	24.50/kg
Cyanide (CN)	1	24.50/kg
Lead (Pb)	1	24.50/kg
Mercury (Hg)	0.02	1,225.00/kg
Nickel (Ni)	3	8.17/kg
Silver (Ag)	0.5	49.00/kg
Zinc (Zn)	3	8.17/kg
Oil and Grease (Hydrocarbons)	15	1.63/kg
Phenols	1	24.50/kg
Cobalt (Co)	5	4.90/kg
Iron (Fe)	50	0.49/kg
Manganese (Mn)	5	4.90/kg
Molybdenum (Mo)	5	4.90/kg
Selenium (Se)	0.3	81.67/kg
PAHs	0.05	490.00/kg
Benzene	0.1	245.00/kg
Ethyl Benzene	0.2	122.50/kg
Toluene	0.2	122.50/kg
Xylenes	0.2	122.50/kg
Chloride (Cl)	1,500	0.02/kg
Sulphate (SO_4)	1,500	0.02/kg
Sulphide (S)	1	24.50/kg

* All rates are in dollars per kilogram ($/kg) except for flow which is expressed as dollars per cubic meter.

(Bylaw 3350)

TABLE 2

PRACTICAL QUANTITATION LIMITS FOR METALS

Parameter	Practical Quantitation Limit (mg/L)
Arsenic (As)	0.0005
Cadmium (Cd)	0.0005
Chromium (Cr)	0.05
Cobalt (Co)	0.05
Copper (Cu)	0.05
Iron (Fe)	0.15
Lead (Pb)	0.005
Manganese (Mn)	0.025
Mercury (Hg)	0.00025
Molybdenum (Mo)	0.15
Nickel (Ni)	0.1
Selenium (Se)	0.0025
Silver (Ag)	0.0005
Zinc (Zn)	0.025

SCHEDULE "G" (Repealed)

SCHEDULE "H" (Repealed)

(Bylaw 3105)
(Bylaw 3350)

(Bylaw 3016)
(Bylaw 3046)
(Bylaw 3105)
(Bylaw 3350)

SCHEDULE "I"

CODE OF PRACTICE FOR FOOD SERVICES OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from food services operations directly or indirectly into a sewer connected to a sewage facility.

1.2 The term "treatment works" in this code of practice means the works referred to in Section 2.2.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a food services operation must not discharge waste, which at the point of discharge into a sewer, contains:

(a) restricted waste with the exception of total oil and grease, biochemical oxygen demand (BOD) and chemical oxygen demand (COD);

(b) prohibited waste, hazardous waste or stormwater; or

(c) uncontaminated water, in quantities greater than two cubic meters per day.

2.2 An operator of a food services operation that discharges wastewater containing oil and grease must install and maintain a grease interceptor in accordance with this code of practice.

2.3 An operator of a food services operation must install and maintain all grease interceptors installed in connection with the food services operation so that the grease interceptors function properly.

2.4 An operator of a food services operation must not permit oil and grease to accumulate in a grease interceptor in excess of the lesser of six inches or 25% of the wetted height of the grease interceptor or solids to collect in excess of 25% of the wetted height of the grease interceptor.

2.5 An operator of a food services operation must not dispose of oil and grease removed from a grease interceptor to a sewer.

2.6 An operator of a food services operation must not use or permit the use of chemical agents, enzymes, bacteria, solvents, hot water or other agents to facilitate the passage of oil and grease through a grease interceptor.

2.7 An operator of a food services operation must install a grease interceptor connected to the following fixtures that discharge wastewater to sewer:

(a) sinks used for washing pots, pans, dishes, cutlery and kitchen utensils, including pre-rinse sinks;

(b) drains serving self-cleaning exhaust hoods installed over commercial cooking equipment;

(c) drains serving commercial cooking equipment that discharge oil and grease;

(d) drains serving a garbage compactor used to compact waste that may contain, or be contaminated with, food waste;

(e) dishwashers as specified in Section 2.10 or 2.11, as applicable;
(f) floor drains as specified in Section 2.14 or 2.15, as applicable; or

(g) other fixtures that discharge wastewater containing oil and grease.

2.8 An operator of an outdoor garbage compactor installation connected to a sewer must install works as necessary to prevent rainwater from entering the drain connected to the sewer.

2.9 Despite Section 2.7, the following fixtures must not be connected to a grease interceptor:

(a) potato peelers and similar equipment discharging solids;

(b) toilets, and urinals; or

(c) garburators except as specified in Section 2.25.

2.10 An operator of a food services operation, commencing operation on or after January 1, 2002 must connect dishwashers to a grease interceptor.

2.11 For an operator of a food services operation which commenced operation prior to January 1, 2002 a dishwasher may be connected to a grease interceptor provided that the grease interceptor is sized to accept the maximum discharge flow rate as specified in the method described in Section 2.13.

2.12 The rated flow capacity of each grease interceptor installed in a food services operation must not be less than the maximum discharge flow from all plumbing fixtures connected to the grease interceptor that will discharge simultaneously.

2.13 An operator of a food services operation must calculate the maximum discharge flow rate to a grease interceptor, as described in Section 2.12, by adding together the flow rates from each fixture that will discharge simultaneously using the following method to estimate the flow rate from each fixture:

(a) for sinks, calculate the total volume of each fixture and assign a drain time of one minute.

(b) for exhaust hoods with an automatic cleaning cycle, measure the discharge flow rate or use the manufacturers' estimate of peak discharge flow rate during the automatic wash cycle.

(c) for floor drains, estimate the flow rate using the following table:

Floor Drain Diameter		Drain Rate		
Millimetres	Inches	L/s	Imperial gpm	US gpm
51	2	1.4	18.3	22
76	3	2.36	31.2	37.5
102	4	2.84	37.5	45

(d) for drains on other equipment, use the table in Section 2.13 (c) or if the drain size is less than 2 inches in diameter either:

(i) measure the discharge flow rate, or

(ii) refer to manufacturers' estimated peak discharge flow rate, or

(iii) use a minimum of 1.4L/s.

(e) for automatic dishwashers, measure the discharge flow rate or use the maximum discharge flow rate specified by the dishwasher manufacturer.

2.14 An operator of a food services operation commencing operation on or after January 1, 2002 must connect floor drains to a grease interceptor.

2.15 For an operator of a food services operation that commenced operation prior to January 1, 2002, floor drains may be connected to a grease interceptor provided that the grease interceptor is sized to accept the maximum discharge flow rate from the fixture as specified in the method described in Section 2.13.

2.16 The rated flow capacity of each grease interceptor must be established using the Plumbing and Drainage Institute standard PDI-G101 or equivalent test as approved by the manager.

2.17 Each grease interceptor installed on or after January 1, 2002 must have either:

(a) one or more vented external flow control fittings installed upstream of the inlet line to the grease interceptor; or

(b) a non-removable internal flow control fitting; or

(c) flow control that is integral in the design of the grease interceptor and is verified by the manufacturer or a mechanical engineer for each installation.

2.18 Grease interceptors installed prior to January 1, 2002 must have either internal flow control fittings or external vented flow control fittings.

2.19 Flow control fittings must be installed so that:

(a) the flow control fitting has been sized to account for head pressure caused by the elevation difference between the fixture(s) and the grease interceptor; and

(b) it can be verified, during inspections to enforce this Bylaw, that flow control fittings are in place.

2.20 The size of the flow control fitting limits the flow to a grease interceptor to a rate that is no more than the rated flow capacity of the grease interceptor.

2.21 An operator of a food services operation who installs a grease interceptor on or after January 1, 2000 must locate the grease interceptor so that it is readily and easily accessible for inspection and maintenance.

2.22 An operator of a food services operation who installs a grease interceptor on or after January 1, 2000 must ensure:

(a) that the grease interceptor is equipped with a sampling tee located either at the outlet of the grease interceptor or downstream of the grease interceptor at a location upstream of any discharge of other waste;

(b) the sampling tee as described in Section 2.22 (a) is the same diameter as the grease interceptor outlet pipe and is installed so that it opens in a direction at right angles to and vertically above the flow in the sewer pipe;

(c) that the sampling tee be readily and easily accessible at all times for inspection; and

(d) that a record of the locations of all sampling tees is maintained at the site and available for inspection by an officer, on request.

2.23 A grease interceptor installed on or after January 1, 2000 must be labelled or stamped with information containing the rated flow capacity of the unit. The label or stamp must be permanently affixed and visible following installation. Where a permanently affixed and visible label is not possible or practical, manufacturer and installation drawings of the grease interceptor must be maintained at the site and must be available for inspection by an officer, on request.

2.24 An operator of a food services operation commencing operation on or after January 1, 2002 must not connect a garburator to the sanitary sewer.

2.25 An operator of a food services operation that commenced operation before January 1, 2002 that has a garburator that discharges to a sanitary sewer must either:

(a) cease the discharge to sanitary sewer from the garburator; or

(b) treat the waste prior to discharge to sanitary sewer using a solids separator followed by a grease interceptor.

2.26 The solids separator listed in 2.25 (b) must be properly sized and maintained to prevent the passage of solids so that any grease interceptor connected to a garburator and solids separator will function in accordance with this Bylaw.

2.27 An operator of a food services operation must remove the cover of a grease interceptor for the purpose of inspection on request of an officer.

~~**3.0 RECORD KEEPING AND RETENTION**~~

~~3.1 An operator of a food services operation must keep a record at the food services operation of all grease interceptor inspection and maintenance activities, including:~~

~~(a) the date of inspection or maintenance;~~

~~(b) the maintenance conducted;~~

~~(c) the type and quantity of material removed from the grease interceptor; and~~

~~(d) the location of disposal of the material removed from the grease interceptor.~~

~~The records must be retained onsite for a period of two years and must be available for inspection on request by an officer.~~

SCHEDULE "J"
(Bylaw 3105)

CODE OF PRACTICE FOR DRY CLEANING OPERATIONS
BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from dry cleaning operations directly or indirectly into a sewer connected to a sewerage facility.

1.2 The term "treatment works" in this code of practice means the works referred to in Section 2.4.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a dry cleaning operation must not discharge waste which, at the point of discharge into a sewer at any time, contains:

(a) prohibited waste as set out in Schedule "A";

(b) restricted waste as set out in Schedule "B";

(c) wastewater containing tetrachloroethylene in concentrations greater than 0.10 milligrams per litre (mg/L);

(d) tetrachloroethylene contaminated residue; or

(e) uncontaminated water, in quantities greater than 2.0 cubic metres per day, without prior authorization from the manager.

2.2 An operator of a dry cleaning operation must not discharge stormwater into a sewer without a valid waste discharge permit or authorization.

2.3 A dry cleaning operation may meet the requirements of Section 2.1 by collecting and transporting the wastewater or other substances specified in Section 2.1 from the dry cleaning operation for off-site waste management.

2.4 On or after January 1, 2004, an operator of a dry cleaning operation that discharges waste that has come in contact with tetrachloroethylene from a dry cleaning process into a sewer must, in addition to the dry cleaning machine's integral tetrachloroethylene-water separator, install and maintain the following treatment works:

(a) a second tetrachloroethylene-water separator that recovers tetrachloroethylene from the wastewater exiting the integral tetrachloroethylene-water separator;

(b) an initial filter containing activated carbon that removes the tetrachloroethylene from the wastewater exiting the second tetrachloroethylene-water separator;

(c) a monitor-alarm that automatically shuts down the wastewater treatment and stops the discharge of wastewater containing tetrachloroethylene into the sewer when the initial filter becomes saturated with tetrachloroethylene; and

(d) a second filter containing activated carbon that removes tetrachloroethylene from the wastewater after it passes through the initial filter and past the monitor-alarm.

2.5 Where an operator of a dry cleaning operation installs the treatment works referred to in subsections 2.4(a) to (d), then the treatment works must be installed in the order in which they are set out in Section 2.4.

2.6 An operator of a dry cleaning operation who operates the tetrachloroethylene-water separators referred to in Section 2.4 must:

(a) visually inspect all tetrachloroethylene-water separators on a daily basis to ensure that the level of tetrachloroethylene does not reach the wastewater outlet of the separators; and

(b) clean the tetrachloroethylene-water separators at least once every seven days or more frequently if required by the manufacturer. *(Bylaw 3350)*

2.7 When the level of the tetrachloroethylene referred to in subsection 2.6(a) reaches the wastewater outlet of the separator, an operator of a dry cleaning operation must:

(a) cease operation to prevent the discharge of tetrachloroethylene from the tetrachloroethylene-water separator;

(b) clean the tetrachloroethylene-water separator in accordance with manufacturer's recommendations; and

(c) return the tetrachloroethylene from the separator to the solvent recovery system or collect and store it for off-site waste management.

2.8 An operator of a dry cleaning operation who installs the activated carbon filters referred to in subsections 2.4(b) and (d) must replace both the initial and second filter containing activated carbon at least once every 12 months and when one of the following occurs:

(a) on or before reaching the manufacturer's or supplier's recommended expiry date; or

(b) when the monitor-alarm referred to in subsection 2.4(c) has been triggered; or

(c) analytical data using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.01 mg/L tetrachloroethylene or lower, indicates that the concentration of tetrachloroethylene in the discharge from the second filter containing activated carbon is greater than, or equal to, 0.10 mg/L.

2.9 An operator of a dry cleaning operation must ensure that waste other than waste to which Section 2.4 of this code of practice applies, including waste from washrooms, staff coffee rooms, washing machines and change rooms, bypasses the treatment works.

2.10 An operator of a dry cleaning operation who installs treatment works referred to in Section 2.4 of this code of practice must:

(a) equip the outlet from the treatment works with a monitoring point at a location upstream of the point of discharge of other waste;

(b) install the monitoring point as described in subsection 2.10(a) of the same diameter as the treatment works outlet pipe so that the monitoring point opens in a direction at right angles to, and horizontal to, the flow in the sewer pipe and is controlled by a hose bib or a valve; and

(c) locate the monitoring point so that it is readily and easily accessible at all times.

3.0 STORAGE AND CONTAINMENT

3.1 An operator of a dry cleaning operation must ensure that all dry cleaning machines and treatment works are operated and stored using a tetrachloroethylene-impermeable spill containment system that will prevent any spilled material from entering a sewer.

3.2 An operator of a dry cleaning operation must store all new and used tetrachloroethylene, tetrachloroethylene-contaminated residue and untreated wastewater using a tetrachloroethylene-impermeable spill containment system that will prevent any spilled material from entering a sewer.

3.3 The containment systems identified in Sections 3.1 and 3.2 must encompass at least the entire surface under each dry cleaning machine, tank or other container containing tetrachloroethylene, wastewater or tetrachloroethylene-contaminated residue and be sufficient to hold at least 110% of the capacity of the largest tank, container or works within the containment system.

3.4 An operator of a dry cleaning operation equipped with a tetrachloroethylene-impermeable containment system must not have open drains within the containment area.

3.5 Drains located within the containment system must be sealed with tetrachloroethylene-resistant drain plugs.

3.6 An operator of a dry cleaning operation must not discharge stormwater from a containment system unless it has first been tested to confirm that such discharge will not breach Section 2.1 unless the operator has obtained a valid waste discharge permit or authorization under this bylaw.

4.0 SPILL RESPONSE PLANS

4.1 An operator of a dry cleaning operation that is in operation on or before January 1, 2004 must prepare a spill response plan on or before July 1, 2004.

4.2 An operator of a dry cleaning operation commencing operation on or after January 1, 2004 must prepare a spill response plan within 30 days after commencing operation.

4.3 The spill response plan required under Sections 4.1 or 4.2 must be posted in a conspicuous location on the dry cleaning premises.

4.4 An operator of a dry cleaning operation must maintain the spill prevention and clean-up equipment and supplies identified in the spill response plan specified in Section 4.1 or 4.2 in stock and readily available for use at all times.

4.5 An operator of a dry cleaning operation must ensure that the spill prevention equipment and supplies identified in the spill response plan specified in Section 4.1 or 4.2 include tetrachloroethylene-resistant drain plugs that are readily available to seal all floor drains into which tetrachloroethylene, wastewater or residue may enter in the event of a spill.

4.6 In the event of a spill, an operator of a dry cleaning operation must immediately carry out the spill response plan, when safe to do so, to prevent or discontinue the discharge of spilled material into a sewer.

5.0 RECORD KEEPING AND RETENTION

5.1 An operator of a dry cleaning operation who installs one or more treatment works must keep a record at the dry cleaning operation of all inspection and maintenance activities for the treatment works, including the:

(a) date of inspection or maintenance;

(b) description of inspection or maintenance conducted;

(c) amounts of activated carbon removed and replaced in the treatment works; and

(d) dates and volumes of material removed from the treatment works.

5.2 An operator of a dry cleaning operation must keep a record of all disposal or recycling services used for disposal or recycling of wastewater and tetrachloroethylene-contaminated residue, including the:

(a) name, civic and postal address, and telephone number of each disposal or recycling company or facility used by the dry cleaning operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

5.3 The records required under Sections 5.1 and 5.2 must be retained for a period of five years and must be available for inspection on request by an officer.

SCHEDULE "K"

CODE OF PRACTICE FOR PHOTOGRAPHIC IMAGING OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from photographic imaging operations directly or indirectly into a sewer connected to a sewage facility. *(Bylaw 3105)*

1.2 The term "treatment works" in this code of practice means the works referred to in Sections 2.2(b) and 2.4. *(Bylaw 3105)*

2.0 DISCHARGE REGULATIONS

2.1 An operator of a photographic imaging operation must not discharge waste which, at the point of discharge into a sewer, contains:

(a) silver in a concentration that is in excess of 5 milligrams per litre (mg/L) as analyzed in a grab sample; or

(b) prohibited waste, restricted waste, special waste, stormwater, or uncontaminated water as defined in this bylaw, other than the following restricted wastes: BOD, COD, chloride, iron and sulphate.

2.2 An operator of a photographic imaging operation that produces liquid waste containing silver on or after June 1, 2000 must either:

(a) collect and transport the waste from the photographic imaging operation for off-site waste management; or

(b) treat the waste at the photographic imaging operation site prior to discharge to the sewer using one of the following silver recovery technologies:

(i) two chemical recovery cartridges connected in a series;

(ii) an electrolytic recovery unit followed by two chemical recovery cartridges connected in series; or

(iii) any other silver recovery technology, or combination of technologies, capable of reducing the concentration of silver in the waste to 5 mg/L or less where valid analytical test data has been submitted to, and accepted by, the manager.

2.3 An operator of a photographic imaging operation must install and maintain silver recovery technology according to the manufacturer's or supplier's recommendations.

2.4 An operator of a photographic imaging operation must collect all liquid waste containing silver in a holding tank and must deliver this waste to the chemical recovery cartridges using a metering pump.

2.5 An operator of a photographic imaging operation must calibrate the metering pump referred to in subsection 2.4 at least once per year.

2.6 An operator of a photographic imaging operation must locate the silver recovery system in such a manner that an accidental spill, leak or container failure will not result in liquid waste containing silver in concentrations greater than 5 mg/L entering any sewer.

2.7 If a location referred to under subsection 2.6 is not available, an operator of a photographic imaging operation must do one of the following:

(a) install spill containment to contain spills or leaks from the silver recovery system; or

(b) cap all floor drains into which liquid spilled from the silver recovery system would normally flow.

2.8 When using two separate chemical recovery cartridges, an operator of a photographic imaging operation must test the discharge from the first cartridge for silver content at least once per month using either silver test paper or a portable silver test kit.

2.9 When the discharge from the first chemical recovery cartridge referred to in subsection 2.8 cannot be sampled, an operator of a photographic imaging operation must:

(a) install a cumulative flow meter on the silver recovery system; and

(b) test the discharge from the second chemical recovery cartridge once per week using silver test paper or a silver test kit.

2.10 An operator of a photographic imaging operation must replace the chemical recovery cartridges when any one of the following occurs:

(a) the manufacturer's or supplier's recommended expiry date, as shown on each cartridge, has been reached;

(b) eighty percent (80%) of the manufacturer's or supplier's maximum recommended capacity, or total cumulative flow, for each cartridge has been reached;

(c) test data, using silver test paper or a silver test kit, indicates that the discharge from the first cartridge is greater than 1000 mg/L; or

(d) analytical data using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.5 mg/L silver or lower, indicates that the concentration of silver in the discharge from the silver recovery system is greater than, or equal to, 5 mg/L.

2.11 If treatment of liquid waste with two chemical recovery cartridges connected in series is the only silver recovery technology being used, then the operator of the photographic imaging operation must replace both chemical recovery cartridges when one of the events referred to in subsection 2.10 occurs. (Bylaw 3350)

2.12 Despite subsection 2.11, if treatment of liquid waste with two chemical recovery cartridges connected in series is used following treatment by an electrolytic recovery unit, the second cartridge may replace the used first cartridge and a new second cartridge may be installed when one of the events referred to in subsection 2.10 occurs.

2.13 Despite subsection 2.12, both chemical recovery cartridges used following an electrolytic recovery unit must be replaced by the operator of the photographic imaging operation when one of the events referred to in subsection 2.10 occurs if this is recommended by the manufacturer or supplier of the cartridges.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a photographic imaging operation that uses a silver recovery system must keep, at the photographic imaging operation site, an operation and maintenance manual pertaining to all equipment used in the silver recovery system.

3.2 An operator of a photographic imaging operation that uses two chemical recovery cartridges connected in series must keep a record book, available for inspection on request, at the photographic imaging operation site that includes the following information recorded for the previous two years:

(a) serial number of each chemical recovery cartridge used;

(b) installation date of each chemical recovery cartridge used;

(c) expiry date of each chemical recovery cartridge used (where provided by manufacturers or suppliers);

(d) maximum recommended capacity, or total cumulative flow, of each chemical recovery cartridge used;

(e) dates of all metering pump calibrations;

(f) monthly silver test results on the discharge from the first chemical recovery cartridge; or where the discharge from the first cartridge cannot be sampled, weekly silver test results on the discharge from the second chemical recovery cartridge and weekly cumulative flows through the silver recovery system; and

(g) dates and descriptions of all operational problems associated with the chemical recovery cartridges and remedial actions taken.

3.3 An operator of a photographic imaging operation that uses an electrolytic recovery unit in addition to two chemical recovery cartridges connected in series must keep a record book, available for inspection on request, at the photographic imaging operation site that includes the following information recorded for the previous two years:

(a) all information specified under subsection 3.2;

(b) date of each removal of silver from the electrolytic recovery unit;

(c) date of each maintenance check on the electrolytic recovery unit; and *(Bylaw 3105)*

(d) dates and descriptions of all operational problems associated with the electrolytic recovery unit and remedial actions taken.

SCHEDULE "L"

CODE OF PRACTICE FOR DENTAL OPERATIONS BYLAW NO. 2922

(Bylaw 3105)

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from dental operations directly or indirectly into a sewer connected to a sewage facility.
(Bylaw 3105)

1.2 The term "treatment works" in this code of practice means the works referred to in Section 2.3(b). *(Bylaw 3105)*

2.0 DISCHARGE REGULATIONS

2.1 An operator of a dental operation must not discharge waste which, at the point of discharge into a sewer, contains:

(a) prohibited waste, special waste, or stormwater ; or

(b) restricted waste with the exception of mercury measured at the point of discharge from a certified amalgam separator.

2.2 An operator of a dental operation that produces liquid waste from photographic imaging containing silver on or after January 1, 2001 must comply with the requirements of Schedule "K" of this bylaw.

2.3 An operator of a dental operation that produces wastewater containing dental amalgam on or after July 1, 2001 must either:

(a) collect and transport the wastewater from the dental operation for off-site waste management; or

(b) treat the wastewater at the dental operation site prior to discharge to the sewer using a certified amalgam separator.

2.4 Despite Section 2.3, an operator of a dental operation that produces wastewater containing dental amalgam and who:

(a) commences operation on or after January 1, 2001; or

(b) makes an improvement, with a value of $2,000 or more, to the premises in which the dental operation is carried out, on or after January 1, 2001,

(c) must comply with either (a) or (b) of Section 2.3.

2.5 An operator of a dental operation must install and maintain the amalgam separator referred to in Sections 2.3 and 2.4 according to the manufacturer's or supplier's recommendations in order that the amalgam separator functions correctly.

2.6 An operator of a dental operation shall not install an amalgam separator other than a certified amalgam separator on or after January 1, 2001.

2.7 An operator of a dental operation who installs an amalgam separator on or after January 1, 2001 must ensure that:

(a) all dental operation wastewater that contains dental amalgam is treated using the amalgam separator;

(b) a monitoring point is installed at the outlet of the amalgam separator or downstream of the amalgam separator at a location upstream of any discharge of other waste;

(c) the monitoring point must be installed in such a manner that the total flow from the amalgam separator may be intercepted and sampled; and

(d) the monitoring point shall be readily and easily accessible at all times for inspection.

2.8 If the amalgam separator referred to under Section 2.6 is located downstream of a wet vacuum system, an operator of a dental operation must ensure that:

(a) the wet vacuum system is fitted with an internal flow control fitting; or

(b) a flow control fitting is installed on the water supply line to the wet vacuum system.

2.9 The flow control fitting referred to in Section 2.8 must be sized to limit the flow to a rate that is no more than the maximum inlet flow rate of the amalgam separator as stated by the manufacturer of the amalgam separator.

2.10 An operator of a dental operation must locate an amalgam separator in such a manner that an accidental spill, leak or collecting container failure will not result in waste containing amalgam entering any sewer.

2.11 If a location referred to under Section 2.10 is not available, an operator of a dental operation must do one of the following:

(a) install spill containment to contain spills or leaks from the amalgam separator; or

(b) cap all floor drains into which liquid spilled from the amalgam separator would normally flow.

2.12 An operator of a dental operation must replace the amalgam separator's collecting container when any one of the following occurs:

(a) the manufacturer's or supplier's recommended expiry date, as shown on the amalgam separator, has been reached; or

(b) the warning level specified in the ISO Standard has been reached; or

(c) analytical data obtained using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.1 mg/L or lower, indicates that the total concentration of mercury in the discharge from the amalgam separator is greater than, or equal to, 2 mg/L.

2.13 An operator of a dental operation must not dispose of dental amalgam collected in an amalgam separator, a collecting container, or any other device, to a sewer.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a dental operation that uses an amalgam separator must keep, at the site of installation of the amalgam separator, an operation and maintenance manual containing instructions for installation, use, maintenance and service of the amalgam separator installed.

3.2 An operator of a dental operation that uses an amalgam separator must post, at the site of installation of the amalgam separator, a copy of the ISO Standard test report pertaining to the amalgam separator installed.

3.3 An operator of a dental operation that uses an amalgam separator must keep a record book at the dental operation site that includes the following information pertaining to the amalgam separator installed:

(a) date of installation of the amalgam separator and name of the installation service provider;

(b) serial number and expiry date of the amalgam separator and/or its components;

(c) maximum recommended flow rate through the amalgam separator, where applicable;

(d) dates of inspection, maintenance, cleaning and replacement of any amalgam separation equipment or components;

(e) dates and descriptions of all operational problems, spills, leaks or collecting container failures associated with the amalgam separator and remedial actions taken;

(f) name, address and telephone number of any person or company who performs any maintenance or disposal services related to the operation of the amalgam separator; and

(g) dates of pick-up of the collecting container for off-site disposal, volume of waste disposed and the location of disposal.

The records must be retained for a period of two years and must be available for inspection on request by an officer.

SCHEDULE "I"

CODE OF PRACTICE FOR FOOD SERVICES OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from food services operations directly or indirectly into a sanitary sewer connected to a sewage facility.

1.2 Prior to altering the fixtures connected to an existing grease interceptor or replacing a grease interceptor an operator of a food services operation must submit a Waste Discharge Assessment Form (WDAF).

2.0 DISCHARGE REGULATIONS

2.1 An operator of a food services operation must not discharge waste, which at the point of discharge into a sanitary sewer, contains:

(a) restricted waste with the exception of total oil and grease, biochemical oxygen demand (BOD) and chemical oxygen demand (COD);

(b) prohibited waste as set out in Schedule “A”;

(c) uncontaminated water, in quantities greater than two cubic meters per day; or

(d) stormwater.

2.2 An operator of a food services operation that discharges wastewater containing fat, oil and grease must install one or more grease interceptors to treat wastewater prior to discharge to a sanitary sewer in accordance with this code of practice.

2.3 An operator of a food services operation who installs one or more grease interceptors under section 2.2 must inspect, maintain, repair and clean out the grease interceptors to ensure they function as designed.

2.4 An operator of a food services operation who commences operation on or after February 15, 2023 and who discharges wastewater containing fat, oil and grease may use alternative treatment works, or a combination of treatment works other than that described in this code of practice, to treat liquid waste from the food services operation prior to discharge to a sanitary sewer if the alternative treatment works meets, or exceeds the fat, oil and grease removal efficiency rating standard for grease interceptors set out in the relevant standards referenced in Sections 2.14 and 2.15 and where valid analytical test data has been submitted to, and accepted by, the manager.

2.5 An operator of a food service operation who installs alternative treatment works described in Section 2.4, following approval by the sewage control manager, is exempt from this code of practice however, the alternative treatment works must be operated in compliance with a waste discharge permit or authorization issued to the operator by the manager.

2.6 An operator of a food services operation who self-cleans must have the grease interceptor cleaned out by a waste hauler at least once every rolling 12-month period, or as directed by the manager.

2.7 An operator of a food services operation must not permit fat, oil, grease, and solids to accumulate in a grease interceptor in excess of 25% of the wetted height of the grease interceptor.

2.8 An operator of a food services operation, or other person, must not dispose of fat, oil and grease or solids removed from a grease interceptor to a sewer.

2.9 An operator of a food services operation must not use or permit the use of high flow water, chemical agents, enzymes, bacteria, solvents, hot water with a temperature greater than 75 degrees Celsius or other agents to facilitate the passage of FOG through a grease interceptor.

2.10 An operator of a food services operation must install a grease interceptor connected to the following fixtures that discharge wastewater to a sanitary sewer:

(a) all compartments of sinks used for rinsing, washing and sanitizing utensils including pre-rinse sinks and sinks used for thawing frozen meat or seafood, unless held in separate containers;

(b) drains serving exhaust hoods with an automatic cleaning cycle installed over cooking equipment;

(c) drains serving cooking equipment including wok stations, soup kettles, tilt kettles and other similar cooking equipment that discharge FOG or solids;

(d) drains serving a garbage compactor or food waste digester that may contain or be contaminated with FOG or solids;

(e) dishwashers except for a food services operation that commenced operation prior to January 1, 2002; or

(f) other fixtures that discharge wastewater containing FOG or solids including, but not limited to, centrifugal solids separators, prep sinks, and barista sinks.

2.11 An operator of an outdoor garbage compactor installation connected to a sanitary sewer must install works as necessary to prevent rainwater from entering the drain connected to the sewer.

2.12 The following fixtures must not be connected to a grease interceptor:

(a) toilets, and urinals;

(b) hand sinks except for a food services operation that commenced prior to January 1, 2002;

(c) janitor's sinks or mop sinks except for a food services operation that commenced operation prior to January 1, 2002;

(d) food grinders and similar equipment discharging organic solids except as specified in Section 2.28 and 2.29; or

(e) drains receiving uncontaminated water.

2.13 All hydromechanical grease interceptors installed on or after February 15, 2023 with a rated flow capacity less than or equal to 100 gallons per minute (gpm) must be rated in accordance with Canadian Standards Association standard B481 (Series 12) or their amendments, or other such standards approved by the manager.

2.14 All hydromechanical grease interceptors installed on or after February 15, 2023 with a rated flow capacity greater than 100 gpm must be rated in accordance with Plumbing and Drainage Institute standard PDI-G101, American Society of Mechanical Engineers standard A112.14.3, or their amendments, or such other standards approved by the manager.

2.15 All gravity grease interceptors installed on or after February 15, 2023 must be designed, engineered, sized and installed in accordance with the standards and guidelines prescribed in the International Association of Plumbing and Mechanical Officials IAPMO/ANSI Z1001, or other such standards approved by the manager.

2.16 An operator of a food services operation who installs a grease interceptor on or after February 15, 2023 must calculate the peak flow rate into the grease interceptor by adding together the flow rates from each of the fixtures identified below which are connected to the grease interceptor and assigning a drain time of one minute as follows:

(a) where the fixtures include a pre-rinse sink, food waste collector, wok station or rotisserie, assign a minimum flow rate of 50 gpm;

(b) for sinks other than pre-rinse sinks, calculate the volume of each fixture using 75% of the total volume;

(c) for each additional sink beyond two three-compartment sinks included in the calculation, other than pre-rinse sinks assign a flow rate of 0 gpm;

(d) for dishwashers and other equipment discharging to sanitary sewer assign a flow rate equal to the manufacturer's published maximum discharge flow rate during operation, or if unknown, assign a flow rate of 5 gpm; and

(e) for floor or hub drains assign a peak flow rate of 0 gpm except where kitchen equipment discharges indirectly through the drain. For each piece of equipment, assign a drain time as per (d) above.

2.17 Despite Section 2.16, the rated flow capacity of the grease interceptor installed by an operator of a food services operation on or after February 15, 2023 must not be less than 25 gpm where a single grease interceptor services the operation.

2.18 Despite Sections 2.16 and 2.17 the rated flow capacity of any grease interceptor installed by an operator of a food services operation on or after February 15, 2023 must be approved by the sewage control manager.

2.19 The rated flow capacity of a grease interceptor installed on or after January 1, 2000 must be:

(a) permanently labelled on the grease interceptor and be visible and clearly legible at all times; or

(b) available in written documentation issued by the manufacturer of the grease interceptor for inspection by an officer on request.

2.20 Hydromechanical grease interceptors installed after January 1, 2002 must have flow control fittings specified and approved in the manufacturer's certification listing.

2.21 Flow control fittings must be installed so that:

(a) the flow control fitting has been sized to account for head pressure caused by the elevation difference between the fixture(s) and the hydromechanical grease interceptor;

(b) it can be verified, during inspections to enforce this Bylaw, that flow control fittings are in place; and

(c) the size of the flow control fitting limits the flow to a hydromechanical grease interceptor to a rate that is no more than the rated flow capacity of the hydromechanical grease interceptor.

2.22 An operator of a food services operation who installs a grease interceptor must locate the grease interceptor in a location that is readily and easily accessible for inspection and maintenance, repair, and clean out.

2.23 An operator of a food services operation who installs a grease interceptor on or after February 15, 2023 must not locate the grease interceptor in a confined space.

2.24 An operator of a food services operation who installs a grease interceptor on or after January 1, 2000 must ensure:

(a) that the grease interceptor is equipped with a monitoring point located either at the outlet of the grease interceptor or downstream of the grease interceptor at a location upstream of any discharge of other waste;

(b) the monitoring point, other than integral monitoring points, is the same diameter as the grease interceptor outlet pipe and is installed so that it opens in a direction at right angles to and vertically above the flow in the sanitary sewer pipe;

(c) that the monitoring point be readily and easily accessible at all times for inspection and sampling purposes.

2.25 The monitoring point(s) referred to in Section 2.24 are considered to be the point of discharge of waste into a sanitary sewer.

2.26 An operator of a food services operation must remove the cover of a grease interceptor for the purpose of inspection on request of an officer.

2.27 An operator of a food services operation using a food grinder that discharges to a sanitary sewer must either:

(a) cease the discharge to sanitary sewer from the garburator; or

(b) treat the waste prior to discharge to sanitary sewer using a solids separator followed by a grease interceptor.

2.28 An operator of a food services operation that installs a blended drink station or similar equipment on or after February 15, 2023 must treat the waste using a solids interceptor followed by a grease interceptor, prior to discharge to sanitary sewer.

2.29 The solids separator referred to in Section 2.28 must be sized, inspected, maintained, repaired and cleaned out in accordance with the manufacturer's instructions and specifications to prevent the passage of solids so that any grease interceptor connected downstream of a solids interceptor will function as designed.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a food services operation who installs one or more grease interceptors or solids interceptors must keep an operation and maintenance manual on site for each grease interceptor and solids interceptor installed.

3.2 An operator of a food services operation who installs one or more grease interceptors must keep a record on site of all inspection, maintenance, repair and clean outs conducted for each grease interceptor, including:

(a) the date of inspection or maintenance, repair or clean out;

(b) the maintenance or repair conducted;

(c) measured or estimated levels of oil and grease and solids removed from the grease interceptor;

(d) the location of disposal of the material removed from the grease interceptor; and name, civic and postal address, and telephone number of each company or waste hauler used by the food services operation for inspection maintenance, repair or clean out services.

3.3 The records required under Section 3.2 must include receipts or invoices for the activities listed under Sections 3.2 (b), (c) and (d), be retained for a period of two years, and must be available for inspection on request by an officer.

3.4 The manual required under Section 3.1 must be retained for the period that the specified grease interceptors or solids interceptors are in operation.

3.5 The records required under Section 3.2 may be electronic records stored in a maintenance tracking application (or equivalent), which provides access to the records at any time by an officer for a period of two years.

3.6 An operator that self-cleans treatment works must provide documentation of self-cleaning which must be available for inspection on request by an officer.

SCHEDULE "J"

CODE OF PRACTICE FOR DRY CLEANING OPERATIONS BYLAW NO. 2922

In this Code of Practice:

"Activated Carbon Filter" means a filter containing treated or prepared liquid phase granular activated carbon capable of removing tetrachloroethylene from wastewater through the process of adsorption.

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from dry cleaning operations directly or indirectly into a sewer connected to a sewerage facility.

1.2 The term "treatment works" in this code of practice means the works referred to in Section 2.4.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a dry cleaning operation must not discharge waste which, at the point of discharge into a sewer at any time, contains:

(a) prohibited waste as set out in Schedule "A";

(b) restricted waste as set out in Schedule "B";

(c) wastewater containing tetrachloroethylene in concentrations greater than 0.10 milligrams per litre (mg/L);

(d) tetrachloroethylene-contaminated residue; or

(e) uncontaminated water, in quantities greater than 2.0 cubic metres per day, without prior authorization from the manager.

2.2 An operator of a dry cleaning operation must not discharge stormwater into a sewer without a valid waste discharge permit or authorization.

2.3 A dry cleaning operation may meet the requirements of Section 2.1 by collecting and transporting the wastewater or other substances specified in Section 2.1 from the dry cleaning operation for off-site waste management at least once every twelve months.

2.4 An operator of a dry cleaning operation that discharges waste that has come in contact with tetrachloroethylene from a dry cleaning process into a sewer must, in addition to the dry cleaning machine's integral tetrachloroethylene-water separator, install and maintain the following treatment works:

(a) a second tetrachloroethylene-water separator that recovers tetrachloroethylene from the wastewater exiting the integral tetrachloroethylene-water separator;

(b) an initial activated carbon filter that removes the tetrachloroethylene from the wastewater exiting the second tetrachloroethylene-water separator;

(c) a monitor-alarm that automatically shuts down the wastewater treatment and stops the discharge of wastewater containing tetrachloroethylene into the sewer when the initial filter becomes saturated with tetrachloroethylene; and

(d) a second activated carbon filter that removes tetrachloroethylene from the wastewater after it passes through the initial filter and past the monitor-alarm.

2.5 Where an operator of a dry cleaning operation installs the treatment works referred to in sections 2.4(a) to (d), then the treatment works must be installed in the order in which they are set out in Section 2.4.

2.6 An operator of a dry cleaning operation who installs the treatment works referred to in Section 2.4 must locate the treatment works so that they are readily and easily accessible for inspection, maintenance, or repair.

2.7 An operator of a dry cleaning operation who installs the treatment works referred to in Section 2.4 must not locate the treatment works in a confined space.

2.8 An operator of a dry cleaning operation must operate and maintain the dry cleaning machine(s) in accordance with the manufacturer's instructions and specifications.

2.9 An operator of a dry cleaning operation who installs the activated carbon filters referred to in sections 2.4(b) and (d) must replace both the initial and second activated carbon filter at least once every 12 months and when one of the following occurs:

(a) on or before reaching the manufacturer's specified expiry date;

(b) when the monitor-alarm referred to in section 2.4(c) has been triggered; or

(c) analytical data, from an accredited laboratory, using a method of analysis outlined in Standard Methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.01 mg/L tetrachloroethylene or lower, indicates that the concentration of tetrachloroethylene in the discharge from the second activated carbon filter is greater than, or equal to, 0.10 mg/L.

2.10 An operator of a dry cleaning operation who installs treatment must:

(a) equip the outlet from the treatment works with a monitoring point as approved by the manager at a location upstream of the point of discharge of other waste; and

(b) locate the monitoring point so that it is readily and easily accessible at all times for inspection and monitoring purposes.

2.11 The monitoring point referred to in Section 2.10 is considered to be the point of discharge of waste into a sewer.

3.0 STORAGE AND CONTAINMENT

3.1 An operator of a dry cleaning operation must ensure that all dry cleaning machines and treatment works are operated and stored using a tetrachloroethylene-impermeable spill containment system that will prevent any spilled material from entering a sewer.

3.2 An operator of a dry cleaning operation must store all new and used tetrachloroethylene, tetrachloroethylene-contaminated residue and untreated wastewater using a tetrachloroethylene-impermeable spill containment system that will prevent any spilled material from entering a sewer.

3.3 The containment systems identified in Sections 3.1 and 3.2 must encompass at least the entire surface under each dry cleaning machine, tank or other container containing tetrachloroethylene, wastewater or tetrachloroethylene-contaminated residue and be sufficient to hold at least 110% of the capacity of the largest tank, container or works within the containment system.

3.4 An operator of a dry cleaning operation equipped with a tetrachloroethylene-impermeable containment system must not have open drains within the containment area.

3.5 Drains located within the containment system must be sealed with tetrachloroethylene-resistant drain plugs.

3.6 An operator of a dry cleaning operation must not discharge stormwater from a containment system unless it has first been tested to confirm that such discharge will not breach Section 2.1 unless the operator has obtained a valid waste discharge permit or authorization under this bylaw.

4.0 SPILL RESPONSE PLANS

4.1 An operator of a dry cleaning operation must prepare and maintain a spill response plan.

4.2 An operator of a dry cleaning operation must prepare a spill response plan within 30 days after commencing operation.

4.3 The spill response plan required under sections 4.1 or 4.2 must be posted in a conspicuous location on the dry cleaning premises.

4.4 An operator of a dry cleaning operation must maintain the spill prevention and clean-up equipment and supplies identified in the spill response plan specified in Section 4.1 or 4.2 in stock and readily available for use at all times.

4.5 An operator of a dry cleaning operation must ensure that the spill prevention equipment and supplies identified in the spill response plan specified in Section 4.1 or 4.2 include tetrachloroethylene-resistant drain plugs that are readily available to seal all floor drains into which tetrachloroethylene, wastewater or residue may enter in the event of a spill.

4.6 In the event of a spill, an operator of a dry cleaning operation must immediately carry out the spill response plan, when safe to do so, to prevent or discontinue the discharge of spilled material into a sewer.

5.0 RECORD KEEPING AND RETENTION

5.1 An operator of a dry cleaning operation who installs one or more treatment works must keep a record at the dry cleaning operation of all inspection, repair, maintenance, or replacement activities associated with the operation of the treatment works, including the:

(a) date of inspection, repair, maintenance, or replacement activity;

(b) description of inspection, repair or maintenance conducted;

(c) date and amount of activated carbon removed and replaced in the treatment works including the activated carbon type and size; and

(d) dates and volumes of material removed from the treatment works.

5.2 An operator of a dry cleaning operation must keep a record, including relevant receipts or invoices upon request of all disposal or recycling services used for disposal or recycling of wastewater and tetrachloroethylene-contaminated residue, including the:

(a) name, civic and postal address, and telephone number of each disposal or recycling company or facility used by the dry cleaning operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

5.3 The records required under Sections 5.1 and 5.2 must be retained for a period of five years and must be available for inspection on request by an officer.

5.4 An operator of a dry cleaning operation who installs one or more treatment works must keep, at the dry cleaning operation site, an operation and maintenance manual pertaining to all equipment used in the treatment works.

SCHEDULE "K"

CODE OF PRACTICE FOR PHOTOGRAPHIC IMAGING OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from photographic imaging operations directly or indirectly into a sewer connected to a sewage facility.

1.2 The term “treatment works” in this code of practice means the works referred to in Sections 2.2(b) and 2.4.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a photographic imaging operation must not discharge waste which, at the point of discharge into a sewer, contains:

(a) silver in a concentration that is in excess of 5 milligrams per litre (mg/L); or

(b) prohibited waste as set out in Schedule “A”.

2.2 An operator of a photographic imaging operation that produces liquid waste containing silver must either:

(a) collect and transport the waste from the photographic imaging operation for off-site waste management; or

(b) treat the waste at the photographic imaging operation site prior to discharge to the sewer using one of the following silver recovery technologies:

(i) two chemical recovery cartridges connected in series;

(ii) an electrolytic recovery unit followed by two chemical recovery cartridges connected in series; or

(iii) any other silver recovery technology, or combination of technologies, capable of reducing the concentration of silver in the waste discharged to sewer to 5 mg/L or less where valid analytical test data has been submitted to, and accepted by, the sewage control manager.

2.3 An operator of a photographic imaging operation must install and maintain silver recovery technology referred to in Section 2.2 according to the manufacturer’s instructions and specifications.

2.4 An operator of a photographic imaging operation must collect all liquid waste containing silver in a holding tank and must deliver this waste to the electrolytic recovery unit and/or chemical recovery cartridges using a metering pump.

2.5 An operator of a photographic imaging operation must calibrate the metering pump referred to in Section 2.4 in accordance with the manufacturer’s instructions and specifications.

2.6 An operator of a photographic imaging operation must locate the silver recovery system and any stored liquid waste collection containers in such a manner that an accidental spill, leak or container failure will not result in liquid waste containing silver entering any sewer.

2.7 If a location referred to under Section 2.6 is not available, an operator of a photographic imaging operation must do one of the following:

(a) install spill containment to contain spills or leaks from the silver recovery system or stored liquid waste collection containers; or

(b) cap all floor drains into which liquid spilled from the silver recovery system or stored liquid waste collection containers would normally flow.

2.8 When using two separate chemical recovery cartridges, an operator of a photographic imaging operation must test the discharge from the first cartridge for silver content at least once per month of operation using either silver test paper or a silver test kit.

2.9 When the discharge from the first chemical recovery cartridge referred to in Section 2.8 cannot be sampled, an operator of a photographic imaging operation must:

(a) install a cumulative flow meter on the silver recovery system; and

(b) test the discharge from the second chemical recovery cartridge once per week of operation using silver test paper or a silver test kit.

2.10 An operator of a photographic imaging operation must replace the chemical recovery cartridges when any one of the following occurs:

(a) the manufacturer's specified expiry date, as shown on each cartridge, has been reached;

(b) eighty percent (80%) of the manufacturer's specified capacity, or total cumulative flow, for each cartridge has been reached;

(c) test data, using silver test paper or a silver test kit, indicates that the discharge from the first cartridge is greater than 1000 mg/L; or

(d) analytical data from an accredited laboratory using a method of analysis outlined in Standard Methods, or an alternative method of analysis approved by the Manager, having a method detection limit of 0.5 mg/L silver or lower, indicates that the concentration of silver in the discharge from the silver recovery system is greater than, or equal to, 5 mg/L.

2.11 If treatment of liquid waste with two chemical recovery cartridges connected in series is the only silver recovery technology being used, then the operator of the photographic imaging operation must replace both chemical recovery cartridges when one of the events referred to in Section 2.10 occurs.

2.12 Despite Section 2.11, if treatment of liquid waste with two chemical recovery cartridges connected in series is used following treatment by an electrolytic recovery unit, the second cartridge may replace the used first cartridge and a new second cartridge may be installed when one of the events referred to in Section 2.10 occurs.

2.13 Despite Section 2.12, both chemical recovery cartridges used following an electrolytic recovery unit must be replaced by the operator of the photographic imaging operation when one of the events referred to in Section 2.10 occurs if this is recommended by the manufacturer of the cartridges.

2.14 An operator of a photographic imaging operation who installs treatment works must locate the treatment works so that they are readily and easily accessible for inspection, maintenance, repair or replacement.

2.15 An operator of a photographic imaging operation who installs treatment works must not locate the treatment works in a confined space.

2.16 An operator of a photographic imaging operation who installs treatment works must:

(a) designate the outlet from the silver recovery system, at a location upstream of the point of discharge of other waste, as a monitoring point; and

(b) locate the monitoring point so that it is readily and easily accessible at all times for inspection and monitoring purposes.

2.17 The monitoring point referred to in Section 2.16 is considered to be the point of discharge into a sewer.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a photographic imaging operation who installs a silver recovery system must keep, at the photographic imaging operation site, an operation and maintenance manual pertaining to all equipment used in the silver recovery system.

3.2 An operator of a photographic imaging operation who installs two chemical recovery cartridges connected in series must keep records, available for inspection on request, at the photographic imaging operation site that includes the following information recorded for the previous two years:

(a) serial number of each chemical recovery cartridge used;

(b) installation date of each chemical recovery cartridge used;

(c) expiry date of each chemical recovery cartridge used (where provided by manufacturers or suppliers);

(d) maximum recommended capacity, or total cumulative flow, of each chemical recovery cartridge used;

(e) dates of all metering pump calibrations through the silver recovery system when the chemical recovery cartridge is replaced and any additional manufacturer recommended calibrations;

(f) silver test results on the discharge from the first chemical recovery cartridge per calendar month of operation; or where the discharge from the first cartridge cannot be sampled, silver test results on the discharge from the second chemical recovery cartridge and cumulative flows through the silver recovery system per calendar week of operation; and

(g) dates and descriptions of all maintenance, repair, or replacement activities associated with the operation of the chemical recovery cartridges.

3.3 An operator of a photographic imaging operation who installs an electrolytic recovery unit in addition to two chemical recovery cartridges connected in series must keep records, available for inspection on request, at the photographic imaging operation site that includes the following information recorded for the previous two years:

(a) all information specified under section 3.2 as applicable;

(b) date of each removal of silver from the electrolytic recovery unit; and

(c) dates and descriptions of all maintenance or repair activities associated with the operation of the electrolytic recovery unit.

3.4 An operator of a photographic imaging operation must keep a record, including relevant receipts or invoices, of all disposal or recycling services used for off-site waste management, disposal or recycling of wastewater, chemical recovery cartridges, and silver-contaminated residue, including the:

(a) name, civic and postal address, and telephone number of each disposal or recycling company or facility used by the photographic imaging operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

3.5 The records required under Sections 3.2, 3.3 and 3.4 must be retained for a period of five years and must be available for inspection on request by an officer.

SCHEDULE "L"

CODE OF PRACTICE FOR DENTAL OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from dental operations directly or indirectly into a sewer connected to a sewage facility.

1.2 The term “treatment works” in this code of practice means the works referred to in Section 2.3(b).

2.0 DISCHARGE REGULATIONS

2.1 An operator of a dental operation must not discharge waste which, at the point of discharge into a sewer, contains:

(a) prohibited waste as set out in Schedule “A”;

(b) restricted waste as set out in Schedule “B”; or

(c) mercury in a concentration greater than 2 milligrams per litre (mg/L) as analyzed in a grab sample.

2.2 An operator of a dental operation that produces liquid waste from photographic imaging containing silver must comply with the requirements of Schedule “K” of this bylaw.

2.3 An operator of a dental operation that produces wastewater containing dental amalgam must either:

(a) collect and transport the wastewater from the dental operation for off-site waste management; or

(b) treat the wastewater at the dental operation site prior to discharge to the sewer using an amalgam separator.

2.4 All amalgam separators must be certified in accordance with the ISO Standard for Amalgam Separators.

2.5 An operator of a dental operation must install, maintain, repair and replace the amalgam separator referred to in Sections 2.3 and 2.4 according to the manufacturer’s instructions and specifications in order that the amalgam separator functions as designed.

2.6 If the amalgam separator referred to under Sections 2.3(b) and 2.4 is located downstream of a wet vacuum system, an operator of a dental operation must ensure that:

(a) the wet vacuum system is fitted with an internal flow control fitting; or

(b) a flow control fitting is installed on the water supply line to the wet vacuum system.

2.7 The flow control fitting referred to in Section 2.6 must be sized to limit the flow to a rate that is no more than the maximum inlet flow rate of the amalgam separator as stated by the manufacturer of the amalgam separator.

2.8 An operator of a dental operation must locate an amalgam separator, or store used collecting containers in such a manner that an accidental spill, leak or collecting container failure will not result in waste containing amalgam entering the sewer.

2.9 If a location referred to under Section 2.8 is not available, an operator of a dental operation must:

(a) install spill containment to contain spills or leaks from the amalgam separator or to store used collecting containers.

2.10 An operator of a dental operation must replace the amalgam separator's collecting container when any one of the following occurs:

(a) the manufacturer's specified expiry date has been reached;

(b) the warning level specified in the ISO Standard for Amalgam Separators has been reached; or

(c) analytical data from an accredited laboratory obtained using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the sewage control manager, having a concentration of mercury in the discharge from the amalgam separator is greater than, or equal to, 2 mg/L.

2.11 An operator of a dental operation must not dispose of dental amalgam collected in an amalgam separator, a collecting container, or any other device, into a sewer.

2.12 An operator of a dental operation who installs an amalgam separator must locate the amalgam separator so that it is readily and easily accessible for inspection, maintenance, repair or replacement.

2.13 An operator of a dental operation who installs an amalgam separator must not locate the amalgam separator in a confined space.

2.14 An operator of a dental operation who installs an amalgam separator must:

(a) install a monitoring point at the outlet of the amalgam separator or downstream of the amalgam separator at a location upstream of any discharge of other waste;

(b) ensure the monitoring point is installed in such a manner that the total flow from the amalgam separator may be intercepted and sampled; and

(c) locate the monitoring point so that it is readily and easily accessible at all times for inspection and monitoring purposes.

2.15 The monitoring point referred to in Section 2.14 is considered the point of discharge into the sanitary sewer.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a dental operation that uses an amalgam separator must keep, at the site of installation of the amalgam separator, an operation and maintenance manual containing instructions for installation, use, maintenance and service of the amalgam separator installed.

3.2 An operator of a dental operation that uses an amalgam separator must keep a copy of the ISO Standard for Amalgam Separators test report with the amalgam separator installed and must be available for inspection on request by an officer.

3.3 An operator of a dental operation that uses an amalgam separator must keep a record book at the dental operation site that includes the following information pertaining to the amalgam separator installed:

(a) date of installation of the amalgam separator and name of the supplier or installation service provider;

(b) serial number and expiry date of the amalgam separator and/or its components;

(c) maximum flow rate through the amalgam separator or maximum capacity rating of the amalgam separator;

(d) dates of inspection, maintenance, repair, cleaning and replacement of any amalgam separation equipment or components;

(e) dates and descriptions of all operational problems, spills, leaks or collecting container failures associated with the amalgam separator and remedial actions taken;

(f) name, address and telephone number of any person or company who performs any maintenance or disposal services related to the operation of the amalgam separator; and

(g) dates of pick-up of the collecting container for off-site disposal, volume of waste disposed and the location of disposal.

3.4 The records must be retained for a period of five years and must be available for inspection on request by an officer.

SCHEDULE "M"

(Bylaw 3105)

CODE OF PRACTICE FOR AUTOMOTIVE REPAIR OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from automotive repair operations directly or indirectly into a sewer connected to a sewage facility.

1.2 The term "treatment works" in this code of practice means the works referred to in Sections 2.4, 2.5, 2.6 and 2.10.

2.0 DISCHARGE REGULATIONS

2.1 An operator of an automotive repair operation must not discharge waste which, at the point of discharge into a sewer, contains:

(a) prohibited waste as set out in Schedule "A";

(b) restricted waste as set out in Schedule "B", with the exception of oil and grease (hydrocarbons);

(c) oil and grease (hydrocarbons) in a concentration that is in excess of 50 milligrams per litre (mg/L) as analyzed in a grab sample;

(d) uncontaminated water, in quantities greater than 2.0 cubic metres per day, without prior authorization from the manager;

(e) water that accumulates in any fuel storage tank;

(f) rinse water from motor vehicle parts that have been washed in solvent;

(g) wastewater from oily rag washing or cleaning; or

(h) wastewater from engine washing or cleaning.

2.2 An operator of an automotive repair operation must not discharge stormwater into a sanitary sewer connected to a sewage facility unless the stormwater originates from:

(a) fueling station areas; or

(b) above ground storage tank containment areas.

2.3 An operator of an automotive repair operation must not discharge groundwater from a contaminated site as defined in the Contaminated Sites Regulation into a sanitary sewer connected to a sewage facility without a waste discharge permit or authorization issued under Section 3 of the bylaw.

2.4 An operator of an automotive repair operation that is in operation on or after January 1, 2004 must not discharge liquid waste from an automotive repair process into a sewer unless the automotive repair operation is equipped with one or more oil-water separators to treat the waste in accordance with this code of practice.

2.5 An operator of an automotive repair operation that is in operation on or after January 1, 2004 may use an alternate treatment works, or a combination of treatment works other than that described in this code of practice, to treat liquid waste from an automotive repair process if the alternate treatment works produces effluent that complies with Section 2.1 prior to discharge into a sewer and where valid analytical test data has been submitted to, and accepted by, the manager.

2.6 An operator of an automotive repair operation who installs an oil-water separator in accordance with Section 2.4 must ensure that the oil-water separator has a minimum liquid volume of 2.0 cubic metres.

2.7 An operator of an automotive repair operation referred to in Sections 2.4 or 2.5 must direct all liquid waste from an automotive repair process to one or more treatment works before discharge into a sewer.

2.8 An operator of an automotive repair operation must ensure that all waste from washrooms, washing machines and change rooms bypasses the treatment works.

2.9 An operator of an automotive repair operation must not use, or allow the use of, chemical agents, solvent-containing products, hot water or other agents with the intention of facilitating the passage of oil and grease through a treatment works.

2.10 An operator of an automotive repair operation who operates a treatment works on or after June 1, 2004 must:

(a) equip the treatment works with a monitoring point located either at the outlet of the treatment works or downstream of the treatment works at a location upstream of the point of discharge of other waste; and

(b) install the monitoring point described in subsection 2.10(a) of the same diameter as the treatment works outlet pipe so that the monitoring point opens in a direction at right angles to, and vertically above, the flow in the sewer pipe.

2.11 An operator of an automotive repair operation must locate the treatment works so that they are readily and easily accessible for inspection and maintenance.

2.12 An operator of an automotive repair operation who operates an oil-water separator must not permit the floating oil and grease to accumulate in any chamber of the oil-water separator in excess of the lesser of 5 cm (two inches) or 5% of the wetted height of the oil-water separator.

2.13 An operator of an automotive repair operation who operates an oil-water separator must not permit the settled solids to accumulate in any chamber of the oil-water separator in excess of the lesser of 15 cm (six inches) or 25% of the wetted height of the oil-water separator.

2.14 An operator of an automotive repair operation who operates an oil-water separator must inspect the oil-water separator and measure the accumulated solids and floating oils at least once every three months to check the levels specified under Sections 2.12 and 2.13.

2.15 An operator of an automotive repair operation must cause an oil-water separator to be cleaned out within seven days of determining that the levels specified under Sections 2.12 or 2.13 have been exceeded.

2.16 An operator of an automotive repair operation must cause the oil-water separator to be cleaned out at least once every 12 months.

3.0 STORAGE AND CONTAINMENT

3.1 An operator of an automotive repair operation must ensure that the following materials are stored using spill containment that will prevent the release of spilled material from entering a sewer connected to a sewage facility:

(a) used acid-filled batteries;

(b) used solvent-containing waste, used antifreeze, used oils, used oil filters, used brake fluid and used transmission fluid;

(c) above ground fuel storage tanks; and

(d) greater than 50 litres of any solvent-containing product, antifreeze, oil or other prohibited or restricted waste stored at floor level in containers other than permanent engineered containers that are protected from vehicle contact.

3.2 An operator of an automotive repair operation must supervise the discharge of accumulated stormwater from a spill containment system to ensure that the discharge does not bypass the treatment works.

4.0 SPILL RESPONSE PLANS

4.1 An operator of an automotive repair operation must have a spill response plan.

4.2 An operator of an automotive repair operation commencing operation after the date this code of practice comes into effect must prepare a spill response plan at least 30 days prior to commencing operation.

4.3 The spill response plan required under Sections 4.1 or 4.2 must be posted in a conspicuous location on the premises of the operation.

4.4 In the event of a spill, an operator of an automotive repair operation must immediately carry out the provisions of the spill response plan, when safe to do so, to prevent or discontinue the discharge of spilled material into a sewer.

4.5 As part of a spill response plan, an operator of an automotive repair operation who operates a treatment works must inspect the treatment works for spilled material immediately after having knowledge of the spill.

4.6 An operator of an automotive repair operation who observes spilled material in the treatment works during an inspection under Section 4.5 must have the spilled material removed before resuming wastewater discharge from the operation.

4.7 An operator of an automotive repair operation must maintain the spill prevention and clean-up equipment and supplies identified in the spill response plan specified in Sections 4.1 and 4.2 in stock and readily available for use at all times.

5.0 RECORD KEEPING AND RETENTION

5.1 An operator of an automotive repair operation who installs one or more treatment works must keep a record at the automotive repair operation of all inspection and maintenance activities for the treatment works, including the:

(a) date of inspection or maintenance;

(b) description of inspection or maintenance conducted;

(c) measured depth of settled material and depth of floating material in the oil-water separator, as required in Section 2.14;

(d) quantity and description of material removed from the treatment works; and

(e) name, civic and postal address, and telephone number of the disposal or recycling company or facility collecting or transporting the material removed from the treatment works.

5.2 An operator of an automotive repair operation who installs treatment works must keep records of the treatment works design calculations and drawings available for inspection at the request of an officer.

5.3 The design drawings required under Section 5.2 must show the point of connection of the treatment works to the sanitary sewer.

5.4 An operator of an automotive repair operation must keep a record at the automotive repair operation of all disposal or recycling services for wastewater and other substances specified in Section 2.1 to be disposed or recycled, including the:

(a) name, civic and postal address, and telephone number of each disposal or recycling company or facility used by the automotive repair operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

5.5 The records required under Sections 5.1 and 5.4 must be retained for a period of two years and must be available for inspection on request by an officer.

SCHEDULE "N"

(Bylaw 3105)

CODE OF PRACTICE FOR VEHICLE WASH OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from vehicle wash operations directly or indirectly into a sewer connected to a sewage facility.

1.2 The term “treatment works” in this code of practice means the works referred to in Sections 2.4, 2.5, 2.7 and 2.11.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a vehicle wash operation must not discharge waste which, at the point of discharge into a sanitary sewer, contains:

(a) prohibited waste as set out in Schedule "A";

(b) restricted waste as set out in Schedule "B";

(c) uncontaminated water, in quantities greater than 2.0 cubic metres per day, without prior authorization from the manager;

(d) wastewater from engine washing or cleaning;

(e) trucked liquid waste;

(f) carpet cleaning waste;

(g) recreational vehicle waste; or

(h) wastewater from oily rag washing or cleaning.

2.2 An operator of a vehicle wash operation must not discharge stormwater into a sanitary sewer connected to a sewage facility unless the stormwater originates from a designated uncovered vehicle wash area that has been designed to minimize the amount of stormwater from outside the vehicle wash area.

2.3 An operator of a vehicle wash operation must not discharge groundwater from a contaminated site as defined in the Contaminated Sites Regulation into a sanitary sewer connected to a sewer facility without a waste discharge permit or authorization issued under Section 3 of the bylaw.

2.4 An operator of a vehicle wash operation that commences operation on or after January 1, 2004 must not discharge liquid waste from a vehicle washing process into a sewer unless the vehicle wash operation is equipped with one or more vehicle wash interceptors to treat the waste in accordance with this code of practice.

2.5 An operator of a vehicle wash operation that commences operation on or after January 1, 2004 may use an alternate treatment works, or a combination of treatment works other than described in this code of practice, to treat liquid waste from a vehicle washing process if the alternate treatment works produces effluent that complies with Section 2.1 prior to discharge into a sewer and where valid analytical test data has been submitted to, and accepted by, the manager.

2.6 An operator of a vehicle wash operation that is in operation before January 1, 2004 and that does not have the treatment works as required in Sections 2.4 or 2.5 must install the treatment works in accordance with this code of practice on the sooner of the occurrence of the following:

(a) January 1, 2005;

(b) the operator of a vehicle wash operation makes an improvement with a value of $1,000 or more within the vehicle wash operation that will increase either or both of the discharge flow of the waste or the amount of any contaminant in the waste; or

(c) the operator of a vehicle wash operation discharges waste into a sewer that exceeds the limitations specified in Section 2.1.

2.7 A vehicle wash interceptor installed in accordance with Section 2.4 or 2.6 must:

(a) have a minimum liquid volume of 2.0 cubic metres per manual wash bay and a minimum liquid volume of 10 cubic metres per mechanical wash bay; and

(b) a minimum of three chambers designed to retain oil and grease and suspended solids from vehicle wash wastewater.

2.8 An operator of a vehicle wash operation who operates a treatment works referred to in Sections 2.4, 2.5 or 2.6 must direct all liquid waste from a vehicle washing process to the treatment works before discharge into a sanitary sewer.

2.9 An operator of a vehicle wash operation must ensure that all waste from washrooms, washing machines and change rooms bypasses the treatment works.

2.10 An operator of a vehicle wash operation must not use or allow the use of chemical agents, solvent-containing products, hot water or other agents with the intention of facilitating the passage of oil and grease through a treatment works.

2.11 An operator of a vehicle wash operation who operates a treatment works on or after June 1, 2004 must:

(a) equip the treatment works with a monitoring point located either at the outlet of the treatment works or downstream of the treatment works at a location upstream of the point of discharge of other waste; and

(b) install the monitoring point described in subsection 2.11(a) of the same diameter as the treatment works outlet pipe and so that the monitoring point opens in a direction at right angles to, and vertically above, the flow in the sewer pipe.

2.12 An operator of a vehicle wash operation must locate the treatment works so that they are readily and easily accessible for inspection and maintenance.

2.13 An operator of a vehicle wash operation who operates a vehicle wash interceptor must not permit the floating oil and grease to accumulate in any chamber of the vehicle wash interceptor in excess of the lesser of 2.5 cm (one inch) or 5% of the wetted height of the vehicle wash interceptor.

2.14 An operator of a vehicle wash operation who operates one or more vehicle wash interceptors must not permit the settled solids to accumulate in any chamber of any vehicle wash interceptor in excess of 50% of the wetted height of the vehicle wash interceptor.

2.15 An operator of a vehicle wash operation who operates one or more vehicle wash interceptors must inspect each chamber of each vehicle wash interceptor and measure the accumulated solids and floating oil and grease at least once per month to check the levels specified under Sections 2.13 and 2.14.

2.16 An operator of a vehicle wash operation who operates one or more vehicle wash interceptors must cause each vehicle wash interceptor to be cleaned out within seven days of determining that the levels specified in Section 2.13 or 2.14 have been exceeded.

2.17 An operator of a vehicle wash operation who operates one or more vehicle wash interceptors must cause each of the vehicle wash interceptors to be cleaned out at least once every 12 months.

2.18 An operator of a vehicle wash operation must display signage prohibiting engine cleaning or washing and the disposal of wastewater or other substances specified in Section 2.1 into a sewer connected to a sewage facility.

2.19 A person must not wash an engine at a vehicle wash operation where wastewater or other substances specified in Section 2.1 associated with the engine washing are discharged into a treatment works or a sewer.

3.0 SPILL RESPONSE PLANS

3.1 An operator of a vehicle wash operation must have a spill response plan.

3.2 An operator of a vehicle wash operation commencing operation after the date this code of practice comes into effect must prepare a spill response plan at least 30 days prior to commencing operation.

3.3 The spill response plan required under Sections 3.1 or 3.2 must be posted in a conspicuous location on the premises of the operation.

3.4 In the event of a spill, an operator of a vehicle wash operation must immediately carry out the provisions of the spill response plan, when safe to do so, to prevent or discontinue the discharge of spilled material into a sewer.

3.5 As part of a spill response plan, an operator of a vehicle wash operation who operates a treatment works must inspect the treatment works for spilled material immediately after having knowledge of the spill.

3.6 An operator of a vehicle wash operation who observes spilled material in the treatment works during an inspection under Section 3.5 must have the spilled material removed before resuming the wastewater discharge from the operation.

3.7 An operator of a vehicle wash operation must maintain the spill prevention and clean-up equipment and supplies identified in the spill response plan specified in Sections 3.1 and 3.2 in stock and readily available for use at all times.

4.0 RECORD KEEPING AND RETENTION

4.1 An operator of a vehicle wash operation who installs one or more treatment works must keep a record at the vehicle wash operation of all inspection and maintenance activities for the treatment works, including the:

(a) date of inspection or maintenance;

(b) description of inspection or maintenance conducted;

(c) measured depth of settled and floating material in each vehicle wash interceptor as required in Section 2.15;

(d) quantity and description of material removed from the treatment works; and

(e) name, civic and postal address, and the telephone number of the disposal or recycling company or facility collecting or transporting the material removed from the treatment works.

4.2 An operator of a vehicle wash operation who installs treatment works must keep records of the treatment works design calculations and drawings available for inspection at the request of an officer.

4.3 The design drawings required under Section 4.2 must show the point of connection of the treatment works to the sanitary sewer.

4.4 An operator of a vehicle wash operation must keep a record at the vehicle wash operation of all disposal or recycling services for wastewater and other substances specified in Section 2.1 to be disposed or recycled, including the:

(a) name, civic and postal address, and the telephone number of each disposal or recycling company or facility used by the vehicle wash operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

4.5 The records required under Sections 4.1 and 4.4 must be retained for a period of two years and must be available for inspection on request by an officer.

SCHEDULE "O"

(Bylaw 3016)

CODE OF PRACTICE FOR CARPET CLEANING OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from carpet cleaning operations directly or indirectly into a sewer connected to a sewage facility.
(Bylaw 3105)

1.2 The term “treatment works” in this code of practice means the works referred to in Section 2.2 (b).

2.0 DISCHARGE REGULATIONS

2.1 On or after July 1, 2003, an operator of a carpet cleaning operation must not discharge waste, which at the point of discharge into a sewer contains:

(a) prohibited waste;

(b) special waste;

(c) restricted waste other than chemical oxygen demand (COD), biochemical oxygen demand (BOD) and total suspended solids;
(Bylaw 3075)

(d) stormwater;
(Bylaw 3075)

(e) uncontaminated water in quantities greater than two cubic meters per day; or
(Bylaw 3075)

(f) total suspended solids in a concentration that is in excess of 1000 milligrams per litre (mg/L) as analyzed in a grab sample.
(Bylaw 3075)

2.2 An operator of a carpet cleaning operation that generates carpet cleaning waste on or after July 1, 2003 must either:

(a) collect and transport the wastewater from the carpet cleaning location for off-site waste management; or

(b) treat the wastewater using a screen with holes not greater than 0.25 millimeters (mm) in width or length prior to discharge into a sewer.

2.3 An operator of a carpet cleaning operation must:

(a) visually inspect the screen for defects on a daily basis; and

(b) repair or replace the screen if any defects are found.

2.4 An operator of a carpet cleaning operation must not discharge unscreened wastewater and/or screened solids into a sewer connected to a sewage facility.

2.5 An operator of a carpet cleaning operation must, on or before July 1, 2003, install spill containment or cap all floor drains located in all chemical storage areas to prevent any accidental discharge of carpet cleaning chemicals into a sewer.

2.6 An operator of a carpet cleaning operation must inspect the equipment referred to in section 2.7 for leaks at least once per week.

2.7 The following equipment must be checked for leaks:

(a) hose connections, unions, couplings and valves;

(b) filter gaskets;

(c) pumps; and

(Bylaw 3105)

(d) wastewater holding tanks.

2.8 An operator of a carpet cleaning operation who detects a leak of wastewater or liquid cleaning product from carpet cleaning equipment or chemical storage must:

(a) immediately take all steps necessary to prevent the discharge of such liquid into a sewer; and

(b) repair the leak within 72 hours of its detection.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a carpet cleaning operation must keep a record at the site of installation of the treatment works that includes the following information:

(a) weekly record of all inspections done by the operator, employees or other hired personnel;

(b) record of any contaminated liquid leaks detected and remedial actions taken;

(c) record of screen repair or replacement; and

(d) record of all other equipment maintenance and repair.

3.2 The records required under Section 3.1 must be retained for a period of two years and must be available for inspection on request by an officer.

SCHEDULE "P"

(Bylaw 3016)

CODE OF PRACTICE FOR FERMENTATION OPERATIONS
BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from fermentation operations directly or indirectly into a sewer connected to a sewage facility.

(Bylaw 3105)

1.2 The term "treatment works" in this code of practice means the works referred to in Sections 2.3, 2.4(b) or Section 2.6.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a fermentation operation must not discharge waste, which at the point of discharge into a sewer, contains one or more of the following: prohibited waste, special waste, restricted waste, stormwater or uncontaminated water in quantities greater than two cubic meters per day.

2.2 An operator of a fermentation operation who generates wastewater on or after January 1, 2003 must test any wastewater containing acid or caustic cleaners or sanitizers for pH and adjust the pH of this wastewater to between 5.5 and 11.0 prior to discharge of such wastewater to a sewer.

2.3 An operator of a fermentation operation who generates wastewater on or after January 1, 2003 from one or more of the following: a mash tun, mash tun washing, a brewing kettle, brewing kettle washing, back-flushing of mash tun strainers, filters or trub filters, must remove solids from the discharge to sewer by:

(a) use of a strainer or a filter with a sieve size not greater than 1,000 microns (µm); or

(b) settling the solids in a separate vessel and discharging the decant water.

2.4 An operator of a fermentation operation that produces waste containing yeast on or after July 1, 2003 must either:

(a) collect and transport the waste from the fermentation sector operation for off-site waste management; or

(b) filter the waste using a filter with a sieve size not greater than 10 microns (µm) prior to discharge into a sewer.

2.5 Section 2.4 of this code of practice does not apply to an operator of a fermentation operation who produces waste containing yeast resulting from back-flushing of a pre-filter following the fermentation process provided that the waste produced from such back-flushing does not contain restricted waste.

(Bylaw 3105)

2.6 An operator of a fermentation operation who discharges waste to a sewer connected to a sewage facility may use an alternate treatment works, or a combination of treatment works, other than described in this code of practice if the alternate treatment works produces effluent that complies with Section 2.1 where valid analytical test data has been submitted to, and accepted by, the manager.

2.7 An operator of a fermentation operation who commences operation on or after January 1, 2003 must ensure that:

(a) one or more sampling tees are installed downstream of the point of discharge of all non-domestic waste and at a location upstream of the point of discharge of any other waste; and

(b) the sampling tee described in Section 2.7(a) must be the same diameter as the discharge line and must be installed so that it opens in a direction at right angles to, and vertically above, the wastewater flow in the sewer pipe.

2.8 An operator of a fermentation operation operating before January 1, 2003, and which continues to operate after January 1, 2003, must install a sampling tee located downstream of the point of discharge to the sewer of all non-domestic waste and at a location upstream of any discharge of other waste when any of the following occur:

(a) the operator of a fermentation operation makes an improvement with a value of $2,000 or more that will increase the discharge flow or amount of any contaminant in the waste; or

(b) the operator of a fermentation operation discharges non-domestic waste that contains restricted waste into a sewer.

2.9 A sampling tee installed under Sections 2.7 or 2.8 of this code of practice must be readily 3and easily accessible at all times for inspection and sampling purposes.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a fermentation operation must keep records, available for inspection on request, at the fermentation operation, containing the following information:

(a) method of solids removal from mash tun wastewater and wash water;

(b) method of treatment of kettle wastewater and kettle wash water;

(c) method(s) of solids removal from wastewater generated by back-flushing mash tun strainers or filters, and back-flushing trub filters;

(d) method of treatment to remove yeast residue;

(e) location of sampling tee, referred to in Section 2.9;

(f) method of pH adjustment and measurement for wastewater containing acid and caustic cleaners or sanitizers; and

(g) dates and results of pH testing required under Section 2.2.

3.2 The records must be retained on site for a period of two years and must be available on request by an officer.

SCHEDULE "Q"

(Bylaw 3016)

CODE OF PRACTICE FOR PRINTING OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from printing operations directly or indirectly into a sewer connected to a sewage facility.

(Bylaw 3105)

1.2 An operator of a printing operation that produces liquid waste from photographic imaging containing silver must comply with the requirements of Schedule "K" of this bylaw.

1.3 The term "treatment works" in this code of practice means the works referred to in Sections 2.3, 2.4, 2.6, 2.7 and 2.10.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a printing operation must not discharge waste which, at the point of discharge into a sewer, contains:

(Bylaw 3105)

(a) prohibited waste;

(b) special waste;

(c) restricted waste other than chemical oxygen demand (COD) and biochemical oxygen demand (BOD);

(d) rinse water from equipment that has been washed in solvent;

(e) inks and fountain solutions;

(f) flexography plate acid bath solutions, etching solutions and wash-out solutions;

(g) cleaning solvents; or

(h) uncontaminated water, in quantities greater than two cubic meters per day.

2.2 An operator of a printing operation must not discharge stormwater into a sewer without a valid waste discharge permit or authorization.

2.3 An operator of a printing operation who commences operation on or after January 1, 2003, and who discharges waste from a printing process into a sewer must install and maintain one or more trade waste interceptors to treat the waste prior to discharge.

2.4 In addition to the trade waste interceptor required under Section 2.3, an operator of a printing operation who discharges waste from a printing process into a sewer, and that commences operation on or after January 1, 2003, must install and maintain:

(a) one or more oil-adsorbing filters; and

(b) one or more activated carbon cartridges.

2.5 An operator of a printing operation referred to in Section 2.4 must install the oil-adsorbing filter downstream of the trade waste interceptor and upstream of the activated carbon cartridge.

2.6 An operator of a printing operation must deliver the waste from the trade waste interceptor to the oil-adsorbing filter and activated carbon cartridge using a metering pump that is calibrated at least once per year.

2.7 An operator of a printing operation who discharges waste from a printing process to a sewer connected to a sewage facility may use an alternate treatment works, or a combination of treatment works, other than described in this code of practice, if the alternate treatment works produces effluent that complies with Section 2.1 where valid analytical test data has been submitted to, and accepted by, the manager.

2.8 An operator of a printing operation must replace the oil-adsorbing filter and activated carbon cartridge when any one of the following occurs:

(a) the manufacturer's or supplier's recommended expiry date, as shown on each filter or cartridge has been reached;

(Bylaw 3105)

(b) eighty per cent (80%) of the manufacturer's or supplier's maximum recommended capacity, or total cumulative flow, for each filter or cartridge has been reached;

(Bylaw 3105)

(c) analytical data using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, that has a method detection limit of 2 mg/L oil and grease or lower, indicates that the concentration of oil and grease in the effluent from the activated carbon cartridge is greater than, or equal to, 100 mg/L; or

(Bylaw 3105)

(d) analytical data using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, that has a method detection limit of 2 mg/L oil and grease (hydrocarbons) or lower, indicates that the concentration of oil and grease (hydrocarbons) in the effluent from the activated carbon cartridge is greater than, or equal to 15 mg/L.

(Bylaw 3105)

2.9 An oil-adsorbing filter or activated carbon cartridge installed in accordance with Sections 2.4 or 2.5, must be designed to ensure that the effluent from the activated carbon cartridge does not contain restricted waste other than COD and BOD.

2.10 An operator of a printing operation who commenced operation prior to January 1, 2003, and who continues to operate after January 1, 2003, and who does not have the treatment works referred to in Sections 2.3, 2.4 and 2.6 or an alternate treatment works referred to in Section 2.7, must, as a condition of the continued discharge of waste from a printing process to a sewer, install the treatment works in accordance with this code of practice not later than January 1, 2005 or when any of following occur:

(a) the operator of a printing operation makes an improvement with a value of $1,000 or more within the printing operation that will increase the discharge flow or amount of any contaminant in the waste; or

(b) the operator of a printing operation discharges waste from a printing process into a sewer that does not comply with Section 2.1.

2.11 An operator of a printing operation who installs a trade waste interceptor in accordance with Sections 2.3 or 2.10 must ensure that the trade waste interceptor has a minimum liquid capacity of 75 litres, and is designed to provide a minimum retention time of four hours based on the maximum expected flow of all non-domestic waste that may be discharged in accordance with this code of practice.

2.12 An operator of a printing operation who operates in accordance with Sections 2.3, 2.4, 2.6 or 2.10 must ensure that all waste from a printing process is directed into the treatment works before being discharged into a sewer.

2.13 After January 1, 2003, an operator of a printing operation must ensure that all sanitary waste and grey water bypasses the treatment works.

2.14 An operator of a printing operation must not dispose any floating material or solids accumulated in the treatment works into a sewer.

2.15 An operator of a printing operation must not use or permit the use of chemical agents, solvents, hot water or other agents with the intention to facilitate the passage of oil and grease and oil and grease (hydrocarbons) through the treatment works.

2.16 On or after January 1, 2003, an operator of a printing operation who installs treatment works must ensure that:

(a) the discharge line from the activated carbon cartridge is equipped with a monitoring point located either at the outlet of the activated carbon cartridge or downstream of the activated carbon cartridge at a location upstream of the point of discharge of other waste; and

(b) the monitoring point must be readily and easily accessible at all times for inspection.

2.17 On or after January 1, 2003, an operator of a printing operation who installs treatment works must locate the treatment works so that they are readily and easily accessible for inspection and maintenance.

2.18 An operator of a printing operation who operates a trade waste interceptor must not permit the floating material to accumulate in any chamber of the trade waste interceptor in excess of the lesser of 2.5 cm (1 inch) or 5% of the wetted height of the trade waste interceptor.

2.19 An operator of a printing operation who operates a trade waste interceptor must not permit the settled solids to accumulate in any chamber of the trade waste interceptor in excess of the lesser of 7.5 cm (3 inches) or 25% of the wetted height of the trade waste interceptor.

2.20 An operator of a printing operation who operates a trade waste interceptor must inspect the trade waste interceptor and measure the accumulated solids and floating material at least once every six months to check the levels specified under Sections 2.18 and 2.19.

2.21 An operator of a printing operation must ensure that the trade waste interceptor is cleaned out within seven days of determining that the levels referred to in Sections 2.18 or 2.19 have been exceeded.

2.22 An operator of a printing operation must ensure that the trade waste interceptor is cleaned out at least once every 24 months.

3.0 STORAGE AND CONTAINMENT

3.1 An operator of a printing operation must ensure that the following materials are stored using spill containment that will prevent any spilled material from entering a sewer:

(a) solvents, dyes, paints and inks; and

(b) waste solvents, waste paint, waste dyes and any other waste from a printing process.

4.0 SPILL RESPONSE PLANS

4.1 An operator of a printing operation operating before January 1, 2003 must prepare a spill response plan by July 1, 2003.

4.2 An operator of a printing operation commencing operation on or after January 1, 2003 must prepare a spill response plan within 60 days of commencing operation.

4.3 In the event of a spill, an operator of a printing operation must immediately carry out the spill response plan, when safe to do so, to prevent or discontinue the discharge of spilled material into a sewer.

(Bylaw 3105)

4.4 As part of a spill response plan, an operator of a printing operation who operates a trade waste interceptor must inspect the trade waste interceptor for spilled material within 24 hours of having knowledge of the spill.

4.5 An operator of a printing operation who observes spilled material in the trade waste interceptor during an inspection under Section 4.4, must remove the spilled material before resuming the wastewater discharge from the operation.

4.6 An operator of a printing operation must ensure that spill prevention and clean-up equipment and supplies are kept in stock at all times and are readily available for use.

5.0 RECORD KEEPING AND RETENTION

5.1 An operator of a printing operation must keep a record at the printing operation of all trade waste interceptor inspection and maintenance activities including:

(a) date of inspection or maintenance;

(b) description of maintenance conducted;

(c) quantity of material removed from the trade waste interceptor; and

(d) name of each disposal or recycling company or facility receiving any material removed from the trade waste interceptor.

5.2 An operator of a printing operation must keep a record at the printing operation of all oil-adsorbing filter and activated carbon cartridge inspection and maintenance activities including:

(a) installation date of each oil-adsorbing filter and activated carbon cartridge;

(b) serial number of each oil-adsorbing filter and activated carbon cartridge (where provided by manufacturers or suppliers);

(c) expiry date of each oil-adsorbing filter and activated carbon cartridge used (where provided by manufacturers or suppliers);

(d) maximum recommended capacity, or total cumulative flow, of each oil-adsorbing filter and activated carbon cartridge used;

(e) dates of all metering pump calibrations; and

(f) dates and descriptions of all operational problems associated with the oil-adsorbing filter and activated carbon cartridge and remedial actions taken.

5.3 An operator of a printing operation who installs treatment works on or after January 1, 2003 must retain records of the design calculations and drawings and ensure that they are available for inspection at the request of an officer.

5.4 An operator of a printing operation must keep the spill response plans required under Sections 4.1 and 4.2 and ensure that they are available for inspection by an officer.

5.5 An operator of a printing operation must keep a record at the printing operation of all disposal or recycling services for spent fountain wash solution, waste solvents, dyes, paints, inks and other waste from a printing process, including:

(a) name of each disposal or recycling company or facility used by the printing operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

5.6 The records required under Sections 5.1, 5.2, 5.4 and 5.5 must be retained for a period of two years and must be available for inspection on request by an officer.

5.7 The records required under Section 5.3 must be retained for the time that the printing operation is in business.

Reserved for future use

~~SCHEDULE "R"~~

~~(Bylaw 3105)~~

~~CODE OF PRACTICE FOR RECREATION FACILITY OPERATIONS BYLAW NO. 2922~~

~~1.0 APPLICATION~~

~~1.1 This code of practice prescribes conditions governing the discharge of waste from recreation facility operations directly or indirectly into a sewer connected to a sewage facility.~~

~~1.2 The term "treatment works" in this code of practice means the works referred to in Sections 2.4 and 2.5.~~

~~1.3 This code of practice does not apply to a recreation facility operation within a hotel, motel or other business that provides accommodation to the travelling or vacationing public.~~

~~2.0 DISCHARGE REGULATIONS~~

~~2.1 An operator of a recreation facility operation must not discharge waste which, at the point of discharge into a sewer, contains:~~

~~(a) prohibited waste as set out in Schedule "A";~~

~~(b) restricted waste, as set out in Schedule "B", with the exception of chloride;~~

~~(c) chloride in a concentration that is in excess of 2100 milligrams per litre (mg/L) as analyzed in a grab sample;~~

~~(d) pool filter media; or~~

~~(e) uncontaminated water, in quantities greater than 2.0 cubic meters per day, without prior authorization from the manager.~~

~~2.2 An operator of a recreation facility operation must not discharge stormwater into a sanitary sewer connected to a sewage facility unless the stormwater originates from a designated uncovered ice melting operation area designed to minimize the amount of stormwater flowing from outside the ice melting operation area into the sewer.~~

~~2.3 An operator of a recreation facility operation that produces wastewater from pools and from back-flushing of pool filters on or after January 1, 2004 must test any wastewater containing residual chlorine and dechlorinate to a concentration of less than 5.0 mg/L chlorine prior to discharge into a sewer.~~

~~2.4 An operator of a recreation facility operation that produces wastewater from ice melting operations on or after January 1, 2004 must remove total suspended solids by filtering the wastewater using a sand bed or a filter cloth such that the effluent will meet the restricted waste criteria set out in Schedule "B" prior to discharge into a sewer.~~

~~2.5 An operator of a recreation facility operation that produces wastewater from ice melting operations on or after January 1, 2004 may use an alternate treatment works, or a combination of treatment works other than described in this code of practice, if the alternate treatment works produces effluent that meets the total suspended solids criteria set out in Schedule "B" prior to discharge into a sewer and where valid analytical test data has been submitted to, and accepted by, the manager.~~

~~2.6 An operator of a recreation facility operation who detects a leak of liquid from an ice-cooling refrigeration system on or after January 1, 2004 must immediately take all steps necessary to prevent or discontinue the discharge of such liquid into a sewer.~~

~~2.7 An operator of a recreation facility operation that commences operation on or after January 1, 2004 must not discharge non-domestic waste into a sewer unless:~~

~~(a) the operator has installed one or more monitoring points downstream of the point of discharge of all non-domestic waste and at a location upstream of the point of discharge of any other waste; and~~

~~(b) the monitoring point described in subsection 2.7(a) is the same diameter as the discharge line and is installed so that it opens in a direction at right angles to, and vertically above, the wastewater flow in the sewer pipe.~~

~~2.8 An operator of a recreation facility operation that is in operation before January 1, 2004 must not discharge non-domestic waste into a sewer after January 1, 2005 unless the operator installs a monitoring point or points as described in subsections 2.7(a) and (b) on the occurrence of the sooner of the following:~~

~~(a) the operator of a recreation facility operation makes an improvement having a value of $2,000 or more to the recreation facility that will increase either or both of the discharge flow of the waste or the amount of any contaminant in the waste; or~~

~~(b) the operator of a recreation facility operation discharges waste into a sewer that exceeds the limitations specified in Section 2.1.~~

~~2.9 A monitoring point installed under Sections 2.7 or 2.8 of this code of practice must be readily and easily accessible at all times for inspection and sampling purposes.~~

~~**3.0 RECORD KEEPING AND RETENTION**~~

~~3.1 An operator of a recreation facility operation must keep a record at the recreation facility site containing the following information:~~

~~(a) dates and results of chlorine or chloride testing of pool water discharges required in Sections 2.1 and 2.3;~~

~~(b) method of chlorine or chloride measurement outlined in Sections 2.1 and 2.3;~~

~~(c) method(s) of removing solids from wastewater produced by ice melting operations, as required in Sections 2.4 and 2.5;~~

~~(d) date of ice melting operation(s) and solids removal;~~

~~(e) dates of detection of any leaks of liquid from an ice-cooling refrigeration system and a description of remedial actions taken; and~~

~~(f) location of monitoring point outlined in Section 2.9.~~

~~3.2 The records required under Section 3.1 must be retained on site for a period of two years and must be available on request by an officer.~~

SCHEDULE "S"

(Bylaw 3105)

CODE OF PRACTICE FOR LABORATORY OPERATIONS
BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from laboratory operations directly or indirectly into a sewer connected to a sewage facility.

1.2 An operator of a laboratory operation that produces liquid waste from photographic imaging containing silver must also comply with the requirements of Schedule "K" of this bylaw.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a laboratory operation must not discharge waste which, at the point of discharge into a sewer, contains:

(a) prohibited waste as set out in Schedule "A";

(b) restricted waste as set out in Schedule "B", with the exception of biochemical oxygen demand (BOD), chemical oxygen demand (COD), chloride, sulphate, mercury and seawater;

(c) waste containing mercury in concentrations greater than 0.01 milligrams per litre;

(d) waste containing PCBs;

(e) waste containing dioxin TEQ;

(f) waste containing halogenated solvents;

(g) waste containing chlorinated phenols;

(h) waste containing pesticides;

(i) seawater, in quantities greater than 2.0 cubic metres per day, without prior authorization from the manager; or

(j) uncontaminated water, in quantities greater than 2.0 cubic metres per day, without prior authorization from the manager.

2.2 An operator of a laboratory operation must not discharge stormwater into a sewer without a valid waste discharge permit or authorization.

2.3 A laboratory may meet the requirements of Section 2.1 by collecting and transporting wastewater or other substances specified in Section 2.1 for off-site waste management.

2.4 An operator of a laboratory operation that commences operation on or after January 1, 2004 must:

(a) install one or more monitoring points downstream of all laboratory discharges and upstream of any discharge of other waste;

(b) install monitoring points described in subsection 2.4(a) of the same diameter as the outlet pipe so that the monitoring point opens in a direction at right angles to, and vertically above, the flow in the sewer pipe; and

(c) maintain the monitoring points readily and easily accessible at all times.

2.5 An operator of a laboratory operation that is in operation before January 1, 2004 and that does not have the monitoring points described in Section 2.4 must install the monitoring points on the occurrence of the sooner of the following:

(a) the operator of a laboratory operation makes an improvement with a value of $5,000 or more within the laboratory operation that will increase either or both of the discharge flow of the waste or the amount of any contaminant in the waste;

(b) the operator of a laboratory operation makes improvements with a value of $5,000 or more that include any changes to laboratory plumbing; or

(c) the operator of a laboratory operation discharges waste into a sanitary sewer that does not comply with Section 2.1.

2.6 An operator of a laboratory operation that treats waste to meet the requirements of Section 2.1 must test the treated waste prior to discharge to sanitary sewer using an analytical method or methods outlined in standard methods, or an alternative analytical method or methods approved by the manager.

3.0 STORAGE AND CONTAINMENT

3.1 An operator of a laboratory operation must ensure that chemicals and waste are stored using spill containment that will prevent any spilled material from entering a sewer.

3.2 An operator of a laboratory operation must not discharge accumulated stormwater from a spill containment system unless it has been tested to confirm that such discharge will not breach Section 2.1 unless the operator has obtained a valid waste discharge permit or authorization under this bylaw.

4.0 SPILL RESPONSE PLANS

4.1 An operator of a laboratory operation that is in operation before January 1, 2004 must prepare a spill response plan by July 1, 2004.

4.2 An operator of a laboratory operation commencing operation on or after January 1, 2004 must prepare a spill response plan within 30 days of commencing operation.

4.3 The spill response plan required under Sections 4.1 or 4.2 must be posted in a conspicuous location on the laboratory premises.

4.4 An operator of a laboratory operation must maintain the spill prevention and clean-up equipment and supplies identified in the spill response plan specified in Sections 4.1 and 4.2 in stock and readily available for use at all times.

4.5 In the event of a spill, an operator of a laboratory operation must immediately carry out the spill response plan, when safe to do so, to prevent or discontinue the discharge of spilled material into a sewer.

4.6 An operator of a laboratory who observes spilled material that has entered, or may enter, the sanitary sewer must have the spilled material removed or treated to meet the requirements of Section 2.1 before resuming normal laboratory operation.

5.0 RECORD KEEPING AND RETENTION

5.1 An operator of a laboratory operation must keep a record of all disposal or recycling services for wastewater and other substances specified in Section 2.1 to be disposed or recycled, including the:

(a) name, civic and postal address, and telephone number of each disposal or recycling company or facility used by the laboratory operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

5.2 An operator of a laboratory operation must keep a list of the types of services provided or general procedures conducted by the laboratory that cause a discharge of waste into a sewer.

5.3 An operator of a laboratory operation must keep an inventory of all chemicals stored in, and used by, the laboratory operation that are contained in a waste discharged into a sewer.

5.4 An operator of a laboratory operation must keep written procedures for all treatment methods used to meet the requirements of Section 2.1 where waste is treated prior to discharge into a sewer.

5.5 An operator of a laboratory operation must keep a record of the results of the testing required in Section 2.6.

5.6 The records required under Sections 5.1 and 5.5 must be retained for a period of two years and must be available for inspection on request by an officer.

5.7 The information specified in Sections 5.2, 5.3 and 5.4 must be available for inspection on request by an officer.

CAPITAL REGIONAL DISTRICT
BYLAW NO. 4530

****

A BYLAW TO AMEND SEWER USE BYLAW (BYLAW NO. 2922)

****

WHEREAS:

A. Under Bylaw No. 2922, “Capital Regional District Sewer Use Bylaw No. 5, 2001”, the Regional Board has established a bylaw to regulate the discharge of waste into sewers connected to a sewage facility operated by the Capital Regional District; and

B. The Board of the Capital Regional District wishes to amend Bylaw No. 2922;

NOW THEREFORE, the Board of the Capital Regional District in open meeting assembled hereby enacts as follows:

1. Bylaw No. 2922, "Capital Regional District Sewer Use Bylaw No. 5, 2001", is hereby amended by:

Updated Schedules

(a) replacing Schedule “I” with the Schedule “I” attached to this Bylaw;

(b) replacing Schedule “J” with the Schedule “J” attached to this Bylaw;

(c) replacing Schedule “K” with the Schedule “K” attached to this Bylaw; and

(d) replacing Schedule “L” with the Schedule “L” attached to this Bylaw;

Definitions

(e) Under Section 1, Definitions:

(i) inserting the following definitions, in alphabetical order:

(a) “**“Bed and Breakfast Operation”** means a private residence occupied by the owner or operator in which overnight accommodation and breakfast food service are provided to guests for compensation.”;

(b) “**“Commercial Kitchen”** means a kitchen equipped with any of the following fixtures: a multi-compartment pot sink, a commercial dishwasher, a pre-rinse sink or a self-cleaning exhaust hood; and which is not located on a premises used solely as a private residence.”;

(c) **“"Confined Space”** means an area that meets all four of the following conditions, as specified by WorkSafe BC:

(a) is enclosed or partially enclosed;

(b) is not designed or intended for continuous human occupancy;

(c) has limited or restricted means for entry or exit that may complicate the provision of first aid, evacuation, rescue, or other emergency response service; and

(d) is large enough and so configured that a worker could enter to perform work.";

(d) "**"Fat, Oil and Grease" or "FOG"** means insoluble organic fats, oils and grease from animal or vegetable sources.";

(e) "**"Food Grinder"** means a mechanical device that is connected to a sewer and is used to reduce the particle size of food waste disposed into a sewer.";

(f) "**"Food Waste Collector"** means a mechanical device, including a scrap collector, a trough collector and a pot and pan collector, which uses high pressure water to wash utensils, capturing particle size waste and other food waste in a basket or a filter prior to discharging wastewater into a sewer.";

(g) "**"Gravity Grease Interceptor"** means a device that uses gravity and interior baffling to separate and retain fat, oil and grease and solids from wastewater.";

(h) "**"Hydromechanical Grease Interceptor"** means a device that uses hydromechanical separation, interior baffling and air entrainment barriers, whether in combination or independently, to separate and retain fat, oil and grease and solids from wastewater.";

(i) "**"ISO Standard for Amalgam Separators"** means standard ISO 11143:2008 (E) for "Dental equipment – Amalgam separators" and its amendments as established by the International Organization for Standardization (ISO).";

(j) "**"Readily and Easily Accessible"** means safe access for work by an officer or manager that complies with Parts 4.54 to 4.63 and Part 13 of the Occupational Health and Safety Regulation without requiring the use of a personal fall protection system as defined in Part 11.";

(k) "**"Rotisserie"** means cooking equipment which is typically used for roasting meat on a rotating spit and which discharges oil and grease or solids to a sewer.";

(l) "**"Self-Clean"** means to remove settled and floating material collected in a grease interceptor for off-site waste disposal in accordance with a plan approved by the manager.";

(m) "**"Solids Interceptor"** means a device that separates, and then removes or retains, solids from wastewater, including a basket, screen or other similar device.";

(n) "**"Soup Kettle"** means a commercial cooking or warming kettle including tilt kettles.";

(o) "**"Utensil"** means any item that may come into contact with food including but not limited to: kitchenware implements, tableware, glassware, cutlery or other similar items used in the preparation, service, storage or consumption of food.";

(p) "**"Waste Hauler"** means a person or company that collects waste from a waste generator for transportation and delivery to a permitted waste management or septage disposal facility.";

(q) "**"Waste Discharge Assessment Form"** or "**WDAF**" means a form which may include engineering drawings that show the sizing calculation listing the dimensions and total volume or flow rates, as applicable, of all connected fixtures as well as the peak flow rate and rated flow capacity of the proposed

grease interceptor, and otherwise demonstrates the installation requirements under this Code are met."; and

(r) "**"Wok Station"** means cooking equipment with a water supply and one or more cooking surfaces, typically used for stir frying food and which discharges water, oil and grease or solids to a sanitary sewer.".

(ii) deleting the definition of "ISO Standard";

(iii) replacing the definition of "Cleaned Out" with:

"**"Cleaned Out"** means to have the settled and floating material collected in a grease interceptor removed by a waste hauler for off-site waste management, disposal at a septage disposal facility or to have the material removed and disposed of in accordance with a plan approved by the manager.";

(iv) replacing the definition of "Food Services Operation" with:

"**"Food Services Operation"** means any operation where food is prepared, processed, packaged, served, sold, dispensed or otherwise handled, including washing of utensils, in a manner that results in the discharge of fat, oil and grease or solids to a sewer; but not including mobile food services operations and bed and breakfast operations without commercial kitchens.";

(v) replacing the definition of "Grease Interceptor" with:

"**"Grease Interceptor"** means a hydromechanical grease interceptor or a gravity grease interceptor designed and installed to separate and retain fat, oil and grease and solids from wastewater for physical removal, while permitting wastewater to discharge to a sewer."; and

(vi) replacing the definition of "Total Volume" with:

"**"Total Volume"**, as referred to in Schedule "I", means the sum of the volumes of each compartment of a sink calculated by multiplying the width of a compartment by the length of a compartment by the height of a compartment measured to the level of the top of the sidewall of the fixture or other valid method of calculating or measuring the quantity of three-dimensional space, not including drain boards."

(f) deleting Schedule "A", Item 7 "Biomedical Waste" and renumbering the following items; and

(g) replacing the content in Schedule "R" with the words "Reserved for future use."

(h) In Schedule "D", Code of Practice Item 10, replacing the words "Recreation Facility Operations" with the words "Reserved for future use".

2. This bylaw may be cited for all purposes as “Capital Regional District Sewer Use Bylaw, No. 5, 2001, Amendment Bylaw No. 7, 2023".

READ A FIRST TIME THIS	th	day of	20__
READ A SECOND TIME THIS	th	day of	20__
READ A THIRD TIME THIS	th	day of	20__
ADOPTED THIS	th	day of	20__

CHAIR

CORPORATE OFFICER

SCHEDULE "I"

CODE OF PRACTICE FOR FOOD SERVICES OPERATIONS
BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from food services operations directly or indirectly into a sanitary sewer connected to a sewage facility.

1.2 Prior to altering the fixtures connected to an existing grease interceptor or replacing a grease interceptor an operator of a food services operation must submit a Waste Discharge Assessment Form (WDAF).

2.0 DISCHARGE REGULATIONS

2.1 An operator of a food services operation must not discharge waste, which at the point of discharge into a sanitary sewer, contains:

(a) restricted waste with the exception of total oil and grease, biochemical oxygen demand (BOD) and chemical oxygen demand (COD);

(b) prohibited waste as set out in Schedule “A”;

(c) uncontaminated water, in quantities greater than two cubic meters per day; or

(d) stormwater.

2.2 An operator of a food services operation that discharges wastewater containing fat, oil and grease must install one or more grease interceptors to treat wastewater prior to discharge to a sanitary sewer in accordance with this code of practice.

2.3 An operator of a food services operation who installs one or more grease interceptors under section 2.2 must inspect, maintain, repair and clean out the grease interceptors to ensure they function as designed.

2.4 An operator of a food services operation who commences operation on or after February 15, 2023 and who discharges wastewater containing fat, oil and grease may use alternative treatment works, or a combination of treatment works other than that described in this code of practice, to treat liquid waste from the food services operation prior to discharge to a sanitary sewer if the alternative treatment works meets, or exceeds the fat, oil and grease removal efficiency rating standard for grease interceptors set out in the relevant standards referenced in Sections 2.14 and 2.15 and where valid analytical test data has been submitted to, and accepted by, the manager.

2.5 An operator of a food service operation who installs alternative treatment works described in Section 2.4, following approval by the sewage control manager, is exempt from this code of practice however, the alternative treatment works must be operated in compliance with a waste discharge permit or authorization issued to the operator by the manager.

2.6 An operator of a food services operation who self-cleans must have the grease interceptor cleaned out by a waste hauler at least once every rolling 12-month period, or as directed by the manager.

2.7 An operator of a food services operation must not permit fat, oil, grease, and solids to accumulate in a grease interceptor in excess of 25% of the wetted height of the grease interceptor.

2.8 An operator of a food services operation, or other person, must not dispose of fat, oil and grease or solids removed from a grease interceptor to a sewer.

2.9 An operator of a food services operation must not use or permit the use of high flow water, chemical agents, enzymes, bacteria, solvents, hot water with a temperature greater than 75 degrees Celsius or other agents to facilitate the passage of FOG through a grease interceptor.

2.10 An operator of a food services operation must install a grease interceptor connected to the following fixtures that discharge wastewater to a sanitary sewer:

(a) all compartments of sinks used for rinsing, washing and sanitizing utensils including pre-rinse sinks and sinks used for thawing frozen meat or seafood, unless held in separate containers;

(b) drains serving exhaust hoods with an automatic cleaning cycle installed over cooking equipment;

(c) drains serving cooking equipment including wok stations, soup kettles, tilt kettles and other similar cooking equipment that discharge FOG or solids;

(d) drains serving a garbage compactor or food waste digester that may contain or be contaminated with FOG or solids;

(e) dishwashers except for a food services operation that commenced operation prior to January 1, 2002; or

(f) other fixtures that discharge wastewater containing FOG or solids including, but not limited to, centrifugal solids separators, prep sinks, and barista sinks.

2.11 An operator of an outdoor garbage compactor installation connected to a sanitary sewer must install works as necessary to prevent rainwater from entering the drain connected to the sewer.

2.12 The following fixtures must not be connected to a grease interceptor:

(a) toilets, and urinals;

(b) hand sinks except for a food services operation that commenced prior to January 1, 2002;

(c) janitor's sinks or mop sinks except for a food services operation that commenced operation prior to January 1, 2002;

(d) food grinders and similar equipment discharging organic solids except as specified in Section 2.28 and 2.29; or

(e) drains receiving uncontaminated water.

2.13 All hydromechanical grease interceptors installed on or after February 15, 2023 with a rated flow capacity less than or equal to 100 gallons per minute (gpm) must be rated in accordance with Canadian Standards Association standard B481 (Series 12) or their amendments, or other such standards approved by the manager.

2.14 All hydromechanical grease interceptors installed on or after February 15, 2023 with a rated flow capacity greater than 100 gpm must be rated in accordance with Plumbing and Drainage Institute standard PDI-G101, American Society of Mechanical Engineers standard A112.14.3, or their amendments, or such other standards approved by the manager.

2.15 All gravity grease interceptors installed on or after February 15, 2023 must be designed, engineered, sized and installed in accordance with the standards and guidelines prescribed in the International Association of Plumbing and Mechanical Officials IAPMO/ANSI Z1001, or other such standards approved by the manager.

2.16 An operator of a food services operation who installs a grease interceptor on or after February 15, 2023 must calculate the peak flow rate into the grease interceptor by adding together the flow rates from each of the fixtures identified below which are connected to the grease interceptor and assigning a drain time of one minute as follows:

(a) where the fixtures include a pre-rinse sink, food waste collector, wok station or rotisserie, assign a minimum flow rate of 50 gpm;

(b) for sinks other than pre-rinse sinks, calculate the volume of each fixture using 75% of the total volume;

(c) for each additional sink beyond two three-compartment sinks included in the calculation, other than pre-rinse sinks assign a flow rate of 0 gpm;

(d) for dishwashers and other equipment discharging to sanitary sewer assign a flow rate equal to the manufacturer's published maximum discharge flow rate during operation, or if unknown, assign a flow rate of 5 gpm; and

(e) for floor or hub drains assign a peak flow rate of 0 gpm except where kitchen equipment discharges indirectly through the drain. For each piece of equipment, assign a drain time as per (d) above.

2.17 Despite Section 2.16, the rated flow capacity of the grease interceptor installed by an operator of a food services operation on or after February 15, 2023 must not be less than 25 gpm where a single grease interceptor services the operation.

2.18 Despite Sections 2.16 and 2.17 the rated flow capacity of any grease interceptor installed by an operator of a food services operation on or after February 15, 2023 must be approved by the sewage control manager.

2.19 The rated flow capacity of a grease interceptor installed on or after January 1, 2000 must be:

(a) permanently labelled on the grease interceptor and be visible and clearly legible at all times; or

(b) available in written documentation issued by the manufacturer of the grease interceptor for inspection by an officer on request.

2.20 Hydromechanical grease interceptors installed after January 1, 2002 must have flow control fittings specified and approved in the manufacturer's certification listing.

2.21 Flow control fittings must be installed so that:

(a) the flow control fitting has been sized to account for head pressure caused by the elevation difference between the fixture(s) and the hydromechanical grease interceptor;

(b) it can be verified, during inspections to enforce this Bylaw, that flow control fittings are in place; and

(c) the size of the flow control fitting limits the flow to a hydromechanical grease interceptor to a rate that is no more than the rated flow capacity of the hydromechanical grease interceptor.

2.22 An operator of a food services operation who installs a grease interceptor must locate the grease interceptor in a location that is readily and easily accessible for inspection and maintenance, repair, and clean out.

2.23 An operator of a food services operation who installs a grease interceptor on or after February 15, 2023 must not locate the grease interceptor in a confined space.

2.24 An operator of a food services operation who installs a grease interceptor on or after January 1, 2000 must ensure:

(a) that the grease interceptor is equipped with a monitoring point located either at the outlet of the grease interceptor or downstream of the grease interceptor at a location upstream of any discharge of other waste;

(b) the monitoring point, other than integral monitoring points, is the same diameter as the grease interceptor outlet pipe and is installed so that it opens in a direction at right angles to and vertically above the flow in the sanitary sewer pipe;

(c) that the monitoring point be readily and easily accessible at all times for inspection and sampling purposes.

2.25 The monitoring point(s) referred to in Section 2.24 are considered to be the point of discharge of waste into a sanitary sewer.

2.26 An operator of a food services operation must remove the cover of a grease interceptor for the purpose of inspection on request of an officer.

2.27 An operator of a food services operation using a food grinder that discharges to a sanitary sewer must either:

(a) cease the discharge to sanitary sewer from the garburator; or

(b) treat the waste prior to discharge to sanitary sewer using a solids separator followed by a grease interceptor.

2.28 An operator of a food services operation that installs a blended drink station or similar equipment on or after February 15, 2023 must treat the waste using a solids interceptor followed by a grease interceptor, prior to discharge to sanitary sewer.

2.29 The solids separator referred to in Section 2.28 must be sized, inspected, maintained, repaired and cleaned out in accordance with the manufacturer's instructions and specifications to prevent the passage of solids so that any grease interceptor connected downstream of a solids interceptor will function as designed.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a food services operation who installs one or more grease interceptors or solids interceptors must keep an operation and maintenance manual on site for each grease interceptor and solids interceptor installed.

3.2 An operator of a food services operation who installs one or more grease interceptors must keep a record on site of all inspection, maintenance, repair and clean outs conducted for each grease interceptor, including:

(a) the date of inspection or maintenance, repair or clean out;

(b) the maintenance or repair conducted;

(c) measured or estimated levels of oil and grease and solids removed from the grease interceptor;

(d) the location of disposal of the material removed from the grease interceptor; and name, civic and postal address, and telephone number of each company or waste hauler used by the food services operation for inspection maintenance, repair or clean out services.

3.3 The records required under Section 3.2 must include receipts or invoices for the activities listed under Sections 3.2 (b), (c) and (d), be retained for a period of two years, and must be available for inspection on request by an officer.

3.4 The manual required under Section 3.1 must be retained for the period that the specified grease interceptors or solids interceptors are in operation.

3.5 The records required under Section 3.2 may be electronic records stored in a maintenance tracking application (or equivalent), which provides access to the records at any time by an officer for a period of two years.

3.6 An operator that self-cleans treatment works must provide documentation of self-cleaning which must be available for inspection on request by an officer.

SCHEDULE "J"

CODE OF PRACTICE FOR DRY CLEANING OPERATIONS
BYLAW NO. 2922

In this Code of Practice:

"Activated Carbon Filter" means a filter containing treated or prepared liquid phase granular activated carbon capable of removing tetrachloroethylene from wastewater through the process of adsorption.

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from dry cleaning operations directly or indirectly into a sewer connected to a sewerage facility.

1.2 The term "treatment works" in this code of practice means the works referred to in Section 2.4.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a dry cleaning operation must not discharge waste which, at the point of discharge into a sewer at any time, contains:

(a) prohibited waste as set out in Schedule "A";

(b) restricted waste as set out in Schedule "B";

(c) wastewater containing tetrachloroethylene in concentrations greater than 0.10 milligrams per litre (mg/L);

(d) tetrachloroethylene-contaminated residue; or

(e) uncontaminated water, in quantities greater than 2.0 cubic metres per day, without prior authorization from the manager.

2.2 An operator of a dry cleaning operation must not discharge stormwater into a sewer without a valid waste discharge permit or authorization.

2.3 A dry cleaning operation may meet the requirements of Section 2.1 by collecting and transporting the wastewater or other substances specified in Section 2.1 from the dry cleaning operation for off-site waste management at least once every twelve months.

2.4 An operator of a dry cleaning operation that discharges waste that has come in contact with tetrachloroethylene from a dry cleaning process into a sewer must, in addition to the dry cleaning machine's integral tetrachloroethylene-water separator, install and maintain the following treatment works:

(a) a second tetrachloroethylene-water separator that recovers tetrachloroethylene from the wastewater exiting the integral tetrachloroethylene-water separator;

(b) an initial activated carbon filter that removes the tetrachloroethylene from the wastewater exiting the second tetrachloroethylene-water separator;

(c) a monitor-alarm that automatically shuts down the wastewater treatment and stops the discharge of wastewater containing tetrachloroethylene into the sewer when the initial filter becomes saturated with tetrachloroethylene; and

(d) a second activated carbon filter that removes tetrachloroethylene from the wastewater after it passes through the initial filter and past the monitor-alarm.

2.5 Where an operator of a dry cleaning operation installs the treatment works referred to in sections 2.4(a) to (d), then the treatment works must be installed in the order in which they are set out in Section 2.4.

2.6 An operator of a dry cleaning operation who installs the treatment works referred to in Section 2.4 must locate the treatment works so that they are readily and easily accessible for inspection, maintenance, or repair.

2.7 An operator of a dry cleaning operation who installs the treatment works referred to in Section 2.4 must not locate the treatment works in a confined space.

2.8 An operator of a dry cleaning operation must operate and maintain the dry cleaning machine(s) in accordance with the manufacturer's instructions and specifications.

2.9 An operator of a dry cleaning operation who installs the activated carbon filters referred to in sections 2.4(b) and (d) must replace both the initial and second activated carbon filter at least once every 12 months and when one of the following occurs:

(a) on or before reaching the manufacturer's specified expiry date;

(b) when the monitor-alarm referred to in section 2.4(c) has been triggered; or

(c) analytical data, from an accredited laboratory, using a method of analysis outlined in Standard Methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.01 mg/L tetrachloroethylene or lower, indicates that the concentration of tetrachloroethylene in the discharge from the second activated carbon filter is greater than, or equal to, 0.10 mg/L.

2.10 An operator of a dry cleaning operation who installs treatment must:

(a) equip the outlet from the treatment works with a monitoring point as approved by the manager at a location upstream of the point of discharge of other waste; and

(b) locate the monitoring point so that it is readily and easily accessible at all times for inspection and monitoring purposes.

2.11 The monitoring point referred to in Section 2.10 is considered to be the point of discharge of waste into a sewer.

3.0 STORAGE AND CONTAINMENT

3.1 An operator of a dry cleaning operation must ensure that all dry cleaning machines and treatment works are operated and stored using a tetrachloroethylene-impermeable spill containment system that will prevent any spilled material from entering a sewer.

3.2 An operator of a dry cleaning operation must store all new and used tetrachloroethylene, tetrachloroethylene-contaminated residue and untreated wastewater using a tetrachloroethylene-impermeable spill containment system that will prevent any spilled material from entering a sewer.

3.3 The containment systems identified in Sections 3.1 and 3.2 must encompass at least the entire surface under each dry cleaning machine, tank or other container containing tetrachloroethylene, wastewater or tetrachloroethylene-contaminated residue and be sufficient to hold at least 110% of the capacity of the largest tank, container or works within the containment system.

3.4 An operator of a dry cleaning operation equipped with a tetrachloroethylene-impermeable containment system must not have open drains within the containment area.

3.5 Drains located within the containment system must be sealed with tetrachloroethylene-resistant drain plugs.

3.6 An operator of a dry cleaning operation must not discharge stormwater from a containment system unless it has first been tested to confirm that such discharge will not breach Section 2.1 unless the operator has obtained a valid waste discharge permit or authorization under this bylaw.

4.0 SPILL RESPONSE PLANS

4.1 An operator of a dry cleaning operation must prepare and maintain a spill response plan.

4.2 An operator of a dry cleaning operation must prepare a spill response plan within 30 days after commencing operation.

4.3 The spill response plan required under sections 4.1 or 4.2 must be posted in a conspicuous location on the dry cleaning premises.

4.4 An operator of a dry cleaning operation must maintain the spill prevention and clean-up equipment and supplies identified in the spill response plan specified in Section 4.1 or 4.2 in stock and readily available for use at all times.

4.5 An operator of a dry cleaning operation must ensure that the spill prevention equipment and supplies identified in the spill response plan specified in Section 4.1 or 4.2 include tetrachloroethylene-resistant drain plugs that are readily available to seal all floor drains into which tetrachloroethylene, wastewater or residue may enter in the event of a spill.

4.6 In the event of a spill, an operator of a dry cleaning operation must immediately carry out the spill response plan, when safe to do so, to prevent or discontinue the discharge of spilled material into a sewer.

5.0 RECORD KEEPING AND RETENTION

5.1 An operator of a dry cleaning operation who installs one or more treatment works must keep a record at the dry cleaning operation of all inspection, repair, maintenance, or replacement activities associated with the operation of the treatment works, including the:

(a) date of inspection, repair, maintenance, or replacement activity;

(b) description of inspection, repair or maintenance conducted;

(c) date and amount of activated carbon removed and replaced in the treatment works including the activated carbon type and size; and

(d) dates and volumes of material removed from the treatment works.

5.2 An operator of a dry cleaning operation must keep a record, including relevant receipts or invoices upon request of all disposal or recycling services used for disposal or recycling of wastewater and tetrachloroethylene-contaminated residue, including the:

(a) name, civic and postal address, and telephone number of each disposal or recycling company or facility used by the dry cleaning operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

5.3 The records required under Sections 5.1 and 5.2 must be retained for a period of five years and must be available for inspection on request by an officer.

5.4 An operator of a dry cleaning operation who installs one or more treatment works must keep, at the dry cleaning operation site, an operation and maintenance manual pertaining to all equipment used in the treatment works.

SCHEDULE "K"

CODE OF PRACTICE FOR PHOTOGRAPHIC IMAGING OPERATIONS BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from photographic imaging operations directly or indirectly into a sewer connected to a sewage facility.

1.2 The term “treatment works” in this code of practice means the works referred to in Sections 2.2(b) and 2.4.

2.0 DISCHARGE REGULATIONS

2.1 An operator of a photographic imaging operation must not discharge waste which, at the point of discharge into a sewer, contains:

(a) silver in a concentration that is in excess of 5 milligrams per litre (mg/L); or

(b) prohibited waste as set out in Schedule “A”.

2.2 An operator of a photographic imaging operation that produces liquid waste containing silver must either:

(a) collect and transport the waste from the photographic imaging operation for off-site waste management; or

(b) treat the waste at the photographic imaging operation site prior to discharge to the sewer using one of the following silver recovery technologies:

(i) two chemical recovery cartridges connected in series;

(ii) an electrolytic recovery unit followed by two chemical recovery cartridges connected in series; or

(iii) any other silver recovery technology, or combination of technologies, capable of reducing the concentration of silver in the waste discharged to sewer to 5 mg/L or less where valid analytical test data has been submitted to, and accepted by, the sewage control manager.

2.3 An operator of a photographic imaging operation must install and maintain silver recovery technology referred to in Section 2.2 according to the manufacturer’s instructions and specifications.

2.4 An operator of a photographic imaging operation must collect all liquid waste containing silver in a holding tank and must deliver this waste to the electrolytic recovery unit and/or chemical recovery cartridges using a metering pump.

2.5 An operator of a photographic imaging operation must calibrate the metering pump referred to in Section 2.4 in accordance with the manufacturer’s instructions and specifications.

2.6 An operator of a photographic imaging operation must locate the silver recovery system and any stored liquid waste collection containers in such a manner that an accidental spill, leak or container failure will not result in liquid waste containing silver entering any sewer.

2.7 If a location referred to under Section 2.6 is not available, an operator of a photographic imaging operation must do one of the following:

(a) install spill containment to contain spills or leaks from the silver recovery system or stored liquid waste collection containers; or

(b) cap all floor drains into which liquid spilled from the silver recovery system or stored liquid waste collection containers would normally flow.

2.8 When using two separate chemical recovery cartridges, an operator of a photographic imaging operation must test the discharge from the first cartridge for silver content at least once per month of operation using either silver test paper or a silver test kit.

2.9 When the discharge from the first chemical recovery cartridge referred to in Section 2.8 cannot be sampled, an operator of a photographic imaging operation must:

(a) install a cumulative flow meter on the silver recovery system; and

(b) test the discharge from the second chemical recovery cartridge once per week of operation using silver test paper or a silver test kit.

2.10 An operator of a photographic imaging operation must replace the chemical recovery cartridges when any one of the following occurs:

(a) the manufacturer's specified expiry date, as shown on each cartridge, has been reached;

(b) eighty percent (80%) of the manufacturer's specified capacity, or total cumulative flow, for each cartridge has been reached;

(c) test data, using silver test paper or a silver test kit, indicates that the discharge from the first cartridge is greater than 1000 mg/L; or

(d) analytical data from an accredited laboratory using a method of analysis outlined in Standard Methods, or an alternative method of analysis approved by the Manager, having a method detection limit of 0.5 mg/L silver or lower, indicates that the concentration of silver in the discharge from the silver recovery system is greater than, or equal to, 5 mg/L.

2.11 If treatment of liquid waste with two chemical recovery cartridges connected in series is the only silver recovery technology being used, then the operator of the photographic imaging operation must replace both chemical recovery cartridges when one of the events referred to in Section 2.10 occurs.

2.12 Despite Section 2.11, if treatment of liquid waste with two chemical recovery cartridges connected in series is used following treatment by an electrolytic recovery unit, the second cartridge may replace the used first cartridge and a new second cartridge may be installed when one of the events referred to in Section 2.10 occurs.

2.13 Despite Section 2.12, both chemical recovery cartridges used following an electrolytic recovery unit must be replaced by the operator of the photographic imaging operation when one of the events referred to in Section 2.10 occurs if this is recommended by the manufacturer of the cartridges.

2.14 An operator of a photographic imaging operation who installs treatment works must locate the treatment works so that they are readily and easily accessible for inspection, maintenance, repair or replacement.

2.15 An operator of a photographic imaging operation who installs treatment works must not locate the treatment works in a confined space.

2.16 An operator of a photographic imaging operation who installs treatment works must:

(a) designate the outlet from the silver recovery system, at a location upstream of the point of discharge of other waste, as a monitoring point; and

(b) locate the monitoring point so that it is readily and easily accessible at all times for inspection and monitoring purposes.

2.17 The monitoring point referred to in Section 2.16 is considered to be the point of discharge into a sewer.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a photographic imaging operation who installs a silver recovery system must keep, at the photographic imaging operation site, an operation and maintenance manual pertaining to all equipment used in the silver recovery system.

3.2 An operator of a photographic imaging operation who installs two chemical recovery cartridges connected in series must keep records, available for inspection on request, at the photographic imaging operation site that includes the following information recorded for the previous two years:

(a) serial number of each chemical recovery cartridge used;

(b) installation date of each chemical recovery cartridge used;

(c) expiry date of each chemical recovery cartridge used (where provided by manufacturers or suppliers);

(d) maximum recommended capacity, or total cumulative flow, of each chemical recovery cartridge used;

(e) dates of all metering pump calibrations through the silver recovery system when the chemical recovery cartridge is replaced and any additional manufacturer recommended calibrations;

(f) silver test results on the discharge from the first chemical recovery cartridge per calendar month of operation; or where the discharge from the first cartridge cannot be sampled, silver test results on the discharge from the second chemical recovery cartridge and cumulative flows through the silver recovery system per calendar week of operation; and

(g) dates and descriptions of all maintenance, repair, or replacement activities associated with the operation of the chemical recovery cartridges.

3.3 An operator of a photographic imaging operation who installs an electrolytic recovery unit in addition to two chemical recovery cartridges connected in series must keep records, available for inspection on request, at the photographic imaging operation site that includes the following information recorded for the previous two years:

(a) all information specified under section 3.2 as applicable;

(b) date of each removal of silver from the electrolytic recovery unit; and

(c) dates and descriptions of all maintenance or repair activities associated with the operation of the electrolytic recovery unit.

3.4 An operator of a photographic imaging operation must keep a record, including relevant receipts or invoices, of all disposal or recycling services used for off-site waste management, disposal or recycling of wastewater, chemical recovery cartridges, and silver-contaminated residue, including the:

(a) name, civic and postal address, and telephone number of each disposal or recycling company or facility used by the photographic imaging operation;

(b) type of material transferred to each company or facility;

(c) quantity of material transferred to each company or facility; and

(d) date of material transferred to each company or facility.

3.5 The records required under Sections 3.2, 3.3 and 3.4 must be retained for a period of five years and must be available for inspection on request by an officer.

SCHEDULE "L"

CODE OF PRACTICE FOR DENTAL OPERATIONS
BYLAW NO. 2922

1.0 APPLICATION

1.1 This code of practice prescribes conditions governing the discharge of waste from dental operations directly or indirectly into a sewer connected to a sewage facility.

1.2 The term “treatment works” in this code of practice means the works referred to in Section 2.3(b).

2.0 DISCHARGE REGULATIONS

2.1 An operator of a dental operation must not discharge waste which, at the point of discharge into a sewer, contains:

(a) prohibited waste as set out in Schedule “A”;

(b) restricted waste as set out in Schedule “B”; or

(c) mercury in a concentration greater than 2 milligrams per litre (mg/L) as analyzed in a grab sample.

2.2 An operator of a dental operation that produces liquid waste from photographic imaging containing silver must comply with the requirements of Schedule “K” of this bylaw.

2.3 An operator of a dental operation that produces wastewater containing dental amalgam must either:

(a) collect and transport the wastewater from the dental operation for off-site waste management; or

(b) treat the wastewater at the dental operation site prior to discharge to the sewer using an amalgam separator.

2.4 All amalgam separators must be certified in accordance with the ISO Standard for Amalgam Separators.

2.5 An operator of a dental operation must install, maintain, repair and replace the amalgam separator referred to in Sections 2.3 and 2.4 according to the manufacturer’s instructions and specifications in order that the amalgam separator functions as designed.

2.6 If the amalgam separator referred to under Sections 2.3(b) and 2.4 is located downstream of a wet vacuum system, an operator of a dental operation must ensure that:

(a) the wet vacuum system is fitted with an internal flow control fitting; or

(b) a flow control fitting is installed on the water supply line to the wet vacuum system.

2.7 The flow control fitting referred to in Section 2.6 must be sized to limit the flow to a rate that is no more than the maximum inlet flow rate of the amalgam separator as stated by the manufacturer of the amalgam separator.

2.8 An operator of a dental operation must locate an amalgam separator, or store used collecting containers in such a manner that an accidental spill, leak or collecting container failure will not result in waste containing amalgam entering the sewer.

2.9 If a location referred to under Section 2.8 is not available, an operator of a dental operation must:

(a) install spill containment to contain spills or leaks from the amalgam separator or to store used collecting containers.

2.10 An operator of a dental operation must replace the amalgam separator's collecting container when any one of the following occurs:

(a) the manufacturer's specified expiry date has been reached;

(b) the warning level specified in the ISO Standard for Amalgam Separators has been reached; or

(c) analytical data from an accredited laboratory obtained using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the sewage control manager, having a concentration of mercury in the discharge from the amalgam separator is greater than, or equal to, 2 mg/L.

2.11 An operator of a dental operation must not dispose of dental amalgam collected in an amalgam separator, a collecting container, or any other device, into a sewer.

2.12 An operator of a dental operation who installs an amalgam separator must locate the amalgam separator so that it is readily and easily accessible for inspection, maintenance, repair or replacement.

2.13 An operator of a dental operation who installs an amalgam separator must not locate the amalgam separator in a confined space.

2.14 An operator of a dental operation who installs an amalgam separator must:

(a) install a monitoring point at the outlet of the amalgam separator or downstream of the amalgam separator at a location upstream of any discharge of other waste;

(b) ensure the monitoring point is installed in such a manner that the total flow from the amalgam separator may be intercepted and sampled; and

(c) locate the monitoring point so that it is readily and easily accessible at all times for inspection and monitoring purposes.

2.15 The monitoring point referred to in Section 2.14 is considered the point of discharge into the sanitary sewer.

3.0 RECORD KEEPING AND RETENTION

3.1 An operator of a dental operation that uses an amalgam separator must keep, at the site of installation of the amalgam separator, an operation and maintenance manual containing instructions for installation, use, maintenance and service of the amalgam separator installed.

3.2 An operator of a dental operation that uses an amalgam separator must keep a copy of the ISO Standard for Amalgam Separators test report with the amalgam separator installed and must be available for inspection on request by an officer.

3.3 An operator of a dental operation that uses an amalgam separator must keep a record book at the dental operation site that includes the following information pertaining to the amalgam separator installed:

(a) date of installation of the amalgam separator and name of the supplier or installation service provider;

(b) serial number and expiry date of the amalgam separator and/or its components;

(c) maximum flow rate through the amalgam separator or maximum capacity rating of the amalgam separator;

(d) dates of inspection, maintenance, repair, cleaning and replacement of any amalgam separation equipment or components;

(e) dates and descriptions of all operational problems, spills, leaks or collecting container failures associated with the amalgam separator and remedial actions taken;

(f) name, address and telephone number of any person or company who performs any maintenance or disposal services related to the operation of the amalgam separator; and

(g) dates of pick-up of the collecting container for off-site disposal, volume of waste disposed and the location of disposal.

3.4 The records must be retained for a period of five years and must be available for inspection on request by an officer.

APPENDIX C

CAPITAL REGIONAL DISTRICT
BYLAW NO. 4531

****

A BYLAW TO AMEND BYLAW NO. 1857, CAPITAL REGIONAL DISTRICT TICKET INFORMATION AUTHORIZATION BYLAW 1990

****

The Board of the Capital Regional District in open meeting assembled enacts as follows:

1. Capital Regional District Ticket Information Authorization Bylaw 1990 is amended by deleting the existing Schedule 21 and replacing it with Schedule 21 attached as Appendix 1 to this Bylaw.

2. This Bylaw may be cited for all purposes as "Capital Regional District Ticket Information Authorization Bylaw, 1990, Amendment Bylaw No. 75, 2023".

READ A FIRST TIME THIS	th	DAY OF	2023
READ A SECOND TIME THIS	th	DAY OF	2023
READ A THIRD TIME THIS	th	DAY OF	2023
ADOPTED THIS	th	DAY OF	2023

CHAIR

SECRETARY

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
1.	Discharge prohibited waste	2.1 (a)	$1,000
2.	Discharge restricted waste	2.1 (b)	$500
3.	High volume discharge	2.1 (c)	$200
4.	Discharge without a permit and contrary to code of practice	2.1 (d)	$200
5.	Unauthorized discharge of excess uncontaminated water	2.1 (e)	$200
6.	Unauthorized discharge of septage	2.3	$500
7.	Unauthorized discharge of trucked liquid waste	2.4	$500
8.	Discharge to dilute non-domestic waste	2.5	$500
9.	Fail to provide spill containment	2.8 (a)	$150
10.	Fail to post name and phone number as required	2.8 (b)	$50
11.	Unauthorized discharge of recreational vehicle waste	2.9	$750
12.	Unauthorized discharge of carpet cleaner waste	2.10	$750
13.	Unauthorized discharge of ship and boat waste	2.11	$750
14.	Unauthorized discharge of kitchen equipment cleaning waste	2.12	$500
15.	Fail to adjust pH	2.13 (a)	$500
16.	Fail to maintain complete records	2.13 (b)	$100
17.	Fail to apply for permit	3.3	$250
18.	Fail to comply with permit terms or conditions	3.6	$1,000
19.	Fail to comply with authorization terms or conditions	3.7	$500
20.	Bypass waste control works	5.2	$500
21.	Fail to maintain complete records, monitoring	6.1 (a)	$200
22.	Fail to maintain complete records, administrative	6.1 (b)	$200
23.	Fail to report unlawful discharge to a manager or officer	7.1 (a)	$250
24.	Fail to report unlawful discharge to owner	7.1 (b)	$250
25.	Fail to provide information to manager on premises	7.2 (a)	$250
26.	Fail to provide information on location	7.2 (b)	$250
27.	Fail to provide information on contact person	7.2 (c)	$250

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
28.	Fail to provide information on time, date and duration	7.2 (d)	$250
29.	Fail to provide information on type	7.2 (e)	$250
30.	Fail to provide information on volume	7.2 (f)	$250
31.	Fail to provide information on corrective action	7.2 (g)	$250
32.	Fail to confine unlawful discharge	7.3 (a)	$500
33.	Fail to dispose of substance properly	7.3 (b)	$500
34.	Fail to give 90 days notice of new activity	7.4 (a)	$250
35.	Fail to give 90 days notice of activity change	7.4 (b)	$250
36.	Inaccessible monitoring point	9.6	$250
37.	Hinder/prevent inspection	13.1	$500
38.	Discharge of restricted waste	Sch. I, 2.1 (a)	$200
39.	Discharge of prohibited waste	Sch. I, 2.1 (b)	$200
40.	Discharge of excess uncontaminated water	Sch. I, 2.1 (c)	$200
41.	Discharge of stormwater to sewer	Sch. I, 2.1 (d)	$200
42.	Fail to install grease interceptor	Sch. I, 2.2	$500
43.	Fail to maintain grease interceptor	Sch. I, 2.3	$150
44.	Installation of unapproved treatment works	Sch. I, 2.4	$250
45.	Alternate treatment works non-compliant with permit or authorization	Sch. I, 2.5	$150
46.	Fail to clean out grease interceptor	Sch. I, 2.6	$150
47.	Accumulation of excess grease or solids	Sch. I, 2.7	$150
48.	Disposal of oil and grease to sewer	Sch. I, 2.8	$150
49.	Use of agents facilitating bypass of grease	Sch. I, 2.9	$150
50.	Fail to connect fixture to grease interceptor, sink	Sch. I, 2.10 (a)	$150
51.	Fail to connect fixture to grease interceptor, exhaust hood	Sch. I, 2.10 (b)	$150
52.	Fail to connect fixture to grease interceptor, drain	Sch. I, 2.10 (c)	$150
53.	Fail to connect fixture to grease interceptor, compactor	Sch. I, 2.10 (d)	$150
54.	Fail to connect fixture to grease interceptor, dishwasher	Sch. I, 2.10 (e)	$150

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
55.	Fail to connect fixture to grease interceptor, grease bearing fixture	Sch. I, 2.10 (f)	$150
56.	Fail to install works preventing discharge of rainwater to sewer	Sch. I, 2.11	$150
57.	Connection of a toilet or urinal	Sch. I, 2.12 (a)	$100
58.	Connection of a hand sink	Sch. I, 2.12 (b)	$100
59.	Connection of a mop sink	Sch. I, 2.12 (c)	$100
60.	Connection of fixture discharging solids	Sch. I, 2.12 (d)	$100
61.	Connection of drain receiving uncontaminated water	Sch. I, 2.12 (e)	$100
62.	Unapproved grease interceptor rating less than 100gpm	Sch. I, 2.13	$150
63.	Unapproved grease interceptor rating greater than 100gpm	Sch. I, 2.14	$150
64.	Unapproved grease interceptor design and installation	Sch. I, 2.15	$150
65.	Fail to install flow control device	Sch. I, 2. 20	$100
66.	Fail to properly size or install flow control device	Sch. I, 2.21 (a)	$100
67.	Flow control cannot be verified	Sch. I, 2.21 (b)	$100
68.	Fail to install correct flow control device	Sch. I, 2.21 (c)	$100
69.	Inaccessible grease interceptor	Sch. I, 2.22	$100
70.	Grease interceptor installed in confined space	Sch. I, 2.23	$100
71.	Fail to correctly install monitoring point, as required	Sch. I, 2.24 (a)	$100
72.	Improper monitoring point	Sch. I, 2.24 (b)	$100
73.	Inaccessible monitoring point	Sch. I, 2.24 (c)	$150
74.	Fail to remove cover of grease interceptor	Sch. I, 2.26	$200
75.	Improper connection of food grinder	Sch. I, 2.27	$100
76.	Fail to install solids interceptor	Sch. I, 2.28	$150
77.	Fail to maintain solids separator	Sch. I, 2.29	$100
78.	Fail to keep operation manual	Sch. I, 3.1	$100
79.	Fail to keep records available for inspection	Sch. I, 3.2	$100
80.	Fail to maintain complete records, date	Sch. I, 3.2 (a)	$100
81.	Fail to maintain complete records, maintenance	Sch. I, 3.2 (b)	$100
82.	Fail to maintain complete records, material removed	Sch. I, 3.2 (c)	$100

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
83.	Fail to maintain complete records, location of disposal	Sch. I, 3.2 (d)	$100
84.	Fail to retain records, maintenance and disposal	Sch. I, 3.3	$100
85.	Fail to retain records, installed grease interceptor	Sch. I, 3.4	$100
86.	Fail to maintain records, electronic records	Sch. I, 3.5	$100
87.	Fail to maintain records, self-clean	Sch. I, 3.6	$100
88.	Discharge prohibited waste	Sch. J, 2.1 (a)	$200
89.	Discharge restricted waste	Sch. J, 2.1 (b)	$200
90.	Discharge excessive tetrachloroethylene	Sch. J, 2.1 (c)	$200
91.	Discharge residue	Sch. J, 2.1 (d)	$200
92.	Discharge of excess uncontaminated water	Sch. J, 2.1 (e)	$200
93.	Unauthorized discharge of stormwater	Sch. J, 2.2	$150
94.	Fail to manage wastewater off-site	Sch. J, 2.3	$250
95.	Fail to install second separator	Sch. J, 2.4 (a)	$500
96.	Fail to install filter	Sch. J, 2.4 (b)	$500
97.	Fail to install alarm	Sch. J, 2.4 (c)	$500
98.	Fail to install second filter	Sch. J, 2.4 (d)	$500
99.	Fail to install works in correct order	Sch. J, 2.5	$150
100.	Treatment works not accessible	Sch. J, 2.6	$150
101.	Treatment works location, confined space	Sch. J, 2.7	$150
102.	Fail to maintain machines	Sch. J, 2.8	$150
103.	Fail to replace filter before expiry date	Sch. J, 2.9 (a)	$150
104.	Fail to replace filter after alarm	Sch. J, 2.9 (b)	$150
105.	Fail to replace filter after elevated concentration	Sch. J, 2.9 (c)	$150
106.	Fail to correctly install monitoring point	Sch. J, 2.10 (a)	$100
107.	Inaccessible monitoring point	Sch. J, 2.10 (b)	$150
108.	Fail to protect sewer against spills	Sch. J, 3.1	$150
109.	Fail to install spill containment system	Sch. J, 3.2	$150
110.	Undersized containment	Sch. J, 3.3	$100

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
111.	Open drains in containment	Sch. J, 3.4	$150
112.	Fail to block drains in contamination area	Sch. J, 3.5	$150
113.	Discharge untested stormwater from containment	Sch. J, 3.6	$100
114.	Fail to prepare spill response plan	Sch. J, 4.1	$100
115.	Fail to prepare spill response plan within 30 days	Sch. J, 4.2	$100
116.	Fail to post spill response plan	Sch. J, 4.3	$50
117.	Fail to stock spill response materials	Sch. J, 4.4	$100
118.	Fail to include plugs	Sch. J, 4.5	$100
119.	Fail to follow spill response plan	Sch. J, 4.6	$200
120.	Fail to maintain complete records, date	Sch. J, 5.1 (a)	$100
121.	Fail to maintain complete records, inspection	Sch. J, 5.1 (b)	$100
122.	Fail to maintain complete records, carbon replaced	Sch. J, 5.1 (c)	$100
123.	Fail to maintain complete records, material removed	Sch. J, 5.1 (d)	$100
124.	Fail to maintain disposal records	Sch. J, 5.2	$100
125.	Fail to retain records	Sch. J, 5.3	$100
126.	Fail to retain operation manual	Sch. J, 5.4	$100
127.	Discharge excess contaminants, silver	Sch. K, 2.1 (a)	$200
128.	Discharge of prohibited waste	Sch. K, 2.1 (b)	$200
129.	Fail to manage waste off-site	Sch. K, 2.2 (a)	$200
130.	Fail to treat wastes	Sch. K, 2.2 (b)	$500
131.	Fail to install and maintain equipment	Sch. K, 2.3	$100
132.	Fail to use metering pump	Sch. K, 2.4	$100
133.	Fail to calibrate metering pump	Sch. K, 2.5	$100
134.	Fail to properly locate recovery system as required	Sch. K, 2.6	$100
135.	Fail to install spill containment or cap drains	Sch. K, 2.7	$150
136.	Fail to test effluent	Sch. K, 2.8	$100
137.	Fail to install flow meter	Sch. K, 2.9 (a)	$100
138.	Fail to test discharge	Sch. K, 2.9 (b)	$100

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
139.	Fail to replace silver recovery cartridge as recommended	Sch. K, 2.10 (a)	$100
140.	Fail to replace silver recovery cartridge at 80% capacity	Sch. K, 2.10 (b)	$100
141.	Fail to replace silver recovery cartridge over 1000 mg/L	Sch. K, 2.10 (c)	$100
142.	Fail to replace silver recovery cartridge for excess silver	Sch. K, 2.10 (d)	$100
143.	Fail to replace both silver recovery cartridges	Sch. K, 2.11	$100
144.	Treatment works not accessible	Sch. K, 2.14	$100
145.	Treatment works location, confined space	Sch. K, 2.15	$100
146.	Improper outlet location	Sch. K, 2.16 (a)	$100
147.	Monitoring point not accessible	Sch. K, 2.16 (b)	$100
148.	Fail to keep maintenance manual	Sch. K, 3.1	$50
149.	Fail to maintain complete records, serial number	Sch. K, 3.2 (a)	$100
150.	Fail to maintain complete records, date	Sch. K, 3.2 (b)	$100
151.	Fail to maintain complete records, expiry date	Sch. K, 3.2 (c)	$100
152.	Fail to maintain complete records, capacity	Sch. K, 3.2 (d)	$100
153.	Fail to maintain complete records, calibrator	Sch. K, 3.2 (e)	$100
154.	Fail to maintain complete records, tests	Sch. K, 3.2 (f)	$100
155.	Fail to maintain complete records, repair/replacement	Sch. K, 3.2 (g)	$100
156.	Fail to maintain complete records on electrolytic unit	Sch. K, 3.3 (a)	$100
157.	Fail to record date of silver removal	Sch. K, 3.3 (b)	$100
158.	Fail to record maintenance/repair information	Sch. K, 3.3 (c)	$100
159.	Fail to maintain disposal records, company name	Sch. K, 3.4 (a)	$100
160.	Fail to maintain disposal records, material type	Sch. K, 3.4 (b)	$100
161.	Fail to maintain disposal records, material quantity	Sch. K, 3.4 (c)	$100
162.	Fail to maintain disposal records, transfer date	Sch. K, 3.4 (d)	$100
163.	Fail to retain records	Sch. K, 3.5	$100
164.	Discharge prohibited waste	Sch. L, 2.1 (a)	$200
165.	Discharge of restricted waste	Sch. L, 2.1 (b)	$200
166.	Discharge of wastewater, elevated mercury concentration	Sch. L, 2.1 (c)	$200

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
167.	Fail to manage wastewater off-site	Sch. L, 2.3 (a)	$250
168.	Fail to treat wastewater prior to sewer discharge	Sch. L, 2.3 (b)	$250
169.	Amalgam separator not certified	Sch. L, 2.4	$150
170.	Fail to correctly install and maintain amalgam separator	Sch. L, 2.5	$150
171.	Fail to install proper flow control	Sch. L, 2.6 (a)	$150
172.	Fail to install flow control, water supply line	Sch. L, 2.6 (b)	$150
173.	Fail to install flow control, specified flow rate	Sch. L, 2.7	$150
174.	Improper storage of collecting containers	Sch. L, 2.8	$150
175.	Fail to install spill containment	Sch. L, 2.9	$150
176.	Fail to replace collecting container, expiry date	Sch. L, 2.10 (a)	$150
177.	Fail to replace collecting container, warning level	Sch. L, 2.10 (b)	$150
178.	Fail to replace collecting container, elevated mercury	Sch. L, 2.10 (c)	$150
179.	Improper disposal to sewer	Sch. L, 2.11	$250
180.	Inaccessible amalgam separator	Sch. L, 2.12	$150
181.	Amalgam separator installed in confined space	Sch. L, 2.13	$150
182.	Fail to correctly install monitoring point	Sch. L, 2.14 (a)	$100
183.	Fail to include total flow	Sch. L, 2.14 (b)	$100
184.	Inaccessible monitoring point	Sch. L, 2.14 (c)	$150
185.	Fail to keep maintenance manual	Sch. L, 3.1	$50
186.	Fail to post ISO standard test report	Sch. L, 3.2	$50
187.	Fail to maintain complete records, date of install	Sch. L, 3.3 (a)	$100
188.	Fail to maintain complete records, serial number	Sch. L, 3.3 (b)	$100
189.	Fail to maintain complete records, maximum flow rate	Sch. L, 3.3 (c)	$100
190.	Fail to maintain complete records, date of inspection	Sch. L, 3.3 (d)	$100
191.	Fail to maintain complete records, description of problems	Sch. L, 3.3 (e)	$100
192.	Fail to maintain complete records, service provider	Sch. L, 3.3 (f)	$100
193.	Fail to maintain complete records, dates of waste pick-up	Sch. L, 3.3 (g)	$100
194.	Fail to retain records, five years	Sch. L, 3.4	$100

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
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	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
195.	Discharge prohibited waste	Sch. M, 2.1 (a)	$200
196.	Discharge restricted waste	Sch. M, 2.1 (b)	$200
197.	Discharge excess oil and grease	Sch. M, 2.1 (c)	$200
198.	Discharge excess uncontaminated water	Sch. M, 2.1 (d)	$200
199.	Discharge fuel-water	Sch. M, 2.1 (e)	$200
200.	Discharge from parts washer	Sch. M, 2.1 (f)	$200
201.	Discharge from oily rag washing	Sch. M, 2.1 (g)	$200
202.	Discharge from engine washing	Sch. M, 2.1 (h)	$200
203.	Unauthorized discharge of stormwater	Sch. M, 2.2	$100
204.	Unauthorized discharge of groundwater	Sch. M, 2.3	$150
205.	Fail to install treatment works	Sch. M, 2.4	$500
206.	Fail to install properly sized separator	Sch. M, 2.6	$150
207.	Fail to treat discharge	Sch. M, 2.7	$150
208.	Unauthorized discharge to treatment works	Sch. M, 2.8	$100
209.	Use of chemical agents	Sch. M, 2.9	$150
210.	Fail to correctly install monitoring point	Sch. M, 2.10 (a)	$100
211.	Improper monitoring point	Sch. M, 2.10 (b)	$100
212.	Inaccessible treatment works	Sch. M, 2.11	$100
213.	Accumulation of excessive oil and grease	Sch. M, 2.12	$100
214.	Accumulation of excessive solids	Sch. M, 2.13	$100
215.	Fail to inspect separator	Sch. M, 2.14	$100
216.	Fail to clean separator	Sch. M, 2.15	$150
217.	Fail to conduct annual cleaning	Sch. M, 2.16	$150
218.	Fail to provide spill containment, used batteries	Sch. M, 3.1 (a)	$150
219.	Fail to provide spill containment, used solvents	Sch. M, 3.1 (b)	$150
220.	Fail to provide spill containment, fuel tanks	Sch. M, 3.1 (c)	$150
221.	Fail to provide spill containment, prohibited waste	Sch. M, 3.1 (d)	$150
222.	Fail to supervise discharge	Sch. M, 3.2	$150

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
223.	Fail to prepare spill response plan	Sch. M, 4.1	$100
224.	Fail to prepare spill response plan within 30 days	Sch. M, 4.2	$100
225.	Fail to post spill response plan	Sch. M, 4.3	$50
226.	Fail to follow spill response plan	Sch. M, 4.4	$200
227.	Fail to inspect following spill	Sch. M, 4.5	$150
228.	Fail to remove spilled materials	Sch. M, 4.6	$150
229.	Fail to stock spill response materials	Sch. M, 4.7	$100
230.	Fail to maintain complete records, date of inspection	Sch. M, 5.1 (a)	$100
231.	Fail to maintain complete records, maintenance	Sch. M, 5.1 (b)	$100
232.	Fail to maintain complete records, material depth	Sch. M, 5.1 (c)	$100
233.	Fail to maintain complete records, quantity removed	Sch. M, 5.1 (d)	$100
234.	Fail to maintain complete records, service provider	Sch. M, 5.1 (e)	$100
235.	Fail to maintain design information	Sch. M, 5.2	$100
236.	Fail to maintain record of waste disposal, name	Sch. M, 5.4 (a)	$100
237.	Fail to maintain record of waste disposal, type of waste	Sch. M, 5.4 (b)	$100
238.	Fail to maintain record of waste disposal, amount	Sch. M, 5.4 (c)	$100
239.	Fail to maintain record of waste disposal, date of transfer	Sch. M, 5.4 (d)	$100
240.	Fail to retain records	Sch. M, 5.5	$100
241.	Discharge prohibited wastes	Sch. N, 2.1 (a)	$200
242.	Discharge restricted waste	Sch. N, 2.1 (b)	$200
243.	Discharge of excess uncontaminated water	Sch. N, 2.1 (c)	$200
244.	Discharge from engine washing	Sch. N, 2.1 (d)	$200
245.	Discharge of trucked liquid waste	Sch. N, 2.1 (e)	$200
246.	Discharge of carpet cleaning waste	Sch. N, 2.1 (f)	$200
247.	Discharge of recreational vehicle waste	Sch. N, 2.1 (g)	$200
248.	Discharge from oily rag washing	Sch. N, 2.1 (h)	$200
249.	Unauthorized discharge of stormwater	Sch. N, 2.2	$100
250.	Unauthorized discharge of groundwater	Sch. N, 2.3	$150

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
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	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
251.	Discharge untreated waste into sewer	Sch. N, 2.4	$500
252.	Fail to install treatment works	Sch. N, 2.6	$500
253.	Fail to install properly designed and sized interceptor	Sch. N, 2.7 (a)	$150
254.	Fail to install properly designed three chamber interceptor	Sch. N, 2.7 (b)	$150
255.	Fail to treat discharge	Sch. N, 2.8	$150
256.	Unauthorized discharge to treatment works	Sch. N, 2.9	$100
257.	Use of chemical agents	Sch. N, 2.10	$150
258.	Fail to correctly install monitoring point	Sch. N, 2.11 (a)	$100
259.	Improper monitoring point	Sch. N, 2.11 (b)	$100
260.	Inaccessible treatment works	Sch. N, 2.12	$100
261.	Accumulation of excessive oil and grease in treatment works	Sch. N, 2.13	$100
262.	Accumulation of excessive solids in treatment works	Sch. N, 2.14	$100
263.	Fail to inspect treatment works	Sch. N, 2.15	$100
264.	Fail to clean treatment works	Sch. N, 2.16	$150
265.	Fail to conduct required cleaning of treatment works	Sch. N, 2.17	$150
266.	Fail to display signs	Sch. N, 2.18	$50
267.	Engine washing	Sch. N, 2.19	$150
268.	Fail to prepare spill response plan	Sch. N, 3.1	$100
269.	Fail to prepare spill response plan within 30 days	Sch. N, 3.2	$100
270.	Fail to post spill response plan	Sch. N, 3.3	$50
271.	Fail to follow spill response plan	Sch. N, 3.4	$200
272.	Fail to inspect treatment works following spill	Sch. N, 3.5	$150
273.	Fail to remove spilled materials	Sch. N, 3.6	$150
274.	Fail to stock materials	Sch. N, 3.7	$100
275.	Fail to maintain complete records, date of inspections	Sch. N, 4.1 (a)	$100
276.	Fail to maintain complete records, maintenance	Sch. N, 4.1 (b)	$100
277.	Fail to maintain complete records, material depth	Sch. N, 4.1 (c)	$100
278.	Fail to maintain complete records, quantity removed	Sch. N, 4.1 (d)	$100

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
279.	Fail to maintain complete records, service provider	Sch. N, 4.1 (e)	$100
280.	Fail to maintain design information	Sch. N, 4.2	$100
281.	Fail to maintain record of waste disposal, name	Sch. N, 4.4 (a)	$100
282.	Fail to maintain record of waste disposal, type of waste	Sch. N, 4.4 (b)	$100
283.	Fail to maintain record of waste disposal, amount	Sch. N, 4.4 (c)	$100
284.	Fail to maintain record of waste disposal, date of transfer	Sch. N, 4.4 (d)	$100
285.	Fail to retain records	Sch. N, 4.5	$100
286.	Discharge prohibited waste	Sch. O, 2.1 (a)	$200
287.	Discharge hazardous waste	Sch. O, 2.1 (b)	$200
288.	Discharge restricted waste	Sch. O, 2.1 (c)	$200
289.	Discharge stormwater	Sch. O, 2.1 (d)	$200
290.	Discharge of excess uncontaminated water	Sch. O, 2.1 (e)	$200
291.	Discharge excess total suspended solids	Sch. O, 2.1 (f)	$200
292.	Fail to treat waste	Sch. O, 2.2 (b)	$500
293.	Fail to visually inspect	Sch. O, 2.3 (a)	$150
294.	Fail to maintain screen	Sch. O, 2.3 (b)	$150
295.	Discharge unscreened waste	Sch. O, 2.4	$150
296.	Fail to install spill containment	Sch. O, 2.5	$150
297.	Fail to inspect equipment for leaks, hoses	Sch. O, 2.7 (a)	$100
298.	Fail to inspect filter gaskets	Sch. O, 2.7 (b)	$100
299.	Fail to inspect pumps	Sch. O, 2.7 (c)	$100
300.	Fail to inspect holding tanks	Sch. O, 2.7 (d)	$100
301.	Fail to prevent discharge to sewer	Sch. O, 2.8 (a)	$100
302.	Fail to repair leak within 72 hours	Sch. O, 2.8 (b)	$100
303.	Fail to keep records, inspections	Sch. O, 3.1 (a)	$100
304.	Fail to keep records, leaks	Sch. O, 3.1 (b)	$100
305.	Fail to keep records, screen replacement	Sch. O, 3.1 (c)	$100
306.	Fail to keep records, maintenance	Sch. O, 3.1 (d)	$100

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
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	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
307.	Fail to retain records	Sch. O, 3.2	$100
308.	Discharge prohibited waste, excess contaminants, water	Sch. P, 2.1	$200
309.	Fail to neutralize pH waste	Sch. P, 2.2	$150
310.	Fail to remove solids	Sch. P, 2.3	$500
311.	Fail to filter waste	Sch. P, 2.4 (b)	$500
312.	Fail to correctly install sampling tee	Sch. P, 2.7 (a)	$100
313.	Improper sampling tee	Sch. P, 2.7 (b)	$100
314.	Inaccessible sampling tee	Sch. P, 2.9	$150
315.	Fail to keep records, mash tun	Sch. P, 3.1 (a)	$100
316.	Fail to keep records, kettle wash	Sch. P, 3.1 (b)	$100
317.	Fail to keep records, back flush	Sch. P, 3.1 (c)	$100
318.	Fail to keep records, yeast residue	Sch. P, 3.1 (d)	$100
319.	Fail to keep records, location of sampling tee	Sch. P, 3.1 (e)	$100
320.	Fail to keep records, pH adjustment	Sch. P, 3.1 (f)	$100
321.	Fail to keep records, date of testing	Sch. P, 3.1 (g)	$100
322.	Fail to retain records	Sch. P, 3.2	$100
323.	Discharge prohibited waste	Sch. Q, 2.1 (a)	$200
324.	Discharge hazardous waste	Sch. Q, 2.1 (b)	$200
325.	Discharge restricted waste	Sch. Q, 2.1 (c)	$200
326.	Discharge solvent rinse	Sch. Q, 2.1 (d)	$200
327.	Discharge inks	Sch. Q, 2.1 (e)	$200
328.	Discharge etching solution	Sch. Q, 2.1 (f)	$200
329.	Discharge cleaning solvents	Sch. Q, 2.1 (g)	$200
330.	Discharge of excess uncontaminated water	Sch. Q, 2.1 (h)	$200
331.	Unauthorized discharge of stormwater	Sch. Q, 2.2	$100
332.	Fail to install trade waste interceptor	Sch. Q, 2.3	$500
333.	Fail to install works	Sch. Q, 2.4	$500
334.	Fail to install and calibrate metering pump	Sch. Q, 2.6	$150

SCHEDULE 21 TO BYLAW NO. 1857
CAPITAL REGIONAL DISTRICT
SEWER USE BYLAW NO. 5, 2001

	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
335.	Fail to replace treatment works as recommended	Sch. Q, 2.8 (a)	$150
336.	Fail to replace treatment works at 80% capacity	Sch. Q, 2.8 (b)	$150
337.	Fail to replace treatment works total oil and grease at breakthrough	Sch. Q, 2.8 (c)	$150
338.	Fail to replace treatment works at breakthrough of oil and grease	Sch. Q, 2.8 (d)	$150
339.	Fail to properly size trade waste interceptor	Sch. Q, 2.11	$150
340.	Bypass of treatment equipment	Sch. Q, 2.12	$150
341.	Fail to divert domestic waste	Sch. Q, 2.13	$150
342.	Use of chemical agents	Sch. Q, 2.15	$150
343.	Fail to correctly install monitoring point	Sch. Q, 2.16 (a)	$100
344.	Inaccessible monitoring point	Sch. Q, 2.16 (b)	$150
345.	Inaccessible treatment works	Sch. Q, 2.17	$150
346.	Accumulation of excessive floatables	Sch. Q, 2.18	$150
347.	Accumulation of excessive solids	Sch. Q, 2.19	$150
348.	Fail to inspect trade waste interceptor	Sch. Q, 2.20	$100
349.	Fail to maintain trade waste interceptor	Sch. Q, 2.21	$150
350.	Fail to clean trade waste interceptor	Sch. Q, 2.22	$150
351.	Fail to provide spill containment for solvents	Sch. Q, 3.1 (a)	$150
352.	Fail to provide spill containment for waste solvents	Sch. Q, 3.1 (b)	$150
353.	Fail to prepare spill response plan	Sch. Q, 4.1	$100
354.	Fail to prepare spill response plan within 60 days	Sch. Q, 4.2	$100
355.	Fail to follow spill response plan	Sch. Q, 4.3	$200
356.	Fail to inspect following spill	Sch. Q, 4.4	$150
357.	Fail to remove spilled materials	Sch. Q, 4.5	$150
358.	Fail to stock materials	Sch. Q, 4.6	$100
359.	Fail to maintain complete records, inspections	Sch. Q, 5.1 (a)	$100
360.	Fail to maintain complete records, maintenance	Sch. Q, 5.1 (b)	$100
361.	Fail to maintain complete records, material removed	Sch. Q, 5.1 (c)	$100
362.	Fail to maintain complete records, service provider	Sch. Q, 5.1 (d)	$100

SCHEDULE 21 TO BYLAW NO. 1857
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	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
363.	Fail to keep equipment records, installation date	Sch. Q, 5.2 (a)	$100
364.	Fail to keep equipment records, serial numbers	Sch. Q, 5.2 (b)	$100
365.	Fail to keep equipment records, expiry date	Sch. Q, 5.2 (c)	$100
366.	Fail to keep equipment records, capacity	Sch. Q, 5.2 (d)	$100
367.	Fail to keep equipment records, calibration dates	Sch. Q, 5.2 (e)	$100
368.	Fail to keep equipment records, problems	Sch. Q, 5.2 (f)	$100
369.	Fail to maintain design information	Sch. Q, 5.3	$100
370.	Fail to maintain spill response plan	Sch. Q, 5.4	$100
371.	Fail to maintain record of waste disposal, name	Sch. Q, 5.5 (a)	$100
372.	Fail to maintain record of waste disposal, type of waste	Sch. Q, 5.5 (b)	$100
373.	Fail to maintain record of waste disposal, amount	Sch. Q, 5.5 (c)	$100
374.	Fail to maintain record of waste disposal, date of transfer	Sch. Q, 5.5 (d)	$100
375.	Fail to retain records	Sch. Q, 5.6	$100
376.	Discharge prohibited waste	Sch. S, 2.1 (a)	$200
377.	Discharge restricted waste	Sch. S, 2.1 (b)	$200
378.	Discharge waste containing mercury	Sch. S, 2.1 (c)	$200
379.	Discharge waste containing Polychlorinated Biphenyl	Sch. S, 2.1 (d)	$200
380.	Discharge waste containing toxic equivalent	Sch. S, 2.1 (e)	$200
381.	Discharge waste containing halogenated solvents	Sch. S, 2.1 (f)	$200
382.	Discharge waste containing chlorinated phenols	Sch. S, 2.1 (g)	$200
383.	Discharge waste containing pesticides	Sch. S, 2.1 (h)	$200
384.	Discharge seawater	Sch. S, 2.1 (i)	$200
385.	Discharge of excess uncontaminated water	Sch. S, 2.1 (j)	$200
386.	Unauthorized discharge of stormwater	Sch. S, 2.2	$100
387.	Fail to correctly install monitoring point	Sch. S, 2.4	$100
388.	Fail to install monitoring point following improvement, lab	Sch. S, 2.5 (a)	$100
389.	Fail to install monitoring point following improvement, plumbing	Sch. S, 2.5 (b)	$100
390.	Fail to install monitoring point after exceeding criteria	Sch. S, 2.5 (c)	$100

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	COLUMN 1	COLUMN 2	COLUMN 3
	WORD OR EXPRESSIONS DESIGNATING OFFENCE	**SECTION**	**FINE**
391.	Fail to use proper methods	Sch. S, 2.6	$150
392.	Fail to install spill containment	Sch. S, 3.1	$150
393.	Discharge unauthorized waste	Sch. S, 3.2	$150
394.	Fail to prepare spill response plan	Sch. S, 4.1	$100
395.	Fail to prepare spill response plan within 30 days	Sch. S, 4.2	$100
396.	Fail to post spill response plan	Sch. S, 4.3	$50
397.	Fail to maintain spill response equipment	Sch. S, 4.4	$100
398.	Fail to carry out spill response plan	Sch. S, 4.5	$200
399.	Fail to removed spilled materials	Sch. S, 4.6	$150
400.	Fail to keep records, name	Sch. S, 5.1 (a)	$100
401.	Fail to keep records, type of waste	Sch. S, 5.1 (b)	$100
402.	Fail to keep records, amount	Sch. S, 5.1 (c)	$100
403.	Fail to keep records, date of transfer	Sch. S, 5.1 (d)	$100
404.	Fail to list procedures	Sch. S, 5.2	$100
405.	Fail to maintain inventory	Sch. S, 5.3	$100
406.	Fail to maintain written procedures	Sch. S, 5.4	$100
407.	Fail to maintain test records	Sch. S, 5.5	$100
408.	Fail to retain records	Sch. S, 5.6	$100

Making a difference...together

REPORT TO FINANCE COMMITTEE
MEETING OF WEDNESDAY, MARCH 01, 2023

SUBJECT **Bylaw No. 4533: Temporary Borrowing (Solid Waste Facilities and Site Improvements) Bylaw No. 1, 2023**

ISSUE SUMMARY

Approval of a Temporary Borrowing Bylaw authorizing short-term funds for projects included in the approved five-year capital plan for the Solid Waste Facilities and Site Improvements.

BACKGROUND

At its meeting of February 8, 2023, the Capital Regional District (CRD) Board adopted Loan Authorization Bylaw No. 4515 intended to fund the planned infrastructure and improvements with the Solid Waste Disposal Service. A temporary borrowing bylaw is required when short-term financing is required to fund capital expenditures in advance of long-term debt issuance.

Long-term debt will be issued near or at completion of the project when the total borrowing amount is known. The conversion of temporary borrowings to long-term debt is an additional and subsequent approval by the Board. When ready for a long-term issue, a Security Issuing Bylaw will be brought forward by staff and will require approval by the Board in advance of the regular Municipal Finance Authority (MFA) spring or fall long-term debt issues.

ALTERNATIVES

Alternative 1
The Finance Committee recommends to the Capital Regional District Board:
1. That Bylaw No. 4533, "Temporary Borrowing (Solid Waste Facilities and Site Improvements) Bylaw No. 1, 2023", be introduced and read a first, second and third time; and
2. That Bylaw No. 4533 be adopted.

Alternative 2

That Bylaw No. 4533 be referred back to staff for additional information.

IMPLICATIONS

Financial Implications

The proposed temporary borrowing bylaw will give the CRD access to interim financing according to the terms specified in Loan Authorization Bylaw No. 4515. Temporary borrowing will not exceed the difference between the total $36,000,000 authorized by the loan authorization bylaw and the amount previously borrowed under this authority. The use of the temporary borrowing will be based on the timing of approved capital expenditures. The associated financing costs will be monthly variable interest-only payments. Currently, MFA's short-term borrowing rate is 4.92% (variable rate as of January 20, 2023). The cash flows required to service short-term debt are in the approved financial plan.

CONCLUSION

Temporary borrowing authority, through the approval of the Temporary Borrowing (Solid Waste Facilities and Site Improvements) Bylaw No. 4533, is required to access interim financing to fund the Solid Waste Facilities and Site Improvements. Timely access to borrowed funds is critical to meeting the approved five-year capital program. All temporary borrowings will be either repaid within five years or converted to long-term debt up to the maximum stated in the approved Loan Authorization Bylaw No. 4515.

RECOMMENDATION

The Finance Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4533, "Temporary Borrowing (Solid Waste Facilities and Site Improvements) Bylaw No. 1, 2023", be introduced and read a first, second and third time; and
2. That Bylaw No. 4533 be adopted.

Submitted by:	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer
Concurrence:	Glenn Harris, Ph.D., RP.Bio., Acting General Manager, Parks & Environmental Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT

Appendix A: Bylaw 4533, "Temporary Borrowing (Solid Waste Facilities and Site Improvements) Bylaw No. 1, 2023"

CAPITAL REGIONAL DISTRICT
BYLAW NO. 4533

****

A BYLAW TO AUTHORIZE TEMPORARY BORROWINGS
FOR THE SOLID WASTE DISPOSAL LOCAL SERVICE

****

WHEREAS:

A. It is provided by Section 409 of the *Local Government Act*, RSBC 2015 c 1, that the Board may, where it has adopted a loan authorization bylaw, without further assents or approvals, borrow temporarily from any person under the conditions therein set out;

B. The Board has adopted Bylaw No. 4515, "Solid Waste Disposal Loan Authorization Bylaw No. 1, 2022", in the amount of Thirty-Six Million Dollars ($36,000,000);

C. The issuance of the said Security Issuing bylaw has been temporarily deferred.

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

1. The Board is hereby authorized and empowered to borrow an amount or amounts not exceeding the sum of Thirty-Six Million Dollars ($36,000,000) as the same may be required, at the prevailing interest rate.

2. The money so borrowed shall be used solely for the purpose set out in the said Bylaw No. 4515.

3. The proceeds from the Security Issuing bylaw, or so much thereof as may be necessary, shall be used to repay the money so borrowed.

4. This Bylaw may be cited as the "Temporary Borrowing (Solid Waste Facilities and Site Improvements) Bylaw No. 1, 2023".

READ A FIRST TIME THIS	day of	20
READ A SECOND TIME THIS	day of	20
READ A THIRD TIME THIS	day of	20
ADOPTED THIS	day of	20

CHAIR

CORPORATE OFFICER

Making a difference...together

REPORT TO HOSPITALS AND HOUSING COMMITTEE
MEETING OF [MEETING DATE]

SUBJECT **2859 Richmond Housing Agreement and Bylaw**

ISSUE SUMMARY

The Capital Regional District (CRD) Board must approve a bylaw that enables it to enter into a housing agreement with a developer in order to administer one one-bedroom below-market home ownership unit at a housing development proposed for 2859 Richmond Road in the District of Saanich.

BACKGROUND

The CRD currently administers resale control agreements on a number of below-market home ownership units within housing developments throughout the region.

The CRD's Regional Housing Division has been in discussions with the District of Saanich and Lapis Homes Ltd. (the Developer) regarding a proposed housing development that will include one resale price-restricted, below-market one-bedroom housing unit as part of the project. The District of Saanich and the Developer have requested the CRD administer resales of the below-market unit.

The unit is part of a proposed nine unit residential strata townhouse development, with no onsite parking, located at 2859 Richmond Road in the District of Saanich. The terms of the Housing Agreement (Appendix A, Appendix 1) and Bylaw (Appendix A) require sales of the below-market unit be restricted to a sale price no higher than 20% below Fair Market Value (i.e., Maximum Price), as determined by an appraisal. A qualified buyer for the initial sale of the Affordable Unit is restricted to:

- a first time home buyer, being a buyer who has not owned a principal residence for at least five years immediately prior to the date of purchase of an Affordable Unit;
- a resident of the CRD from time to time, for at least one year immediately prior to the date of purchase of an Affordable Unit;
- a person who provides Proof of Income that their annual gross household income is, for at least one year immediately prior to the date of purchase of an Affordable Unit, within BC Housing Low and Moderate Income Limits, as determined by size of unit, and set by BC Housing from time to time; and
- a person who intends to immediately use and occupy the Affordable Unit as their principal residence.

The above buyer qualifications apply to subsequent sales, with the exception of income requirements which may be adjusted by the CRD in order to respond to prevailing market conditions.

A resale control and administrative procedure based on best practice has been prepared within the Agreement to ensure the units may only be sold as described, and, in cases of hardship, may be rented at a below-market rate for up to two years at which time they must be re-occupied with an approved occupant or relisted for sale. The Agreement provides for cost-recovery measures

to pay for the CRD's administrative services. Staff are taking the same resale control approach consistent with projects previously approved by the CRD Board whereby the CRD may take control in its own name in order to most effectively administer the provisions for any below market unit.

The District of Saanich and the Developer have requested the CRD adopt this Agreement as a covenant and housing agreement within Section 483 of the *Local Government Act*, which further requires the CRD do so by way of bylaw. To secure the rights under the housing agreement, the CRD will also take an Option to Purchase and Right of First Refusal (Appendix B).

ALTERNATIVES

Alternative 1
The Hospitals and Housing Committee recommends to the Capital Regional District Board:
1. That Bylaw No.4539, "Resale Control and Housing Agreement Bylaw (2859 Richmond Road), 2023" be introduced and read for a first, second and third time; and
2. That Bylaw No. 4539 be adopted.

Alternative 2
That the 2859 Richmond Road Housing Agreement and Bylaw report be referred back to staff for additional information based on Capital Regional District Board direction.

IMPLICATIONS

Financial Implications
The CRD administers a one-time fee of $3,500 (plus tax) to the Developer to cover CRD costs associated with setting up the Housing Agreement and facilitating the approval of the bylaw. Administration of the resale control function and ensuring compliance with the terms of use of the affordable unit has a cost associated with it, which is factored into the program by charging the buyer a fee of 0.5% of the gross selling price of the unit at time of completion (e.g., $1,500 on a $300,000 sale). The administration fee is subject to change with market fluctuations and consideration of staff time and other resources to ensure full cost recovery for the provided service.

Social Implications
For the moderate income households who become able to purchase and occupy these units, the economic implications of home ownership will be significant. The measure of resale control allows them to build a modest level of equity while also providing them with security of tenure. The resale control also ensures a degree of ongoing affordability that is available to future eligible buyers for the duration of the agreement.

Legal Implications
The properties' rezoning is not yet final. Should the rezoning fail, CRD's practice is to repeal the associated housing agreement bylaw and discharge the covenant on the Developer's request.

CONCLUSION

The CRD has experience unique in the region, and the potential to enter into agreements with developers to administer the sale of affordable home ownership units aligns with the goals and objectives of the Regional Housing Affordability Strategy. The developer and CRD staff have negotiated the Agreement, which includes the terms of use and matters related to the resale of

the unit. The CRD has developed administrative procedures that ensure unit use conforms to the Agreement terms, provides greater authority for the CRD to act when use is non-conforming and provides the CRD adequate cost recovery for the provision of the program.

RECOMMENDATION

The Hospitals and Housing Committee recommends to the Capital Regional District Board:

1. That Bylaw No.4539, "Resale Control and Housing Agreement Bylaw (2859 Richmond Road), 2023" be introduced and read for a first, second and third time; and
2. That Bylaw No. 4539 be adopted.

Submitted by:	Don Elliott, MUP, Senior Manager, Regional Housing
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Kristen Morley, General Manager, Corporate Services & Corporate Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Bylaw No. 4539, "Resale Control and Housing Agreement Bylaw (2859 Richmond Road), 2023"
Appendix B: Right of First Refusal and Option to Purchase (2859 Richmond Road Unit)

CAPITAL REGIONAL DISTRICT
BYLAW NO. 4539

****

A BYLAW TO AUTHORIZE A HOUSING AGREEMENT
(2859 RICHMOND ROAD)

****

WHEREAS:

A. The owner of land legally described as LOT 9, BLOCK 5, PLAN VIP1107, SECTION 26 & 27, VICTORIA LAND DISTRICT, PID 007-912-277 wishes to develop it in the District of Saanich to provide, among a strata development of market housing, one unit of affordable housing, in the form of a one-bedroom unit;

B. Under the *Local Government Act*, RSBC 2015, c 1, section 483, the Capital Regional District may enter into an agreement, by bylaw, to ensure the availability of the housing units to certain classes of persons identified in the agreement, the administration and management of the units, rents, leases, and sale prices that may be charged, and the rates at which these may be increased over time as specified in the agreement or as determined by a formula; and under the *Land Title Act*, RSBC 1996, c 250, section 219, it may place a covenant on property to restrict its use and alienation; and

C. Whereas the Board wishes to enter into such a housing agreement and covenant to secure the affordable housing;

NOW THEREFORE, the Capital Regional District Board in open meeting enacts as follows:

1. The Capital Regional District is authorized to enter into the *Local Government Act* section 483 housing agreement and *Land Title Act* section 219 covenant attached to this Bylaw as Appendix 1 (the “Housing Agreement”).

2. The Chair of the Capital Regional District is authorized to execute the Housing Agreement and the Corporate Officer or designate is authorized to sign and file in the Land Title Office a notice of the Housing Agreement, as required by the *Local Government Act*.

3. This bylaw may be cited for all purposes as “Resale Control and Housing Agreement Bylaw (2859 Richmond Road), 2023".

READ A FIRST TIME THIS	__	day of	2023
READ A SECOND TIME THIS	__	day of	2023
READ A THIRD TIME THIS	__	day of	2023
ADOPTED THIS	__	day of	2023

CHAIR

CORPORATE OFFICER

bc Land Title & Survey

Land Title Act

Charge

General Instrument – Part 1

1. Application

Robert James Maguire
1727 Jefferson Avenue
Victoria BC V8N 2B3
250-370-0300

File 127/20
1267767 B.C. LTD. - 2859 Richmond Rd
Covenant, Rent Charge

2. Description of Land

PID/Plan Number	Legal Description
007-912-277	**LOT 9, BLOCK 5, SECTION 26, VICTORIA DISTRICT, PLAN 1107**

3. Nature of Interest

Type	Number	Additional Information
COVENANT		**Notice of Housing Agreement with registration number six (6) registration numbers more than this Covenant.**
PRIORITY AGREEMENT		**granting Covenant priority over Mortgage CA8509110**
PRIORITY AGREEMENT		**granting Covenant priority over Assignment of Rents CA8509111**
RENT CHARGE		
PRIORITY AGREEMENT		**granting Rent Charge priority over Mortgage CA8509110**
PRIORITY AGREEMENT		**granting Rent Charge priority over Assignment of Rents CA8509111**

4. Terms

Part 2 of this instrument consists of:

(b) Express Charge Terms Annexed as Part 2

5. Transferor(s)

1267767 B.C. LTD., NO.BC1267767

VANCOUVER CITY SAVINGS CREDIT UNION, NO.FI 97

6. Transferee(s)

CAPITAL REGIONAL DISTRICT
625 FISGARD STREET
VICTORIA BC V8W 1R7

7. Additional or Modified Terms

8. Execution(s)

This instrument creates, assigns, modifies, enlarges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
Marianne Phyllis Pilon **Commissioner for Taking Affidavits for British Columbia** 1727 Jefferson Avenue Victoria BC V8N 2B3 Expiry date: February 28, 2025	YYYY-MM-DD **2023-02-21**	**1267767 B.C. LTD.** By their Authorized Signatory **Ryan Thomas Jabs**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
	YYYY-MM-DD	**CAPITAL REGIONAL DISTRICT** By their Authorized Signatory **Print Name** **Print Name**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Land Title Act
Charge
General Instrument – Part 1

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
Abby Pelaez A Commissioner for Taking Affidavits for British Columbia 183 Terminal Avenue Vancouver, B.C. V6A 4G2 Phone: 604-877-8274 Expiry Date: September 30, 2024	YYYY-MM-DD 2023-02-21	**Vancouver City Savings Credit Union** By their Authorized Signatory **Print Name** **Erin Kaliczak** **Community Business Lending Coordinator**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Electronic Signature

Your electronic signature is a representation that you are a designate authorized to certify this document under section 168.4 of the *Land Title Act*, RSBC 1996 c.250, that you certify this document under section 168.41(4) of the act, and that an execution copy, or a true copy of that execution copy, is in your possession.

TERMS OF INSTRUMENT – PART 2

SECTION 219 COVENANT AND HOUSING AGREEMENT

WHEREAS:

A. **1267767 B.C. LTD.** (the "**Developer**") is the registered owner of the Lands described in Item 2 of Part 1 of this General Instrument and the Developer intends to complete a nine (9) unit townhouse development on the Lands (the "**Strata Development**") and shall designate one (1) affordable one-bedroom unit of the strata lots to be created by the strata plan for the Strata Development as the Affordable Units to which strata lots this Agreement will apply.

B. The Developer intends to build the Affordable Units to ensure the availability of affordable housing in the District of Saanich, British Columbia.

C. To ensure that the Affordable Unit continues to be available as affordable housing, the Developer has agreed to grant the Capital Regional District ("**CRD**"):

(a) a covenant under Section 219 of the *Land Title Act* (the "**Covenant**") and enter into a housing agreement under Section 483 of the Local Government Act setting out, amongst other things, the procedure to be followed in connection with any sale of an Affordable Unit as well as restrictions on the sale price on use and rental of the Affordable Unit (the "**Housing Agreement**";

(b) an option to purchase an Affordable Unit if it is sold, rented or used in breach of the Covenant.

NOW THEREFORE in consideration of the mutual covenants set out below and other good and valuable consideration (the receipt and sufficiency of which are acknowledged by each of the parties), the parties agree as follows:

SECTION 1.
INTERPRETATION

1.1 **Definitions**. In this Agreement:

1.1.1 "Administration Fee" has the meaning given to it at section 2.2.8;

1.1.2 "Affordable Rate" means a rate determined from time-to-time by the NPO in its discretion with reference to BC Government guidelines, if any;

1.1.3 "Affordable Unit" or "Affordable Units" shall mean the one (1) strata lot, comprising of a single one-bedroom unit, to be designated by the Developer within the Strata Development as the strata lot to which this Agreement shall apply;

1.1.4 "Agreement" means this Covenant and Housing Agreement, including all recitals and schedules attached hereto;

1.1.5 "Appraiser" means an appraiser accredited by the Appraisal Institute of Canada and duly

qualified to appraise an Affordable Unit and on an approved list maintained by the NPO, if any;

1.1.6 "Approved Lender" means an "approved lender" (as defined in the *National Housing Act*, R.S.C. 1985, c. N-11) which holds an Insured Mortgage of an Affordable Unit;

1.1.7 "BC Housing Low and Moderate Income Limits" means the low and moderate income limits determined by BC Housing from time to time, by size of unit. For 2023, BC Housing Low and Moderate Income Limits are:

- For residential units with less than two (2) bedrooms, a gross household income that does not exceed the median income for couples without children in BC, as determined by BC Housing from time to time. For 2023, this figure is $82,310 (compared to $77,430 last year),
- For residential units with two (2) or more bedrooms, a gross household income that does not exceed the median income for families with children in BC, as determined by BC Housing from time to time. For 2023, this figure is $128,810 (compared to $120,990 last year);

1.1.8 "Business Day" means any day other than Saturday, Sunday or a statutory holiday in the Province of British Columbia, or day that the LTO is not open for business;

1.1.9 "CMHC" means Canada Mortgage and Housing Corporation or any successor thereto;

1.1.10 "Covenant" has the meaning stated in Recital C and is the covenant set out in Section 2.1;

1.1.11 "CRD" has the meaning stated in Recital C;

1.1.12 "Developer" has the meaning stated in Recital A;

1.1.13 "Fair Market Value" of an Affordable Unit means the purchase price from time to time which a willing purchaser would pay to a willing vendor, dealing at arm's length from each other, for an Affordable Unit, without the benefit of a parking stall or other parking entitlement;

1.1.14 "General Instrument - Part 1" means the General Instrument - Part 1 to which this Terms of Instrument - Part 2 is attached;

1.1.15 "Immediate Family" means grandparent, parent, sibling, spouse, common-law partner, son or daughter;

1.1.16 "Insured Mortgage" means a mortgage insured pursuant to the *National Housing Act*, R.S.C. 1985, c. N-11;

1.1.17 "LTO" means the Land Title Office for the jurisdiction in which an Affordable Unit is located;

1.1.18 "Maximum Price " means the sale price for the sale of the Affordable Unit determined in accordance with Schedule "C".

1.1.19 "NPO" means the Capital Region Housing Corporation or other non-profit housing organization or Person retained by CRD from time to time to administer the sale of the

Affordable Units and to manage the rental of the Affordable Units;

1.1.20 "NPO Appraisal" has the meaning stated in Schedule "C";

1.1.21 "Option" means the option to purchase and right of first refusal granted by the Owner to CRD in substantially the form attached hereto as Schedule "D";

1.1.22 "Owner" means the registered owner of an Affordable Unit from time to time and includes the Developer in its capacity as developer of the Affordable Units until the first conveyance to a Qualified Buyer, and their respective heirs, legal representatives, successors and assigns;

1.1.23 "Owner Appraisal" has the meaning stated in Schedule "C";

1.1.24 "Permitted Encumbrances" means those charges or encumbrances stated in Schedule "A" and any other encumbrances approved as required by the District of Saanich or Developer from time to time to complete the Strata Development or as in writing by CRD but shall not include any mortgage or other financial encumbrance and shall not include this Agreement;

1.1.25 "Person" means any individual, society, corporation, partnership, trustee, administrator, legal representative, Statutory Authority or other legal entity;

1.1.26 "Proceeding" has the meaning stated in Section 2.3.1;

1.1.27 "Project" means the Strata Development of which the Affordable Units will be a part and comprises all of the Lands referred to in Item 2 of the General Instrument - Part 1;

1.1.28 "Qualified Buyer" means an individual who meets the criteria stated in Schedule "B";

1.1.29 "Statutory Authority" means any federal, provincial or municipal governmental authority which has jurisdiction over any matter referred to in this Agreement;

1.1.30 "Term" means the period commencing on the date of registration of this Agreement in the LTO and ending on the later of (a) the date which is ninety-nine (99) years thereafter, and (b) the date of any destruction or statutorily deemed destruction of the Project.

1.2 **Notice of Housing Agreement**. The Owner acknowledges and agrees that:

1.2.1 this Agreement constitutes both a covenant under Section 219 of the *Land Title Act* and a housing agreement entered into under Section 483 of the *Local Government Act*;

1.2.2 the CRD is required to file a notice of housing agreement in the Land Title Office against title to the Land; and

1.2.3 once such notice is filed, this Agreement binds all persons who acquire an interest in the Land as a housing agreement under Section 483 of the *Local Government Act*.

1.3 **Time**. Time will be of the essence of this Agreement. If any party expressly or impliedly waives this requirement, that party may reinstate it by delivering notice to the other party. If a time is

specified in this Agreement for observing or performing any obligation, such time will be local time in Victoria, British Columbia.

1.4 **Governing Law**. This Agreement will be governed by and construed and enforced in accordance with the laws of British Columbia and the laws of Canada applicable in British Columbia.

1.5 **References**. In this Agreement, words importing the singular include the plural and vice versa, and words importing gender include all genders.

1.6 **Construction**. The division of this Agreement into sections and the use of headings are for convenience of reference only and are not intended to govern, limit or aid in the interpretation of this Agreement. The wording of this Agreement will be construed simply, according to its fair meaning, and not strictly for or against any party.

1.7 **Validity of Provisions**. If a Court of competent jurisdiction finds that any provision contained in this Agreement is invalid, illegal or unenforceable, such invalidity, illegality or unenforceability will not affect any other provision of this Agreement which will be construed as if such invalid, illegal or unenforceable provision had never existed and such other provisions will be enforceable to the fullest extent permitted at law.

1.8 **No Waiver**. Failure by either party to exercise any of its rights, powers or remedies hereunder or its delay to do so, will not be interpreted as a waiver of those rights, powers or remedies except in the case of a written waiver. No waiver of a particular right will be deemed to be a waiver of that right in any other instance or a waiver of any other right.

1.9 **Statutes**. Any reference to a statute and to any regulations under that statute means the statute and regulations as amended or replaced from time to time.

1.10 **Remedies**. Any party to this Agreement, in addition to its rights under this Agreement or at law, will be entitled to all equitable remedies including specific performance, injunction and/or declaratory relief, to enforce its rights under this Agreement. No reference to or exercise of any specific right or remedy under this Agreement or at law or in equity by any party will prejudice or preclude that party from exercising any other such right or remedy. No such right or remedy will be exclusive or dependent upon any other such right or remedy, but any party, from time to time, may exercise any one or more of such rights or remedies independently, successively or in combination. The Owner acknowledges that specific performance, injunctive relief (mandatory or otherwise) or other equitable relief may be the only adequate remedy for a default by the Owner under this Agreement.

1.11 **Schedules**. The following Schedules are attached to and form integral parts of this Agreement:

Schedule "A" Permitted Encumbrances
Schedule "B" Qualified Buyer Criteria
Schedule "C" Maximum Price, Fair Market Value
Schedule "D" Option to Purchase and Right of First Refusal (include a Schedule "A")

SECTION 2.
SECTION 219 COVENANT

2.1 **Covenant**. The Owner hereby covenants with CRD that:

(a) the Affordable Unit will not be sold, assigned or otherwise transferred otherwise than:

(i) to a Qualified Buyer;

(ii) for a selling price not greater than the Maximum Price;

(iii) in accordance with this Agreement and the Option; and

(iv) in a way which complies with Section 2.2, or to CRD under the Option;

(b) the Affordable Unit will not at any time be subject to a conventional high ratio mortgage or mortgages which, in total, secure an amount which exceeds 95% of the Maximum Price;

(c) the Owner shall not permit (whether by renting or otherwise) any person other than the Owner and members of the owner's Immediate Family to occupy the Affordable Unit, and shall not use or permit the premises to be used solely for conducting a business or profession;

(d) the Owner will do everything necessary, at the Owner's expense, to ensure that this Agreement and an Option, if required by the CRD, will be registered against title to the Land in priority to all charges and encumbrances which may have been registered or are pending registration against title to the Land save and except those specifically approved in writing by the CRD or in favour of the CRD,

and the Owner and CRD agree that, subject to Section 2.3 the covenant set out above will be registered as a charge against the Affordable Unit and run with the Affordable Unit for the Term.

2.2 **Procedure for Sale of Affordable Unit.**

2.2.1 **Owner Notifies NPO of Intention to Sell.**

If the Owner wishes to sell, assign or otherwise transfer the Affordable Unit, the Owner will do so in accordance with a bona fide arm's length agreement of purchase and sale (or as a court may order in a proceeding to enforce a mortgage of the Affordable Unit) and the Owner will, prior to:

(a) listing or offering the Affordable Unit for sale; or

(b) accepting an offer to purchase the Affordable Unit,

deliver to the NPO written notice of their intention to sell an Affordable Unit, such notice to be in the form required by the NPO and determine the Maximum Price in accordance with Schedule "C" attached hereto.

2.2.2 **Owner Responsible for Appraisal Costs.**

The Owner will be responsible for the cost of both the Owner Appraisal and the NPO Appraisal. If the cost of the NPO Appraisal is initially paid by the NPO, the Owner will reimburse the NPO for the cost of the NPO Appraisal within 30 days after demand by

the NPO. If any amount owed by the Owner to the NPO with respect to the NPO Appraisal is not paid prior to the completion of the sale of the Affordable Unit by the Owner, a portion of the sale proceeds equal to the amount owing to the NPO will be deemed to have been irrevocably assigned by the Owner to the NPO.

2.2.3 **NPO Notifies Owner of Maximum Selling Price.**

Within 7 days after the Fair Market Value of the Affordable Unit has been determined under Schedule "C", the NPO will notify the Owner of the Maximum Price, determined under Schedule "C", at which time the Owner will be permitted to offer to sell the Affordable Unit, which price shall be deemed to be its Maximum Price.

In addition to the Maximum Price, the Owner will be entitled to charge the Qualified Buyer, the Administration Fee.

2.2.4 **Owner to Deliver True Copy of Sale Contract to NPO.**

For each sale of an Affordable Unit, the Owner will immediately deliver a true copy of any contract of purchase and sale which the Owner may enter into with respect to the sale of the Affordable Unit or any interest therein (the "Sale Contract"). The Owner will deliver to the NPO with the Sale Contract, or upon the request of the NPO, such information with respect to the buyer named in the Sale Contract as the NPO may reasonably require to determine whether the buyer is a Qualified Buyer.

2.2.5 **Terms to be Included in Sale Contract.**

The Sale Contract will be in writing and will:

(a) be for a selling price not greater than the Maximum Price of the Affordable Unit;

(b) include as a true condition precedent that the seller's obligation to sell is subject to the NPO determining and notifying the Owner in writing (within a period of 10 Business Days after the NPO receives a true copy of the Sale Contract) that (1) the Owner has complied with the requirements of this Section 2.2, and (2) the buyer is a Qualified Buyer, failing which the Sale Contract will be null and void; and

(c) include as a true condition precedent that the seller's obligation to sell is subject to the seller notifying the buyer in writing that the CRD has approved the terms of the sale of the Affordable Unit to the buyer and that the CRD has decided not to exercise its right of first refusal or option to purchase the Affordable Unit with respect to this transaction only;

(d) require the buyer to execute an agreement with the CRD, as a condition of closing, under which the buyer agrees that its purchase of the Affordable Unit is subject to the terms of this Agreement and the Option.

2.2.6 **No Sale after 6 Months Without New Appraisal.**

The NPO will not be obligated to review or make any determination with respect to a Sale Contract as stated in subsection 2.2.5(b) above if the date of receipt by the NPO of a true

copy of the Sale Contract is after the expiry of the 6-month period during which the Owner is permitted to sell the Affordable Unit. If the 6-month period has expired, the process under Schedule C will begin again, with the Owner giving fresh notice to the NPO of their intention to sell the Affordable Unit.

2.2.7 **CRD Will Notify Owner of Change in NPO.**

CRD will notify the Owner in writing of any appointment or replacement of an NPO and of the address to which notices to the NPO will be sent.

2.2.8 **Fee to NPO.**

The NPO will be entitled to payment of a fee equal to 0.5% of the gross selling price of an Affordable Unit (the "Administration Fee"), such Administration Fee to be paid on closing of the sale of such Affordable Unit by the Owner and a portion of the sale proceeds equal to the amount owing to the NPO will be deemed to have been irrevocably assigned by the Owner to the NPO.

2.3 **Procedure for Foreclosure.**

2.3.1 **CRD Right to Market and Sell.**

If the Approved Lender or CMHC commences a foreclosure proceeding (the "Proceeding") under an Insured Mortgage of the Affordable Unit the Owner covenants and agrees with CRD that:

(a) the Owner shall notify CRD of the Proceeding;

(b) at the time which is the midpoint of any redemption period (the "Redemption Period") ordered in the Proceeding, CRD shall have the right and may apply for an order in the Proceeding, unopposed by the Owner, to market and sell the Affordable Unit in accordance with Section 2.1(a)(i), (ii), (iii) and (iv);

(c) on receipt of the order in the Proceeding under Section 2.3.1(b) CRD shall have the right to enter into an agreement with a licensed realtor to market and sell the Affordable Unit at the prevailing commission or fee; and

(d) the Owner shall provide reasonable access to the Affordable Unit by CRD, the licensed realtor and any prospective purchaser of the Affordable Unit for the purpose of repairing, cleaning, appraising, marketing and selling the Affordable Unit.

2.3.2 **CMHC Notice to CRD.**

In the event that CRD does not sell the Affordable Unit pursuant to Section 2.3.1, CMHC or the Approved Lender may, 120 days after expiry of the Redemption Period ordered in the Proceeding, issue a 30 day notice (the "Notice Period") to CRD to redeem the Insured Mortgage. In the event that CRD does not redeem the Insured Mortgage within the Notice Period, CRD shall cause this Agreement to be discharged from title to the Affordable Unit at the LTO within 7 days of expiry of the Notice Period.

2.3.3 **CMHC Sale.**

In the event that the Affordable Unit is sold by the Approved Lender or CMHC after discharge of this Agreement from title to the Affordable Unit and such sale generates funds in excess of the balance owing under the Insured Mortgage and related costs, including charges, taxes, commissions and utilities regarding the Affordable Unit, such excess funds shall forthwith be paid to CRD, for its own use absolutely. This Section 2.3.3 shall bind the Owner, the Approved Lender, CMHC (where CMHC has a mortgage loan insurance policy in force for the Affordable Unit) and CRD both before and after discharge of this Agreement from title to the Affordable Unit.

2.4 **Procedure for Rental and Recovery of Rent Charges.**

2.4.1 **Rental Prohibited.**

2.4.1.1 All rentals of the Affordable Units are prohibited, except:

(a) In the case of hardship, as decided by the NPO in its sole discretion, and on making an application to the NPO in the form provided by the NPO, if any, an Affordable Unit may be rented at an Affordable Rate for a period no shorter than six months; or

(b) If a Qualified Buyer cannot be located, as decided by the NPO in its sole discretion, and on making an application to the NPO in the form provided by the NPO, if any, an Affordable Unit may be rented at an Affordable Rate for a period no shorter than six months.

2.4.1.2 The maximum term of any rental shall be two years, at which point the Affordable Unit must be listed for sale in accordance with section 2.2. Rental may continue at an Affordable Rate at the discretion of the NPO. If hardship continues or a Qualified Buyer cannot be located after this listing, additional sales listings may be required at any time at intervals decided by the NPO at its discretion.

2.4.1.3 Any tenancy shall be governed by an agreement under the *Residential Tenancy Act* (BC) which shall include the following provisions, as material terms to the tenancy agreement:

(a) permitting the Owner to terminate the tenancy agreement in accordance with the *Residential Tenancy Act* if the tenant uses or occupies, or allows use or occupation of, the Affordable Unit in breach of the use or occupancy restrictions contained in this Agreement;

(b) explicitly prohibiting the assignability, sub-letting, and use of the Affordable Unit for short term vacation rentals;

(c) explicitly specifying that only persons named in the tenancy agreement may occupy the Affordable Unit;

(d) providing that the Owner will have the right, at its option and subject to the

Residential Tenancy Act, to terminate the tenancy agreement should the tenant remain absent from the Affordable Unit for three consecutive months or longer, notwithstanding the timely payment of rent;

(e) prohibiting guests residing in the Affordable Unit for more than 30 days, whether or not consecutive, in any 12 month period without the prior written consent of the Owner; and

(f) prohibiting use of the Affordable Unit for non-residential rentals, assignments, sub- lets, licenses and uses, such as vacation rentals, including such services as AirBNB or Vacation Rental By Owner, short term licenses, or short-stay use of any kind, and business-only premises.

2.4.1.4 The Owner will terminate the tenancy if the tenant uses or occupies, or allows use or occupancy in breach of the use and occupancy restrictions in this Agreement.

2.4.2 Rent Charge and Acknowledgement.

2.4.2.1 The Owner acknowledges that the CRD requires affordable housing to ensure prosperity and economic growth for the residents of the Capital Region. The Owner acknowledges the purpose of the Affordable Unit is to provide affordable housing to residents of the Capital Region, and it is not to be used for a short term vacation rental or left as a vacant home. The Owner therefore agrees that for each day an Affordable Unit is occupied in breach of this Agreement, the Owner will pay to the CRD $150 for each day on which the breach has occurred and continues to occur, as liquidated damages and not as a penalty, due and payable at the offices of the CRD on the last day of the calendar month in which the breach occurred. The $150 per day amount will increase on January 1 of each year by the amount calculated by multiplying the amount per day payable on the previous January 1 by the percentage increase between that previous January 1 and the immediately preceding December 31 in the CCPI.

2.4.2.2 The Owner hereby grants to the CRD a rent charge under s. 219 of the *Land Title Act* (British Columbia), and at common law, securing payment by the Owner to the CRD of the amount payable by the Owner pursuant to section 2.4.2 of this Agreement. The Owner agrees that the CRD, at its option, may enforce payment of such outstanding amount in a court of competent jurisdiction as a contract debt, by an action for and order for sale, by proceedings for the appointment of a receiver, or in any other method available to the CRD in law or in equity.

SECTION 5.
INDEMNITY AND RELEASE

5.1 **Indemnity.** The Owner indemnifies the CRD and its officers, directors, employees and agents and their respective heirs, executors, administrators, personal representatives, successors and assigns from any claims which anyone has or may have against the CRD or which the CRD incurs as a result of any loss, damage, deprivation, enrichment or injury, including economic loss, arising out of or connected with the restrictions or requirements of this Agreement, the breach of any covenant in this Agreement, the granting of any approvals or advice or direction respecting the

sale of the Affordable Unit or use of the Affordable Unit given to the Owner by any of them or by the NPO.

5.2 **Release**. The Owner releases CRD and its officers, directors, employees and agents and their respective heirs, executors, administrators, personal representatives, successors and assigns absolutely and forever, from any claims the Owner may have against all or any of them for costs, expenses or damages the Owner may suffer, incur or be put to arising out of or in connection with this Agreement and from all claims arising out or connected with the restrictions or requirements of this Agreement, the breach of any covenant in this Agreement, the granting of any approvals or advice or direction respecting the sale of the Affordable Unit or use of the Affordable Unit given to the Owner by any of them or by the NPO.

SECTION 6.
GENERAL PROVISIONS

6.1 **Discharge of Covenant on Strata Lots not designated as Affordable Units**. The parties agree that this Agreement is intended to only apply to the one (1) strata lot to be designated by the Developer as the Affordable Unit upon the filing of the strata plan for the Strata Development and concurrently with filing of the strata plan for the Strata Development this Covenant, the Rent Charge and the Option to Purchase shall be discharged from title to all of the strata lots and the common property except for the one (1) Affordable Unit designated by the Developer, and this Agreement will only charge the Affordable Unit. The parties will execute all such documents as may be required to complete the foregoing discharges.

6.2 **Notices**. Unless otherwise specified, each notice to the Owner must be given in writing and delivered personally or by courier to the Owner at its address shown on title to the Affordable Unit as registered in the LTO from time to time. Unless otherwise specified, each notice to CRD must be given in writing and delivered personally or by courier to CRD, Attention: Manager Real Estate Services, at the address shown on the General Instrument - Part 1 or to such other address or addresses or person or persons as CRD may designate. Notices will be deemed to have been received when delivered.

6.3 **Fees**. Each of the Owner and CRD will pay its own legal fees.

6.4 **Enuring Effect**. This Agreement will enure to the benefit of and be binding upon the respective heirs, executors, administrators, successors and permitted assigns as the case may be of the Owner and CRD, provided that the Owner shall not be liable for any breach of the covenant contained in Section 2.1 except as such liability relates to the period of ownership of an Affordable Unit by the Owner.

6.5 **Registration**. This Agreement will be registered against title to the Lands initially and then shall be restricted to the titles to the Affordable Units upon filing of a strata plan of the Lands in the LTO subject only to Permitted Encumbrances.

6.6 **Discharge**. On expiry of the Term, the Owner may require that CRD execute and deliver to the Owner a release in registrable form of the Covenant and the Option.

6.7 **Amendment**. This Agreement may only be amended by written agreement of the parties.

6.8 **Counterparts**. This Agreement and any amendment, supplement, restatement or termination of

any provision of this Agreement may be executed and delivered in any number of counterparts, each of which, when executed and delivered is an original, but all of which taken together constitute one and the same instrument.

IN WITNESS WHEREOF the parties have duly executed this Agreement by signing the General Instrument - Part 1.

CONSENT AND PRIORITY AGREEMENT

VANCOUVER CITY SAVINGS CREDIT UNION, having a Mortgage and Assignment of Rents registered in the Land Title Office at Victoria in the Province of British Columbia, under charge number CA8509110 and CA8509111, respectively, in consideration of the sum of ONE DOLLAR and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby approves of and consents to the foregoing grant of Covenant, Housing Agreement and Rent Charge and to their registration in the Land Title Office aforesaid with priority over the registration of the said Mortgage and Assignment of Rents.

AS EVIDENCE of its agreement with the Transferee to be bound by this Covenant and Priority Agreement, as a contract and as a deed executed and delivered under seal, VANCOUVER CITY SAVINGS CREDIT UNION has executed and delivered this agreement by executing Part I of the Land Title Act Form C to which this agreement is attached and which forms part of this agreement.

SCHEDULE "A"
PERMITTED ENCUMBRANCES

Legal Notations:

NONE

Charges, Liens and Interests:

NONE

SCHEDULE "B"
QUALIFIED BUYER CRITERIA

1. **Sale of an Affordable Unit by the Developer:**

In the case of the sale of an Affordable Unit by the Developer, a Qualified Buyer means:

(a) a first time home buyer, being a buyer who has not owned a principal residence for at least 5 years immediately prior to the date of purchase of an Affordable Unit;

(b) a resident of the Capital Regional District from time to time, for at least one year immediately prior to the date of purchase of an Affordable Unit;

(c) A person who provides Proof of Income that their annual gross household Income is, for at least one year immediately prior to the date of purchase of an Affordable Unit, within BC Housing Low and Moderate Income Limits, as determined by size of unit, and set by BC Housing from time to time;

(d) a person who intends to immediately use and occupy the Affordable Unit as their principal residence and not rent or lease the Affordable Unit to any other person, nor leave the unit vacant, use it solely for a business or profession, or use it as a short-term vacation rental property of any kind

it being understood and agreed that preferential consideration may be given to a person who meets all of the above criteria and all or some of the following criteria:

(a) a person who does not own a vehicle; and

(b) a person who satisfies such other criteria as may be applied by the NPO and CRD from time to time.

2. **Sale of an Affordable Unit by an Owner other than the Developer:**

In the case of the sale of an Affordable Unit by an Owner other than the Developer, a Qualified Buyer means:

(a) a first time home buyer, being a buyer who has not owned a principal residence for at least 5 years immediately prior to the date of purchase of an Affordable Unit;

(b) a resident of the Capital Regional District from time to time, for at least one year immediately prior to the date of purchase of an Affordable Unit;

(c) a person who provides Proof of Income that annual gross Income is between the range set from time-to-time by the NPO in its sole discretion (which shall not be appealed) for at least one year immediately prior to the date of purchase of an Affordable Unit, it being understood and agreed that the NPO may, from time to time, grant an exemption from or vary such requirement if, in the opinion of the NPO and having regard to prevailing market conditions, such exemption or variation is consistent with the continued use and availability of the Affordable Unit as affordable housing; and

(d) a person who intends to immediately use and occupy the Affordable Unit as their principal residence and not rent or lease the Affordable Unit to any other person, nor leave the unit vacant, use it solely for a business or profession, or use it as a short-term vacation rental property of any kind.

For the purpose of Schedule "B":

"Income" means the total income before income tax from all sources of all persons intending to live in an Affordable Unit including, without limitation:

(a) all income from earnings, including commissions and tips;

(b) all income from all public and private pension plans, old age security and guaranteed income supplement;

(c) all income received under the *Employment and Assistance Act* and the *Employment and Assistance for Persons with Disabilities Act*;

(d) disabled veteran's allowance;

(e) alimony;

(f) child support;

(g) workers' compensation benefits;

(h) employment insurance; and

(i) Income from Assets,

but excluding the following:

(a) child tax benefit;

(b) capital gains, such as insurance settlement, inheritances, disability awards and sale of effects in the year they are received;

(c) the earnings of a person aged 18 and under;

(d) student loans, student loan equalization payments and student grants but excluding non-repayable training allowances, research fellowships or similar grants;

(e) shelter aid for elderly renters (SAFER) or rental assistance program (RAP) payments received prior to purchasing an Affordable Unit;

(f) GST rebates;

(g) taxable benefits received through employment;

(h) government provided daycare allowance; and

(i) payments for foster children, or child in home of relative (CIHR) income under the *Employment and Assistance Act*.

"Income from Assets" means computing income from assets of all persons intending to live in an Affordable Unit at a percentage per annum as determined by CRD, excluding the first $62,051.00 in assets of such persons, based on November 1, 2018 dollars, indexed over time by reference to changes from time to time in the consumer price index (all items, British Columbia) or if such consumer price index is no longer published, such substitute and comparable index as the NPO may designate.

"Proof of Income" means a tax return filed with Canada Revenue Agency or a notice of assessment from Canada Revenue Agency under the *Income Tax Act*.

SCHEDULE "C"
MAXIMUM PRICE, FAIR MARKET VALUE

The Maximum Price shall be determined as follows:

1. Within 7 days after the Owner delivers the notice, as required by section 2.2.1, the Owner will select an Appraiser to be retained by the Owner to undertake an appraisal (the "Owner Appraisal") of the Fair Market Value of the Affordable Unit. The Owner will deliver a copy of the Owner Appraisal to the NPO within 7 days after the Owner receives the Owner Appraisal.

2. If the Owner and the NPO agree within 7 days after the Owner Appraisal is delivered to the NPO that the Fair Market Value of the Affordable Unit is as stated in the Owner Appraisal, the Fair Market Value stated in the Owner Appraisal, less 20%, will be the maximum price at which the Owner will be permitted to sell the Affordable Unit during a period of 6 months commencing on the effective date of the Owner Appraisal.

3. If the Owner and the NPO do not agree within 7 days (the "Appraisal Review Period") after the Owner Appraisal is delivered to the NPO that the Fair Market Value of the Affordable Unit is as stated in the Owner Appraisal, the NPO will retain its own Appraiser to undertake an appraisal (the "NPO Appraisal") of the Fair Market Value of the Affordable Unit in which case the average of the Fair Market Value stated in the Owner Appraisal and the NPO Appraisal, less 20%, will be the maximum price at which the Owner will be permitted to sell the Affordable Unit during a period of 6 months commencing on the effective date of the NPO Appraisal.

4. The NPO will deliver a copy of the NPO Appraisal to the Owner within 7 days after the NPO receives the NPO Appraisal.

5. If the NPO Appraisal is not delivered to the Owner within 30 days after the end of the Appraisal Review Period, the Fair Market Value stated in the Owner Appraisal, less 20%, will be the maximum price at which the Owner will be permitted to sell the Affordable Unit during a period of 6 months commencing on the effective date of the Owner Appraisal.

SCHEDULE "D"
RIGHT OF FIRST REFUSAL AND OPTION TO PURCHASE

WHEREAS:

A. The Owner is the registered owner in fee-simple of those lands and premises located within the Capital Regional District, in the Province of British Columbia, more particularly described as:

PID: 007-912-277
LOT 9, BLOCK 5, SECTION 26, VICTORIA DISTRICT, PLAN 1107
(the "Lands")

A. The Owner has entered into a Housing Agreement with the Capital Regional District (the "CRD") under section 483 of the *Local Government Act* and has granted to the CRD a Covenant under section 219 of the *Land Title Act* relating to certain restrictions on the use of the Land (collectively, the "Housing Agreement");

B. Pursuant to the terms of the Housing Agreement, the Owner has agreed to use and occupy the Lands for the purposes of the Affordable Units on the Lands; and

C. In order to ensure that the Affordable Unit is occupied and disposed of in accordance with the Housing Agreement, the Owner agrees to grant to the CRD a right of first refusal to purchase and an option to purchase the Affordable Unit on the terms and conditions set out in this Agreement.

THIS AGREEMENT is evidence that in consideration of the mutual promises contained in it and in consideration of the payment of $2.00 by the CRD to the Owner, the receipt of sufficiency of which is hereby acknowledged by the Owner, the parties agree as follows:

PART I – DEFINITIONS

1. In this Agreement the following words have the following meanings:

   a. Affordable Unit" means a Dwelling Unit designated as an affordable unit in accordance with the Housing Agreement, to be used, occupied and Disposed of in accordance with the Housing Agreement.

   b. "Agreement" means this Agreement together with the General Instrument.

   c. "Approved Lender" means an "approved lender" (as defined in the *National Housing Act*, R.S.C. 1985, c. N-11) which holds an Insured Mortgage of an Affordable Unit.

   d. "Bona Fide Offer" means an offer to purchase the Owner's Interest in the Affordable Unit:

      i. in writing;

      ii. signed by an Outside Offeror;

      iii. in a form legally enforceable against the Outside Offeror and subject to no conditions except for the CRD's Subjects;

      iv. for a purchase price that is at or below the Maximum Price;

v. providing that if the CRD does not exercise its right of first refusal as set forth in this Agreement, the Outside Offeror will grant to the CRD a right of first refusal and option to purchase the Lands upon the same terms and conditions as are set forth in this Agreement;

vi. providing that the Outside Offeror will not assign or transfer the contract for the purchase of the Affordable Unit; and

vii. confirming that the Outsider Offeror has read and understood the terms of this Agreement, the Housing Agreement and all other charges in favour of the CRD that are registered in the LTO against the Lands and that the Outside Offeror agrees to be bound by the owner's obligations pursuant to such charges.

e. "Business Day" means Monday to Friday inclusive except for those excluded days declared by lawful authority as holidays, excluding any date that the LTO is not open for business.

f. "Closing Date" means the 30th day after the Notice Date, or the first Business Day thereafter that the LTO is open for business to the public.

g. "CRD's Subjects" mean the following clauses:

The obligation of the seller to complete the transaction contemplated herein is subject to the following (the "Seller's Conditions"):

i. the seller notifying the buyer in writing, not later than 15 business days that the Capital Regional District has approved the terms of the sale of the Land to the buyer and that the Capital Regional District has decided not to exercise its right of first refusal and option to purchase the Land with respect to this transaction only; and

ii. the Capital Regional District determining and notifying the Owner in writing no later than 15 business days that the Owner has complied with the requirements of the Housing Agreement regarding the sale, and that Capital Regional District is satisfied that the buyer is a Qualified Buyer as defined in the Housing Agreement.

The Seller's Conditions are for the sole benefit of the seller and may be satisfied by the seller by notice in writing to the buyer. If the Seller's Conditions are not satisfied on or before the date specified for their removal, this agreement will automatically be terminated, the deposit will be returned to the buyer, and neither party will have any further obligation to the other under this agreement.

h. "Dispose" means to transfer by any method, and includes assign, give, sell, grant, charge, convey, bequeath, devise, lease, rent or sublet, divest, release, and agree to do any of those things.

i. "Dwelling Units" means all residential dwelling units located or to be located on the Land whether those dwelling units are lots, strata lots or parcels, or parts or portions thereof, into which ownership or right of possession or occupation of the Land may be Subdivided.

j. "Environmental Law" means any applicable federal, provincial or municipal laws pertaining to the presence, handling, release or removal of Hazardous Substances.

k. "General Instrument" means the Form C under the Land Title (Transfer Forms) Regulation, to which this Agreement is attached.

l. "Hazardous Substances" collectively means contaminants, pollutants or other substances which are hazardous or dangerous to the health of humans, animals or plants or to the environment and includes substances defined as hazardous substances or special waste under any law, regulation or order of a Statutory Authority.

m. "Insured Mortgage" means a mortgage insured pursuant to the *National Housing Act*, R.S.C. 1985, c. N-11.

n. "Interest" means the property interest of the Owner in the Affordable Unit.

o. "LTO" means the Victoria Land Title Office or its successor.

p. "Maximum Price" has the meaning given to it in the Housing Agreement.

q. "Notice" means any written notice which CRD may deliver to the Owner under Section 8.

r. "Notice Date" means the day on which the Owner is deemed by Section 41 to have received the Notice.

s. "Outside Offeror" means a purchaser or prospective purchaser of the Affordable Unit who deals at arm's length with the vendor of the Affordable Unit.

t. "Owner" means the Transferor described in the General Instrument and any subsequent owner of the Land or of any part into which the Land is Subdivided, and includes any person who is a registered owner in fee simple of an Affordable Unit from time to time.

u. "Option Purchase Price" has the meaning given to it at section 12.

v. "Personal Property" means all lighting fixtures, appliances, equipment, cabinetry, affixed carpeting, drapes and blinds located within an Affordable Unit (except to the extent otherwise agreed in writing by CRD) but does not include an Owner's personal effects.

w. "Permitted Encumbrances" means those charges or encumbrances stated in Schedule "A" and any other encumbrances approved in writing by CRD but shall not include any mortgage or other financial encumbrance and shall not include this Agreement.

x. "Person" means any individual, society, corporation, partnership, trustee, administrator, legal representative, Statutory Authority or other legal entity.

y. "Project" means the Strata Development of which the Affordable Units will be a part and comprises all of the Lands referred to in Item 2 of the General Instrument - Part 1.

z. "Property" means the Affordable Unit and all Personal Property within the Affordable Unit.

aa. "Qualified Buyer" means an individual who meets the criteria stated in Schedule "B" of the Housing Agreement registered against title to the Land.

bb. "Subdivide" means to divide, apportion, consolidate or subdivide the Land, or the ownership or right to possession or occupation of the Land into two or more lots, strata lots, parcels, parts, portions or shares, whether by plan, descriptive words or otherwise, under the *Land Title Act*, the *Strata Property Act*, or otherwise, and includes the creation, conversion, organization or development of "cooperative units" or "shared interests in land" as defined in the *Real Estate Act*.

cc. "Transfer" means an instrument in a statutorily prescribed form by which the Owner transfers title to the Affordable Unit to CRD.

dd. "Transaction" means transfer of an Affordable Unit from the Owner to CRD.

2. **Schedules**. The following Schedules are attached to and form integral parts of this Agreement:

Schedule "A" Permitted Encumbrances

PART II – GENERAL

3. During the Term, the Owner covenants and agrees that the Owner will not Dispose of its Interest in any Affordable Unit unless such Interest is Disposed of in accordance with this Agreement and the Housing Agreement.

4. The Owner will not Dispose of its Interest in the Affordable Unit other than to the CRD or to an Outside Offeror pursuant to a Bona Fide Offer.

5. Provided that the Owner is not in breach of any of its obligations under this Agreement or under the Housing Agreement, at the request of the Owner and the Owner's sole expense, the CRD will deliver to the Owner discharges of this Agreement in registrable form for each Dwelling Unit that:

a. is a separate legal parcel; and

b. is not an Affordable Unit.

PART III – RIGHT OF FIRST REFUSAL

6. The Owner covenants and agrees as follows:

a. the Owner will not sell or offer to sell the Affordable Unit for any consideration not consisting entirely of lawful money of Canada;

b. if the Owner receives an offer to purchase the Affordable Unit (the "Offer") which the Owner is willing to accept, then the Owner will offer to sell the Affordable Unit to the CRD on the terms that are set out in Part 5 of this Agreement, by giving to the CRD a notice in writing (the "RFR Notice") attached to a copy of the Offer. The CRD will have the exclusive right for ten (10) Business Days (the "Election Period") from the date on which the CRD receives from the Owner the RFR Notice and a copy of the Offer within which to purchase the Affordable Unit on the terms set out in Part V of this Agreement. The Owner agrees

that the CRD's Election Period to purchase the Affordable Unit will not start to run until the Owner gives to the CRD notice of the Offer;

c. If the CRD wishes to exercise this right of first refusal, the CRD will give the Owner written notice of such exercise on or before the end of the Election Period.

d. If the CRD does not exercise this right of first refusal with respect to a specific Offer, the CRD's rights under this right of first refusal with respect to the particular Offer will be waived, but only if the Officer is a Bona Fide Offer and only if the terms of sale between the Outside Offeror and the Owner are in strict compliance with the terms stated in the Offer, and if the Owner complies with the following requirements:

    i. the Owner delivers to the CRD, within 10 Business Days after the delivery of the RFR Notice written proof, satisfactory to the CRD, in its sole discretion and including but not limited to the information required under Schedule B of the Housing Agreement, that the purchaser is a Qualified Buyer, and that the person agrees to be bound by all the agreements in favour of the CRD which affect the Affordable Unit, including but not limited to the Housing Agreement;

    ii. the Owner does not remove the second part of the CRD's Subject until such time as the CRD informs the Owner that it is satisfied with the information provided pursuant to sub-section 5.d.i herein;

    iii. at least 5 Business Days before completion of the sale pursuant to the Bona Fide Offer the Owner delivers to the CRD the following:

        (1) written proof, satisfactory to the CRD, in its sole discretion, that the purchase price payable under the Bona Fide Offer is the Maximum Price;

        (2) a signed Form C granting to the CRD an option to purchase and a right of first refusal to purchase the Affordable Unit (the "New Form C") on substantially the same terms as set out in this Agreement, with such amendments as the CRD may reasonably require;

        (3) a discharge of this Agreement (the "Discharge") for execution by the CRD;

        (4) undertakings from the solicitor or notary for the Outside Offeror (the "Legal Representative") on terms satisfactory to the CRD, including that:

            (a) the Legal Representative will only register the Discharge if it is done concurrently with the registration of the New Form C;

            (b) the Legal Representative will ensure that the New Form C is registered against the Affordable Unit in priority to all mortgages and other financial liens, charges and encumbrances, except for any charges in favour of the CRD;

            (c) forthwith after registration of the New Form C, provide to the CRD copies of the Discharge and the New Form C with registration particulars endorsed thereon, and a copy of the State of Title

Certificate for the Land confirming registration of the New Form C; and

(5) a copy of the vendor's statement of adjustments for the Affordable Unit certified to be true by the Legal Representative; and

iv. upon request by the CRD, the Owner delivers to the CRD such further evidence as the CRD may reasonably require to confirm the purchase price of the Affordable Unit, and to confirm that the Outside Offeror has granted to the CRD an option to purchase and a right of first refusal to purchase the Affordable Unit.

PART IV – GRANT OF OPTION

7. The Owner hereby grants CRD an exclusive and irrevocable option to purchase the Property at the Option Purchase Price in accordance with Parts IV and V of this Agreement.

8. CRD may exercise the Option only if the Owner:

a. defaults in its obligations under the Housing Agreement; or

b. acquired the Affordable Unit from a previous Owner for a price which was, as of the date of closing of that transaction, greater than the Maximum Price or if the Owner was not, as of that date, a Qualified Buyer;

c. delivers the RFR Notice; or

d. defaults in its obligations under any mortgage of the Affordable Unit.

9. CRD may exercise the Option by delivering notice of exercise of the Option to the Owner (the "Notice").

10. From and after the Notice Date, this Agreement and the Notice will together constitute a binding and enforceable contract between the Owner and CRD for the purchase and sale of the Affordable Unit in accordance with the terms and conditions of Part IV and V.

PART V – PURCHASE AND SALE

11. **Purchase and Sale** Subject to the terms and conditions of this Part V and relying on the warranties and representations herein set out, the Owner agrees to sell and CRD agrees to purchase the Property on the Closing Date for the Option Purchase Price, and the Owner agrees that, at the request of CRD, it will transfer registered title to the Property to CRD or such other Person as CRD may designate.

12. **Option Purchase Price** Subject to adjustments as provided in this Agreement, the option to purchase price (the "Option Purchase Price") under the Option to Purchase shall be:

a. 95% of the Maximum Price; or

b. if the Owner has granted a bona fide arm's length mortgage or mortgages of the Affordable Unit to an Approved Lender which, as at the Closing Date, secures in aggregate an

amount which exceeds 95% of the Maximum Price, the amount owing under and required to discharge the mortgage or mortgages to the Approved Lender as at the Closing Date.

13. **Repair and Maintenance**. From and after the Notice Date to the Closing Date, the Owner will take good care of the Property, will carry out all necessary repairs, maintenance, and replacements, will take reasonable care to protect and safeguard the Property and will in all other respects deal with the Property so that the warranties and representations of the Owner set out in this Agreement remain true and correct.

14. **Insurance** From and after the Notice Date to the Closing Date, the Owner will ensure that all policies of insurance with respect to the Property remain in full force and effect.

15. **Representations** The Owner hereby represents and warrants to, and covenants and agrees with the CRD, to transfer the Property to the CRD on the condition that as at the Closing Date that:

i. the Owner has not used the Affordable Unit or permitted any use of the Affordable Unit to store, manufacture, dispose of, emit, spill, leak, generate, transport, produce, process, release, discharge, landfill, treat or remediate any Hazardous Substances, including anything the storage, manufacture, disposal, emission, discharge, treatment, generation, use, transport, remediation or release into the environment of which is now or at any time after the execution of this Agreement is prohibited, controlled, regulated or licensed under Environmental Laws;

ii. the Owner has not caused or permitted the storage, manufacture, disposal, emission, spilling, leakage, treatment, generation, transportation, production, processing, release, discharge, landfilling, treatment or remediation of any Hazardous Substances in, on, under or from the Affordable Unit;

iii. the Owner has at all times used the Affordable Unit in compliance with all Environmental Laws;

iv. the Owner will indemnify and save harmless the Regional District, and its elected and appointed officials, officers, employees and agents, from and against any and all actions, causes of action, liabilities, demands, losses, damages, costs (including remediation costs and costs of compliance with any law, and legal fees and disbursements), expenses, fines and penalties, suffered or incurred by the CRD by reason of a breach of any representation or warranty, covenant or agreement of the Owner set forth in this Agreement. This obligation will survive the termination of this Agreement.

16. **Risk** The Property will be at the risk of the Owner up to the time the Transfer is submitted for registration at the LTO on the Closing Date and will be at the risk of CRD after the time the Transfer is submitted for registration at the LTO on the Closing Date.

17. **Damage** If, prior to the time the Transfer is submitted for registration at the LTO, any damage occurs to the Property or any of the assets comprising the Property, CRD, by notice to the Owner, may elect to postpone the Closing Date for a period of not more than 30 days and may also elect:

a. not to acquire the Property, in which case neither party will have any further obligation to the other under this Part V pertaining to that particular Notice; or

b. that the Owner assign to CRD the Owner's right to receive any and all insurance proceeds payable with respect to the damage, subject to any bona fide loss payee designation, in which case the Owner will execute and deliver to CRD an assignment satisfactory to CRD.

18. **Construction Warranties** From and after the Closing Date, the Owner will assign to CRD all the Owner's rights under all warranties, guarantees or contractual obligations against any contractor or supplier who was engaged in the construction, renovation, or repair of all or any part of the Property or any improvement to the Property. CRD's acceptance of this assignment will not represent a waiver by CRD of the Owner's covenants, agreements, representations and warranties set out in this Agreement.

19. **Owner's Covenants** The Owner will:

a. take all proper actions and proceedings on its part to enable the Owner to transfer a good and marketable title of the Property to CRD or such Person as CRD may designate, free and clear of all encumbrances other than Permitted Encumbrances;

b. deliver vacant possession of the Property to CRD or such Person as CRD may designate on the Closing Date, subject to prior receipt of the Option Purchase Price by the Owner;

c. not, from and after the Notice Date to the Closing Date, sell, transfer, dispose of or remove from the Affordable Unit any Personal Property; and

d. both before and after the Closing Date do such other things as CRD may reasonably require for transferring to and vesting in CRD or such Person as CRD may designate title to the Affordable Unit as contemplated by this Part V.

20. **Documents** CRD will prepare the documents necessary to complete the Transaction which will be in a form and substance reasonably satisfactory to CRD and its lawyers.

21. **Adjustments and Credits** The Owner and CRD will adjust, as at the Closing Date, all usual adjustments for a property similar to the Property including taxes, utility rates and any moneys owing to the strata corporation formed in respect of the Project.

22. **Closing** The Owner and CRD will complete the Transaction on the Closing Date at the offices of CRD or its lawyers.

23. **Owner's Closing Documents** At the closing, the Owner will deliver to CRD the following duly executed documents:

a. the Transfer;

b. a vendor's statement of adjustments;

c. if required, a bill of sale for the Personal Property and all other deeds, transfers, assignments, resolutions, consents, estoppels and other certificates and assurances as CRD may reasonably require;

d. a statutory declaration of the Owner that the Owner is a resident of Canada within the meaning of the Income Tax Act (Canada);

e. a certificate in confirmation that the sale of the Affordable Unit to CRD is exempt from taxes under the *Excise Tax Act* (the "GST") or, alternately, a certified cheque or bank draft payable to CRD in an amount equal to the GST payable by CRD on the Option Purchase Price; and

f. unless waived in writing by CRD, a certified cheque or bank draft payable to CRD in the amount, if any, by which the moneys owing under and required to discharge any mortgage or mortgages of the Affordable Unit exceed the Option Purchase Price as adjusted under Section 21.

24. **CRD's Closing Documents** At the closing, CRD will deliver to the Owner:

a. a purchaser's statement of adjustments; and

b. a cheque for the Option Purchase Price, as adjusted under Section 21.

25. **Tabling** Except for the Transfer, all documents and cheques will be tabled at the closing. CRD will cause its lawyers, on the Closing Date, to conduct a pre-registration index search of the Affordable Unit at the LTO. If that search indicates that no liens, charges or encumbrances have been registered or filed in respect of the Affordable Unit except for Permitted Encumbrances and encumbrances which the lawyers for the Owner have undertaken to discharge, the lawyers for CRD or their agents shall submit the Transfer for registration and then conduct a post-filing registration index search. If that search indicates that no liens, charges or encumbrances have been registered or filed in respect of the Affordable Unit since the pre-filing registration index search, all documents and payments will be released to each of the Owner and CRD according to the entitlement of each of them.

26. **Reimbursement** If CRD waives payment on the Closing Date of the amount referred to in Section 23.f., the Owner shall pay such amount to CRD, on demand, with interest thereon at the rate of eighteen percent (18%) per annum, compounded monthly, from the Closing Date to the date of payment.

27. **Survival** All the representations, warranties, covenants and agreements of the Owner and CRD contained in this Agreement will survive the Closing Date, registration of documents, and the payment of the Option Purchase Price.

PART VI – INTERPRETATION

28. **Time** Time will be of the essence of this Agreement. If any party expressly or impliedly waives this requirement, that party may reinstate it by delivering notice to the other party. If a time is specified in this Agreement for observing or performing any obligation, such time will be local time in Victoria, British Columbia.

29. **Governing Law** This Agreement will be governed by and construed and enforced in accordance with the laws of British Columbia and the laws of Canada applicable in British Columbia.

30. **References** In this Agreement, words importing the singular include the plural and vice versa, and words importing gender include all genders.

31. **Construction** The division of this Agreement into sections and the use of headings are for convenience of reference only and are not intended to govern, limit or aid in the interpretation of this Agreement. The wording of this Agreement will be construed simply, according to its fair meaning, and not strictly for or against any party.

32. **Validity of Provisions** If a Court of competent jurisdiction finds that any provision contained in this Agreement is invalid, illegal or unenforceable, such invalidity, illegality or unenforceability will not affect any other provision of this Agreement which will be construed as if such invalid, illegal or unenforceable provision had never existed and such other provisions will be enforceable to the fullest extent permitted at law.

33. **No Waiver** Failure by either party to exercise any of its rights, powers or remedies hereunder or its delay to do so, will not be interpreted as a waiver of those rights, powers or remedies except in the case of a written waiver. No waiver of a particular right will be deemed to be a waiver of that right in any other instance or a waiver of any other right.

34. **Statute**. Any reference to a statute and to any regulations under that statute means the statute and regulations as amended or replaced from time to time.

35. **Remedies** Any party to this Agreement, in addition to its rights under this Agreement or at law, will be entitled to all equitable remedies including specific performance, injunction and/or declaratory relief, to enforce its rights under this Agreement. No reference to or exercise of any specific right or remedy under this Agreement or at law or in equity by any party will prejudice or preclude that party from exercising any other such right or remedy. No such right or remedy will be exclusive or dependent upon any other such right or remedy, but any party, from time to time, may exercise any one or more of such rights or remedies independently, successively or in combination. The Owner acknowledges that specific performance, injunctive relief (mandatory or otherwise) or other equitable relief may be the only adequate remedy for a default by the Owner under this Agreement.

PART VII – MISCELLANEOUS

36. **CRD Not Obligated to Exercise Right of First Refusal or Option** The Owner acknowledges and agrees that the CRD is under no obligation to exercise the rights granted under this Agreement.

37. **Duration of Option and Right of First Refusal** The option to purchase and right of first refusal hereby granted and the right of first refusal granted by this Agreement are effective until the date that is 80 years less a day after the date on which Form C referring to this Agreement is deposited for registration in the LTO, provided that if the perpetuity period for the Agreement as specified in the *Perpetuity Act* is increased or decreased in length than the term of this Agreement will be increased or decreased accordingly.

38. **Powers Unaffected** This Agreement does not:

    a. affect or limit the discretion, rights, duties or powers of the CRD under any enactment or at common law, including in relation to the use or subdivision of the Land;

    b. impose on the CRD any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement;

c. affect or limit any enactment relating to the use or subdivision of the Land; or

d. relieve the Owner from complying with any enactment, including in relation to the use or subdivision of the Land.

39. **Agreement for Benefit of CRD Only** The Owner and the CRD agree that;

a. this agreement is entered into only for the benefit of the CRD;

b. this agreement is not intended to protect the interests of the Owner, any tenant, or any future owner, lessee, occupier or user of the Property, the Land or the building or any portion thereof, including any Affordable Unit;

c. the CRD may at any time execute a release and discharge of this agreement, without liability to anyone for doing so, and without obtaining the consent of the Owner.

40. **No Public Law Duty** Where the CRD is required or permitted by this Agreement to form an opinion, exercise a discretion, express satisfaction, make a determination or give its consent, the Owner agrees that the CRD is under no public law duty of fairness or natural justice in that regard and agrees that the CRD may do any of those things in the same manner as if it were a private party and not a public body.

41. **Notices** Unless otherwise specified, each notice to the Owner must be given in writing and delivered personally or by courier to the Owner at its address shown on title to the Affordable Unit as registered in the LTO from time to time. Unless otherwise specified, each notice to CRD must be given in writing and delivered personally or by courier to CRD, Attention: Manager Real Estate Services, at the address shown on the General Instrument - Part 1 or to such other address or addresses or person or persons as CRD may designate. Notices will be deemed to have been received when delivered.

42. **Fees** Each of the Owner and CRD will pay its own legal fees.

43. **Costs** Unless otherwise specified in this Agreement, the Owner will comply with all the requirements of this Agreement at its own cost and expense and will pay to the CRD, on request, all reasonable costs or expenses it incurs in connection with this Agreement.

44. **Enuring Effect** This Agreement will enure to the benefit of and be binding upon the respective heirs, executors, administrators, successors and permitted assigns as the case may be of the Owner and CRD.

45. **Further Assurance** Upon request by the CRD, the Owner will forthwith do such acts and execute such documents as may be reasonably necessary in the opinion of the CRD to give effect to this Agreement.

46. **Registration** This Agreement will be registered against title to the Lands initially and then shall be restricted to the titles to the Affordable Units upon filing of a strata plan of the Lands in the LTO subject only to Permitted Encumbrances.

47. **Discharge** On expiry of the Term, the Owner may require that CRD execute and deliver to the Owner a release in registrable form of the Covenant and the Option.

48. **Amendment** This Agreement may only be amended by written agreement of the parties.

49. **Counterparts** This Agreement and any amendment, supplement, restatement or termination of any provision of this Agreement may be executed and delivered in any number of counterparts, each of which, when executed and delivered is an original, but all of which taken together constitute one and the same instrument.

IN WITNESS WHEREOF the parties have duly executed this Agreement by signing the General Instrument - Part 1

SCHEDULE "A"
PERMITTED ENCUMBRANCES

Legal Notations:

HOUSING AGREEMENT in favour of the Capital Regional District
HOUSING AGREEMENT in favour of the District of Saanich

Charges, Liens and Interests:

S.219 COVENANT in favour of the Capital Regional District
RENT CHARGE in favour of the Capital Regional District
S.219 COVENANT in favour of the District of Saanich

bc Land Title & Survey

Land Title Act

Charge

General Instrument – Part 1

1. Application

Robert James Maguire
1727 Jefferson Avenue
Victoria BC V8N 2B3
250-370-0300

File 127/20
1267767 B.C. Ltd. - 2859 Richmond Road
Option to Purchase, Right of First Refusal

2. Description of Land

PID/Plan Number	Legal Description
007-912-277	**LOT 9, BLOCK 5, SECTION 26, VICTORIA DISTRICT, PLAN 1107**

3. Nature of Interest

Type	Number	Additional Information
RIGHT OF FIRST REFUSAL		
PRIORITY AGREEMENT		**granting Right of First Refusal priority over Mortgage CA8509110**
PRIORITY AGREEMENT		**granting Right of First Refusal priority over Assignment of Rents CA8509111**
OPTION TO PURCHASE		
PRIORITY AGREEMENT		**granting Option to Purchase priority over Mortgage CA8509110**
PRIORITY AGREEMENT		**granting Option to Purchase priority over Assignment of Rents CA8509111**

4. Terms

Part 2 of this instrument consists of:

(b) Express Charge Terms Annexed as Part 2

5. Transferor(s)

1267767 B.C. LTD., NO.BC1267767

VANCOUVER CITY SAVINGS CREDIT UNION, NO.FI 97

6. Transferee(s)

CAPITAL REGIONAL DISTRICT
625 FISGARD STREET
VICTORIA BC V8W 1R7

7. Additional or Modified Terms

8. Execution(s)

This instrument creates, assigns, modifies, enlarges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
Robert James Maguire **Barrister & Solicitor** 1727 Jefferson Avenue Victoria BC V8N 2B3	YYYY-MM-DD 2023 01 21	**1267767 B.C. LTD.** By their Authorized Signatory **Ryan Thomas Jabs**

Marianne Phyllis Pilon
A Commissioner for Taking
Affidavits for British Columbia
Maguire & Company
1727 Jefferson Avenue
Victoria, BC V8N 2B3
Phone: 250-370-0300
Expiry Date: February 28, 2025

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
Moushume Akter A Commissioner for Taking Affidavits for British Columbia 183 Terminal Avenue Vancouver, B.C. V6A 4G2 Phone: 778-877-6211 Expiry Date: January 31, 2026	YYYY-MM-DD 2023-02-17	**Vancouver City Savings Credit Union** By their Authorized Signatory **Print Name** **Ellie Karkari** **Community Business** Lending Coordinator

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
	YYYY-MM-DD	**CAPITAL REGIONAL DISTRICT** By their Authorized Signatory **Print Name**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Electronic Signature

Your electronic signature is a representation that you are a designate authorized to certify this document under section 168.4 of the *Land Title Act*, RSBC 1996 c.250, that you certify this document under section 168.41(4) of the act, and that an execution copy, or a true copy of that execution copy, is in your possession.

TERMS OF INSTRUMENT - PART 2

RIGHT OF FIRST REFUSAL AND OPTION TO PURCHASE

WHEREAS:

A. The Owner is the registered owner in fee-simple of those lands and premises located within the Capital Regional District, in the Province of British Columbia, more particularly described as:

PID: 007-912-277

LOT 9, BLOCK 5, SECTION 26, VICTORIA DISTRICT, PLAN 1107
(the "Lands")

B. The Owner has entered into a Housing Agreement with the Capital Regional District (the "CRD") under section 483 of the *Local Government Act* and has granted to the CRD a Covenant under section 219 of the *Land Title Act* relating to certain restrictions on the use of the Land (collectively, the "Housing Agreement");

C. Pursuant to the terms of the Housing Agreement, the Owner has agreed to use and occupy the Lands for the purposes of the Affordable Units on the Lands; and

D. In order to ensure that the Affordable Unit is occupied and disposed of in accordance with the Housing Agreement, the Owner agrees to grant to the CRD a right of first refusal to purchase and an option to purchase the Affordable Unit on the terms and conditions set out in this Agreement.

THIS AGREEMENT is evidence that in consideration of the mutual promises contained in it and in consideration of the payment of $2.00 by the CRD to the Owner, the receipt of sufficiency of which is hereby acknowledged by the Owner, the parties agree as follows:

PART I – DEFINITIONS

1. In this Agreement the following words have the following meanings:

   a. Affordable Unit" means a Dwelling Unit designated as an affordable unit in accordance with the Housing Agreement, to be used, occupied and Disposed of in accordance with the Housing Agreement.

   b. "Agreement" means this Agreement together with the General Instrument.

   c. "Approved Lender" means an "approved lender" (as defined in the *National Housing Act*, R.S.C. 1985, c. N-11) which holds an Insured Mortgage of an Affordable Unit.

   d. "Bona Fide Offer" means an offer to purchase the Owner's Interest in the Affordable Unit:

      i. in writing;

      ii. signed by an Outside Offeror;

      iii. in a form legally enforceable against the Outside Offeror and subject to no conditions except for the CRD's Subjects;

      iv. for a purchase price that is at or below the Maximum Price;

v. providing that if the CRD does not exercise its right of first refusal as set forth in this Agreement, the Outside Offeror will grant to the CRD a right of first refusal and option to purchase the Lands upon the same terms and conditions as are set forth in this Agreement;

vi. providing that the Outside Offeror will not assign or transfer the contract for the purchase of the Affordable Unit; and

vii. confirming that the Outsider Offeror has read and understood the terms of this Agreement, the Housing Agreement and all other charges in favour of the CRD that are registered in the LTO against the Lands and that the Outside Offeror agrees to be bound by the owner's obligations pursuant to such charges.

e. "Business Day" means Monday to Friday inclusive except for those excluded days declared by lawful authority as holidays, excluding any date that the LTO is not open for business.

f. "Closing Date" means the 30th day after the Notice Date, or the first Business Day thereafter that the LTO is open for business to the public.

g. "CRD's Subjects" mean the following clauses:

The obligation of the seller to complete the transaction contemplated herein is subject to the following (the "Seller's Conditions"):

i. the seller notifying the buyer in writing, not later than 15 business days that the Capital Regional District has approved the terms of the sale of the Land to the buyer and that the Capital Regional District has decided not to exercise its right of first refusal and option to purchase the Land with respect to this transaction only; and

ii. the Capital Regional District determining and notifying the Owner in writing no later than 15 business days that the Owner has complied with the requirements of the Housing Agreement regarding the sale, and that Capital Regional District is satisfied that the buyer is a Qualified Buyer as defined in the Housing Agreement.

The Seller's Conditions are for the sole benefit of the seller and may be satisfied by the seller by notice in writing to the buyer. If the Seller's Conditions are not satisfied on or before the date specified for their removal, this agreement will automatically be terminated, the deposit will be returned to the buyer, and neither party will have any further obligation to the other under this agreement.

h. "Dispose" means to transfer by any method, and includes assign, give, sell, grant, charge, convey, bequeath, devise, lease, rent or sublet, divest, release, and agree to do any of those things.

i. "Dwelling Units" means all residential dwelling units located or to be located on the Land whether those dwelling units are lots, strata lots or parcels, or parts or portions thereof, into which ownership or right of possession or occupation of the Land may be Subdivided.

j. "Environmental Law" means any applicable federal, provincial or municipal laws pertaining to the presence, handling, release or removal of Hazardous Substances.

k. "General Instrument" means the Form C under the Land Title (Transfer Forms) Regulation, to which this Agreement is attached.

l. "Hazardous Substances" collectively means contaminants, pollutants or other substances which are hazardous or dangerous to the health of humans, animals or plants or to the environment and includes substances defined as hazardous substances or special waste under any law, regulation or order of a Statutory Authority.

m. "Insured Mortgage" means a mortgage insured pursuant to the *National Housing Act*, R.S.C. 1985, c. N-11.

n. "Interest" means the property interest of the Owner in the Affordable Unit.

o. "LTO" means the Victoria Land Title Office or its successor.

p. "Maximum Price" has the meaning given to it in the Housing Agreement.

q. "Notice" means any written notice which CRD may deliver to the Owner under Section 8.

r. "Notice Date" means the day on which the Owner is deemed by Section 41 to have received the Notice.

s. "Outside Offeror" means a purchaser or prospective purchaser of the Affordable Unit who deals at arm's length with the vendor of the Affordable Unit.

t. "Owner" means the Transferor described in the General Instrument and any subsequent owner of the Land or of any part into which the Land is Subdivided, and includes any person who is a registered owner in fee simple of an Affordable Unit from time to time.

u. "Option Purchase Price" has the meaning given to it at section 12.

v. "Personal Property" means all lighting fixtures, appliances, equipment, cabinetry, affixed carpeting, drapes and blinds located within an Affordable Unit (except to the extent otherwise agreed in writing by CRD) but does not include an Owner's personal effects.

w. "Permitted Encumbrances" means those charges or encumbrances stated in Schedule "A" and any other encumbrances approved in writing by CRD but shall not include any mortgage or other financial encumbrance and shall not include this Agreement.

x. "Person" means any individual, society, corporation, partnership, trustee, administrator, legal representative, Statutory Authority or other legal entity.

y. "Project" means the Strata Development of which the Affordable Units will be a part and comprises all of the Lands referred to in Item 2 of the General Instrument - Part 1.

z. "Property" means the Affordable Unit and all Personal Property within the Affordable Unit.

aa. "Qualified Buyer" means an individual who meets the criteria stated in Schedule "B" of the Housing Agreement registered against title to the Land.

bb. "Subdivide" means to divide, apportion, consolidate or subdivide the Land, or the ownership or right to possession or occupation of the Land into two or more lots, strata lots, parcels, parts, portions or shares, whether by plan, descriptive words or otherwise, under the *Land Title Act*, the *Strata Property Act*, or otherwise, and includes the creation, conversion, organization or development of "cooperative units" or "shared interests in land" as defined in the *Real Estate Act*.

cc. "Transfer" means an instrument in a statutorily prescribed form by which the Owner transfers title to the Affordable Unit to CRD.

dd. "Transaction" means transfer of an Affordable Unit from the Owner to CRD.

2. **Schedules**. The following Schedules are attached to and form integral parts of this Agreement:

Schedule "A" Permitted Encumbrances

PART II – GENERAL

3. During the Term, the Owner covenants and agrees that the Owner will not Dispose of its Interest in any Affordable Unit unless such Interest is Disposed of in accordance with this Agreement and the Housing Agreement.

4. The Owner will not Dispose of its Interest in the Affordable Unit other than to the CRD or to an Outside Offeror pursuant to a Bona Fide Offer.

5. Provided that the Owner is not in breach of any of its obligations under this Agreement or under the Housing Agreement, at the request of the Owner and the Owner's sole expense, the CRD will deliver to the Owner discharges of this Agreement in registrable form for each Dwelling Unit that:

a. is a separate legal parcel; and

b. is not an Affordable Unit.

PART III – RIGHT OF FIRST REFUSAL

6. The Owner covenants and agrees as follows:

a. the Owner will not sell or offer to sell the Affordable Unit for any consideration not consisting entirely of lawful money of Canada;

b. if the Owner receives an offer to purchase the Affordable Unit (the "Offer") which the Owner is willing to accept, then the Owner will offer to sell the Affordable Unit to the CRD on the terms that are set out in Part 5 of this Agreement, by giving to the CRD a notice in writing (the "RFR Notice") attached to a copy of the Offer. The CRD will have the exclusive right for ten (10) Business Days (the "Election Period") from the date on which the CRD receives from the Owner the RFR Notice and a copy of the Offer within which to purchase the Affordable Unit on the terms set out in Part V of this Agreement. The Owner agrees

that the CRD's Election Period to purchase the Affordable Unit will not start to run until the Owner gives to the CRD notice of the Offer;

c. If the CRD wishes to exercise this right of first refusal, the CRD will give the Owner written notice of such exercise on or before the end of the Election Period.

d. If the CRD does not exercise this right of first refusal with respect to a specific Offer, the CRD's rights under this right of first refusal with respect to the particular Offer will be waived, but only if the Officer is a Bona Fide Offer and only if the terms of sale between the Outside Offeror and the Owner are in strict compliance with the terms stated in the Offer, and if the Owner complies with the following requirements:

    i. the Owner delivers to the CRD, within 10 Business Days after the delivery of the RFR Notice written proof, satisfactory to the CRD, in its sole discretion and including but not limited to the information required under Schedule B of the Housing Agreement, that the purchaser is a Qualified Buyer, and that the person agrees to be bound by all the agreements in favour of the CRD which affect the Affordable Unit, including but not limited to the Housing Agreement;

    ii. the Owner does not remove the second part of the CRD's Subject until such time as the CRD informs the Owner that it is satisfied with the information provided pursuant to sub-section 5.d.i herein;

    iii. at least 5 Business Days before completion of the sale pursuant to the Bona Fide Offer the Owner delivers to the CRD the following:

        (1) written proof, satisfactory to the CRD, in its sole discretion, that the purchase price payable under the Bona Fide Offer is the Maximum Price;

        (2) a signed Form C granting to the CRD an option to purchase and a right of first refusal to purchase the Affordable Unit (the "New Form C") on substantially the same terms as set out in this Agreement, with such amendments as the CRD may reasonably require;

        (3) a discharge of this Agreement (the "Discharge") for execution by the CRD;

        (4) undertakings from the solicitor or notary for the Outside Offeror (the "Legal Representative") on terms satisfactory to the CRD, including that:

            (a) the Legal Representative will only register the Discharge if it is done concurrently with the registration of the New Form C;

            (b) the Legal Representative will ensure that the New Form C is registered against the Affordable Unit in priority to all mortgages and other financial liens, charges and encumbrances, except for any charges in favour of the CRD;

            (c) forthwith after registration of the New Form C, provide to the CRD copies of the Discharge and the New Form C with registration particulars endorsed thereon, and a copy of the State of Title

Certificate for the Land confirming registration of the New Form C; and

(5) a copy of the vendor's statement of adjustments for the Affordable Unit certified to be true by the Legal Representative; and

iv. upon request by the CRD, the Owner delivers to the CRD such further evidence as the CRD may reasonably require to confirm the purchase price of the Affordable Unit, and to confirm that the Outside Offeror has granted to the CRD an option to purchase and a right of first refusal to purchase the Affordable Unit.

PART IV – GRANT OF OPTION

7. The Owner hereby grants CRD an exclusive and irrevocable option to purchase the Property at the Option Purchase Price in accordance with Parts IV and V of this Agreement.

8. CRD may exercise the Option only if the Owner:

a. defaults in its obligations under the Housing Agreement; or

b. acquired the Affordable Unit from a previous Owner for a price which was, as of the date of closing of that transaction, greater than the Maximum Price or if the Owner was not, as of that date, a Qualified Buyer;

c. delivers the RFR Notice; or

d. defaults in its obligations under any mortgage of the Affordable Unit.

9. CRD may exercise the Option by delivering notice of exercise of the Option to the Owner (the "Notice").

10. From and after the Notice Date, this Agreement and the Notice will together constitute a binding and enforceable contract between the Owner and CRD for the purchase and sale of the Affordable Unit in accordance with the terms and conditions of Part IV and V.

PART V – PURCHASE AND SALE

11. **Purchase and Sale** Subject to the terms and conditions of this Part V and relying on the warranties and representations herein set out, the Owner agrees to sell and CRD agrees to purchase the Property on the Closing Date for the Option Purchase Price, and the Owner agrees that, at the request of CRD, it will transfer registered title to the Property to CRD or such other Person as CRD may designate.

12. **Option Purchase Price** Subject to adjustments as provided in this Agreement, the option to purchase price (the "Option Purchase Price") under the Option to Purchase shall be:

a. 95% of the Maximum Price; or

b. if the Owner has granted a bona fide arm's length mortgage or mortgages of the Affordable Unit to an Approved Lender which, as at the Closing Date, secures in aggregate an

amount which exceeds 95% of the Maximum Price, the amount owing under and required to discharge the mortgage or mortgages to the Approved Lender as at the Closing Date.

13. **Repair and Maintenance**. From and after the Notice Date to the Closing Date, the Owner will take good care of the Property, will carry out all necessary repairs, maintenance, and replacements, will take reasonable care to protect and safeguard the Property and will in all other respects deal with the Property so that the warranties and representations of the Owner set out in this Agreement remain true and correct.

14. **Insurance** From and after the Notice Date to the Closing Date, the Owner will ensure that all policies of insurance with respect to the Property remain in full force and effect.

15. **Representations** The Owner hereby represents and warrants to, and covenants and agrees with the CRD, to transfer the Property to the CRD on the condition that as at the Closing Date that:

    i. the Owner has not used the Affordable Unit or permitted any use of the Affordable Unit to store, manufacture, dispose of, emit, spill, leak, generate, transport, produce, process, release, discharge, landfill, treat or remediate any Hazardous Substances, including anything the storage, manufacture, disposal, emission, discharge, treatment, generation, use, transport, remediation or release into the environment of which is now or at any time after the execution of this Agreement is prohibited, controlled, regulated or licensed under Environmental Laws;

    ii. the Owner has not caused or permitted the storage, manufacture, disposal, emission, spilling, leakage, treatment, generation, transportation, production, processing, release, discharge, landfilling, treatment or remediation of any Hazardous Substances in, on, under or from the Affordable Unit;

    iii. the Owner has at all times used the Affordable Unit in compliance with all Environmental Laws;

    iv. the Owner will indemnify and save harmless the Regional District, and its elected and appointed officials, officers, employees and agents, from and against any and all actions, causes of action, liabilities, demands, losses, damages, costs (including remediation costs and costs of compliance with any law, and legal fees and disbursements), expenses, fines and penalties, suffered or incurred by the CRD by reason of a breach of any representation or warranty, covenant or agreement of the Owner set forth in this Agreement. This obligation will survive the termination of this Agreement.

16. **Risk** The Property will be at the risk of the Owner up to the time the Transfer is submitted for registration at the LTO on the Closing Date and will be at the risk of CRD after the time the Transfer is submitted for registration at the LTO on the Closing Date.

17. **Damage** If, prior to the time the Transfer is submitted for registration at the LTO, any damage occurs to the Property or any of the assets comprising the Property, CRD, by notice to the Owner, may elect to postpone the Closing Date for a period of not more than 30 days and may also elect:

a. not to acquire the Property, in which case neither party will have any further obligation to the other under this Part V pertaining to that particular Notice; or

b. that the Owner assign to CRD the Owner's right to receive any and all insurance proceeds payable with respect to the damage, subject to any bona fide loss payee designation, in which case the Owner will execute and deliver to CRD an assignment satisfactory to CRD.

18. **Construction Warranties** From and after the Closing Date, the Owner will assign to CRD all the Owner's rights under all warranties, guarantees or contractual obligations against any contractor or supplier who was engaged in the construction, renovation, or repair of all or any part of the Property or any improvement to the Property. CRD's acceptance of this assignment will not represent a waiver by CRD of the Owner's covenants, agreements, representations and warranties set out in this Agreement.

19. **Owner's Covenants** The Owner will:

a. take all proper actions and proceedings on its part to enable the Owner to transfer a good and marketable title of the Property to CRD or such Person as CRD may designate, free and clear of all encumbrances other than Permitted Encumbrances;

b. deliver vacant possession of the Property to CRD or such Person as CRD may designate on the Closing Date, subject to prior receipt of the Option Purchase Price by the Owner;

c. not, from and after the Notice Date to the Closing Date, sell, transfer, dispose of or remove from the Affordable Unit any Personal Property; and

d. both before and after the Closing Date do such other things as CRD may reasonably require for transferring to and vesting in CRD or such Person as CRD may designate title to the Affordable Unit as contemplated by this Part V.

20. **Documents** CRD will prepare the documents necessary to complete the Transaction which will be in a form and substance reasonably satisfactory to CRD and its lawyers.

21. **Adjustments and Credits** The Owner and CRD will adjust, as at the Closing Date, all usual adjustments for a property similar to the Property including taxes, utility rates and any moneys owing to the strata corporation formed in respect of the Project.

22. **Closing** The Owner and CRD will complete the Transaction on the Closing Date at the offices of CRD or its lawyers.

23. **Owner's Closing Documents** At the closing, the Owner will deliver to CRD the following duly executed documents:

a. the Transfer;

b. a vendor's statement of adjustments;

c. if required, a bill of sale for the Personal Property and all other deeds, transfers, assignments, resolutions, consents, estoppels and other certificates and assurances as CRD may reasonably require;

d. a statutory declaration of the Owner that the Owner is a resident of Canada within the meaning of the Income Tax Act (Canada);

e. a certificate in confirmation that the sale of the Affordable Unit to CRD is exempt from taxes under the *Excise Tax Act* (the "GST") or, alternately, a certified cheque or bank draft payable to CRD in an amount equal to the GST payable by CRD on the Option Purchase Price; and

f. unless waived in writing by CRD, a certified cheque or bank draft payable to CRD in the amount, if any, by which the moneys owing under and required to discharge any mortgage or mortgages of the Affordable Unit exceed the Option Purchase Price as adjusted under Section 21.

24. **CRD's Closing Documents** At the closing, CRD will deliver to the Owner:

a. a purchaser's statement of adjustments; and

b. a cheque for the Option Purchase Price, as adjusted under Section 21.

25. **Tabling** Except for the Transfer, all documents and cheques will be tabled at the closing. CRD will cause its lawyers, on the Closing Date, to conduct a pre-registration index search of the Affordable Unit at the LTO. If that search indicates that no liens, charges or encumbrances have been registered or filed in respect of the Affordable Unit except for Permitted Encumbrances and encumbrances which the lawyers for the Owner have undertaken to discharge, the lawyers for CRD or their agents shall submit the Transfer for registration and then conduct a post-filing registration index search. If that search indicates that no liens, charges or encumbrances have been registered or filed in respect of the Affordable Unit since the pre-filing registration index search, all documents and payments will be released to each of the Owner and CRD according to the entitlement of each of them.

26. **Reimbursement** If CRD waives payment on the Closing Date of the amount referred to in Section 23.f., the Owner shall pay such amount to CRD, on demand, with interest thereon at the rate of eighteen percent (18%) per annum, compounded monthly, from the Closing Date to the date of payment.

27. **Survival** All the representations, warranties, covenants and agreements of the Owner and CRD contained in this Agreement will survive the Closing Date, registration of documents, and the payment of the Option Purchase Price.

PART VI – INTERPRETATION

28. **Time** Time will be of the essence of this Agreement. If any party expressly or impliedly waives this requirement, that party may reinstate it by delivering notice to the other party. If a time is specified in this Agreement for observing or performing any obligation, such time will be local time in Victoria, British Columbia.

29. **Governing Law** This Agreement will be governed by and construed and enforced in accordance with the laws of British Columbia and the laws of Canada applicable in British Columbia.

30. **References** In this Agreement, words importing the singular include the plural and vice versa, and words importing gender include all genders.

31. **Construction** The division of this Agreement into sections and the use of headings are for convenience of reference only and are not intended to govern, limit or aid in the interpretation of this Agreement. The wording of this Agreement will be construed simply, according to its fair meaning, and not strictly for or against any party.

32. **Validity of Provisions** If a Court of competent jurisdiction finds that any provision contained in this Agreement is invalid, illegal or unenforceable, such invalidity, illegality or unenforceability will not affect any other provision of this Agreement which will be construed as if such invalid, illegal or unenforceable provision had never existed and such other provisions will be enforceable to the fullest extent permitted at law.

33. **No Waiver** Failure by either party to exercise any of its rights, powers or remedies hereunder or its delay to do so, will not be interpreted as a waiver of those rights, powers or remedies except in the case of a written waiver. No waiver of a particular right will be deemed to be a waiver of that right in any other instance or a waiver of any other right.

34. **Statute**. Any reference to a statute and to any regulations under that statute means the statute and regulations as amended or replaced from time to time.

35. **Remedies** Any party to this Agreement, in addition to its rights under this Agreement or at law, will be entitled to all equitable remedies including specific performance, injunction and/or declaratory relief, to enforce its rights under this Agreement. No reference to or exercise of any specific right or remedy under this Agreement or at law or in equity by any party will prejudice or preclude that party from exercising any other such right or remedy. No such right or remedy will be exclusive or dependent upon any other such right or remedy, but any party, from time to time, may exercise any one or more of such rights or remedies independently, successively or in combination. The Owner acknowledges that specific performance, injunctive relief (mandatory or otherwise) or other equitable relief may be the only adequate remedy for a default by the Owner under this Agreement.

PART VII – MISCELLANEOUS

36. **CRD Not Obligated to Exercise Right of First Refusal or Option** The Owner acknowledges and agrees that the CRD is under no obligation to exercise the rights granted under this Agreement.

37. **Duration of Option and Right of First Refusal** The option to purchase and right of first refusal hereby granted and the right of first refusal granted by this Agreement are effective until the date that is 80 years less a day after the date on which Form C referring to this Agreement is deposited for registration in the LTO, provided that if the perpetuity period for the Agreement as specified in the *Perpetuity Act* is increased or decreased in length than the term of this Agreement will be increased or decreased accordingly.

38. **Powers Unaffected** This Agreement does not:

    a. affect or limit the discretion, rights, duties or powers of the CRD under any enactment or at common law, including in relation to the use or subdivision of the Land;

    b. impose on the CRD any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement;

c. affect or limit any enactment relating to the use or subdivision of the Land; or

d. relieve the Owner from complying with any enactment, including in relation to the use or subdivision of the Land.

39. **Agreement for Benefit of CRD Only** The Owner and the CRD agree that;

a. this agreement is entered into only for the benefit of the CRD;

b. this agreement is not intended to protect the interests of the Owner, any tenant, or any future owner, lessee, occupier or user of the Property, the Land or the building or any portion thereof, including any Affordable Unit;

c. the CRD may at any time execute a release and discharge of this agreement, without liability to anyone for doing so, and without obtaining the consent of the Owner.

40. **No Public Law Duty** Where the CRD is required or permitted by this Agreement to form an opinion, exercise a discretion, express satisfaction, make a determination or give its consent, the Owner agrees that the CRD is under no public law duty of fairness or natural justice in that regard and agrees that the CRD may do any of those things in the same manner as if it were a private party and not a public body.

41. **Notices** Unless otherwise specified, each notice to the Owner must be given in writing and delivered personally or by courier to the Owner at its address shown on title to the Affordable Unit as registered in the LTO from time to time. Unless otherwise specified, each notice to CRD must be given in writing and delivered personally or by courier to CRD, Attention: Manager Real Estate Services, at the address shown on the General Instrument - Part 1 or to such other address or addresses or person or persons as CRD may designate. Notices will be deemed to have been received when delivered.

42. **Fees** Each of the Owner and CRD will pay its own legal fees.

43. **Costs** Unless otherwise specified in this Agreement, the Owner will comply with all the requirements of this Agreement at its own cost and expense and will pay to the CRD, on request, all reasonable costs or expenses it incurs in connection with this Agreement.

44. **Enuring Effect** This Agreement will enure to the benefit of and be binding upon the respective heirs, executors, administrators, successors and permitted assigns as the case may be of the Owner and CRD.

45. **Further Assurance** Upon request by the CRD, the Owner will forthwith do such acts and execute such documents as may be reasonably necessary in the opinion of the CRD to give effect to this Agreement.

46. **Registration** This Agreement will be registered against title to the Lands initially and then shall be restricted to the titles to the Affordable Units upon filing of a strata plan of the Lands in the LTO subject only to Permitted Encumbrances.

47. **Discharge** On expiry of the Term, the Owner may require that CRD execute and deliver to the Owner a release in registrable form of the Covenant and the Option.

48. **Amendment** This Agreement may only be amended by written agreement of the parties.

49. **Counterparts** This Agreement and any amendment, supplement, restatement or termination of any provision of this Agreement may be executed and delivered in any number of counterparts, each of which, when executed and delivered is an original, but all of which taken together constitute one and the same instrument.

IN WITNESS WHEREOF the parties have duly executed this Agreement by signing the General Instrument - Part 1

SCHEDULE "A"
PERMITTED ENCUMBRANCES

Legal Notations:

HOUSING AGREEMENT in favour of the Capital Regional District
HOUSING AGREEMENT in favour of the District of Saanich

Charges, Liens and Interests:

S.219 COVENANT in favour of the Capital Regional District
RENT CHARGE in favour of the Capital Regional District
S.219 COVENANT in favour of the District of Saanich

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REPORT TO HOSPITALS AND HOUSING COMMITTEE
MEETING OF WEDNESDAY, MARCH 01, 2023

SUBJECT **Capital Regional District Land Banking and Housing Land Acquisition Financing**

ISSUE SUMMARY

To report on options to fund land acquisitions for affordable housing.

BACKGROUND

On September 21, 2022, the Capital Regional District (CRD) Board passed a motion directing staff *to report back on options for increasing funding for land acquisition for housing*.

On July 13, 2022, the Board directed staff to proceed on priorities identified in the *Future Housing Priorities and Partnerships* report, which included land acquisition for affordable housing.

Land values in the capital region continue to appreciate annually, increasing economic barriers to develop affordable housing. Front loading land acquisition can mitigate downstream costs by leveraging the time value of land, enabling greater flexibility to deliver more affordable housing.

Since receiving Board direction, staff have begun exploring the possibility of establishing an acquisition fund with the intention of working collaboratively with other levels of government to preserve existing Naturally Occurring Affordable Housing (NOAH). Staff are also seeking to acquire land that provide “shovel ready” development opportunities or could be held for future residential development.

Through the remainder of 2023, staff will continue to advance a range of activities including the exploration of funding alternatives, business cases, eligibility criteria, roles and responsibilities of potential funding partners and plans for monitoring and reporting as well as other related activities. Once complete, staff will report back to the Hospital and Housing Committee for direction.

This information report focuses on options to fund land acquisition for housing purposes and is intended to support continued exploration of a potential acquisition fund that is still under development.

IMPLICATIONS

Analysis

Authority

Under Bylaw No. 3712, the Land Banking and Housing (LBH) Service (Service No. 1.310) has authority to acquire and assemble land for the purpose of housing. The existing service establishment bylaw currently has a maximum requisition limit (based on property assessment values) and has an existing loan authorization bylaw. The borrowing limit currently authorized is $35 million and is entirely committed to the existing program approved in the service and financial

plans. Incremental commitments would require service establishment amendments and a new loan authorization bylaw. Regional cost apportionment for this service is based on property assessments.

Under Bylaw No. 3266, the Regional Housing and Trust (RHTF) Service (Service No. 1.311) has authority to raise up to $1 million and contribute those funds to projects that include funds from other partners. The existing cost apportionment is 50% property assessments and 50% population. Additionally, there is an option for a participant to voluntarily increase their contribution. The service currently has sub-regional participation consisting of 11 municipalities and two electoral areas. The available capacity within this service is limited to the maximum requisition of $1 million, has no borrowing authority and is not authorized to directly acquire or hold property. Its purpose is to act in the limited capacity as a contributor, assisting with the acquisition and pursuit of affordable housing projects.

The Capital Regional Housing Corporation (CRHC) is a wholly owned not-for-profit organization of the CRD providing affordable housing in the region. The CRHC is also able to finance land purchases for the purpose of developing and operating affordable housing, however, the CRHC has limited borrowing and revenue capacity based on the inherent operating model.

Economic Indicators

While interest rates and the cost of borrowing are increasing and subsequently translating to higher costs, there has been an offsetting impact on real estate valuation in the region. Additionally, domestic interest rate forecasts are signaling stabilization in the coming year. With local demand continuing to show year-over-year increases in real estate values, analysis supports asset value growth net of financing costs.

Capacity

The LBH service can increase requisition regionally to increase funding for land acquisition. Requisition funding can be used to pay cash or to service debt borrowed for acquisitions. Borrowing can increase the amount of purchases through leverage and is advantageous when appreciation exceeds the cost of debt.

Two alternatives (listed below) simulate scenarios to increase funding for acquisition where each is incremental to existing program commitments.

Alternative 1 considers requisition to fund acquisitions directly. Paying cash provides immediate funding for acquisitions or to be set aside in an acquisition fund. Table 1 below provides estimated impact of increasing requisition by $0.5 million, $1 million and $5 million:

Table 1: Revenue Implications – Cash for Acquisitions

Description	2023 Financial Plan	Scenario					
		A		B		C	
LBH $ Requisition	$1.4 million	+$0.5 million		+$1.0 million		+$5.0 million	
LBH Change per Avg HH	$7	+$3	+34%	+$5	+68%	+$26	+338%
Total CRD Cost/Avg HH	$509	$512	+0.6%	$514	+1%	$535	+5%

Alternative 2 considers requisition to fund acquisitions by repaying debt over time. Table 2 shows total principal available with the same increased requisition funding as considered in Table 1.

Table 2: Revenue Implications – Borrowing for Acquisitions

Description	2023 Financial Plan	Scenario					
		A		B		C	
LBH Borrowing		$8.5 million		$20 million		$85 million	
LBH $ Requisition	$1.4 million	+$0.5 million		+$1.0 million		+$5.0 million	
LBH Change per Avg HH	$7	+$3	+34%	+$5	+68%	+$26	+338%
Total CRD Cost/Avg HH	$509	$512	+0.6%	$514	+1%	$535	+5%

Revenue implications in Table 1 and Table 2 indicate a general impact on revenue and borrowing capacity only, they do not represent acquisition cost estimates and do not reflect size and scale of an acquisition program. These estimates can be used by Committee in considering appropriate affordable housing strategies. A report addressing program development will be brought back to a future Committee meeting.

CONCLUSION

On September 21, 2022, the CRD Board passed a motion directing staff to report back on options for increasing funding for land acquisition for affordable housing. On July 13, 2022, the Board directed staff to proceed on priorities as identified in the *Future Housing Priorities and Partnerships* report, which included land acquisition for affordable housing. This information report focuses on options to fund land acquisition for housing purposes and is intended to support the acquisition fund currently under development. An increase to funding for land acquisition, beyond

the existing revenue and authorized capacity already committed, would require a service establishment bylaw amendment and potentially the approval of a new loan authorization.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

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REPORT TO THE JUAN DE FUCA LAND USE COMMITTEE
MEETING OF TUESDAY, FEBRUARY 21, 2023

SUBJECT: **Subdivision Application within the Agricultural Land Reserve for Lot B, Section 110, Sooke District, Plan 32912; PID: 000-210-897 – 6040 East Sooke Road**

ISSUE

To consider a 2-lot, fee-simple subdivision of land within the Agricultural Land Reserve (ALR), in accordance with Section 34.1 of the *Agricultural Land Commission Act (ALC Act).*

BACKGROUND

The 10.2 ha subject property is located in East Sooke at 6040 East Sooke Road, and is bounded by Covina Road to the east, East Sooke Road to the south and Sooke Basin to the north (Appendix A). That part of the property located in the ALR is designated Agriculture in the East Sooke Official Community Plan, Bylaw No. 4000, while the remainder is designated Settlement. The entire property is zoned Agricultural (AG) under Juan de Fuca Land Use Bylaw, 1992, Bylaw No. 2040, and is adjacent to AG zoned land to the east and west, and to Rural A zoned land in the southeast. The property is partially designated as steep slopes and shoreline protection development permit areas (DPAs); however, in accordance with the East Sooke OCP, normal farm practices as defined in the *Farm Practices Protection (Right to Farm) Act* and farm uses defined in the *ALR Use, Subdivision and Procedure Regulation*, are exempt from the requirement for a development permit.

The landowner has made an application to subdivide the subject properties (File: AG000082) to create one 6.2 ha parcel and one 4.0 ha parcel (Appendix B). The applicant has stated that while the proposed 4.0 ha portion is intended to be sold, both proposed parcels will remain in the ALR. The subdivision application related to this application (File: SU000750) was referred to the CRD by the Ministry of Transportation and Infrastructure (MoTI) on behalf of the Provincial Approving Officer (PAO). However, since the property is located in the ALR, approval for subdivision by the ALC is required prior to approval by the PAO. In accordance with the *ALC Act*, applications for the subdivision of land within the ALR require local government resolution prior to review and determination by the ALC (Appendix C).

The CRD Board supported a *non-farm use* application (AG000078) for the subject property in December 2012 to permit 20% of the land area to be used for Royal Canadian Marine Search and Rescue (Canadian Coast Guard Auxiliary) headquarters and training operations. The application for *non-farm use* was approved by the ALC on January 16, 2013. The proposed plan of subdivision includes all approved non-farm uses on the 6.2 ha portion leaving the 4.0 ha portion as vacant agricultural land.

Staff recommend referring AG000082 to the Juan de Fuca Agricultural Advisory Planning Commission, applicable CRD departments, external agencies, and First Nations for comment.

ALTERNATIVES

Alternative 1
That the Juan de Fuca Land Use Committee direct staff to refer Agricultural Land Reserve application AG000082 for Lot B, Section 110, Sooke District, Plan 32912, to the Juan de Fuca

Electoral Area Agricultural Advisory Planning Commission, the T'Sou-ke and Scia'new First Nations, and to appropriate CRD departments.

Alternative 2
That ALR application AG000082 be denied.

IMPLICATIONS

Legislative Implications

Section 25 of the *ALC Act*, establishes requirements for applications that propose subdivision within the ALR. Applicants are not required to provide public notice; however, Subsection 25(3) requires that applications be submitted to the ALC together with a resolution from the local government if the land is zoned to permit farm use. Should the subdivision be supported, the resolution would be forwarded to the ALC. Should the subdivision be denied, the resolution would not be forwarded to the ALC and the application and any outstanding fees would be returned to the applicant. Alternatively, the Board may decide to forward the application to the ALC without comment.

Advisory Planning Commissions (APCs) were established to make recommendations to the Juan de Fuca Land Use Committee on land use planning matters referred to them by the Committee or the CRD Board. The Juan de Fuca Agricultural Advisory Planning Commission (AAPC) was established by Bylaw No. 4120 to provide advice on the potential impacts of planning decisions on agriculture. The Juan de Fuca Agricultural Land Reserve Application Policy provides direction to refer an application to the AAPC, or if inactive, to the applicable community APC. In accordance with the Policy, staff recommend referring AG000082 to the AAPC.

Notice of application AG000082 will be mailed to property owners and occupiers of land within 500 m of the subject property 10 days in advance of the February 21, 2023, Land Use Committee meeting. Any responses received from the public will be presented at the meeting.

Regional Growth Strategy Implications

Section 445 of the *LGA* requires that all bylaws and services undertaken or provided by a regional district after the board has adopted a regional growth strategy (RGS) must be consistent with the RGS. In accordance with CRD policy, consistency with the RGS is considered when an application is associated with an amendment to the RGS, OCP, or zoning bylaw. This application is not related to a bylaw amendment, and the lot sizes of the proposed subdivision meet the AG zone regulations of Bylaw No. 2040. Staff are of the opinion that this application is consistent with the OCP; therefore, the application does not proceed to the CRD Board for a determination of consistency with the RGS.

Food & Agriculture Strategy Implications

In accordance with Section 6.1 of the RGS and the CRD's Juan de Fuca Agricultural Land Reserve Application Policy (BRD05); implications with the CRD's Food and Agricultural Strategy will be considered through a referral to the Regional and Strategic Planning Division. The recommendations of the Strategy are intended to support the development and future success of food and agriculture by improving the CRD's capacity to address regional food and agricultural issues. The Strategy recommends increasing access to agricultural food lands and supporting regional economic development.

Land Use Implications

Areas of the subject property, including buildings and structures, are currently used for training

and administration by Royal Canadian Marine Search and Rescue (RCM-SAR). The plan of subdivision proposes an irregular north-to-south lot line that contains all non-farm uses associated with RCM-SAR's activities within proposed Lot 2. The proposed subdivision contemplated by application AG000082 would provide separate title to that part of the land used for approved non-farm uses and to that part that remains presently available for agricultural uses. Both parcels would remain in the ALR.

The East Sooke OCP designates the majority of the property as Agriculture, with a small southeastern portion designated as Settlement. The Agriculture designation is intended to protect farmland from other types of development for current and future agricultural activities. Section 464(D) of the OCP states that the subdivision of lands designated Agriculture will only be supported in accordance with the *ALC Act.*

The land is zoned AG under the Juan de Fuca Land Use Bylaw, which permits agricultural and intensive agricultural uses. The AG zone specifies a minimum parcel size of 4.0 ha, as well as increased setbacks for agricultural and intensive agricultural uses and buildings. The proposed plan of subdivision indicates that the proposed lots will meet the minimum lot size. Setbacks from the proposed lot line to existing buildings will be confirmed as part of the formal subdivision review process under the Ministry of Transportation and Infrastructure (MoTI).

In order to assess the potential impact of the proposed subdivision on agriculture, staff recommend that the application be referred to the Juan de Fuca Agricultural Advisory Planning Commission for comment. In order to determine the impact on First Nations' interests, the application should also be referred to the T'Sou-ke and Scia'new First Nations.

CONCLUSION

The purpose of application AG000082 is to consider a 2-lot, fee-simple subdivision of land located in the ALR. The *ALC Act* requires that local governments provide a resolution supporting the proposal in order for it to be considered by the ALC. Staff recommend that the application be referred to the Agricultural Advisory Planning Commission, applicable CRD departments, and First Nations for comment. All comments received will be brought back to the Land Use Committee. At that time, the Committee may consider a recommendation to the CRD Board.

RECOMMENDATION

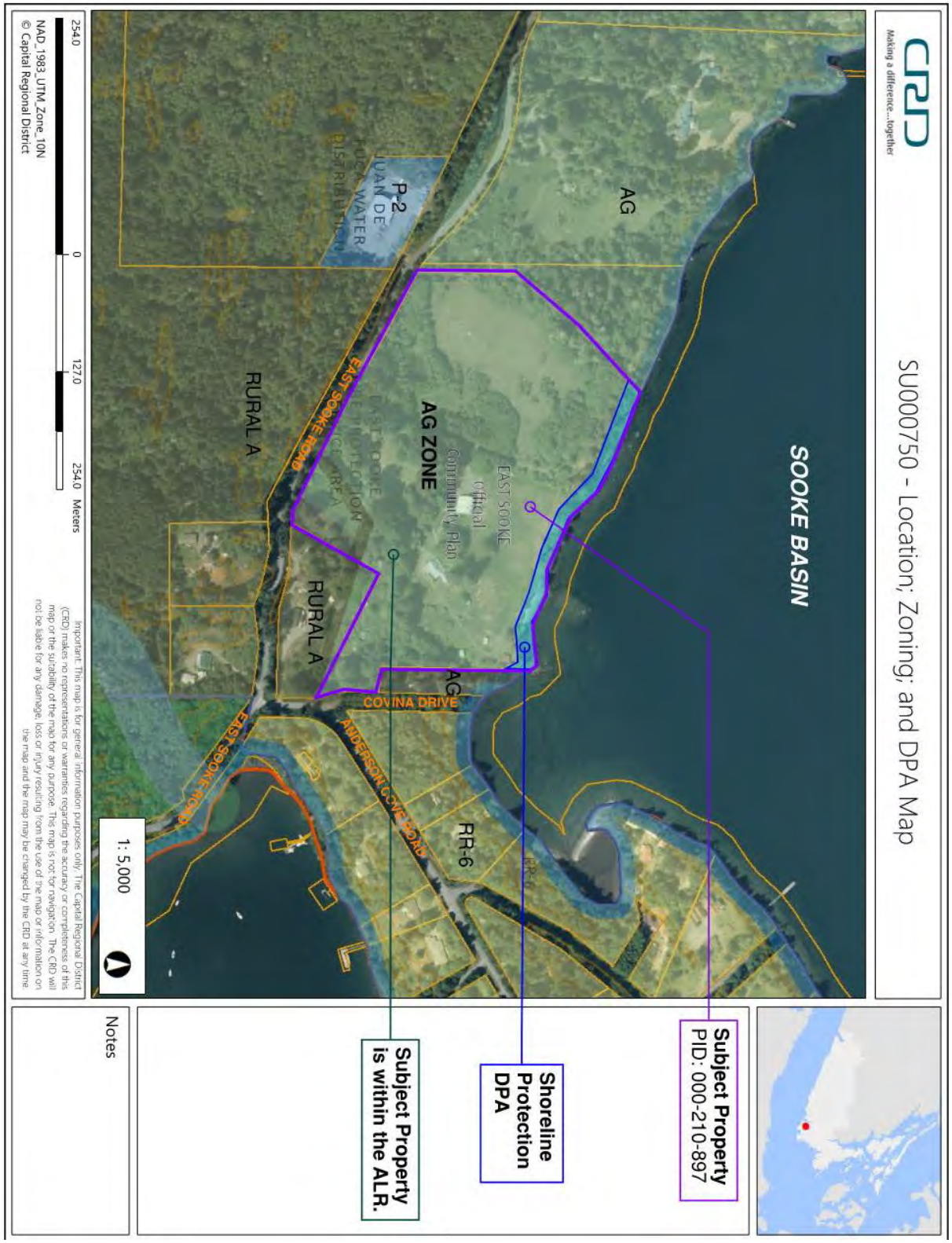
That the Juan de Fuca Land Use Committee direct staff to refer Agricultural Land Reserve application AG000082 for Lot B, Section 110, Sooke District, Plan 32912, to the Juan de Fuca Electoral Area Agricultural Advisory Planning Commission, the T'Sou-ke and Scia'new First Nations, and to appropriate CRD departments.

Submitted by:	Iain Lawrence, RPP, MCIP, Senior Manager, Juan de Fuca Local Area Services
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services

ATTACHMENTS

Appendix A: Subject Property and Zoning Map
Appendix B: Plan of Subdivision
Appendix C: Juan de Fuca Agricultural Land Reserve Application Policy
Appendix D: Agricultural Zone - AG

Appendix A: Subject Property and Zoning Map



Appendix B: Plan of Subdivision

Appendix C: Juan de Fuca Agricultural Land Reserve Application Policy

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CAPITAL REGIONAL DISTRICT
CORPORATE POLICY

Policy Type	Board		
Section			
Title	**JUAN DE FUCA AGRICULTURAL LAND RESERVE APPLICATION POLICY**		
Adopted Date	December 9, 2020	Policy Number	BRD05
Last Amended			
Policy Owner	Juan de Fuca Community Planning		

1. POLICY:

To provide a formal procedure for the CRD Board's review and consideration of Agricultural Land Reserve applications in the Juan de Fuca (JdF) Electoral Area.

2. PURPOSE:

To establish policy and procedures for review and consideration of Agricultural Land Reserve applications in the JdF.

3. SCOPE:

The *Agricultural Land Commission Act* (*ALC Act*) requires that local government review applications submitted for land in the Agricultural Land Reserve and may forward to the Agricultural Land Commission (the Commission) the application together with comments and recommendations in respect of the application or notify the applicant that the application will not be forwarded to the Commission.

This policy applies to the following types of applications in the JdF that are subject to the *Agricultural Land Commission Act and Regulations*:

- Non-adhering residential use;
- Non-farm use;
- Subdivision;
- Exclusion and block exclusion;
- Inclusion and block inclusion;
- Soil use for placement of fill or removal of soil.

The Juan de Fuca Land Use Committee may make comments and recommendations to the CRD Board on matters relating to applications under the *Agricultural Land Commission Act and Regulations* in the JdF in accordance with CRD Bylaw No. 3166, "Juan de Fuca Land Use Committee Bylaw No. 1, 2004".

The Advisory Planning Commissions are established pursuant to section 461 of the *Local Government Act*, and by CRD Bylaw No. 2945, "Capital Regional District Advisory Planning Commission Bylaw No. 1, 2002", and CRD Bylaw No. 3517, "Capital Regional District Agricultural Advisory Planning Commission Bylaw No. 1, 2008".

4. DEFINITIONS:

AAPC means the Agricultural Advisory Planning Commission for the Juan de Fuca Electoral Area of the Capital Regional District established by bylaw;

APC means an Advisory Planning Commission for the Juan de Fuca Electoral Area of the Capital Regional District established by bylaw;

ALC means the Agricultural Land Commission of British Columbia;

COMMUNITY PLANNING means the Juan de Fuca Community Planning Division of the Planning & Protective Services Department of the Capital Regional District;

CRD means the Capital Regional District;

JdF means the Juan de Fuca Electoral Area of the Capital Regional District;

LUC means the Juan de Fuca Land Use Committee of the Capital Regional District Board;

ALR means land in the Agricultural Land Reserve as designated by the *Agricultural Land Commission Act*.

5. PROCEDURE:

ALR applications submitted to Community Planning shall be reviewed in accordance with the following procedure:

1. Applications are received by Community Planning through the ALC portal.
2. Community Planning shall confirm the required application documents are submitted.
3. Community Planning shall accept the fee payment as specified by the ALC.
4. Community Planning shall confirm any public notification required by the ALC and prepare public notification of the LUC, AAPC and APC meeting.
5. Community Planning will prepare a report to the LUC that includes the application information, reference to the applicable official community plan policies and zoning bylaw regulations, and any other applicable information.
6. Applications will be considered by LUC and a recommendation forwarded to the CRD Board.
7. Should the CRD Board refer the application to the AAPC or APC, Community Planning staff will prepare the public notification of the meeting.
8. Community Planning staff will prepare a report to the LUC outlining the APC recommendation, public comments received, planning analysis, and draft resolutions for consideration.
9. The LUC will consider the public comments, AAPC or APC recommendation, and provide a recommendation on the application to the CRD Board, unless otherwise delegated.
10. Should the CRD Board forward the application to the ALC, Community Planning staff will prepare the required documents and upload it to the ALC portal.
11. Should the CRD Board not forward the application to the ALC, Community Planning will notify the applicant and return the ALC portion of the application fee to the applicant.

Public Consultation:

12. The CRD Board may refer the application to the AAPC or, if inactive, to the community APC.

13. Public notification of the LUC, AAPC and APC meeting will include information about the public meeting at which the application will be considered.

14. Notices will be mailed or otherwise delivered to owners and occupants of all parcels within a distance of 500 metres of the parcel(s) that is subject to the application.

15. Notices of the LUC, AAPC or APC meeting will be mailed or otherwise delivered at least 10 days prior to the meeting.

16. Meetings are open to the public and advertised in the local newspaper and on the CRD website.

17. Where an application is associated with a Regional Growth Strategy amendment, an Official Community Plan amendment and/or a zoning amendment, the procedure for considering that application shall be used to obtain public input on the ALR application.

Evaluation Criteria:

18. The CRD may consider the following criteria when reviewing an ALR application:

    a) Compliance with Regional Growth Strategy and official community plan policies, zoning regulations, agricultural strategies;
    b) Agricultural suitability and potential of the land to support farm uses;
    c) Agricultural capability;
    d) Alternative locations for the proposed development on non-ALR lands;
    e) Proximity of the proposed development to existing farms;
    f) Provision of landscaping and buffering, or existing natural topographical features, of sufficient dimension to separate and minimize impacts between agricultural and non-agricultural uses;
    g) Referral responses and comments received through public notification;
    h) Potential impact on the community if the application is approved.

19. In addition to the above criteria, exclusion or block exclusion applications may be considered subject to:

    a) Exclusion or block exclusion applications can only be considered in conjunction with an amendment to the Regional Growth Strategy, official community plan and zoning bylaw;
    b) Accommodating government/Crown corporation facilities where it is demonstrated that the facility cannot practically be located on non-ALR lands;
    c) The land proposed to be excluded from the ALR abuts existing non-ALR land and is a 'sliver' of land comprising less than 25% of the subject parcel;
    d) The land proposed to be excluded from the ALR forms a logical extension to the existing non-ALR area and does not constitute an intrusion into the ALR (the ALR boundary will not be significantly lengthened as a result of the extension);
    e) The land proposed to be excluded from the ALR is contained within permanent well-defined boundaries (i.e. roads, topographic or other natural features);
    f) The land has a Soil Capability Rating of, or is improvable to, a Class 5-7 and is not suitable to support the growing of crops or use by farm animals for grazing, as demonstrated by a Qualified Professional;
    g) An alternate parcel of land in the JdF is proposed to be included in the ALR that is of a higher soil capability rating, adjacent to existing ALR land, and is of an equivalent size of the parcel proposed to be excluded, so there is no-net-loss of ALR land.

20. In cases where soils have been degraded due to poor land use practices, illegal dumping, soil deposit or soil removal, favorable consideration of an application may not be given.

21. The applicant is responsible for retaining services of a Qualified Professional, as necessary, to provide information and to demonstrate the criteria in this policy has been satisfied.

Decisions:

22. The LUC will consider the application, the AAPC or APC recommendation, and any public comments received, and make a recommendation to the CRD Board, unless otherwise delegated.

23. The CRD Board, unless otherwise delegated, must review the application subject to section 34(4) of the *Agricultural Land Commission Act* and may resolve to:

    a) Not forward the application to the ALC subject to the *Agricultural Land Commission Act*;
    b) Forward the application to the ALC with comments and a recommendation to support the application;
    c) Forward the application to the ALC with comments and a recommendation to reject the application;
    d) Forward the application to the ALC without comments or a recommendation.

24. If the CRD Board exercises its authority as set out in the *Agricultural Land Commission Act* and does not authorize the application to proceed, the application will not be considered by the ALC.

7. AMENDMENT(S):

Adoption Date	Description:
9 December, 2020	

8. REVIEW(S):

Review Date	Description:

Appendix D: Agricultural Zone - AG

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

4.0 AGRICULTURAL ZONE - AG

4.01 Permitted Uses

In addition to the uses permitted in Section 4.15 of Part 1 of this Bylaw, the following uses and no others shall be permitted in the Agricultural AG Zone:

(a) Agriculture;
(b) Intensive Agriculture;
(c) One-family dwellings; *Bylaw 4278*
(d) Home Based Business Categories One, Two and Three; *Bylaw 3705*
(e) Farm Buildings;
(f) One travel trailer or one camper may be permitted in conjunction with a permitted residential use on a lot, which may be used but not rented for the temporary accommodation of guests or visitors;
(g) Accessory uses such as on-site logging, and pole- or post- or shake-cutting, from trees grown on the lot;
(h) Two boarders or lodgers;
(i) Secondary Suite pursuant to Part 1, Subsection 4.19; *Bylaw 3849*
(j) Detached Accessory Suite pursuant to Part 1, Subsection 4.20 on ALR lands with the approval of the Agricultural Land Commission; *Bylaw 3849*
(k) Detached Accessory Suite pursuant to Part 1, Subsection 4.20 on non-ALR lands without an additional dwelling pursuant to Section 4.07. *Bylaw 3849*

4.02 Minimum Lot Size for Subdivision Purposes

The minimum lot size shall be 4ha.

4.03 Density

On non-ALR lands, one one-family dwelling plus one additional dwelling unit is permitted on a lot.

On ALR lands, one one-family dwelling plus two additional dwelling units are permitted on a lot with the approval of the Agricultural Land Commission. *Bylaw 3849*

4.04 Height

Maximum height shall be 11m.

4.05 Lot Coverage

The maximum lot coverage shall be 20 percent.

4.06 Maximum Size of Residential Buildings

Provided applicants having either met the *Sewerage System Regulation* (e.g., a filing) or acceptance by VIHA via referral: *Bylaw 3705*

(i) On lots of less than 1ha in area, residential buildings and structures shall not exceed a Floor Area Ratio of 0.45 or a Total Floor Area of 418m^2, whichever is less;
(ii) On lots of 1ha or more in size, residential buildings and structures shall not exceed a Floor Area Ratio of 0.45.

4.07	**Additional Dwellings**	Notwithstanding Section 4.03 above, one additional one-family dwelling for the sole purpose of housing employees may be located on a lot classified as a farm pursuant to the *Assessment Act* where such lot is 4ha or more in area, and where approved by the B.C. Agricultural Land Commission.
4.08	**Yard Requirements, Agriculture and Farm Buildings**	(a) Front yards shall be a minimum of 30m; (b) Side, rear and flanking yards shall be a minimum of 15m.
4.09	**Yard Requirements for Intensive Agriculture uses and Buildings**	(a) Front yards shall be a minimum of 90m; (b) Side, flanking and rear yards shall be a minimum of 30m.
4.10	**Yard Requirements for All Other Permitted Uses and Buildings**	(a) Front yards shall be a minimum of 7.5m; (b) Side yards shall be a minimum of 6m; except that for lots of greater than 1ha in size and where residential uses exceed a Total Floor Area of 418m^2, minimum side yards shall be 15m each side; (c) Flanking yards shall be a minimum of 6m CTS; (d) Rear yards shall be a minimum of 10m.
4.11	**Yard Requirements for Cannabis Cultivation Buildings**	(a) Front, side, flanking and rear yards shall be a minimum of 30m. *Bylaw 3922, Bylaw 4278*

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REPORT TO THE JUAN DE FUCA LAND USE COMMITTEE
MEETING OF TUESDAY, FEBRUARY 21, 2023

SUBJECT **Zoning Bylaw Amendment Application for Strata Lots 1, 2, 3, & 4, Section 85, Sooke District, Strata Plan EPS1027 Together with an interest in the Common Property in proportion to the Unit Entitlement of the Strata Lot as shown on Form V – 476, 478, 480 & 482 Becher Bay Road**

ISSUE SUMMARY

Landowners of a 4-lot building strata property on Becher Bay Road have submitted a joint application to amend Bylaw No. 2040 by changing the zone from Rural Zone – A (Rural A) to the Rural Residential 6A Zone (RR-6A) for the purpose of dissolving the strata and facilitating subdivision to create an equivalent number of parcels.

BACKGROUND

The 4.5 ha building strata property is located in East Sooke on Becher Bay Road and is subject to the Rural A zone in Bylaw No. 2040 (Appendix A). The property is designated as Settlement under the East Sooke Official Community Plan (OCP), Bylaw No. 4000.

The four single-family detached strata units are dispersed throughout the subject property and cover 2.4% (1,102 m^2) of the subject land area. The property is located within the East Sooke Fire Protection Service Area and each parcel will be required to provide proof of septic and a source of potable water at the time of subdivision.

The landowners have made a joint application to change the current Rural A zone (Appendix B) to the Rural Residential 6A (RR-6A) zone (Appendix C). The RR-6A zone would allow for a subdivision application to dissolve the existing building strata and create four fee-simple or bare land strata properties that complement the existing arrangement of buildings and have an average parcel size of 1 ha (Appendix D). The owners of Strata EPS1027 have submitted a subdivision application (SU000753) to run concurrently with the proposed Bylaw No. 4505 (Appendix E).

At its meeting of September 20, 2022, the Juan de Fuca Land Use Committee recommended referral of the proposed bylaw to the East Sooke Advisory Planning Commission; CRD departments; BC Hydro; District of Sooke; Island Health; Ministry of Forests – Archaeology Branch; Ministry of Forests – Water Protection Section; Ministry of Land, Water and Resource Stewardship; Ministry of Transportation & Infrastructure; RCMP; Sc'ianew First Nation; Sooke School District #62; and T'Sou-ke First Nation. Comments have been received and are included in Appendix F.

ALTERNATIVES

Alternative 1

The Juan de Fuca Land Use Committee recommends to the Capital Regional District Board:

1. That the referral of proposed Bylaw No. 4505, "Juan de Fuca Land Use Bylaw, 1992, Amendment Bylaw No. 157, 2022", to the East Sooke Advisory Planning Commission; CRD departments; BC Hydro; District of Sooke; Island Health; Ministry of Forests – Archaeology Branch; Ministry of Forests – Water Protection Section; Ministry of Land, Water and Recourse Stewardship; Ministry of Transportation & Infrastructure; RCMP; Sc'ianew First Nation; Sooke School District #62; and T'Sou-ke First Nation be approved and the comments received;
2. That proposed Bylaw No. 4505 be introduced and read a first time and read a second time;

3. That in accordance with the provisions of section 469 of the *Local Government Act,* the Director for the Juan de Fuca Electoral Area, or Alternate Director, be delegated authority to hold a Public Hearing with respect to Bylaw No. 4505; and
4. That adoption of proposed Bylaw No. 4505 be withheld pending receipt by the CRD of a Preliminary Layout Review from the Ministry of Transportation and Infrastructure for subdivision application SU000753.

Alternative 2
That the CRD not proceed with proposed Bylaw No. 4505.

IMPLICATIONS

Legislative Implications

The Advisory Planning Commissions (APCs) were established to make recommendations to the Land Use Committee on land use planning matters referred to them related to Part 14 of the *Local Government Act* (*LGA*). The East Sooke APC considered the application at its meeting on November 7, 2022.

Should the proposal proceed, a public hearing pursuant to Part 14, Division 3 of the *LGA* will be required subsequent to the amendment passing second reading by the CRD Board. Property owners within 500 m of the land will be sent notice of the proposed bylaw amendment and the public hearing will be advertised in the local paper and on the CRD website.

Regional Growth Strategy Implications

Section 445 of the *LGA* requires that all bylaws adopted by a regional district board after the board has adopted a Regional Growth Strategy (RGS) be consistent with the RGS. In accordance with CRD policy, where a zoning bylaw amendment that applies to land within the East Sooke OCP area is consistent with the OCP, it does not proceed to the full CRD Board for a determination of consistency with the RGS. The proposed zoning amendment is consistent with the policies of the East Sooke OCP.

Referral Comments

Referrals were sent to 11 agencies, CRD departments, and to the East Sooke APC. Comments received are summarized below and included in Appendix F.

BC Hydro expressed no concerns with the application; however, new statutory right of way agreements will be required over the new lots at the time of subdivision. They also referred their correspondence to the BC Hydro Field Operations' Distribution Engineering & Design Department in Victoria, BC for potential comment. No additional comments were received at the time this report was written.

Ministry of Forests – Water Protection Section stated that the bed rock aquifer consists of fractured crystalline rock, which is known to have low productivity and high vulnerability to contamination. This Ministerial Branch cites the regulations of the *Public Health Act Health Hazard Regulation* and advises that in accordance with the *Water Sustainability Act* a water licence is required for surface water and non-domestic ground water use. The Water Protection Section provided links to the regulations and emphasized that wells are required to be setback 30 m from a potential source of contamination, such as a septic system.

Ministry of Transportation and Infrastructure (MoTI) had no objection to the application and stated that Section 52 of the *Transportation Act*, which requires Ministry approval of zoning bylaw amendments within a radius of 800 m of a controlled access highway, does not apply. To ensure that all requirements of the related subdivision application are met, the Ministry encouraged landowners to review the Province's Subdivision Approval Manual.

Sooke School District #62 stated that they have no concerns.

T'Sou-ke First Nation stated that they have no comment at this time regarding the application.

CRD First Nations Relations stated that they have no comments related to archaeology at this time.

CRD Bylaw Enforcement stated that they have no concerns.

CRD Protective Services expressed that approval of the future subdivision be conditional upon ensuring that future access to each of the proposed fee simple lots are engineered to meet or exceed driveway standards. These driveway standards are included in Appendix F.

The East Sooke APC considered the application at their meeting on November 7, 2022, with approximately 10 members of the public in attendance. The East Sooke APC passed the following motion with respect to Bylaw No. 4505:

> **MOVED** by Zac Doeding, **SECONDED** by Tim Marks that the East Sooke Advisory Planning Commission recommends to the Juan de Fuca Land Use Committee that it supports the application and proposed Bylaw No. 4504 to rezone the subject property from Rural Zone – A (Rural A) to Rural Residential 6A Zone (RR-6A).

Land Use

All of the parcels that abut the building strata property are subject to the Rural A zone, and two properties located to the east across Becher Bay Road are subject to the Agricultural Zone (AG). The East Sooke OCP, Bylaw No. 4000, designates the subject property as Settlement Area. The intent of the Settlement Area land use designation is to support residential uses; agricultural uses; suites to increase housing affordability; home based businesses; small-scale commercial and tourism activities; cottage industry; civic and institutional uses; and community parks subject to consideration in any individual circumstances of the anticipated impact of the use. Furthermore, OCP policies support the rezoning of Rural A zoned lands and existing building strata developments for the purposes of subdivision as an alternative to a building strata to create an equivalent number of lots. Proposed Bylaw No. 4505 removes the Strata property from the Rural A zone and adds it to the RR-6A zone. The proposal is in alignment with the OCP and its intention to maintain the neighbourhood's rural character.

The RR-6A zone does not permit intensive agriculture; animal hospitals; veterinary clinics; accessory on-site logging; pole, post, or shake cutting from on-site trees; and finfish culture, which are all permitted uses within the current Rural A zone. The RR-6A zone has a minimum average parcel size of 1 ha and permits one one-family dwelling per parcel with either a secondary suite or a detached accessory suite. In comparison, the current Rural A zone has a minimum parcel size of 4 ha and permits up to four one-family dwellings on parcels that are greater than 4 ha, but less than 16 ha. Proposed Bylaw No. 4505 does not increase the existing density of one-family dwellings on the 4.5 ha property; however, individual parcel could include a suite in accordance with the OCP's goals to address housing affordability and the regulations of Bylaw No. 2040.

Procedures and Future Development

Should Bylaw No. 4505 be approved, the active subdivision application (SU000753) will likely require approval of a development permit as the lands are subject to the Steep Slopes, Sensitive Ecosystem, and Riparian development permit areas. The subdivision application will also require compliance with MoTI and CRD standards, including proof of potable water. While Island Health has not provided comment regarding this bylaw amendment application, compliance with the applicable regulations is required during subdivision as they pertain to onsite septic systems.

The RR-6A zone permits a maximum density of one dwelling per parcel. Should Bylaw No. 4505 be adopted and subdivision of the strata not be completed, the existing development would

become non-conforming in accordance with Section 528 of the *LGA*. This may result in constraints on the future use, repair and development of the property, or on reconstruction of dwellings in the event of damage to the structures to the extent of 75% or more of their value above the foundation. For this reason, staff recommend that adoption of Bylaw No. 4505 be withheld until such time as MoTI has issued a Preliminary Layout Review (PLR) for the associated subdivision, and the full set of subdivision requirements, including proof of potable water, have been provided to the owners.

Based on the information provided by the applicants, referral comments received and the policies of the East Sooke OCP, staff recommend that proposed Bylaw No. 4505 be introduced, read a first and second time, that a public hearing be held, and that the adoption of the Bylaw be withheld pending receipt by the CRD of a Preliminary Layout Review from the Ministry of Transportation and Infrastructure for the concurrent subdivision application (File: SU000753).

CONCLUSION

The purpose of Bylaw No. 4505 is to amend the Juan de Fuca Land Use Bylaw, 1992, Bylaw No. 2040 by rezoning the subject property from Rural A to RR-6A. Staff have prepared proposed Bylaw No. 4505 and recommend receipt of referral comments, first and second reading, advancement to public hearing. Staff further recommend that adoption of the Bylaw be withheld until the CRD has received a Preliminary Layout Review from MoTI for subdivision application SU000753.

RECOMMENDATION

The Juan de Fuca Land Use Committee recommends to the Capital Regional District Board:

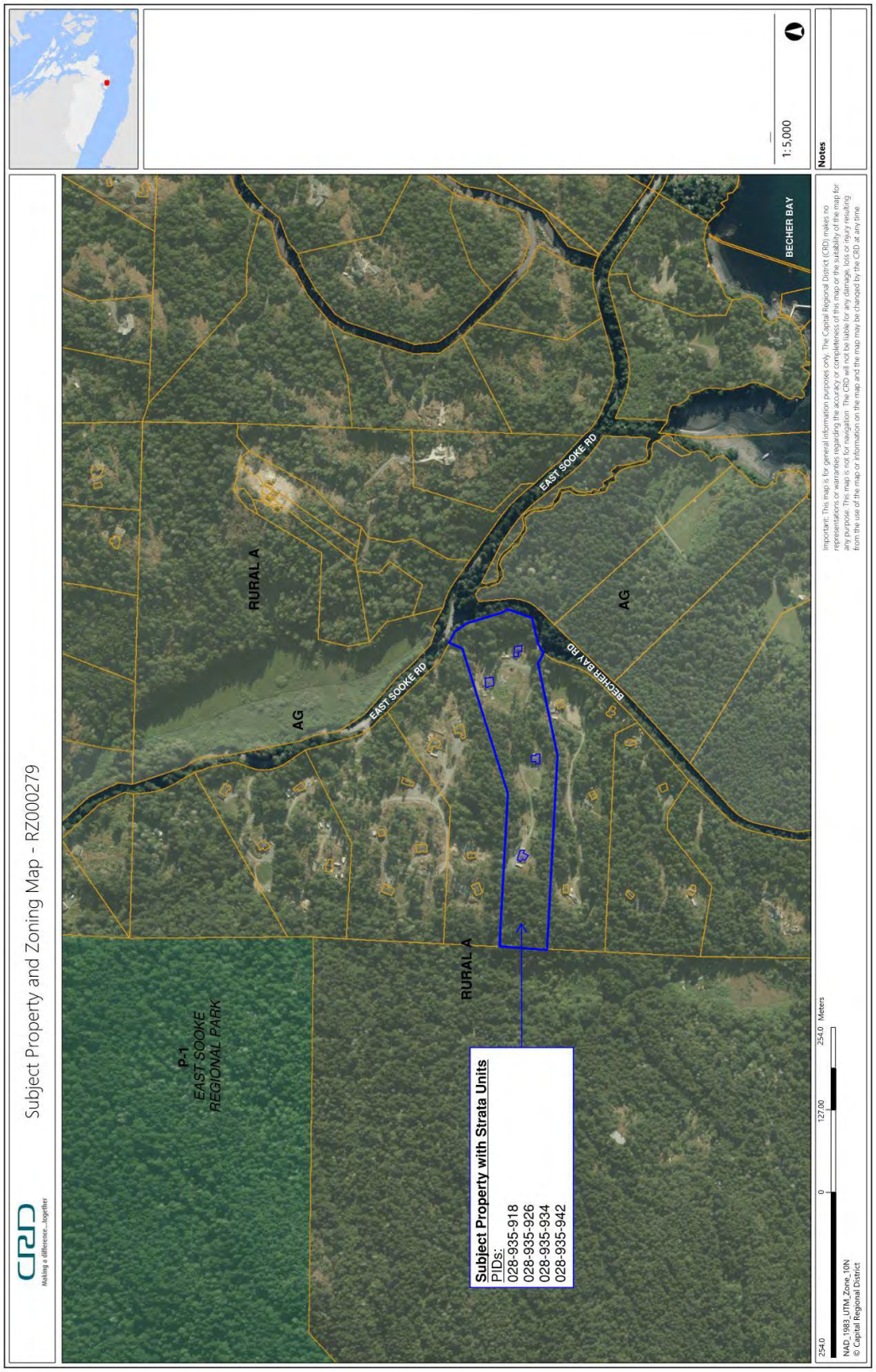
1. That the referral of proposed Bylaw No. 4505, "Juan de Fuca Land Use Bylaw, 1992, Amendment Bylaw No. 157, 2022", to the East Sooke Advisory Planning Commission; CRD departments; BC Hydro; District of Sooke; Island Health; Ministry of Forests – Archaeology Branch; Ministry of Forests – Water Protection Section; Ministry of Land, Water and Recourse Stewardship; Ministry of Transportation & Infrastructure; RCMP; Sc'ianew First Nation; Sooke School District #62; and T'Sou-ke First Nation be approved and the comments received;
2. That proposed Bylaw No. 4505 be introduced and read a first time and read a second time;
3. That in accordance with the provisions of section 469 of the *Local Government Act,* the Director for the Juan de Fuca Electoral Area, or Alternate Director, be delegated authority to hold a Public Hearing with respect to Bylaw No. 4505; and
4. That adoption of proposed Bylaw No. 4505 be withheld pending receipt by the CRD of a Preliminary Layout Review from the Ministry of Transportation and Infrastructure for subdivision application SU000753.

Submitted by:	Iain Lawrence, RPP, MCIP, Senior Manager, Juan de Fuca Local Area Services
Concurrence:	Kevin Lorette, P.Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Subject Property and Zoning Map
Appendix B: Current Rural Zone – A
Appendix C: Proposed Rural Residential 6A Zone - RR-6A
Appendix D: Lot Plan
Appendix E: Proposed Bylaw No. 4505
Appendix F: Referral Comments

Appendix A: Subject Property and Zoning Map



Appendix B: Current Rural Zone – A

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

2.0 RURAL ZONE - A

2.01 Permitted Uses

In addition to the uses permitted by Section 4.15 of Part 1 of this Bylaw, the following uses and no others shall be permitted in the Rural A Zone:

(a) Agriculture;
(b) Intensive Agriculture, except that sites for piggeries, fur farming and other similar agricultural, horticultural and animal raising activities in which the intensity and nature of the use would be materially more offensive by reason of noise, odour or appearance shall be located at least 150m from the nearest Residential or Multiple Family Residential Zone;
(c) Silviculture;
(d) Home Based Business Categories One, Two and Three; *Bylaw 3705*
(e) One-family dwelling;
(f) Two-family dwelling;
(g) Animal Hospitals;
(h) Veterinary Clinics;
(i) One travel trailer or one camper may be permitted in conjunction with a permitted residential use on a lot, which may be used but not rented for the temporary accommodation of guests or visitors;
(j) Two Boarders or Lodgers;
(k) Accessory uses such as on-site logging, and pole- or post- or shake-cutting from trees grown on-site;
(l) Finfish culture, land-based;
(m) One secondary suite per lot pursuant to Part 1, Subsection 4.19; *Bylaw 2674*
(n) Detached Accessory Suites pursuant to Part 1, Subsection 4.20. *Bylaw 3605*

2.02 Minimum Parcel Size for Subdivision Purposes

The minimum lot size shall be 4.0ha.

2.03 Number of Dwelling Units

The maximum density for residential buildings (comprised of one- and/or two-family dwellings) shall not exceed the following:

(a) On lots of 0.4ha or less, one one-family dwelling;
(b) On lots of more than 0.4ha and less than 0.8ha, not more than two one-family or one two-family dwelling;
(c) On lots of more than 0.8ha and less than 4ha, not more than three one-family dwellings or three dwelling units;
(d) On lots of more than 4ha and less than 16ha, not more than four one-family dwellings or four dwelling units;
(e) On lots of more than 16ha and less than 32ha, not more than five one-family dwellings or five dwelling units;
(f) On lots of more than 32ha, not more than eight one-family dwellings or eight dwelling units.

2.04 Height

The maximum height permitted shall be 11m.

2.05 Lot Coverage

The maximum lot coverage permitted shall be 15 percent.

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

2.06	**Maximum Size of Residential Buildings**	Provided applicants having either met the *Sewerage System Regulation* (e.g., a filing) or acceptance by VIHA via referral: *Bylaw 3705* (a) On lots of less than 1ha in area, residential buildings and structures shall not exceed a Floor Area Ratio of 0.45 or a Total Floor Area of 418m^2, whichever is less; (b) On lots of 1ha or more in size, residential buildings and structure shall not exceed a Floor Area Ratio of 0.45. *Bylaw 3705*
2.07	**Yard Requirements for Residential Buildings**	(a) Front yards shall be a minimum of 7.5m; (b) Side yards shall be a minimum of 6m except for lots of greater than 1ha in size and where residential uses exceed a Total Floor Area of 418m^2, minimum side yards shall be 15 m each side; (c) Flanking yards shall be a minimum of 6m CTS; (d) Rear yards shall be a minimum of 11m.
2.08	**Yard Requirements for Farm Buildings**	(a) Front yards shall be a minimum of 30m; (b) Side, flanking and rear yards shall be a minimum of 15m.
2.09	**Yard Requirements for Finfish Culture, Land-Based Uses and Structures**	Front, side, flanking and rear yards shall be a minimum of 30m.
2.10	**Yard Requirements for Intensive Agriculture Uses and Buildings**	(a) Front yards shall be a minimum of 30 m; (b) Side, rear and flanking yards shall be a minimum of 30m. *Bylaw 2103*

Appendix C: Proposed Rural Residential 6A Zone - RR-6A

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

10A.0 RURAL RESIDENTIAL 6A ZONE – RR-6A

Bylaw 4246

10A.01 Permitted Uses

In addition to the uses permitted by Section 4.15 of Part 1 of this Bylaw, the following uses and no others are permitted in the Rural Residential 6A (RR-6A) zone:

(a) One-family dwelling;
(b) Agriculture;
(c) Silviculture;
(d) Two Boarders or Lodgers;
(e) Farm/Agriculture Buildings;
(f) Home Based Business Categories One, Two and Three;
(g) One travel trailer or one camper may be permitted in conjunction with a permitted residential use on a lot, to be used, but not rented, for the temporary accommodation of guests or visitors.
(h) Secondary suite pursuant to Part 1, Section 4.19;
(i) Detached accessory suite pursuant to Part 1, Section 4.20.

10A.02 Minimum Lot Size for Subdivision Purposes

(a) The minimum average lot size for subdivision purposes is 1 ha and no lot shall be created with a lot size smaller than 0.5 ha.
(b) For the purposes of this zone, the total area of land in a plan of subdivision, prior to the removal of land for road and park dedication or for common property, divided by the number of lots intended to be created shall not be less than the minimum average lot size specified in Section 10A.02(a).

10A.03 Number of Dwellings

One one-family dwelling and one of either a secondary suite or a detached accessory suite, but not both.

10A.04 Height

Maximum height shall be 9 m.

10A.05 Lot Coverage

Lot coverage shall not exceed 25 percent.

10A.06 Maximum Size of Residential Buildings

Provided applicants having either met the *Sewerage System Regulation* (e.g., a filing) or acceptance by VIHA via referral:
(a) On lots of less than 1 ha in area, residential buildings and structures shall not exceed a Total Floor Area of 418 m^2;
(b) On lots of 1 ha or more in size, residential buildings and structures shall not exceed a Floor Area Ratio of 0.045.

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

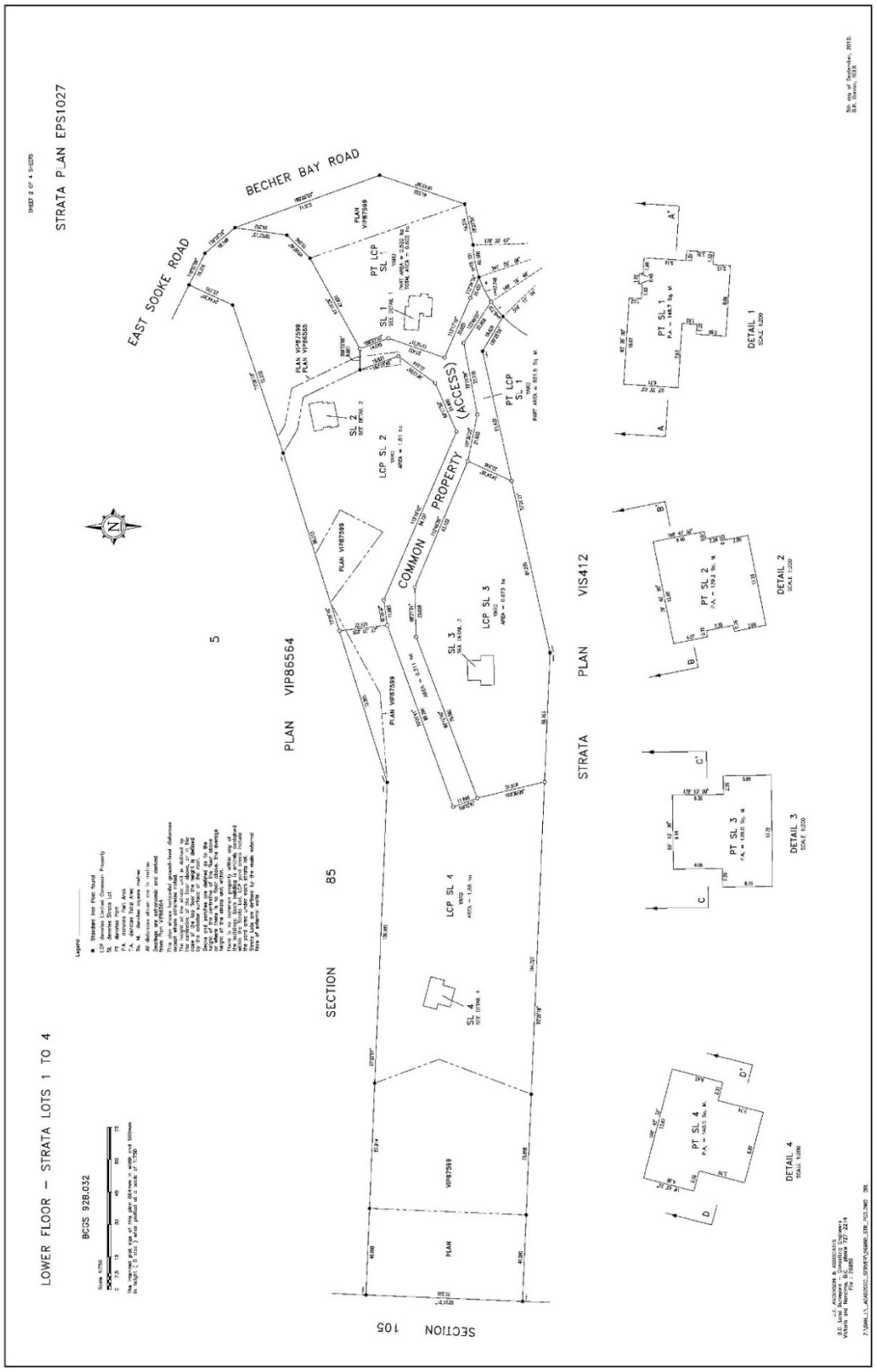
10A.07 Yard Requirements

(a) Front yards shall be a minimum of 7.5 m;
(b) Side yards shall be a minimum of 6 m; except that for lots of greater than 1 ha in size and where residential uses exceed a Total Floor Area of 418 m^2, minimum side yards shall be 15 m each side;
(c) Flanking yards shall be a minimum of 6 m CTS;
(d) Rear yards shall be a minimum of 10 m.

10A.08 Yard Requirements for Agricultural Buildings and Structures

Farm buildings and structures for agricultural uses shall be not less than 30 m from the front lot line and not less than 15 m from any other boundary of the lot.

Appendix D: Lot Plan



Appendix E: Proposed Bylaw No. 4505

CAPITAL REGIONAL DISTRICT
BYLAW NO. 4505

****

A BYLAW TO AMEND BYLAW NO. 2040, THE "JUAN DE FUCA LAND USE BYLAW, 1992"

****

The Capital Regional District Board, in open meeting assembled, enacts as follows:

1. Bylaw No. 2040 being the "Juan de Fuca Land Use Bylaw, 1992" is hereby amended as follows:

A. SCHEDULE B, Map No. 1 – EAST SOOKE ZONING MAP

(a) By deleting

Strata Lot 1 Section 85 Sooke District Strata Plan EPS1027;

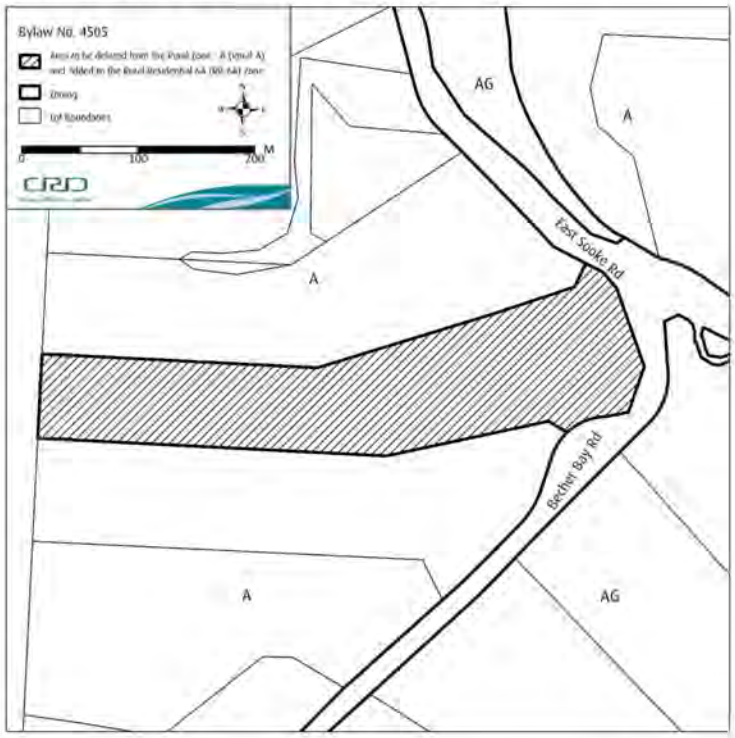
Strata Lot 2 Section 85 Sooke District Strata Plan EPS1027;

Strata Lot 3 Section 85 Sooke District Strata Plan EPS1027;

Strata Lot 4 Section 85 Sooke District Strata Plan EPS1027; and

Together with an interest in the Common Property in Proportion to the Unit Entitlement of the Strata Lots as Shown on Form V from the Rural Zone – A (Rural A) and adding to the Rural Residential 6A (RR-6A) zone, as shown on Plan No. 1.

Plan No. 1 of Bylaw No. 4505, an amendment to Bylaw No. 2040



2. This bylaw may be cited as "Juan de Fuca Land Use Bylaw, 1992, Amendment Bylaw No. 157, 2022".

READ A FIRST TIME THIS	day of	, 2023.
READ A SECOND TIME THIS	day of	, 2023.
READ A THIRD TIME THIS	day of	, 2023.
ADOPTED THIS	day of	, 2023.

CHAIR CORPORATE OFFICER

Appendix F: Referral Comments

From: Mann, Elaine
To: Wendy Miller
Cc: Reidy, Drew; Design, SVI
Subject: RE: Zoning Amendment Application RZ000279 - CRD Referral (Strata Dissolution - East Sooke)
Date: Friday, October 07, 2022 10:20:42 AM

CAUTION: This Email is from an EXTERNAL source. Ensure you trust this sender before clicking on any links or attachments.

Hi Wendy

BC Hydro have no issue with the zoning amendment application. Once the proposed subdivision comes through, we will require new statutory right of way agreements over the new lots.

In the event that BC Hydro Field Operations' Distribution Engineering & Design Department in Victoria wishes to comment, they will provide you with a response under separate cover. If you wish to follow up with that office, please contact them at email.

The registered owner can contact the BC Hydro Electric Service Coordination Centre for new construction power connections and to speak with a distribution designer at the following toll-free number: 1-877-520-1355.

Regards,

Elaine Mann | Property Coordinator, Property Rights Services

BC Hydro
Vancouver Island
400 Madsen Road | Nanaimo, BC V9R 5M3

P 250-755-7169
E elaine.mann@bchydro.com

bchydro.com

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RESPONSE SUMMARY – REZONING APPLICATION RZ000279

_X_ Interest Affected by Proposal for Reasons Outlined Below

___ Interest Unaffected by Proposal

Comments:

The Ministry of Forests, Water Protection, has received a referral with respect to proposed land-use change of the subject area (Strata Lots 1, 2, 3, & 4, Section 85, Sooke District, Strata Plan EPS1027).

Four wells have been drilled on the subject area lot (shown in the table below), in bedrock Aquifer 606 (AQ 606; Fact Sheet: https://apps.nrs.gov.bc.ca/gwells/aquifers/606), which consists of fractured crystalline rock, known to have a low productivity and high vulnerability. The median finished depth of 62 bedrock wells registered in the Groundwater Wells database (GWELLS https://apps.nrs.gov.bc.ca/gwells) within 1 km of this site is 99 m, ranging from 0.6 m to 238 m.

Well Tag Number	Finished Well Depth (m)	Potential Yield (US gpm)
95616	111	2
105330	78	4
95571	154	0.75
105332	151	0.75

As this area does not appear to have a local water service provider, the applicants should be advised that a water licence for surface water or for non-domestic groundwater use is required under the *Water Sustainability Act* (https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/14015). Information about water application requirements and process can be found here: https://portal.nrs.gov.bc.ca/web/client/-/water-licence-application. Increased development in the area and low aquifer yield may result in groundwater availability issues and impacts to other water supply wells in the area. If a water service is planned a licence for diversion of groundwater is required which also requires approval from Vancouver Island Health Authority under the Drinking Water Protection Act and the Drinking Water Protection Regulation which regulate protection of drinking water.

The nearest water body, an unnamed creek, lies approximately 25 m to the east of the property. The creek is listed as Fully Recorded with Exceptions (FR-EXC). For more information on water licensing and rights refer to: https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-licensing-rights. A groundwater license for domestic use on a single lot is not required for domestic parcels serviced by individual wells.

Aquifer 606 is classified as having an overall high vulnerability to contaminants introduced at the land surface because of the thin layer of unconsolidated material overlying the aquifer. Intrinsic vulnerability mapping (https://catalogue.data.gov.bc.ca/dataset/drastic-aquifer-intrinsic-vulnerability) indicates that aquifer vulnerability to contamination in the area of the subject parcel may be low. Animal grazing areas, paddocks and locations of manure storage can be a source of nutrient and bacterial contamination of surface and groundwater sources, therefore adequate (minimum 30 m) setbacks of these contaminant source from wells and surface water sources is required (in accordance with *Public Health Act*, Health Hazard Regulation https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/216_2011), and agricultural best practices (Code of Practice for Agricultural Environmental Management) https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/8_2019) to reduce runoff of

contaminants are recommended to be employed.

No additional concerns are noted with respect to the proposed bylaw.

David van Everdingen	Regional Hydrogeologist
Signed	Title
October 31, 2022	Ministry of Forests, Water Protection
Date	Agency

RESPONSE SUMMARY – REZONING APPLICATION RZ000279

___ Interest Affected by Proposal for Reasons Outlined Below

X Interest Unaffected by Proposal

Comments:

The property does not fall within Section 52 of the Transportation Act and will not require Ministry formal approval. The Ministry has no objections to the rezoning, however, a subdivision application to the Ministry will be required once the strata has been dissolved.

Applications can be submitted online:

https://www2.gov.bc.ca/gov/content?id=98219C50C0A74658AB8CC813D5A92558

The applicants should familiarize themselves with the Subdivision Approval Manual, specifically the access requirements as all lots will require public road frontage. If seeking alternative means of access(via easement), the applicants should ensure that they meet all requirements prior to submitting an application. Alternative access will only be accepted by the Ministry if it is proven that public road access is not achievable.

Signed	Senior Development Officer Title
October 5, 2022 Date	Ministry of Transportation and Infrastructure Agency

From: Pete Godau
To: Wendy Miller
Cc: Scott Stinson; Harold Cull; Windy Beadall; Kristina Ross
Subject: FW: Zoning Amendment Application RZ000279 - CRD Referral (Strata Dissolution - East Sooke)
Date: Thursday, September 29, 2022 2:43:01 PM
Attachments: REFFERAL-FORM-AGENCIES-RZ000279.pdf
PPS-JDF-2022-09-20-RZ000279-Referral-LUC-Report.pdf

Afternoon Wendy,

At this time the school district does not have any concerns with this referral.

Thank you,

Pete

Peter Godau
Director of Facilities| School District # 62
P (250)474-9840 Ext 203 | C (250)361-7330 | pgodau@sd62.bc.ca
Shaping Tomorrow Today

T'SOU-KE NATION

2154 Lazzar Road, Sooke B.C., V9Z 1G1
Ph.:250-642-3957 Fax: 250-642-7808

20 October 2022

Re: Zoning Amendment Application RZ000279

File: RZ000279

Attention: Wendy Miller

Dear Wendy:

T'Sou-ke Nation has no comment at this time. If you have any questions or follow up, please do not hesitate to contact our office.

Thank you.

Sincerely,

Sam Coggins, PhD RPF
A/Lands Manager, T'Sou-ke Nation

Cc:
Michelle Thut; T'Sou-ke Nation Administration

From: Shauna Huculak
To: Wendy Miller
Cc: Sandra Allen; Caitlyn Vernon
Subject: RE: Zoning Amendment Application RZ000279 - Referral (Strata Dissolution - East Sooke)
Date: Wednesday, October 12, 2022 3:14:49 PM

Thank you Wendy,

No comments related to archaeology at this time.

shauna

From: Mark Groulx
To: Wendy Miller
Cc: Shayne Gorman; Coral L. Henderson
Subject: RE: Zoning Amendment Application RZ000279 - Referral (Strata Dissolution - East Sooke)
Date: Thursday, September 29, 2022 11:57:41 AM

Good day Wendy,

I have reviewed the submission and we do not have any concerns with this proposed change.

Regards,

Mark Groulx | Chief Bylaw Officer
Bylaw and Animal Care Services | Capital Regional District
212-2780 Veterans Memorial Parkway, Victoria BC V9B 3S6
T: 250.474.3351 | F : 250.391.9727
mgroulx@crd.bc.ca

From:	Darren Lucas
To:	Wendy Miller
Subject:	FW: Zoning Amendment Application RZ000279 - Referral (Strata Dissolution - East Sooke)
Date:	Tuesday, October 25, 2022 1:08:20 PM
Attachments:	Driveway standards per document supplied by CRD.pdf image001.png

From: Chris Vrabel
Sent: Tuesday, October 25, 2022 1:07 PM
To: Darren Lucas <DLucas@crd.bc.ca>
Subject: RE: Zoning Amendment Application RZ000279 - Referral (Strata Dissolution - East Sooke)

Hi Darren,
Please use the following:

This application should be conditional on ensuring the access roads to each of the proposed fee simple lots are engineered and built to meet or exceed the attached standards. A report from an engineer may be required.

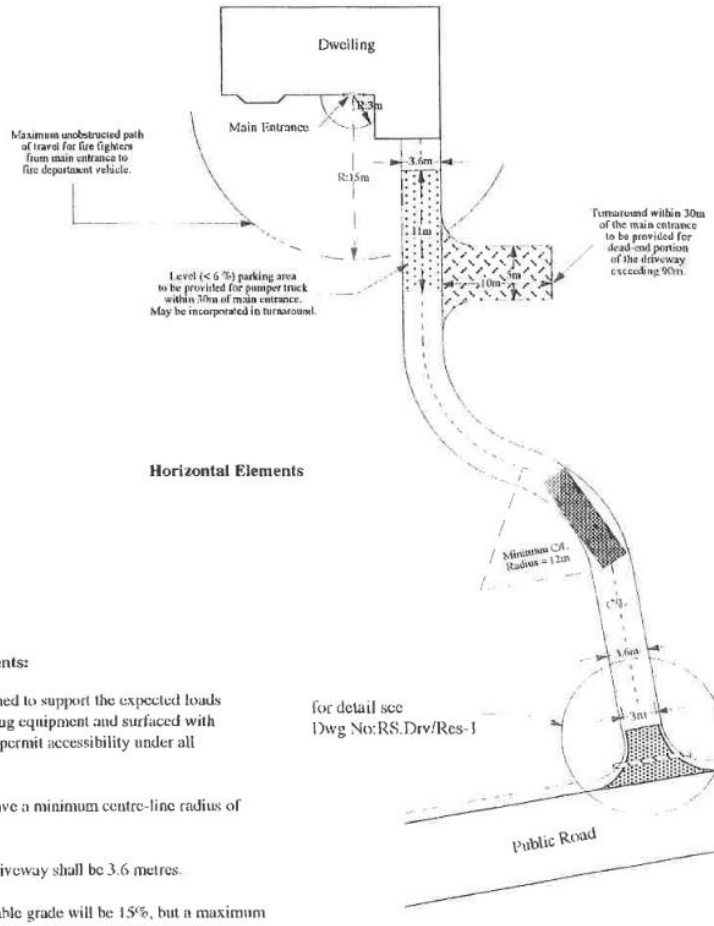
I don't recommend including the fire chief's comments in blue as the statement above achieves the same objective.

Sincerely,
Chris

SUBURBAN ROAD STANDARDS

Class: Residential Driveway

Typical Residential Driveway



Construction Requirements:

1. Driveway to be designed to support the expected loads imposed by fire fighting equipment and surfaced with materials designed to permit accessibility under all climatic conditions.
2. The driveway shall have a minimum centre-line radius of 12 metres.
3. Minimum width of driveway shall be 3.6 metres.
4. The maximum allowable grade will be 15%, but a maximum grade of 20% may be allowed when the driveway is surfaced to a minimum width of 3.0 metres with concrete or asphaltic pavement.
5. The minimum "K" value for vertical curves shall be "0.5".
6. Full width of driveway to have a minimum overhead clearance of 4 metres.

JBR Highway Consulting Ltd.
1019 Loch Glen Place Phone (250) 478-6235
Victoria, B.C. V9B 4N9 Fax (250) 478-4491

Typical Residential Driveway

Fire Access Route

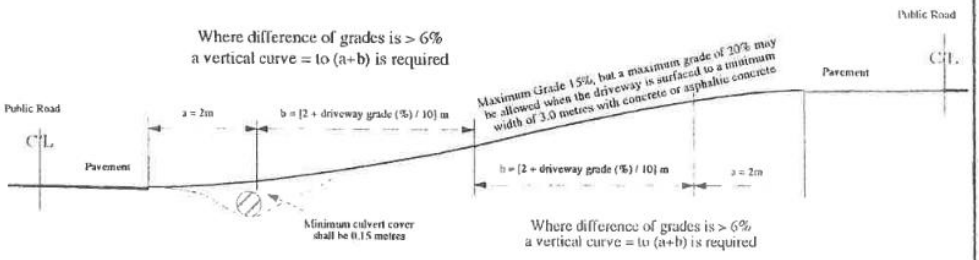
Scale 1: 500

Dwg. No: RS.Drv / Res-2 | Date: 96/7/14

SUBURBAN ROAD STANDARDS

Class: Residential Driveway

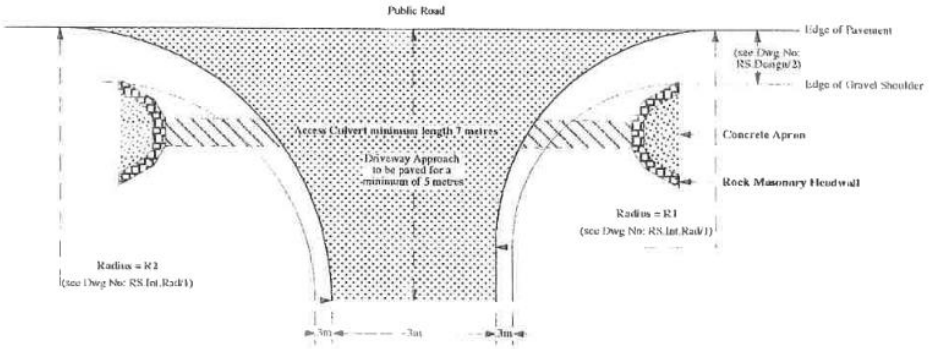
Typical Residential Driveway



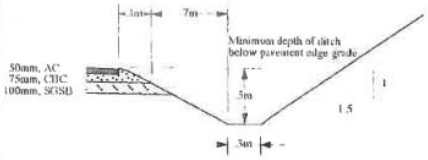
NOTE:
If the driveway grade does not prevent surface water from flowing onto the road surface a suitable water control device will be installed on the driveway.

Typical Profile

nts



Typical Driveway Intersection Detail



Typical Earth Cut Section

Scale 1:50

JBR Highway Consulting Ltd.
1019 Loch Glen Place Phone (250) 478-6235
Victoria, B.C. V9B 4N9 Fax (250) 478-4491

Typical Residential Driveway

Scale 1: 100

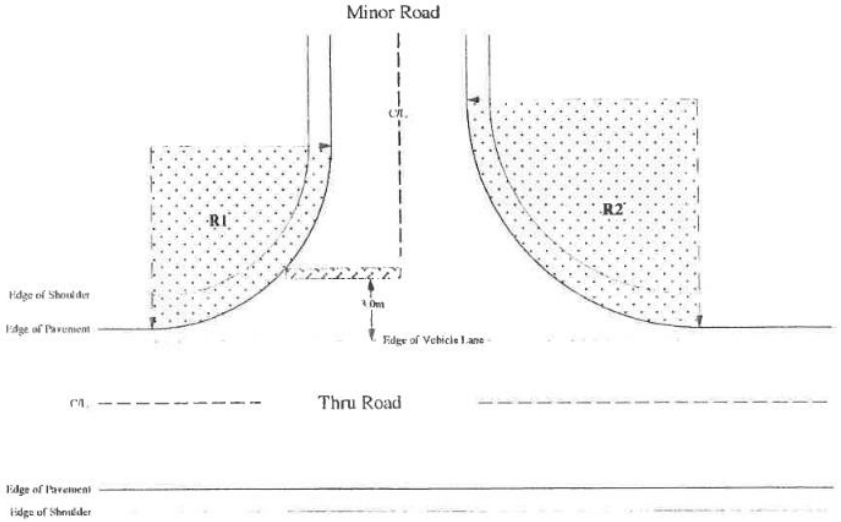
Dwg. No: RS.Drv / Res-1 | Date: 97/5/12

SUBURBAN ROAD STANDARDS

Class: All Classes

Intersection Turning Radius

(Stop Controlled)



Thru Road	Classification	Minor Road										Driveway			
		Major		Collector		Local A		Local B		Local C		Business		Residential	
		R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2
		Radius in metres										Radius in metres			
	Major	12	15	10	15	9	12	8	12	6	12	8	12	5	10
	Collector			10	12	9	12	8	10	6	10	8	12	5	8
	Local A					9	10	8	10	6	10	8	10	5	8
	Local B							8	8	6	8	6	8	5	6
	Local C									6	8	6	8	5	6

JBR Highway Consulting Ltd.
1019 Loch Glen Place Phone (250) 478-6235
Victoria, B.C. V9B 4N9 Fax (250) 478-4491

Minimum Intersection

Turning Radius

Scale 1: 500

Dwg. No: RS.Int.Rad/1 Date: 97/5/13

Making a difference...together

Minutes of a Meeting of the East Sooke Advisory Planning Commission Held Monday, November 7, 2022 at the East Sooke Community Hall, 1397 Coppermine Road, East Sooke, BC

PRESENT: Zac Doeding, Tim Marks, Janice St. John
ABSENT: **Staff:** Iain Lawrence, Senior Manager, Juan de Fuca Local Area Services; Darren Lucas, Planner; Wendy Miller, Recorder
PUBLIC: 10

The meeting was called to order at 7:00 pm.

Iain Lawrence provided a Territorial Acknowledgment.

1. **Elections**
   Iain Lawrence called for nominations for the position of Chair of the East Sooke APC for 2022 and Zac Doeding's name was put forward. Iain Lawrence called two times for further nominations and, as there were none, Zac Doeding was acclaimed Chair. Noting that this will be the first and last meeting of the APC in 2022, the election for the position of Vice Chair was not held.

2. **Approval of the Agenda**

   MOVED by Janice St. John, **SECONDED** by Tim Marks that the agenda be approved. **CARRIED**

3. **Approval of the Supplementary Agenda**
   No supplementary items.

4. **Adoption of Minutes from the Meeting of September 9, 2019**

   MOVED by Tim Marks, **SECONDED** by Janice St. John that the minutes of September 9, 2019, be adopted. **CARRIED**

5. **Planner's Report**
   Iain Lawrence extended a thank you to the APC for its work over the last four years, noting that the term of the current APC concludes December 31, 2022. Certificates of appreciation as issued by the CRD Board Chair were presented to the APC.

   It was advised that residents interested in becoming a member of the APC need to submit interest by November 18, 2022.

   It was advised that Natalia Day was elected by acclamation to fill the East Sooke position on the Juan de Fuca Land Use Committee.

   Iain Lawrence introduced Darren Lucas, Planner.

6. Zoning Amendment Application

a) RZ000279 - Strata Lots 1, 2, 3, & 4, Section 85, Sooke District, Strata Plan EPS1027 Together with an interest in the Common Property in proportion to the Unit Entitlement of the Strata Lot as shown on Form V (476, 478, 480 & 482 Becher Bay Road)

Darren Lucas spoke to the staff report for a joint application to rezone the subject property from Rural Zone – A (Rural A) to the Rural Residential 6A Zone (RR-6A) for the purposes of dissolving the strata and facilitating subdivision to create the equivalent number of parcels.

The Chair confirmed that the applicants were present.

An applicant stated that subdivision is being pursued due in part to the cost of house insurance for the common property.

The APC noted that, through the Official Community Plan (OCP) review, policies were established to support rezoning of existing building strata developments for the purposes of subdivision to create an equivalent number of lots.

Veronica Somers, East Sooke, questioned if there will be more than one access into the subject property and if rezoning would increase density.

An applicant stated that only one access onto the property is planned.

Staff responded to questions from the APC advising that:

- the road standard for the driveway will be determined by the Provincial Approving Officer, Ministry of Transportation and Infrastructure
- road standards may differ depending on whether the applicants pursue a bareland strata subdivision or a fee simple subdivision
- should a bareland subdivision be pursued, the driveway could remain common property and, as such, remain the responsibility of the owners
- based on the definition of "lot" in Bylaw No. 2040, the current Rural A zone would allow the strata plan as a whole the opportunity for either one secondary suite or one detached accessory suite
- should the rezoning and subsequent subdivision proceed, each fee simple or bareland strata lot would be permitted one one-family dwelling per parcel, as well as either one secondary suite or one detached accessory suite per parcel

MOVED by Zac Doeding, **SECONDED** by Tim Marks that the East Sooke Advisory Planning Commission recommends to the Juan de Fuca Land Use Committee that it supports the application and proposed Bylaw No. 4504, to rezone the subject property from Rural Zone – A (Rural A) to Rural Residential 6A Zone (RR-6A).

CARRIED

7. Adjournment

The meeting adjourned at 7:18 pm.

_____

Chair

PPSS-35010459-2926