

COLUMBIA SHUSWAP REGIONAL DISTRICT Regular Board Meeting LATE ITEMS AGENDA

Date: Thursday, May 18, 2017

Time: 9:30 AM

Location: Revelstoke Community & Aquatic Centre

Revelstoke Community & Aquatic Centre, 600 Campbell Ave, Revelstoke

6. Business General

*6.4 Rescheduling of the Committee of the Whole (Policy) Session

Report from Charles Hamilton, Chief Administrative Officer, dated May 15, 2017.

Motion

THAT: the Board endorse the rescheduling of the June 15, 2017 Committee of the Whole (Policy) Session to the October 19, 2017 regular Board meeting.

7. <u>Business By Area</u>

*7.4 General Strategic Priorities Grant Application

Report from Terry Langlois, Team Leader Utilities, dated May 15, 2017. Board approval to apply for a General Strategic Priorities Grant.

Motion

THAT: the Board empower the authorized signatories to apply for a General Strategic Priorities Fund grant in the amount of \$2,091,000 to fund 100% of the eligible costs to upgrade the Saratoga Water System.

*7.5 Electoral Area C Grant-in-Aid Request

Verbal update will be provided at the Board Meeting by Darcy Mooney, Manager, Operations Management.

Pages

1

3

Motion

WHEREAS the Compliance and Enforcement Brach of the Ministry of Forests, Lands and Natural Resource Operations is interested in working collaboratively with the CSRD to fund the removal and proper disposal of an abandoned and derelict houseboat vessel from Shuswap Lake located near the 3900 block of Eagle Bay Road in Electoral Area C;

BE IT RESOLVED THAT the Board authorize the expenditure of a maximum of \$1000 from the Electoral Area C Grant-in-Aid fund to cover the costs of landfill user fees associated with the disposal of the vessel.

8. Administration Bylaws

*8.1 Alternative Approval Process (AAP) – Rail Corridor Trail Service and Loan Authorization

Report from L. Shykora, Deputy Manager Corporate Administration Services, dated May 15, 2017. Staff are asking that the Board approve:

- 1) Estimate of Electors,
- 2) Elector Response Form,
- 3) Deadline of the date for submission of Elector Response Forms, and
- 4) Communication Document entitled Frequently Asked Questions The Rail Corridor Initiative.

6

Motion

THAT: for the purpose of obtaining approval for the Rail Corridor Trail Service Establishment Bylaw No. 5755 and the Rail Corridor Trail Service Loan Authorization Bylaw No. 5756, using the Alternative Approval Process, 2,918 be used as the fair determination of 10% of the eligible number of electors within the service area (Electoral Areas C, D, E, F, the City of Salmon Arm and the District of Sicamous).

Motion

THAT: the Rail Corridor Trail Service Establishment Alternative Approval Process Elector Response Form be approved by the Board in the form attached to the report from the Deputy Manager, Corporate Administration Services dated May 15, 2017, subject to both the Rail Corridor Trail Service Establishment Bylaw and the Rail Corridor Trail Service Loan Authorization Bylaw No. 5756 being approved by the Inspector of Municipalities by Monday, May 29, 2017.

Motion

THAT: the deadline for receipt of submissions of Elector Response Forms for the Alternative Approval Process conducted for the Rail Corridor Trail Service Establishment Bylaw No. 5755 and for Rail Corridor Trail Service Loan Authorization Bylaw No. 5756 be determined to be 4:00 pm, Monday, July 17, 2017.

Motion

THAT: the Board endorse the publication "Frequently Asked Questions – The Rail Corridor Initiative" dated May, 2017.

*8.2 Amendment to Rail Corridor Trail Service Establishment Bylaw No. 5755

Report from Lynda Shykora, Deputy Manager, Corporate Administration Services, dated May 15, 2017.

Motion

THAT: Third Reading given to Rail Corridor Trail Service Establishment Bylaw No. 5755 on April 20, 2017 be Rescinded this 18th day of May, 2017.

Motion

THAT: Section 6 of Rail Corridor Trail Service Establishment Bylaw No. 5755 be Amended to reflect the maximum requisition amount to be an equivalent of \$0.06 for each \$1,000 of net taxable value of land and improvements included in the Service Area this 18th day of May, 2017.

Motion

THAT: Rail Corridor Trail Service Establishment Bylaw No. 5755 be given Third Reading as Amended this 18th day of May, 2017.

27

33

10. Business General

*10.1 Proposed Public Consultation Plan for Draft Noise Bylaw No. 5754.

Report from Gerald Christie, Manager, Development Services, dated May 18, 2017.

Proposed public consultation plan for draft Noise Bylaw No. 5754.

Motion

THAT: the Board support the recommended communications plan for Noise Bylaw No. 5754 which includes website and social media information, online survey, and public availability of printed information prior to consideration of second reading of the bylaw.

13. <u>Business by Area</u>

*13.1 Electoral Area A: Development Variance Permit No. 641-27 (Palumbo)

48

Report from Jennifer Sham, Planner, dated April 24, 2017. Palumbo Heights Drive, Nicholson

Submission(s) from neighbouring property owners attached to Late Agenda.

Motion

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 641-27, for that part of Legal Subdivision 2, Section 35, Township 25, Range 21, West of the 5th Meridian, Kootenay District, except Plans NEP66313, NEP74775, NEP7680, EPP37325 and EPP45014, varying Schedule 'A' – Levels of Service of Subdivision Servicing Bylaw No. 641, as amended (Bylaw No. 641), to allow a subdivision which would create a fee simple lot (Lot 1, EPP68187) with a parcel size of 0.674 ha serviced by on-site water and on-site sewerage disposal system, as shown on Schedule 'B',

be approved for issuance this 18th day of May, 2017.

*13.3 Electoral Area F: Temporary Use Permit No. 830-2 (Darroch/Isley)

114

Report from Dan Passmore, Senior Planner, dated April 7, 2017. 6929 Squilax-Anglemont Road, Magna Bay

Submission(s) from neighbouring property owners and applicant attached to Late Agenda.

Motion

THAT: In accordance with Section 493 of the Local Government Act, Temporary Use Permit No. 830-2 for Part W1/2 of the NW 1/4, Section 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633 (PID: 014-009-552), for an approximately 7,500 m2 portion of the subject property for outdoor boat and trailer parking for registered guests of Magna Bay Resort on the subject property from May 19, 2017 until May 19, 2020, be issued this 18th day of May, 2017



BOARD REPORT

TO:		Chair a	and Directors		File No:	0530 03	
SUBJECT:		Rescheduling of the Committee of the Whole (Policy) Session					
DESCRIPTIO	N:	Report 1 15, 201	from Charles Hamiltor 7.	n, Chief	Administra	tive Officer, date	ed May
RECOMMENDATION #1:		Commit	the Board endorse tee of the Whole (P Board meeting.				
VOTING:	Unweighted Corporate	d 🖂	LGA Part 14 (Unweighted)	Weight Corpor	·	Stakeholder (Weighted)	

BACKGROUND:

Staff are proposing that the Committee of the Whole (Policy) Session be rescheduled from June 15, 2017 to October 19, 2017 in order to make the session more meaningful and focussed.

The annual policy session is an opportunity for the Board to review policies. Throughout the year, policies are being kept up to date as staff continue to bring forward various policy amendments on an ongoing and priority basis.

Staff have identified the need to prioritize initiatives that are currently underway/immediately pressing, such as the Rail Corridor Initiative, Building Inspection, Directors remuneration, not to mention Operations Management being in extreme Emergency Management operations mode currently. With all of these priorities, staff propose a rescheduling of the policy session to October, 2017.

Staff have consulted with both the Chair and Vice Chair on rescheduling the Committee of the Whole (Policy) Session and they both support staff's request.

IMPLEMENTATION:

If the Board endorses the rescheduling of the policy session, staff will make the necessary changes on the CSRD website and prepare the report for the policy session for the October 19, 2017 regular Board meeting.

BOARD'S OPTIONS:

- 1. Endorse the Recommendation.
- 2. Deny the Recommendation.
- 3. Defer.
- 4. Any other action deemed appropriate by the Board.

Report Approval Details

Document Title:	2017-05-18_Board_CA_Reschedule-CoW.docx
Attachments:	
Final Approval Date:	May 15, 2017

This report and all of its attachments were approved and signed as outlined below:

Lynda Shykora - May 15, 2017 - 11:52 AM

Charles Hamilton - May 15, 2017 - 11:56 AM



BOARD REPORT

ТО:	Chair and Directors	File No: 5600 49 06			
SUBJECT:	General Strategic Priorities G	General Strategic Priorities Grant Application			
DESCRIPTION:		Team Leader Utilities, dated May 15, 2017. a General Strategic Priorities Grant.			
RECOMMENDATION #1:	General Strategic Priorities F	the authorized signatories to apply for a fund grant in the amount of \$2,091,000 to costs to upgrade the Saratoga Water			
SHORT SUMMARY:					
An engineering assessment conducted by Gentech Engineering Inc. has identified the necessar upgrades required to the Saratoga Waterworks in order to facilitate the connection of the Coppe Island RV Park to the water system. The costs of the required upgrades are far beyond the financia ability of the community.					
VOTING: Unweighte Corporate		Weighted Stakeholder Corporate (Weighted)			
BACKGROUND:					
The Common Island DV D	The Common Island DV Doub is a 41 west development in the Costab Costab cost and address to the				

The Copper Island RV Park is a 41 unit development in the Scotch Creek area adjacent to the Saratoga Waterworks Service Area. The RV Park's existing water system is a groundwater well with no treatment. After years of failing sample results, Interior Health has ordered the RV Park to either acquire a new water source or provide proper treatment to its existing water system. The Saratoga Waterworks is immediately adjacent to the Copper Island RV Park, but has limitations for current expansion, primarily in regards to a water reservoir and storage issues.

POLICY:

A Board resolution endorsing the grant application to the General Strategic Priorities Fund through the Ministry of Community, Sport and Cultural Development is required as part of the grant application process. The grant application is consistent with the policies as outlined in CSRD policy W-4 "Water Acquisition Strategy".

As outlined in "CSRD Delegation Bylaw No 5582, 2010" Board authorization is required for any grant application in excess of \$150,000.

FINANCIAL:

The General Strategic Priorities Fund Grant offers 100% funding for eligible projects.

KEY ISSUES/CONCEPTS:

To apply for the General Strategic Priorities Fund grant, which, if successful would allow the community of Copper Island RV Park to connect to the Saratoga Waterworks.

IMPLEMENTATION:

Staff will submit the application to the General Strategic Priorities fund by the June 2, 2017 application deadline.

COMMUNICATIONS:

Upon approval, staff will continue to work on the grant application and will include the Board resolution in the application package.

DESIRED OUTCOMES:

The Board endorse the grant application to secure funding for connection of the Copper Island RV Park to the Saratoga Water Works.

BOARD'S OPTIONS:

- 1. Endorse the Recommendation.
- 2. Deny the Recommendation.
- 3. Defer.
- 4. Any other action deemed appropriate by the Board.

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Copper Island RV Park, Engineering Assessment – Gentech Engineering Inc.

Report Approval Details

Document Title:	2017-05-15_Strategic_Priorities_Grant_SaratogaWW.docx
Attachments:	
Final Approval Date:	May 16, 2017

This report and all of its attachments were approved and signed as outlined below:

Darcy Mooney - May 15, 2017 - 1:18 PM

Jodi Pierce - May 15, 2017 - 1:39 PM

Lynda Shykora - May 15, 2017 - 2:15 PM

Charles Hamilton - May 16, 2017 - 8:44 AM



BOARD REPORT

TO: Chair and Directors File No: Bylaw 5755
Bylaw 5756

SUBJECT: Alternative Approval Process (AAP) – Rail Corridor Trail Service and

Loan Authorization

DESCRIPTION: Report from L. Shykora, Deputy Manager Corporate Administration

Services, dated May 15, 2017. Staff are asking that the Board approve: 1) Estimate of Electors, 2) Elector Response Form, 3)

Deadline of the date for submission of Elector Response Forms, and 4) Communication Document entitled Frequently Asked Questions – The

Rail Corridor Initiative.

RECOMMENDATION

#1:

THAT: for the purpose of obtaining approval for the Rail Corridor Trail Service Establishment Bylaw No. 5755 and the Rail Corridor Trail Service Loan Authorization Bylaw No. 5756, using the Alternative Approval Process, 2,918 be used as the fair determination of 10% of the eligible number of electors within the service area (Electoral Areas C, D, E, F, the City of Salmon Arm and the District of Sicamous).

RECOMMENDATION

#2:

THAT: the Rail Corridor Trail Service Establishment Alternative Approval Process Elector Response Form be approved by the Board in the form attached to the report from the Deputy Manager, Corporate Administration Services dated May 15, 2017, subject to both the Rail Corridor Trail Service Establishment Bylaw and the Rail Corridor Trail Service Loan Authorization Bylaw No. 5756 being approved by the Inspector of Municipalities by Monday, May 29, 2017.

RECOMMENDATION

#3:

THAT: the deadline for receipt of submissions of Elector Response Forms for the Alternative Approval Process conducted for the Rail Corridor Trail Service Establishment Bylaw No. 5755 and for Rail Corridor Trail Service Loan Authorization Bylaw No. 5756 be determined to be 4:00 pm, Monday, July 17, 2017.

RECOMMENDATION

#4:

THAT: the Board endorse the publication "Frequently Asked Questions

- The Rail Corridor Initiative" dated May, 2017.

SHORT SUMMARY:

In conjunction with the Alternative Approval Process (AAP) for the CP Rail Corridor Service Establishment and Loan Authorization Bylaws which were given Three Readings by the Board on April 20, 2017, three actions are required by the Board:

- 1) Endorse the Estimate of Electors
- 2) Approve the Elector Response Form;
- 3) Approve the Deadline Date for the Submissions of Elector Response Forms to be received by the CSRD.

The fourth recommendation asks that the Board endorse the document entitled "Frequently Asked Questions – The Rail Corridor Initiative", as presented. This document will be communicated through the media to inform the public about the Rail Corridor Initiative.

May 18, 2017

Alternative Approval Process - Rail Trail Corridor	

VOTING:	Unweighted Corporate	\boxtimes	LGA Part 14 (Unweighted)	Weighted Corporate	Stakeholder (Weighted)	

BACKGROUND:

Board Report

At the April 20, 2017 CSRD Board meeting, the following resolutions were adopted:

"THAT: the Board endorse the alternative approval process in accordance with Section345(1)(a) of the Local Government Act as the method to obtain the assent of the lectors for:

- The establishment of a Rail Corridor Trail Services identified in Bylaw No. 5755; and
- For the proposal to authorize the borrowing of funds for the purpose of acquiring the rail corridor within the service area as identified in the Loan Authorization Bylaw No. 5756."

and

"THAT: the Board provide that the participating area approval relative to the Rail Corridor Service and associated Loan Authorization is to be obtained for the entire service area (on an area-wide basis)."

At the same Board meeting the Rail Corridor Trail Service Establishment Bylaw No. 5755 and the Rail Corridor Trail Service Loan Authorization Bylaw No. 5756 were given Three Readings. The bylaws have been submitted to the Inspector of Municipalities for approval. An alternative approval process cannot proceed until the Inspector's approval is received.

In an AAP, eligible electors (those electors who meet the same requirements for participation as in an election or referendum) <u>register their opposition to the initiative</u> by completing an Elector Response Form and submitting it to the Corporate Officer before the deadline, rather than attending a voting place and casting a ballot. Approval is received if less than 10% of the eligible electors within the proposed service area sign and submit an Elector Response Form by the AAP deadline.

Section 86 of the *Community Charter* sets out specific requirements for conducting an AAP. The Board must:

- (a) **Establish the deadline for receipt of elector responses.** The deadline can be no sooner than 30 days after the second publication in the local newspaper.
- (b) **Establish elector response forms**. The forms must include: (i) a general description of the proposed bylaw, (ii) a description of the area to which the approval process applies, (iii) the deadline for elector responses, (iv) a statement that the Board may proceed with service establishment unless at least 10% of the electors of the area submit elector response forms by the deadline, (v) a statement that the responses must be in the form approved by the Board, where the forms are available and that only eligible electors are entitled to sign; (vi) the number of elector responses required to prevent the Board from proceeding with adoption without conducting an assent voting opportunity (referendum).
- (c) make a fair determination of the total number of electors of the area to which the approval process applies.

Deadline for Submission

The Board must establish the deadline during which qualified electors are required to submit the

Elector Response Forms if electors are opposed to adopting Bylaws No. 5755 and 5756.

The deadline for submission of elector response forms may be <u>no sooner</u> than 30 days after the second publication in the local newspaper. If the Inspector of Municipalities has approved Bylaw No. 5755 and Bylaw No. 5756 by May 29, 2017 it is proposed that the Statutory Notice of Alternate Approval Process be published for two consecutive weeks (the weeks of June 4 and June 11, 2017, with the last statutory Notice being published by Friday, June 14, 2017. By setting the deadline for submission of elector response forms as Monday, July 17, 2017, electors will have no less than 30 days from the last newspaper publication to sign the submission form and submit it to the CSRD Corporate Officer. Any Elector Response Forms received after the deadline has passed cannot be counted.

Although an elector response form is not considered the same as the ballot used in a general local election, bi-election or in assent voting; local government corporate officers have a duty to keep the forms secure during the AAP. Local governments must also ensure the elector response forms and the personal information they contain are retained in accordance with the Freedom of Information and Protection of Privacy Act.

After the AAP deadline has passed, the local government's corporate officer must determine and certify whether the valid elector response forms submitted met or exceeded the 10% threshold established for the AAP. This determination of the corporate officer is final and conclusive. When 10% or more of the eligible electors sign and submit response forms, local governments cannot proceed with the proposed matter without first holding an assent voting opportunity (referendum). Proceeding to an assent vote would require that voting occur no later than 80 days after the deadline established for electors to submit the elector response forms during the Alternative Approval Process.

Elector Response Form

A draft Elector Response Form is attached to this report for the Board's approval.

Electors are required to submit a completed Elector Response Form to the CSRD by either mail or hand delivery, by the deadline date of 4 PM, Monday, July 17, 2017.

Elector Response Forms (ERF) will be made available on the CSRD website, at the CSRD and the District of Sicamous and City of Salmon Arm Municipal offices throughout the AAP process.

All Elector Response Forms submitted by electors will be reviewed by staff to ensure residency requirements and compliance with other requirements stated on the Response Form.

Fair Determination of the Number of Electors

Section 86(3) of the Community Charter requires that the Board make a fair determination of the total number of electors within the area to which the Alternative Approval Process applies.

With respect to determination of the number of electors within the proposed service area, a fair estimate was arrived at using Statistics Canada Census data from the last census (2016). The following is an estimate of the total number of residents over the voting age of 18 (eligible electors)

within Electoral Areas C, D, E, and F, the District of Sicamous and the City of Salmon Arm.

	Total Number of	Number of Residents		10%
	Residents	over the Age of 18		
Area C	7,921	6,881		688
Area D	4,044	3,289		329
Area E	1,185	1,025		103
Area F	2,454	2,214		221
District of	2,429	2,069		207
Sicamous				
City of Salmon	17,904	13,692*		1,370
Arm	*Includes conservative reduction non-			
		Canadian citizens, those who have not		
		lived in BC for at least 6 months or the		
		municipality for 30 days or those otherwise		
		disqualified under the Local Government		
		Act.		
TOTAL	35,937	29,170		2,918

Based on the fair determination of the Number of Electors, if less than 2,918 Elector Response Forms are signed and submitted before the AAP deadline (10% of the eligible electors within Electoral Areas C, D, E, F, the City of Salmon Arm and the District of Sicamous), the Board will be in a position to consider adoption of Rail Corridor Trail Service Establishment Bylaw No. 5755 and Rail Corridor Trail Service Loan Authorization Bylaw No. 5756.

POLICY:

Community Charter and Local Government Act.

There are legislative requirements to consult with the public. Sections 86 and 94 of the Community Charter state that Notice of the approval process must be posted in the public notice posting places and published in a newspaper that is distributed at least weekly in the areas affected and must be published once per week for 2 consecutive weeks.

The advertised Notice must include:

- a general description of the bylaw, agreement, or other matter;
- a statement that the local government may proceed unless more than 10% of the electors sign an elector response form;
- a description of the area to which the alternative approval process applies;
- the deadline by which elector response forms must be submitted;

- an estimate of the number of electors in the area to which the alternative approval process applies that would constitute 10% of the total electors; and,
- a statement that: elector response must be given in the form established by the local government; the forms are available at the local government offices; and the only persons entitled to sign the forms are the electors of the area to which the AAP applies.

FINANCIAL:

The cost estimate for advertising of statutory public notices for the Alternative Approval Process is \$7,000. The statutory public notice is a publication of Notice of the AAP and a synopsis of the bylaws, in two (2) consecutive issues of the newspaper circulating in each of the proposed service areas. There are 5 separate area newspapers circulating in Electoral Areas C, D, E, F, the District of Sicamous and the City of Salmon Arm. Any advertising costs will be funded from the Rail Corridor Feasibility Reserve Fund.

Additional costs will be incurred for communicating the "Frequently Asked Questions – The Rail Corridor Initiative" document to the proposed service area residents/electors through a variety of channels including news media, website and social media. Staff estimate this cost to be up to \$10,000, the costs of which would also be funded from the Rail Corridor Feasibility Reserve Fund.

In terms of the service, the annual costs for this service will be recovered through the collection of taxes levied against the value of land and improvements for those properties within the boundaries of the service area (the entirety of the City of Salmon Arm, the District of Sicamous and Electoral Areas C, D, E and F). The Service Area Establishment Bylaw proposes the following customized cost apportionment formula amongst the service area participants:

City of Salmon Arm: 35%
District of Sicamous: 30%
Electoral Area E: 15%
Electoral Area D: 3%
Electoral Area C: 12%
Electoral Area F: 5%.

The proposed loan authorization bylaw would authorize the CSRD to borrow up to \$1,840,000 to purchase the abandoned Canadian Pacific rail corridor. The Loan Authorization Bylaw proposes a borrowing term of 25 years.

The cost to each participating jurisdiction to borrow this money is estimated as follows, based upon the following: Borrowing up to \$1,840,000 at a market rate of 3.58%, amortized over a 25 year repayment schedule. Using the customized cost apportionment formula, the share of the annual repayment amount for each participating jurisdiction is as follows:

Jurisdiction	Percentage of Total	Total Annual Debt Repayment Amount by Jurisdiction
City of Salmon Arm	35%	\$40,719
District of Sicamous	30%	\$34,907
Electoral Area E	15%	\$17,451
Electoral Area C	12%	\$13,961

Total Debt Repayment	100%	\$116,340
Electoral Area D	3%	\$ 3,490
Electoral Area F	5%	\$ 5,817

The annual tax impact be for the average residential taxpayer in each of the participating jurisdictions is anticipated to be as follows:

Jurisdiction	Average Residential	Average Residential Tax
	Assessment	
City of Salmon Arm	\$ 335,874	\$ 3.98
District of Sicamous	\$ 258,302	\$ 13.57
Electoral Area E	\$ 274,779	\$ 10.03
Electoral Area C	\$ 349,414	\$ 2.16
Electoral Area F	\$ 286,637	\$ 1.29
Electoral Area D	\$ 258,969	\$ 1.83

COMMUNICATIONS:

Once the CSRD is notified that Bylaw No. 5755 and Bylaw No. 5756 are approved by the Inspector of Municipalities, the required statutory advertising of public notices will be published in local newspapers, CSRD website, and social media.

An information sheet and details of the Alternative Approval Process and the Elector Response Forms will be made available on the CSRD website, as well as at the CSRD office, the District of Sicamous Municipal Office and the City of Salmon Arm Municipal Office. After the submission deadline of July 17, 2017, it is expected that the results of the Alternative Approval Process will be reported at the July 20, 2017 Board meeting.

The Regional District of North Okanagan will also be conducting an Alternative Approval Process for their portion of the rail corridor at the same time as the CSRD. The CSRD and RDNO staff will liaise to ensure consistent messaging to the public regarding the Elector Response form, parallel advertising and communications to assist the public throughout the process.

DESIRED OUTCOMES:

That the Board endorse the four (4) recommendations as presented so that staff is in a position to advance the Alternative Approval Process upon receipt of Ministerial approval of the service establishment and loan authorization bylaws.

BOARD'S OPTIONS:

- 1. Endorse the Recommendations.
- 2. Any other action deemed appropriate by the Board.

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. N/A

Report Approval Details

Document Title:	Alternate Approval Process - Rail Corridor Trail Service
	Establishment and Loan Authorization.docx
Attachments:	- CSRD FINAL Elector Response Form AAP Rail Corridor.pdf
	- Rail-Corridor - FAQ - May 15-2017.pdf
	- Rail Corridor Map.pdf
Final Approval Date:	May 16, 2017

This report and all of its attachments were approved and signed as outlined below:

No Signature found

Jodi Pierce - May 16, 2017 - 2:42 PM

Charles Hamilton - May 16, 2017 - 3:52 PM

Page 7 of 7

Page 13 of 137



COLUMBIA SHUSWAP REGIONAL DISTRICT ALTERNATIVE APPROVAL PROCESS ELECTOR RESPONSE FORM

City of Salmon Arm, District of Sicamous, and
Electoral Areas C, D, E and F of the Columbia Shuswap Regional District
Rail Corridor Trail Service Establishment Bylaw No. 5755
and Rail Corridor Trail Service Loan Authorization Bylaw No. 5756

to establish a Rail Corridor Service and to facilitate borrowing of up to \$1,840,000 (\$1.84 Million) to be repaid over a period not to exceed 25 (twenty-five) years in order to finance the costs of acquiring the abandoned Canadian Pacific Rail Corridor located within the boundaries of the CSRD

Pursuant to Section 269 of the Local Government Act, the Regional Board of the Columbia Shuswap Regional District is proposing to seek approval of the electors by alternative approval process in accordance with Section 86 of the Community Charter.

By completing this elector response form I certify that I am <u>OPPOSED</u> to the Board of Directors of the Columbia Shuswap Regional District adopting *Rail Corridor Trail Service Establishment Bylaw No. 5755 and Rail Corridor Trail Service Loan Authorization Bylaw No. 5756* which authorizes the Board of Directors to establish a service to acquire, construct, improve, manage and operate the Rail Corridor Trail Initiative within those parts of the Rail Corridor Trail that are located within the boundaries of the Columbia Shuswap Regional District and to facilitate borrowing of up to One Million Eight Hundred Forty Thousand Dollars(\$1.84 Million) to be repaid over a period not to exceed 25 (twenty-five) years in order to finance the costs of acquiring the abandoned Canadian Pacific Rail Corridor located within the boundaries of the CSRD, unless a vote is held. The participants to this Service shall be the City of Salmon Arm, the District of Sicamous and Electoral Areas C, D, E and F of the Columbia Shuswap Regional District.

The deadline for submitting this Elector Response Form is <u>4:00 pm on Monday, July 17, 2017</u>. The address for submission is: Columbia Shuswap Regional District, PO Box 978, 555 Harbourfront Drive NE, Salmon Arm, BC V1E 4P1

The Columbia Shuswap Regional District may proceed with the adoption of *Rail Corridor Trail Service Establishment Bylaw No.* 5755 and *Rail Corridor Trail Service Loan Authorization Bylaw No.* 5756 unless at least 10% (2,918) of eligible electors within the participating service area sign and submit a completed Elector Response Form to the CSRD by the deadline.

A person must not sign more than one Elector Response Form in relation to this Alternative Approval Process.

ADDITIONAL INFORMATION DECADDING ELECTED QUALIFICATIONS CAN BE FOUND ON THE DEVELOPE SIDE OF THIS ELECTED DESCRIPTION

PRINT FULL NAME OF ELECTOR*: (ex. Jane Doe, not J. Doe)	
	(NAME - PLEASE PRINT)
ELECTOR'S FULL ADDRESS*:	(FULL RESIDENTIAL (STREET) ADDRESS INCLUDING TOWN/CITY)
SIGNATURE OF ELECTOR:	(SIGNATURE)
DATE:	

This section to be completed (in addition to the above) if you are a Non-Resident Property Elector* (see reverse for eligibility requirements):

I am a <u>non-resident property elector</u> who lives in another community and owns property in the jurisdiction located at: (insert address of property below)

*MUST include full Residential (Street) address of property in relation to which the person is entitled to vote. Note - Only one (1) owner can sign the elector response form when a property is owned by more than one person – the person signing must have written consent of a majority of the other property owner(s) to sign. Where a property is owned in whole or in part by a corporation, no one is eligible to sign the form)

*Section 86(7) of the *Community Charter* **requires** the elector's **full** name and residential address **and** if applicable, the civic (street) address of the property in relation to which the person is entitled to register as a <u>non-resident</u> property elector for this response form to be counted.

INFORMATION REGARDING QUALIFICATIONS FOR ELECTORS

In order to sign an elector response form in relation to the alternative approval process (AAP), a person must either be a **resident elector** or a **non-resident property elector** (not both) within the proposed service area. For the purposes of this AAP, the following jurisdictions apply: the City of Salmon Arm, the District of Sicamous, and Electoral Areas C, D, E and F of the Columbia Shuswap Regional District (CSRD).

A <u>resident elector</u> is an individual who is qualified to vote in a jurisdiction by virtue of **living (residing)** in the jurisdiction. To sign an elector response form as a resident elector, a person must:

- be 18 years of age or older; and
- be a Canadian citizen; and
- have lived in British Columbia for at least six months immediately prior to signing this Elector Response Form; and
- have lived in the jurisdiction (City of Salmon Arm, District of Sicamous, Electoral Areas C, D, E or F of the CSRD) for at least 30 days prior to signing this Elector Response Form; and
- not be disqualified by any enactment from voting in an election or otherwise disqualified by law.

A <u>non-resident property elector</u> is an individual who **does not live (does not reside)** in the participating service area but is entitled to vote by virtue of owning real property in that jurisdiction. To sign an elector response form as a non-resident property elector, a person must:

- not be entitled to register as a resident elector in the participating service area; and
- be 18 years of age or older; and
- be a Canadian citizen; and
- · have lived in British Columbia for at least six months immediately prior to signing this Elector Response Form; and
- not be disqualified by any enactment from voting in an election or otherwise disqualified by law; and
- have owned property in the jurisdiction (City of Salmon Arm, District of Sicamous, Electoral Areas C, D, E or F of the CSRD for at least 30 days prior to signing this Elector Response Form.
 - o If a property is owned by *more than one* individual, only *one* of them may sign an elector response form;
 - o A person may register as a non-resident property elector in relation to *one* parcel of real property in the service area.

NOTE: There is no Corporate Vote – No corporation is entitled to be registered as an elector or have a representative registered as an elector and no corporation is entitled to vote.

INSTRUCTIONS

OPPOSED - if you are OPPOSED to the adoption of *Rail Corridor Trail Service Establishment Bylaw No. 5755* and *Rail Corridor Trail Service Loan Authorization Bylaw No. 5756* you can sign and submit an Elector Response Form if you qualify as an elector of the participating service area. All Elector Response Forms must be received in the office of the CSRD no later than the deadline of 4:00 p.m. on Monday, July 17, 2017. If you are submitting your form by mail, be advised that postmarks will not be accepted as the date of submission.

NOT OPPOSED - If you are **NOT OPPOSED** you need do nothing. No action is required.

Elector Response Forms are available on our website at www.csrd.bc.ca and at the following locations during regular business hours:

- City of Salmon Arm, 500 2 Ave NE Salmon Arm, BC
- District of Sicamous, 446 Main Street, Sicamous, BC
- Columbia Shuswap Regional District, 555 Harbourfront Drive NE, Salmon Arm, BC.

1. Submit*:

All Elector Response forms <u>must</u> be received by the CSRD <u>on or before</u> <u>4:00 p.m. on Monday, July 17,</u> 2017 to be considered.

Signed submissions will be accepted by:

MAIL or IN PERSON to:

Columbia Shuswap Regional District PO Box 978 555 Harbourfront Drive NE Salmon Arm, BC V1E 4P1

*Note: Submissions WILL NOT be accepted by fax or email; and postmarks WILL NOT be accepted as the date of submission.

2. Electors:

The estimated number of electors in the service area is 29,170. If 10% (2,918) of the estimated number of electors in the service area sign and submit an Elector Response Form **opposing** adoption of the Bylaws prior to the deadline of 4:00 p.m. on Monday, July 17, 2017, the CSRD cannot adopt the Bylaws without receiving the assent of the electors by way of assent voting (referendum).

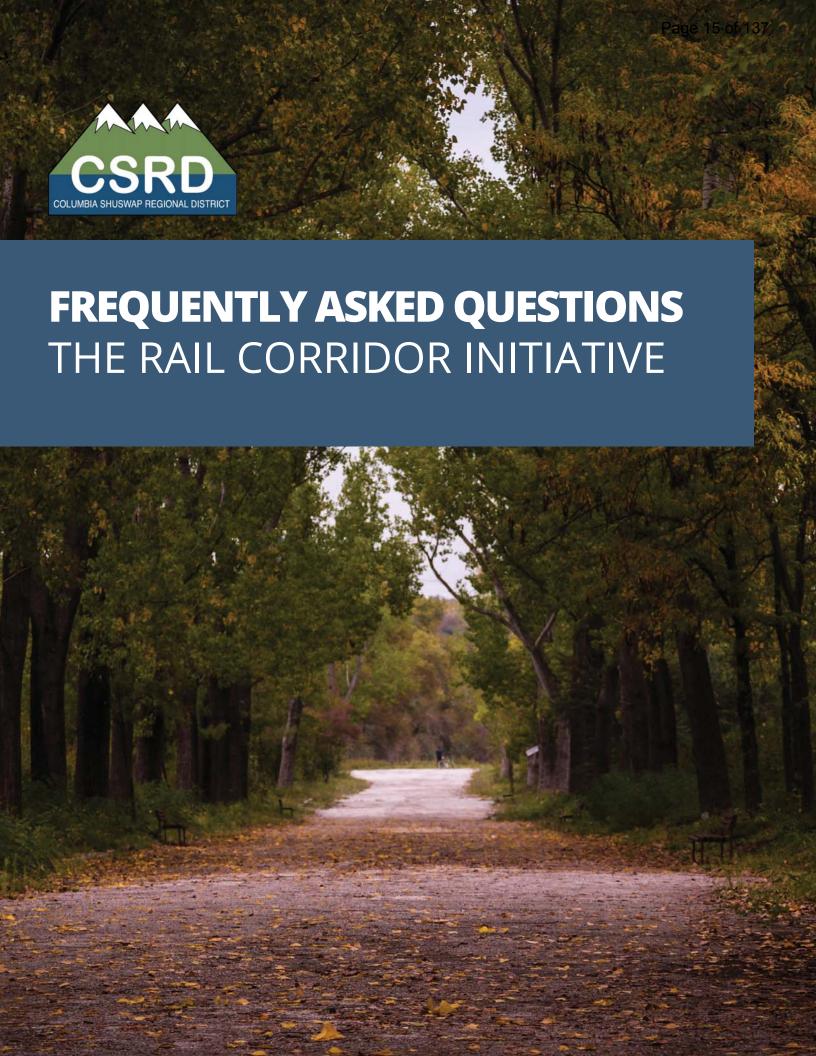
3. Information:

For further information contact:

Lynda Shykora Deputy Corporate Officer Columbia Shuswap Regional District PO Box 978 555 Harbourfront Drive NE Salmon Arm, BC V1E 4P1

250.833.5939 (Direct Line) or 250-832-8194 admin@csrd.bc.ca

A copy of the Bylaws and a report summarizing this project is available on CSRD website www.csrd.bc.ca and at the CSRD office Monday through Friday from 9:00 a.m. to 4:00 p.m. excluding holidays.



A BRIEF HISTORY



The abandoned CP Rail Corridor between Sicamous and Armstrong is a transportation corridor that represents enormous opportunity for the Columbia Shuswap Regional District (CSRD) and the surrounding region. The CSRD and the Regional District of North Okanagan (RDNO) have negotiated a Contract of Purchase and Sale with Canadian Pacific Railway Company for purchase of the abandoned CP Rail Corridor known as the former Okanagan subdivision from Mile 0.3 to Mile 1.2, Mile 1.8 to 23.5 and Mile 25.5 to 30.76 ("the Lands"). The abandoned rail line is a continuous, uninterrupted corridor from the District of Sicamous to the City of Armstrong, including the approximate 7 kms that passes through Splatsin Indian Reserve Nos. 2 & 3.

Keeping the corridor in public ownership for use as a public right of way will provide for recreational opportunities in the near term, particularly pedestrian and bicycle transportation, as well as opportunities to meet the future transportation and economic needs of the region. The purchase price is \$6.5 million for the approximate 43 km corridor, excluding approximately 7 km already acquired by the Splatsin First Nation. The \$6.5 million purchase price will be divided equally between a Provincial government grant, the RDNO and the CSRD. The Province's financial commitment of \$2.17 million has already been obtained.

The CSRD's portion amounts to \$2.17 million. The CSRD proposes to finance its share of the purchase price as follows:

- 1. \$250,000 contribution from the Sicamous/Area E Economic Opportunity Fund (EOF);
- 2. \$100,000 contribution from the Revelstoke/Area B EOF Fund, and
- 3. long-term borrowing in the amount of \$1,838,384 (includes the administration fee charged by the Municipal Finance Authority (MFA)).

Public approval must be obtained before the CSRD can adopt bylaws to establish the service and borrow these funds. The CSRD jurisdictions that will participate in the proposed purchase include the City of Salmon Arm, the District of Sicamous, and Electoral Areas C, D, E, and F.

This overview profiles the CP Rail Corridor project for all residents and taxpayers of the participating jurisdictions within the CSRD. The paper uses a Q&A format that anticipates and answers some of the more important questions that may arise. If your specific question is not addressed here, please feel free to contact the CSRD (contact details are provided at the end of the document).

FAQ - CORRIDOR LANDS

Q: Where is the rail corridor? How long is it?

A: The length of the Sicamous to Armstrong corridor (see map) is approximately 50 kilometres or 31 miles and is commonly referred to as the Okanagan Subdivision ("Line"). The entire Line runs from Sicamous (mile 0.3) to Armstrong (mile 31.63). The northern segment of the line (mile: 0.3 – 14.4) runs through the Columbia Shuswap Regional District (CSRD), including the municipality of Sicamous. The southern segment (mile 16.4 – 31.63) runs through the Regional District of North Okanagan (RDNO), including the municipalities of Enderby, Spallumcheen, and Armstrong. The Splatsin First Nation has already acquired approximately 7 km of the 50 km rail corridor made up of a 1 km

section immediately south of the District of Sicamous and a 6 km section starting immediately south of the City of Enderby.

Q: Why isn't the rail corridor being used for train traffic?

A: The Line has been owned by CP since 1891 and was most recently operated and maintained from November 1998 until August 2009 by OmniTRAX Inc., pursuant to a lease agreement with CP. There have been no railway operations on the Line since OmniTRAX ceased its operations in August 2009.

Control of the Line was returned to CP following the expiration of its lease agreement with OmniTRAX Inc. in August 2009, and CP Rail began the formal process of discontinuing the Line between Sicamous and Armstrong. The rail line is composed of two distinct segments – notably, the north and the south. CP attempted to dispose of the two segments separately through a different transfer and discontinuance process.

In accordance with the Canada Transportation Act, CP initially advertised the availability of the Line for continued rail operations by another rail operator. As no agreement was reached with a viable successor, CP later offered to sell all of its interest in the rail line to the provincial and municipal governments. Although two expressions of interest were received from local government to separately acquire the north and south segments of the Line, CP Rail was

unable to arrive at an agreement to sell either segment of the rail line. As a result, CP formally discontinued the northern segment of the rail corridor (mile: 0.3 to 16.4) in November 2012 and the southern segment in April 2014.

Q: Will CP turn over to local governments a completely contiguous right of way?

A: Yes. However, it should be noted that the portions of the corridor that pass through Splatsin Reserve lands are not included in the transfer. To ensure the corridor remains contiguous, the three owner jurisdictions (i.e., CSRD, Splatsin & RDNO) have agreed that the corridor will be developed, operated and maintained for its use as a continuous recreational trail as well as future potential use as a continuous multi-modal regional transportation corridor. Further, the owner jurisdictions will covenant with each other under the terms of a statutory right of way agreement for public access over those sections of the corridor that they own, to maintain it (and not encumber it) in perpetuity for these ultimate uses.



FAQ - CORRIDOR USE

Q: What kind of transportation might happen on the corridor and when?

A: The flat grade, limited road crossings and connection to the urban centres of the North Okanagan/Shuswap make the corridor a viable route possibility for future generations. Transforming the corridor into a recreational trail or linear park for pedestrians and cyclists is a popular idea that will benefit visitors and residents of the North Okanagan/Shuswap region. Until the population base of the municipalities is sufficient to support some form of mass transportation, it is unlikely development of a transit corridor would happen.

Q: What would the trail look like? When would it be built?

A: Due to the significant investment to purchase the corridor, local governments are not in a position to make any significant financial commitment to develop a trail in the short term. Negotiations surrounding the purchase have been focused on acquisition of the corridor as a strategic investment, rather than how to maximize the recreational and economic potential of the corridor, or potential funding for a development plan.

Although there is no trail development plan at this time, there is considerable interest among the owner jurisdictions and the public for the timely development and operation of a continuous recreational trail within the corridor. In order to achieve this goal cooperatively, the owner jurisdictions plan to establish an Inter-jurisdictional Development Team (IDT) to plan and develop the initial improvements required for a basic, continuous recreational trail.

Q: Will CSRD taxpayers have input into the design and development decisions and if so, by what mechanism?

A: Yes, rail trails represent a community decision. As with other land use planning exercises, the CSRD would seek public input on lands that it owns and has control over. Details surrounding this process have not yet been determined as the land is not currently owned by the CSRD.

Q: How will the rail trail be developed, managed and maintained after purchase?

A: In the absence of a trail development plan, it is not possible to say with any certainty how the trail will be developed, managed, and maintained. To date, the CSRD and the RDNO have focused on protecting the corridor through acquisition. Development, operations and maintenance of the corridor could take many forms and will need to be evaluated. It is anticipated that a plan for development of a recreational trail will be one of the first steps upon successful acquisition of the corridor. The future will be determined, in large part, through public input once ownership is acquired.

Q: Who is going to pay the maintenance costs for the corridor?

A: Maintenance and upgrades would be managed through the IDT with funding from senior government, participation by private citizens, organizations and companies as well as volunteers interested in land stewardship. While there may be costs in the future to develop and maintain the rail corridor, the overall objective is to fund development and maintenance costs through non-tax based revenues.

Q: Who will be responsible for fencing along the right of way if there is a perceived conflict with adjacent property owners?

A: Operations, maintenance, and security of the corridor is yet to be determined; however, these lands would likely be treated similar to other regional district or jointly held lands in our inventory. Property owners would have the right to install fencing on their own property if they wished.

Q: How will unauthorized access and use of the corridor be managed prior to full development and management of a recreation corridor?

A: It is acknowledged that a key part of the development and management plan of the corridor will be to identify and establish corridor access points. These access points will be established through the IDT. Prior to the full development and management of the corridor, it is anticipated that temporary signage will be installed to restrict access and discourage unauthorized use.

FAQ - ENVIRONMENTAL

Q: Who is responsible for the immediate environmental clean-up and to what level?

A: As part of the negotiations, CP Rail undertook an environmental assessment of the Lands. During the assessment, contamination was identified in three small sections of the corridor (identified areas). CP Rail has offered to provide BC Ministry of Environment (MoE) Instruments, in this case Certificates of Compliance (CoCs), for the identified areas. The CoCs will provide a relatively high standard of due diligence for the sections to which they apply. It is unknown at this stage whether any hidden environmental hazards exist in the corridor outside of the "identified areas." The Regional Districts will assess environmental issues that may be assumed under this contract during the three-month due diligence period. They will have until early August 2017 to have their environmental consultants obtain and review reports and provide advice regarding any further investigations, studies or tests which ought to be completed to mitigate or manage unidentified risks.

Q: What environmental remediation will be left for the participating communities and are there plans to deal with this?

A: CP Rail will be required to obtain CoC's for identified areas from the Ministry of Environment and remediate these areas to industrial land use standards-this will be a continuing obligation on CP Rail, post-closing. CP will also provide copies of previous environmental reports to the Regional Districts, along with "reliance letters" from CP Rail's consultants. These letters will allow the Regional Districts to rely on such reports in making the determination of whether the Lands are acceptable. It is too early to say whether there are any unidentified environmental issues or what the related remediation costs might be. As noted previously, it is during the due diligence period that the Regional Districts will review the existing environmental reports and undertake further assessment work if deemed appropriate. Should the Regional Districts discover any problems or issues regarding the condition of the corridor that cannot be resolved with CP Rail, they will have the ability to renegotiate or terminate the contract.



FAQ - FINANCIAL

Q: How much is the CSRD asking to borrow?

A: The CSRD is seeking approval to borrow up to \$1,840,000 (\$1,820,000 plus debt financing) through Loan Authorization Bylaw 5756 to purchase a 50% share of the abandoned CP Rail Corridor known as the former Okanagan subdivision from Mile 0.3 to Mile 1.2, Mile 1.8 to 23.5 and Mile 25.5 to 30.76.

Q: What is the full cost and who is paying for the entire corridor?

A: The purchase price is \$6.5 million for the approximate 43 km corridor, excluding the approximate 7 km already acquired by the Splatsin First Nation. The \$6.5 million purchase price will be divided equally between the Provincial government grant, the RDNO, and the CSRD. The CSRD's portion amounts to \$2.17 million.

Q: How will the CSRD fund its share of the purchase price?

A: The purchase of the CSRD's 50% share of the corridor, net of the Provincial contribution, is proposed to be funded as follows:

- a \$250,000 contribution from the Sicamous/ Area 'E' Economic Opportunity Fund (EOF);
- 2. a \$100,000 contribution from the Revelstoke/Area 'B' EOF Fund, and
- 3. the balance of \$1,840,000 (including \$20,000 financing fee) will be paid for through long-term borrowing with the MFA upon adoption of Loan Authorization Bylaw 5756.

Q: Why is the CSRD borrowing funds for this purchase?

A: As this will be a new service, the Regional District does not have sufficient funds available to complete this purchase.

Q: What will be the impact on taxpayers and how are the costs apportioned among the participating jurisdictions?

A: The CSRD Board has made every effort to minimize the tax impact in the interest of securing a land asset that would be valued for generations. The Board also made efforts to ensure the costs were apportioned fairly among the service participants (the City of Salmon Arm, the District of Sicamous, and Electoral Areas C, D, E, and F). As the proposed

purchase is a sub-regional initiative, not all CSRD taxpayers will be affected; only those taxpayers in the participating service area will see an impact on their property taxes. The boundary of the proposed service area was recommended because it mirrors the boundaries of the Shuswap Tourism service area. To ensure fairness and equity among service participants, a customized cost apportionment formula was developed. Typically, taxes are allocated using BC Assessments' values for Converted Assessment. However, as benefits from a trail initiative are perceived to accrue differently based on a jurisdiction's proximity to the trail, it was decided that allocating the costs on the basis of converted assessments was not the most fair or equitable method. Instead, the Board approved the following customized cost apportionment formula among the service area participants:

City of Salmon Arm	35%
District of Sicamous	30%
Electoral Area C	12%
Electoral Area D	3%
Electoral Area E	15%
Electoral Area F	5%

Q: How much will it cost each participating jurisdiction to borrow this money?

A: The CSRD is proposing to borrow up to \$1,840,000 at a market rate of 3.58%, amortized over a 25 year repayment schedule. Using the customized cost apportionment formula, the share of the annual repayment amount for each participating jurisdiction is anticipated to be as follows:

Jurisdiction	Percentage of Total	Total Annual Debt Repayment Amount by Jurisdiction
City of Salmon Arm	35%	\$40,719
District of Sicamous	30%	\$34,902
Electoral Area E	15%	\$17,451
Electoral Area C	12%	\$13,961
Electoral Area F	5%	\$ 5,817
Electoral Area D	3%	\$ 3,490
Total Debt Repayment	100%	\$116,340



Q: What will the annual tax impact be for the average residential taxpayer in each of the participating jurisdictions?

A: The annual tax impact, based on current rates and assessment values, is estimated to be as follows:

Jurisdiction	Average Residential Assessment	Average Residential Tax per Annum
City of Salmon Arm	\$ 335,874	\$ 3.98
District of Sicamous	\$ 258,302	\$ 13.57
Electoral Area E	\$ 274,779	\$ 10.03
Electoral Area C	\$ 349,414	\$ 2.16
Electoral Area F	\$ 286,637	\$ 1.29
Electoral Area D	\$ 258,969	\$ 1.83

Q: What if the CSRD receives approval from their electors and the RDNO does not (or vice-versa) – will the project still proceed?

A: No, the purchase arrangement would not be able to proceed as contemplated as each Regional District is required to obtain the full share of its own financial contribution for the transaction to be completed.

Q: Can individuals or organizations donate money towards purchasing the rail corridor and get a tax receipt?

A: Yes, there is an opportunity to donate. If the Alternative Approval Process (AAP) is successful, the local government can provide a tax receipt for donations. If the majority of electors support the borrowing, then any funds received will be used to lessen the tax impact for all property owners in the participating service area. Alternatively, if the AAP is successful and individuals or organizations want to donate money towards actual trail development costs, there will also be opportunities to donate money to organizations such as the Shuswap Trail Alliance, in exchange for a charitable tax receipt.

FAQ - FIRST NATIONS INVOLVEMENT

Q: How has the Splatsin First Nation (Splatsin) been involved in discussions about the rail corridor?

A: In fact, Splatsin initiated the process of acquiring the abandoned rail corridor. In December 2014, it was announced that the Secwepemc community had acquired 11.7 hectares of the discontinued railway. The rail line passes through two reserves by Mara Lake and Enderby. Chief Wayne Christian indicated at the time of the announcement that he planned to meet with local government leaders in the New Year with a view to acquiring the remaining sections of the 50-kilometre corridor.

In February, 2015, representatives from several North Okanagan local governments met with Splatsin Band officials to discuss opportunities to work together. While visions for the future of the rail corridor varied, there was broad support for maintaining the rail corridor as a continuous corridor for longer term strategic objectives, such as transportation planning, greenway, and recreation trails.

A follow-up meeting was held in March 2015 to discuss next steps. It was agreed that the various interested parties would work under the umbrella of the two Regional Districts and the Splatsin Indian Band. It was further agreed that the Chairs of the two Regional Districts and the Band Chief would provide political leadership for advancing the initiative.

Q: What about Splatsin, doesn't some of the rail line pass through their reserve lands?

A: As noted earlier, the three owner jurisdictions (i.e. CSRD, Splatsin & RDNO) have agreed that the corridor will be developed, operated and maintained for its use as a continuous recreational trail and its potential future use as a continuous multi-modal regional transportation corridor. Moreover, the owner jurisdictions will covenant with each other under the terms of a statutory right of way agreement for public access over those sections of the corridor that they own, to maintain it (and not encumber it) in perpetuity for these ultimate uses.

FAQ - GOVERNMENT INVOLVEMENT

Q: Why are the local governments and First Nations of the North Okanagan/Shuswap considering purchasing the rail corridor?

A: After the formal discontinuance process had run its course, the Splatsin Indian Band successfully acquired two sections of the rail line, both of which run through Splatsin Reserves (a 1 km section immediately south of the District of Sicamous and a 6 km section starting immediately south of the City of Enderby between Enderby and Spallumcheen).

Splatsin subsequently invited local governments to work with the Band on acquiring the remaining portions of the line. The vision was to pursue a strategic land acquisition of the abandoned CP rail line (Sicamous to Armstrong), as a continuous corridor. The vision is premised on the belief that protecting the rail line for use as a public right of way will benefit residents and recreational

enthusiasts today and will provide opportunities to meet the transportation and economic needs of the region in the future.

Given that Splatsin had already acquired approximately 7 km of the 50 km rail corridor, it was decided that CSRD and RDNO would consider purchasing the remainder of the rail corridor, with the purchase price to be shared 50/50 between CSRD and RDNO.

Q: Which local government are involved?

A: The local government stakeholders that are seeking to purchase and protect the corridor include: the City of Salmon Arm, District of Sicamous, and Electoral Areas C, D, E and F of the Columbia Shuswap Regional District, along with the Cities of Enderby and Armstrong, Township of Spallumcheen, Village of Lumby and Electoral Areas D and F of the Regional District of North Okanagan.

FAQ - ALTERNATIVE APPROVAL PROCESS

Q: What is an Alternative Approval Process?

A: An Alternative Approval Process (AAP) is one method of obtaining elector approval on local government bylaws or agreements that require the assent of the electors. The most common example of local governments using an AAP is for long-term borrowing.

Q: How does it work?

A: The AAP is like a reverse-referendum, whereby a person only submits a response to the local government if they are opposed to the specific purpose of the AAP (eg. borrowing money). Forms are provided to the public online, City of Salmon Arm and District of Sicamous municipal offices, and at the Regional District office. There is a minimum 30-day period to submit response forms.

Q: Can anyone participate in the process?

A: Persons are eligible to participate in the AAP if they meet the following criteria:

- · eighteen years of age or older;
- · Canadian Citizen;
- resident of British Columbia for at least the last six months;
- resident of, OR registered owner of real property within one of the participating jurisdictions within the Columbia Shuswap Regional District for at least the last 30 days;
- not disqualified by law from voting in local elections; and
- have not previously signed an elector response form in relation to Bylaw No. 5755 and 5756.

Q: When a property has multiple owners can each owner submit a response form?

A: No, in such cases a majority of the property owners must appoint one of the owners in writing to submit a response form for that property. A form to be used in such cases is provided by the Regional District.

Q: Why does the CSRD need public approval to borrow the funds?

A: As per the Local Government Act, the Regional District must receive the approval of the electors before it can adopt a bylaw to establish the service and incur long-term debt.

Q: Why doesn't the CSRD use a referendum (assent vote) to obtain public approval?

A: Referendums are far more costly than an AAP. The cost of holding a referendum on Bylaw Nos. 5755 and 5756 is estimated to cost \$15,000, where the costs of an AAP would be limited to advertising, postage and staff time. Note that if the AAP fails to provide elector support, the CSRD will not be able to adopt either Bylaw No. 5755 or 5756 without going to a referendum.

Q: Can a response form be withdrawn after it is submitted?

A: Yes, response forms can be withdrawn prior to the deadline of 4:00 p.m. on Monday, July 17, 2017. Withdrawal requests must be in writing and contain sufficient information to identify the elector concerned. They must be signed by the person making the request for withdrawal and delivered to the Regional District office by hand or mail.

Q: Will response forms submitted electronically be accepted?

A: No, elector response forms will not be accepted by fax or by email. Rather, signed response forms must be hand delivered or mailed to the Regional District and must be received before the deadline of 4:00 p.m. on Monday, July 17, 2017.

Q: What will the \$1.84 million be used for?

A: The approval to borrow \$1.84 million will be to acquire a 50 percent ownership interest in the abandoned rail corridor from CP Rail. To minimize the tax impact to residents, the CSRD Board has agreed to make a \$350,000 down payment from Economic Opportunity Funds, thereby lessening the amount of debt to be incurred.

Q: Will this impact my taxes?

A: Yes, if the AAP is successful and you live within a participating jurisdiction, there will be a tax impact. However, because the CSRD Board elected to utilize a customized apportionment formula rather than rely on the converted assessment mechanism, the cost to the average residential property will not be the same across the service area.

Instead the annual estimated cost to the average residential taxpayer, based on current rates and assessments, across the service area is shown in the following table:

Jurisdiction	Average Residential Assessment	Average Residential Tax per Annum
City of Salmon Arm	\$ 335,874	\$ 3.98
District of Sicamous	\$ 258,302	\$ 13.57
Electoral Area E	\$ 274,779	\$ 10.03
Electoral Area C	\$ 349,414	\$ 2.16
Electoral Area F	\$ 286,637	\$ 1.29
Electoral Area D	\$ 258,969	\$ 1.83

Q: Will there be public consultation?

A: The CSRD is committed to ensuring that the process is transparent and informative for all citizens. Information will be provided through a variety of channels including news media, website, and social media.



FAQ - NEXT STEPS

Q: What are the next steps?

A: The success of the AAP remains a critical part of securing the funding to purchase the land asset. Assuming public ownership is achieved through the AAP, the next step will be the establishment of an Inter-jurisdictional Development Team (IDT) to initiate a formal planning process. It is envisioned that the role of the IDT will be to initiate, prepare, coordinate, advise and make joint recommendations to the councils and board on the following matters:

- A plan for the development of a recreational trail along the entire corridor consistent with the shared objectives of the local government owners for the use and protection of the corridor;
- Policies and regulations concerning the uses and activities permitted within the corridor;
- Trail standards and designs (including minimum standards);
- A project schedule for the development of the corridor;
- Cost estimates and funding strategies to undertake improvements consistent with approved standards and designs;
- Standards for the maintenance of the corridor;
- Policies for the administration of existing encroachment claims, leases, rights of way/easements and other tenures or interests;
- Fundraising strategies including joint applications for grant funding and partnering with fundraising groups.

Q: What is it going to cost taxpayers to develop and maintain the rail corridor if the local governments buy it?

A: While there may be costs in the future to develop and maintain the rail corridor, the overall objective is to fund development and maintenance costs through non-tax based revenues. Other models have shown that there may be options, other than taxation, for funding development and maintenance of corridors; the IDT will explore

stimulus funding, government grant programs, fundraising and foundation contributions. Groups such as the Shuswap Trail Alliance have made a huge difference in preserving and developing trail networks that are unquestioned assets in the Shuswap Region. Parallel groups, such as the Ribbons of Green Trail Society and the Okanagan Rail Trail Initiative Society are actively working in the North and Central Okanagan regions.

Q: Who would the corridor be for?

A: The corridor would be intended for the region as a whole; for the residents of the North Okanagan/ Shuswap and our visitors.

Q: Who should I contact if I have any questions that are not addressed in this FAQ or want to request additional information?

A: Questions or requests for further information can be sent to Lynda Shykora, Deputy Corporate Officer or Charles Hamilton, Chief Administrative Officer:

- by email to inquiries@csrd.bc.ca
- by phone at 250.832.8194 or Toll free (within BC) at 1.888.248.2773.









BOARD REPORT

TO:		Chair a	and Directors		File N	0:	BL 5755	
SUBJECT:		Amendment to Rail Corridor Trail Service Establishment Bylaw No. 5755						
DESCRIPTIO	N:	Report from Lynda Shykora, Deputy Manager, Corporate Administration Services, dated May 15, 2017.						istration
RECOMMEND #1:	PATION	THAT: Third Reading given to Rail Corridor Trail Service Establishment Bylaw No. 5755 on April 20, 2017 be Rescinded this 18 th day of May, 2017.						
RECOMMEND #2:	PATION	THAT: Section 6 of Rail Corridor Trail Service Establishment Bylaw No. 5755 be Amended to reflect the maximum requisition amount to be an equivalent of \$0.06 for each \$1,000 of net taxable value of land and improvements included in the Service Area this 18 th day of May, 2017.						
RECOMMEND #3:	PATION	THAT: Rail Corridor Trail Service Establishment Bylaw No. 5755 be given Third Reading as Amended this 18 th day of May, 2017.						
SHORT SUMM	MARY:							
to the Rail Co	rridor Trail S	ervice E	nd Cultural Developr stablishment Bylaw at may be requisition	No. 575	55. Ťh	ne am	nendment requ	ested is a
VOTING:	Unweighted Corporate	d 🖂	LGA Part 14 (Unweighted)	Weigh Corpo			Stakeholder (Weighted)	
BACKGROUN	D:							
bylaw had esta be \$0.50 for	ablished the n each \$1,000	naximum O of net	leadings at the April In amount that may be It taxable value of la Ity of Salmon Arm, Dis	e requis and imp	sitioned proveme	for thents t	ne Rail Corridor to be collected	Service to

MCSCD staff have advised that the Inspector's approval of the Service Establishment Bylaw is likely, provided that the maximum requisition amount more closely align with the \$1.84 million maximum loan authorization sought through Bylaw No. 5756.

CSRD staff are presenting an amendment to Section 6 of Bylaw No. 5755 based on the comments of Ministry staff. The amount establishes a maximum requisition amount of \$0.06 rather than the \$0.50 originally proposed.

POLICY:

The Board is required to adopt separate resolutions to Rescind, Amend, and re-read the bylaw at Third Reading.

FINANCIAL:

The maximum requisition of \$0.06 per \$1,000 of net taxable value of land and improvements will generate a requisition that will allow for repayment of the \$1.84 million loan authorization proposed in Rail Corridor Trail Service Loan Authorization Bylaw No. 5756, plus some minor operating costs, if necessary.

KEY ISSUES/CONCEPTS:

Ministry of Community Sport and Cultural Development staff have instructed the CSRD to amend the service establishment bylaw, in order to recommend that the bylaw be approved by the Inspector of Municipalities.

IMPLEMENTATION:

Staff will be submitting the amended bylaw to the MCSCD office immediately following the May 18th, 2017 Board meeting.

COMMUNICATIONS:

The amended Rail Corridor Service Establishment Bylaw will be submitted to the Inspector of Municipalities' office with a request that the bylaw be approved by Monday, May 29, 2017.

DESIRED OUTCOMES:

That the Board endorse the recommendations.

BOARD'S OPTIONS:

- 1. Endorse the Recommendation.
- 2. Deny the Recommendation.
- 3. Defer.
- 4. Any other action deemed appropriate by the Board.

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. List reports

Report Approval Details

Document Title:	2017-05-18_Board_CA_BL5755.docx
Attachments:	- BL 5755 Rail Corridor Trail Loan Service Establishment Bylaw - Proposed Amendment to maximum requisition.pdf
Final Approval Date:	May 16, 2017

This report and all of its attachments were approved and signed as outlined below:

Jodi Pierce - May 16, 2017

Charles Hamilton - May 16, 2017

COLUMBIA SHUSWAP REGIONAL DISTRICT

BYLAW NO. 5755

A bylaw to establish a service and service area for a network of regional trails within former railway corridor lands

WHEREAS under section 332 of the *Local Government Act* a regional district may, by bylaw, establish and operate any service that the board considers necessary or desirable for all or part of the regional district;

AND WHEREAS the Board of the Columbia Shuswap Regional District (the "Board") wishes to acquire, in conjunction with the Splatsin First Nation and the Regional District of the North Okanagan, the abandoned Canadian Pacific rail corridor between Sicamous and Armstrong in order to develop a network of regional trails (the "Rail Corridor Trail Initiative");

AND WHEREAS THE Board wishes to establish a service to acquire, construct, improve, manage and operate the Rail Corridor Trail Initiative with respect to those parts of the Rail Corridor Trail Initiative that are within the Columbia Shuswap Regional District;

AND WHEREAS the approval of the electors in the Participating Areas has been obtained in accordance with section 345(1)(a) of the Local Government Act;

AND WHEREAS the approval of the Inspector of Municipalities has been obtained in accordance with sections 342(1)(a) of the *Local Government Act*;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

- 1. The Regional District hereby establishes a service for the purpose of acquiring, constructing, improving, managing and operating the Rail Corridor Initiative (the "Rail Corridor Trail Service").
- 2. The participating areas and the service areas for the Rail Corridor Trail Service consist of the City of Salmon Arm, the District of Sicamous and Electoral Areas "C", "D", "E" and "F" (the "Participating Areas").

3. Boundaries:

The boundaries of the service area are:

- All of Electoral Area C;
- All of Electoral Area D;
- All of Electoral Area E;
- All of Electoral Area F;
- All of the City of Salmon Arm;
- All of the District of Sicamous.

- 4. The annual costs for the Rail Corridor Trail Service shall be recovered by:
 - (a) requisition of money to be collected by property value taxes imposed in accordance with Division 3 of Part 11 of the *Local Government Act*;
 - (b) fees and charges imposed under section 397 of the Local Government Act;
 - (c) revenues raised by other means authorized under the *Local Government Act* or another Act; and
 - (d) revenues received by way of agreement, enterprise, gift, grant or otherwise.
- 5. The requisition of money to be collected by property value taxes imposed in accordance with Division 3 of Part 11 of the *Local Government Act* is to be apportioned among the Participating Area as follows:
 - a. 35% from City of Salmon Arm;
 - b. 30% from District of Sicamous;
 - c. 12% from Electoral Area "C";
 - d. 3% from Electoral Area "D";
 - e. 15% from Electoral Area "E"; and
 - f. 5% from Electoral Area "F".
- 6. The maximum amount that may be requisitioned for the Rail Corridor Trail Service is the amount equivalent to **\$0.06** for each \$1,000 of net taxable value of land and improvements included in the Service Area.

7	This bylaw may	be cited as	"Rail Corridor	Trail Service	Establishment By	vlaw No. 5755.'
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READ A FIRST TIME THIS	20 th	day of	<u>April</u>	, 2017.
READ A SECOND TIME THIS	20 th	day of	April	, 2017.
READ A THIRD TIME THIS	20 th	day of	April	, 2017.
THIRD READING RESCINDED T	HIS	day of	Victoria de la companya della companya della companya de la companya de la companya della compan	, 2017
READ A THIRD TIME AS AMEND	DED THIS	day of		, 2017.
Approved by the Inspector of Mun	icipalities this	day of		, 2017.
RECEIVED elector approval this _		day of		, 2017.
ADOPTED THIS	day of		, 2	017.

MANAGER OF CORPORATE
ADMINISTRATION SERVICES (SECRETARY)

CERTIFIED a true copy of
Bylaw No. 5755 as read a third time.

Deputy Manager of Corporate
Administration Services

CHAIR

CHAIR

Deputy Manager of Corporate
Administration Services



BOARD REPORT

TO: Chair and Directors File No: BL 5754 3995 20 04

SUBJECT: Proposed Public Consultation Plan for Draft Noise Bylaw No. 5754.

DESCRIPTION: Report from Gerald Christie, Manager Development Services, dated

May 18, 2017.

Proposed public consultation plan for draft Noise Bylaw No. 5754.

RECOMMENDATION: THAT: the Board support the recommended communications plan for

Noise Bylaw No. 5754 which includes website and social media information, online survey, and public availability of printed information

prior to consideration of second reading of the bylaw.

SHORT SUMMARY:

At the April 20, 2017 Board meeting a report from Lynda Shykora, Deputy Manager, Corporate Administration, was presented first reading of proposed Noise Bylaw No. 5754. Although the bylaw received first reading from the Board, some Directors desired additional information from staff as to how information about the proposed Noise Bylaw will be relayed to the public. This report outlines a proposed communication plan that will provide opportunities for the public to give feedback that will be provided to the Board when the bylaw is considered for second reading.

VOTING:	Unweighted Corporate	\boxtimes	LGA Part 14 🔲 (Unweighted)	Weighted Corporate		Stakeholder (Weighted)		
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BACKGROUND:

Over the course of the last year, the Board has discussed the creation of a Good Neighbour Bylaw which eventually led to a Board recommendation on March 23, 2017 instructing staff to instead focus on developing a Noise Bylaw. On April 20, 2017 the Board gave first reading to Noise Bylaw No. 5754 which provides regulations pertaining to loud and disruptive noises emanating from individuals, equipment, or vehicle use that are deemed to be objectionable and that may generally be disturbing the quiet, peace, rest, enjoyment, comfort or convenience of individuals or the public.

During consideration of first reading of Bylaw No. 5754, the Board discussed various ways to obtain comments and opinions from the public with regard to the bylaw prior to considering second reading. Directors requested that staff create a communications plan that could include online information, a frequently asked questions (FAQ) sheet, online survey and public information meetings. A budget for the proposed communications plan was also requested.

POLICY:

As noted in the April 20, 2017 Board report, Bylaw Enforcement Policy A-69 details how complaints are handled by CSRD bylaw enforcement staff. The policy also prioritizes types of complaints into two classifications with priority given to immediate health and safety risks to humans, significant adverse

environmental risks, or harm to CSRD infrastructure, i.e. Class 1 violations. Noise complaints would be considered a Class 2 violation as they do not typically involve an immediate risk to health and safety of individuals, property or the environment and therefore would be investigated subject to the order the complaint has been received, other priorities, staffing availability, and budget resources. For these reasons, and in particular the civil and subjective nature of such complaints which often happen during the evening/night hours and on weekends when CSRD bylaw enforcement staff are typically unavailable, the RCMP would have the ability to enforce the regulations of the proposed bylaw and issue tickets at their discretion.

The primary purpose in having the Noise Bylaw is to empower and give ticketing ability to the RCMP to sanction those who contravene the bylaw regulations. The bylaw and ticketing are also tools which afford the RCMP with a level of discretion that they would not have otherwise through the Criminal Code. Although CSRD bylaw enforcement staff will deal with noise complaints and work with the RCMP in the enforcement of the bylaw, due to limited CSRD staffing, the very large geographic size of the CSRD, and concern for the safety of staff, it is not considered practical or desirable to have CSRD bylaw enforcement staff patrolling or investigating noise complaints in the middle of the night or throughout the weekends except in exceptional circumstances.

FINANCIAL:

As noted below, the staff recommendation is to proceed with online information, via social media and the CSRD website, an online survey, and some newspaper advertising with regard to the proposed Noise Bylaw. Costs including staff time are limited to the creation of the online information and survey and compilation of information and data for a report to the Board prior to consideration of second reading of the bylaw. Costs of the recommended consultation can be absorbed within the Development Services budget and the staff time necessary for undertaking such work will be prioritized within the existing staff workload. Newspaper advertising is the most costly part of the proposed communication plan but would be limited to one informational advertisement in each Electoral Area and costing approximately \$2500.

Directors had put forward the idea of holding public information meetings in the Electoral Areas on the proposed bylaw. The costs of advertising, meeting space and staff time make such an undertaking very expensive and time intensive and is therefore not recommended.

Advertising - \$5000 approx. (min. 2 advertisements per electoral area for public meetings)

Hall Rentals - \$1000 approx.

Staff time - \$1500 minimum (1 staff / 6days)

Vehicle Use - \$500

TOTAL \$8000

KEY ISSUES/CONCEPTS:

The main intent of the proposed Noise Bylaw is primarily to provide the RCMP with ticketing ability for the most egregious noise-related infractions, most often occurring during the evening/night and summer months. The bylaw provides prohibitions against individuals or property owners from disturbing others peaceful enjoyment of their property or neighborhood. In short, the bylaw proposes that any loud or disruptive sounds that may be heard by a neighbouring property or other premises in the vicinity be prohibited between the hours of 10:00pm and 8:00am. Construction-related activities

and excavation or fill on lands that generates noise that can be heard from a neighbouring property or other premises in the vicinity is prohibited between 10:00pm and 7:00am. Bylaw contraventions can be enforced by a CSRD Bylaw Enforcement Officer or Peace Officer (e.g. RCMP) as appropriate and can involve fines of up to \$1000 via proceedings under the CSRD Ticket Information Utilization Bylaw No. 5296, as amended.

An online public information and consultation program is proposed to disseminate information to the public about the bylaw and to seek feedback via an online survey. Staff will create a webpage for the proposed bylaw that will include a description of the bylaw, a FAQ section, and a link to a short online survey. Using this approach the proposed online information and survey can be completed in a timely and cost effective manner.

Staff are not recommending a larger scale form of consultation via public meetings about the proposed bylaw given the bylaw's simplicity and the intent to merely give the RCMP another tool to use when dealing with excessive and ongoing noise issues. Development Services staff already have underway several projects which require an extensive amount of work and consultation to complete over the next few months, including: new Building Inspection Service open houses and new Building Regulation Bylaw preparation, Electoral Area 'E' OCP public meetings, and Ranchero/Deep Creek Zoning Bylaw public meetings. Aside from the significant costs associated with holding public meetings in the Electoral Areas on the proposed Noise Bylaw, due to other priorities already approved by the Board in Development Services work plan for 2017, if the Board required public meetings be held on the proposed Noise Bylaw the earliest staff would be able to undertake such consultation work would be sometime in the fall of 2017 or winter of 2018. For all of these reasons staff are of the opinion that a more limited consultation program is appropriate in this case.

SUMMARY:

At the April 20, 2017 meeting of the CSRD Board, Directors requested that staff develop a plan for informing the public and soliciting feedback about the proposed Noise Bylaw No. 5754. Staff are proposing to use newspaper advertising, social media, webpage on the CSRD's website, and an online survey to elicit comments. Although the Directors discussed the possibility of holding of public meetings on the proposed bylaw staff are of the opinion that due to the excessive costs of advertising and holding these meetings, and the staff time required, that such public meetings are unnecessary given the straightforward nature of the bylaw.

IMPLEMENTATION:

Development Services staff will work with CSRD Information and Technology staff to develop a webpage and survey for the CSRD's website which can then be cross posted on social media. It is anticipated that the newspaper advertisements and online information and survey can be developed over the next few weeks. Respondents will then be given approximately one month to submit comments to staff. Staff will then compile the responses and prepare a report for the September or October Board meeting agenda.

COMMUNICATIONS:

Results from consultation will be provided to the Board for information when the bylaw is brought forward for consideration of second reading. The bylaw was also referred to the RCMP for

information and comment and will be informed of the proposed communication plan as approved by the Board.

DESIRED OUTCOMES:

That the Board endorse the staff recommendation. If endorsed staff will create a webpage, FAQ sheet and online survey to be posted as soon as possible.

BOARD'S OPTIONS:

- 1. Endorse the Recommendation.
- 2. Deny the Recommendation.
- 3. Defer.
- 4. Any other action deemed appropriate by the Board.

Report Approval Details

Document Title:	2017-05-18_Board_DS_BL5754_Noise_Bylaw_consultation.docx
Attachments:	- BL5754_Noise_Bylaw_Board Report_First_Reading_2017-04-20.pdf - BL5754_Noise_Bylaw_First_Reading_2017-04-20.pdf
Final Approval	May 15, 2017
Date:	

This report and all of its attachments were approved and signed as outlined below:

Corey Paiement - May 15, 2017 - 9:41 AM

Lynda Shykora - May 15, 2017 - 11:22 AM

Charles Hamilton - May 15, 2017 - 11:58 AM

RI 5754



BOARD REPORT

TO:	Chair an	d Directors	File No:	2300-10			
SUBJECT:		tion of CSRD Noise Areas A, B, C, D, E	-	gulation of noise within			
DESCRIPTION: Report from Lynda Shykora, Deputy Manager, Corporate Administration Services dated April 10, 2017							
RECOMMENDATION THAT: "CSRD Noise Bylaw No. 5754" be read a first time this 20 th day of April, 2017;							
	AND FURTHER THAT: the Board support an informal opinion poll and a customized public consultation for each Electoral Area to inform, consult and to gather feedback from community residents in relation to the proposed noise bylaw.						
APPROVED for Boar	d Consideratio						
Meeting Date: April 20		Charles Ham	ilton, CAO				
SHORT SUMMARY:							
Bylaw No. 5754 is attached for consideration of First Reading (introduction), to be followed by the opportunity for Electoral Area Directors to gather public input from community members in relation to the proposed noise bylaw within Electoral Areas A, B, C, D, E and F.							
VOTING: Unwe	<i>_</i>	LGA Part 14 [] (Unweighted)	Weighted Corporate	Stakeholder (Weighted)			
BACKGROUND:							
At the February 7, 2017 Flectoral Area Directors' Committee meeting, discussion, took place about							

At the February 7, 2017 Electoral Area Directors' Committee meeting, discussion took place about moving forward with a Good Neighbour Bylaw, initially intended for the regulation of noise and property maintenance (unsightly premises), in Electoral Areas A, B, C, E and F. The outcome of the discussion was a recommendation to the Board "that staff be directed to draft a Noise Bylaw pertaining to Electoral Areas A, B, C, D, E and F for first reading, to be followed up by a public consultation process in the affected communities." At its March 23, 2017 Board meeting, the Board supported the recommendation of the Electoral Area Directors Committee.

POLICY:

The CSRD, pursuant to supplementary Letters Patent dated October 1, 1981, was granted the power to exercise the authority under Section 932 of the Municipal Act, pertaining to control of noise.

Section 324 of the Local Government Act provides that the Board may, by bylaw, regulate or prohibit the making or causes of noise.... that disturb or tend to disturb the quiet, peace, rest, enjoyment,

comfort or convenience of the neighbourhood or persons in the vicinity OR that the Board considers are objectionable or liable to disturb the quiet, peace, rest, enjoyment, comfort or convenience of individuals or the public.

Bylaw Enforcement Policy A-69, adopted February, 2017 - Noise Complaints, as per the policy, would be considered by staff to be Class 2 violations:

- "Class 2 violations do not pose an immediate hazard to persons or property and typically do not involve significant environmental impacts. Such violations tend to have limited off-site implication and may be cosmetic in nature. Investigation of Class 2 complaints will be ranked in the order received and investigated subject to staffing, other priorities, and budgetary resources."
- "To initiate enforcement action by the Regional District, complaints must be submitted in accordance with the following criteria:
 - two (2) complete written bylaw complaints signed by unrelated complainants from within the Electoral Area in which the property is located;
 - one (1) complete written bylaw complaint signed by a complainant whose property is located within 100 metres of the subject property; or,
 - -one (1) written or verbal complaint from an RCMP officer.

This means that two written complaints would need to be received by bylaw enforcement staff about the same complaint, one which would need to be from a property owner/resident residing within 100 metres of the property or place subject to the noise complaint. Alternatively, a complaint received from the RCMP would be investigated.

How the RCMP chooses to utilize the proposed Noise Bylaw for the enforcement of noise issues will be based on criteria established by the RCMP.

FINANCIAL:

The Bylaw Enforcement Officers would investigate and enforce as required noise complaints during normal business hours, within the existing Bylaw Enforcement budget, and based upon the newly adopted Bylaw Enforcement Policy A-69.

Depending on the how the proposed Noise Bylaw is utilized by the RCMP, there may additional budget requests made by the RCMP to the CSRD. This matter was discussed at the Electoral Area Directors meeting in February, where the CSRD indicated that it would consider cost-sharing with the RCMP, on a case by case basis, in relation to costs for RCMP personnel to attend court proceedings.

In terms of communications needed to obtain public feedback on the adoption of a noise bylaw within the electoral areas, there are incidental administrative costs for items such as preparing and hosting an on-line opinion poll. There are also costs to advertise and inform the public that the CSRD is seeking feedback on a noise bylaw for their area. It is anticipated that such costs will be captured within the existing administration budget allocations.

KEY ISSUES/CONCEPTS:

The CSRD currently does not have a bylaw to regulate noise in the Electoral Areas.. The noise bylaw is a tool that will assist the CSRD in those escalating noise issues, and more particularly the RCMP in dealing with noise issues during evenings and weekends. Before proceeding with adopting noise bylaw regulations, the Electoral Area Directors wish to gather comments from area residents.

The key aspects of the proposed Bylaw are contained in Part III – Noise Regulations. There is a section on General Regulations, a section on Specific Prohibitions (ie the creation of certain noise [music, construction] between 10 pm and 8 am), and an Exemptions section (ie farm operations noise is exempt).

For the Board's information:

- the draft bylaw does <u>not</u> contain noise regulations pertaining to noise generated by the
 operation of a boat/vessel (ie engine/motor noise) as the CSRD does not have the authority to
 control noises produced by the operation of vessels or another aspect of navigation that is a
 federal matter of regulation.
- the draft bylaw does not apply to barking dogs.

The reference to 'vessel' within the Noise Bylaw Specific Prohibitions would provide the authority to address noise generated by the occupant(s) of a boat/vessel (ie party noise). The enforcement of noise created from on or within a boat/vessel is included as an option that may be utilized by the RCMP. who may have the authority to enter a boat/vessel, whereas the CSRD Bylaw Enforcement Officers do not. Although included in the proposed Noise Bylaw at this time, there are some inherent difficulties in enforcing noise generated from occupants of boats/vessels.

COMMUNICATIONS:

If the Board gives First reading to Noise Bylaw No. 5754, it will be reported in the April, 2017 Board in Brief which will be published on the CSRD website, Facebook and Twitter pages.

Administratively, an opinion poll will be made available on the CSRD website and at the CSRD office. Other methods of communicating information about the proposed bylaw and opinion poll include emailing the information to community associations within the electoral areas.

It is assumed that the individual Electoral Area Directors will develop and carry out their own customized method(s) for community consultation best suited to their particular electoral area, whether it be speaking to residents at community events, community hall association meetings, utilizing existing Committee meetings such as the Area A Local Advisory Committee, etc..

DESIRED OUTCOMES:

That CSRD Noise Bylaw No. 5754 be read a First Time.

It is proposed that the public input be compiled and that outcomes of the feedback be presented at a future Board meeting in approximately two to three months time.

BOARD'S OPTIONS:

- 1. Endorse the Recommendation.
- 2. Deny the Recommendation.

- 3. Defer.
- 4. Any other action deemed appropriate by the Board.

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

Report Approval Details

Document Title:	Noise Bylaw No. 5754.docx
Attachments:	- BL5754 Noise Bylaw for First Reading.pdf
Final Approval Date:	Apr 19, 2017

This report and all of its attachments were approved and signed as outlined below:

Charles Hamilton - Apr 19, 2017 - 10:41 AM

COLUMBIA SHUSWAP REGIONAL DISTRICT

BYLAW NO. 5754

A BYLAW TO ENHANCE THE QUALITY OF LIFE FOR THE CITIZENS OF THE COLUMBIA SHUSWAP REGIONAL DISTRICT

WHEREAS, the Board of the Columbia Shuswap Regional District desires to protect the quality of life for its citizens, endeavours to promote civic responsibility, and strives to encourage good relationships between neighbours:

AND WHEREAS the Board wishes to exercise its authority under Section 324 of the Local Government Act related to noise control;

AND WHEREAS the Columbia Shuswap Regional District, pursuant to supplementary Letter Patent dated October 1, 1981, was granted the power to exercise the authority under section 932 of the Municipal Act pertaining to control of noise;

NOW THEREFORE BE IT RESOLVED that the Board of the Columbia Shuswap Regional District in open meeting assembled, hereby ENACTS AS FOLLOWS:

PART I - INTERPRETATION

- 1.1 Words or phrases defined in the British Columbia Interpretation Act, Motor Vehicle Act or Local Government Act or any successor legislation, shall have the same meaning when used in this Bylaw unless otherwise defined in this Bylaw.
- 1.2 Terms used in this Bylaw are defined in Schedule "A" attached to this Bylaw.
- 1.3 A reference to an enactment refers to an enactment of the Province of British Columbia and a reference to an enactment, including a bylaw of the Regional District, refers to that enactment as it may be amended or replaced from time to time.
- 1.4 The headings contained in this Bylaw are for convenience only and are not to be construed as defining, or in any way limiting, the scope or the intent of the provisions of this Bylaw.
- 1.5 If any part of this Bylaw is for any reason held invalid by any court of competent jurisdiction, the invalid portion shall be severed and the severance shall not affect the validity of the remainder.

PART II – GENERAL REGULATIONS

- 2.1 No *person* shall obstruct or interfere with a *bylaw enforcement officer* in the exercise of their duties.
- 2.2 A *bylaw enforcement officer* or peace officer shall have the right to enter upon the property of any owner or occupant at all reasonable times and in a reasonable manner to inspect and determine whether the requirements, restrictions and regulations of this Bylaw are being met.

PART III - NOISE REGULATIONS

3.1 General Prohibitions:

- (a) No *person* being the owner, occupier or tenant of *real property* shall allow or permit such *real property* to be used so that noise or sound which occurs thereon or emanates therefrom, disturbs or tends to disturb the quiet, peace, rest, enjoyment, comfort or convenience of any *person* or *persons* on the same property or in the neighbourhood or *vicinity* of that property.
- (b) No person shall make or cause, or permit to be made or caused, any noise or sound on a highway or other public place in the Regional District which disturbs or tends to disturb the quiet, peace, rest, enjoyment, comfort or convenience of any person or persons in the neighbourhood or vicinity of that place.

3.2 Specific Prohibitions:

Without limiting the generality of Section 3.1 herein, any of the following sounds are deemed by the Board to be objectionable and disturbing the quiet, peace, rest, enjoyment, comfort or convenience of individuals or the public and are, therefore, generally prohibited:

- (a) between the hours of 10 p.m. and 8 a.m., the use of a megaphone, microphone or other voice amplification device, or shouting, clamouring, banging or making similarly disruptive sounds, whether produced outdoors or from the occupants within a premises, vehicle or vessel, such that the sound can be heard from a neighbouring lot or from another premises in the vicinity;
- (b) between the hours of 10 p.m. and 8 a.m., sound from a radio, stereophonic equipment, television, musical instrument, computer or other instrument or other apparatus for the production or amplification of sound, whether produced outdoors or from within a premises, vehicle or vessel, such that the sound can be heard from a neighbouring lot or from another premises in the vicinity;
- (c) between the hours of 10:00 p.m. and 7:00 a.m., no person shall construct, erect, reconstruct, alter, repair or demolish any building, structure or thing or excavate or fill in land in any manner so as to generate any noise that can be heard from a neighbouring lot or from another premises in the *vicinity*.

3.3 Exemptions:

Section 3.1 does not apply to persons engaged in any of the following:

- (a) operating or in charge of Fire Department, Police or Ambulance or Emergency vehicles while in the execution of their duties;
- (b) operating any motor vehicle, machinery or other apparatus or thing during an emergency or for a civic, provincial or federal purpose such as avalanche or rock fall control, snow removal, civil defence exercises, construction, alteration, excavation, maintenance, improvement and repair

- of highways, water and sewer mains and other public works, buildings and structures and park property;
- (c) performing works of an emergency nature for the preservation or protection of life, health or property; or
- (d) farm operations conducted on land designated by the Province as a farm area or agricultural land reserve or that is the subject of an aquaculture licence, and in accordance with normal farm practices under the Farm Practices Protection (Right to Farm) Act.

PART IV - ENFORCEMENT

4.1 The provisions of this Bylaw may be enforced by a *Bylaw Enforcement Officer* or by a *peace officer* unless otherwise specified.

PART V - PENALTY

- 5.1 A person who contravenes any provisions of this Bylaw, or who directs, permits, suffers or allows any act or thing to be done in contravention or violation of any of the provisions of this Bylaw, commits an offence and each day that the offence continues constitutes a separate offence.
- 5.2 If proceedings are brought under the Offence Act, a person convicted of an offence under this Bylaw is liable to pay a fine in the maximum amount established under that Act, and any further penalties, costs, fines and compensation that may be ordered by the court under that Act or the Local Government Act, or both.
- 5.3 If proceedings are brought under the CSRD Ticket Information Utilization Bylaw No. 5296, a person convicted of an offence is liable to pay a fine of up to \$1,000.

PART VI - APPLICATION

6.1 The provisions of this Bylaw apply to lands located within Electoral Areas A, B, C, D, E and F situated within the geographic boundaries of the Regional District.

PART VII – TITLE

7.1	This Bylaw may be cited	as the "CS	RD Noise Bylaw	No. 5754".
READ	a FIRST TIME this	_ day of	,	2017.
READ	a SECOND TIME this	day of _.		, 2017.
READ	a THIRD TIME this	_ day of		, 2017.
ADOP	TED thisday of		,	, 2017.
Chair			Chief Administr	rative Officer

CERTIFIED true copy of Bylaw No. 5754, as adopted.

(Deputy) Manager, Corporate Administration Services

SCHEDULE "A" Attached to CSRD Noise Bylaw No. 5754

In this Bylaw:

"Bylaw Enforcement Officer" means the persons duly appointed by the Board as such, and shall include any peace officer, the Chief Administrative Officer or designate, Corporate Officer or designate, Manager, Development Services or designate; and the Manager of Operations or designate;

"Board" means the Board of Directors of the Regional District;

"peace officer" has the same meaning as in the British Columbia Interpretation Act and includes a bylaw enforcement officer;

"person" includes a natural person, a company, corporation, partnership, firm, association, society, or party and the personal or other legal representatives of a person to whom the context can apply according to law;

"premises" means any place occupied by an individual as a residence;

"real property" means land, with or without improvements so affixed to the land as to make them in fact and in law a part of the real property, and includes, as the context requires, individual premises located on the real property;

"Regional District" means the Columbia Shuswap Regional District or the area within the geographic boundaries of the electoral area as the context may require.

"vicinity" means close to neighbouring or near a particular place of origin.



BOARD REPORT

TO: Chair and Directors File No: DVP641-27 PL20170078

SUBJECT: Electoral Area A: Development Variance Permit No. 641-27 (Palumbo)

DESCRIPTION: Report from Jennifer Sham, Planner, dated April 24, 2017.

Palumbo Heights Drive, Nicholson

RECOMMENDATION: THAT: in accordance with Section 498 of the Local Government Act,

Development Variance Permit No. 641-27, for that part of Legal Subdivision 2, Section 35, Township 25, Range 21, West of the 5th Meridian, Kootenay District, except Plans NEP66313, NEP74775, NEP7680, EPP37325 and EPP45014, varying Schedule 'A' — Levels of Service of Subdivision Servicing Bylaw No. 641, as amended (Bylaw No. 641), to allow a subdivision which would create a fee simple lot (Lot 1, EPP68187) with a parcel size of 0.674 ha serviced by on-site water and on-site sewerage disposal system, as shown on Schedule

'B',

be approved for issuance this 18th day of May, 2017.

SHORT SUMMARY:

The subject property is located in the Nicholson area of Electoral Area A. The owner has made application to subdivide the property into 3 lots. Proposed Lot 1 will be serviced by an independent on-site water system and on-site disposal system and is less than 1 ha in size. The owner is applying for a Development Variance Permit to waive the Levels of Service requirements in Schedule 'A' of Bylaw No. 641 to allow the creation of a lot smaller than the 1 ha.

VOTING: Unweighted Corporate □ LGA Part 14 □ Weighted Corporate □ Stakeholder (Weighted)]
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BACKGROUND:

Owner: Barry Palumbo

Electoral Area: A

Legal Description: That part of Legal Subdivision 2, Section 35, Township 25, Range 21, West of

the 5th Meridian, Kootenay District, except Plans NEP66313, NEP74775,

NEP7680, EPP37325 and EPP45014

Size of Property: 11.32 ha (estimated)

Surrounding Land

Use Pattern: North: Palumbo Heights Road, Mitchell Road, Rural Residential

South: Highway 95, Mitchell Road, CP Rail, Columbia River, Rural

East: Mitchell Road, West Twin Creek, Rural West: Palumbo Heights Road, Rural Residential

Current Use: Vacant

Board Report DVP641-27 May 18, 2017

Proposed Use: Residential

OCP Designation: N/A Zoning: N/A

Site comments: According to the surveyor, the subject property currently has a vehicle storage structure and a barn and no other buildings. According to Bing satellite images, it appears that the property is being used for parking of vehicles, hay storage, and possibly uncovered outdoor storage of logs.

POLICY:

Subdivision Servicing Bylaw No. 641, as amended

Schedule 'A' Levels of Service

All properties to be subdivided for single family residential use proposed to be serviced with an Onsite Sewage Disposal System and an Independent On-site Water System must be a minimum of 1.0 ha in size, unless a smaller parcel size is permitted in Zoning Regulations.

Development Variance Permit

The applicant is requesting that the Board consider waiving the requirements of Schedule 'A' Levels of Service that all new parcels created by subdivision for residential use and serviced by an On-site Sewage Disposal System and an Independent On-site Water System, must be a minimum of 1 ha in size.

FINANCIAL:

There are no financial implications to the CSRD, the DVP application is not the result of a Bylaw Enforcement action. The cost of preparing legal documents will be borne by the property owners.

KEY ISSUES/CONCEPTS:

While drafting final comments for subdivision 2015-03773A, staff discovered that the final survey plan of subdivision showed a property size of 0.674 ha for proposed Lot 1. According to the application, the proposed subdivision was for 2 lots of 1 ha each and a remainder. Staff contacted the owner and Mr. Palumbo is now applying for a variance to the Levels of Service for proposed Lot 1.

Through the subdivision process, Marion Masson, Environmental Health Officer, Interior Health, in her letter dated September 28, 2016, confirmed that based on the information provided by the Authorized Person, Mario Pecora, Registered On-site Wastewater Practitioner, and the agent, Fairley and Scott Barristers and Solicitors, she "is satisfied that suitable dispersal areas have been identified for all proposed lots." Mr. Pecora submitted a diagram showing that the well on proposed Lot 1 is 30.9 m from the proposed septic field area.

Staff is also in receipt of a hydrogeological assessment by Michael Weldon, GIT, and Marta Green, P. Geo, of Associated Environmental Consultants Inc. dated August 17, 2016, confirming that the well located on proposed lot 1 is capable of producing the quantity stated in Bylaw No. 641 with consideration of drawdown in neighbouring wells and well recovery, and the water tested is considered potable.

Board Report DVP641-27 May 18, 2017

SUMMARY:

The owner is requesting a variance to the Level of Service in Bylaw No. 641, as amended, which requires that minimum property sizes for the purpose of residential subdivision be 1 ha. The owner would like the Board to consider issuing this DVP to permit proposed Lot 1 to be 0.674 ha.

Staff is recommending issuance of DVP641-27 for the following reasons:

- Interior Health has no objections to the subdivision;
- An Authorized Person has supplied staff with a design for an adequate sewage disposal method that is not within 30 m of a well; and,
- Staff is in receipt of a hydrogeological assessment confirming the well on proposed lot 1 can supply an adequate amount of potable water without drawdown interference in neighbouring wells.

IMPLEMENTATION:

If the Board issues DVP641-27, staff will forward the documentation to Land Title Office for registration on the title of Lot 1, after the subdivision is created.

COMMUNICATIONS:

Property owners and tenants in occupation within 100 m of the subject property were given notification a minimum of 10 days prior to the CSRD Board of Directors considering this application. Notification letters will be mailed on May 2, 2017. All interested parties have had the opportunity to provide comments regarding this application prior to the Board Meeting.

DESIRED OUTCOMES:

That the Board endorse staff recommendation.

BOARD'S OPTIONS:

- 1. Endorse the Recommendation.
- 2. Deny the Recommendation.
- 3. Defer.
- 4. Any other action deemed appropriate by the Board.

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Subdivision Servicing Bylaw No. 641, as amended

May 18, 2017

Report Approval Details

Document Title:	2017-05-18_Board_DS_DVP641-27_Palumbo.docx
Attachments:	 - DVP641-27 Permit.pdf - DVP641-27 Proposed Plan submitted with application.pdf - DVP641-27 Copy of Hydrogeology Report.pdf - DVP641-27 rowp lot 1.pdf
Final Approval Date:	May 8, 2017

This report and all of its attachments were approved and signed as outlined below:

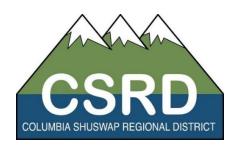
Corey Paiement - May 2, 2017 - 11:49 AM

Gerald Christie - May 5, 2017 - 10:39 AM

Lynda Shykora - May 5, 2017 - 12:20 PM

Charles Hamilton - May 8, 2017 - 2:38 PM

Page 4 of 4



DEVELOPMENT VARIANCE PERMIT NO. 641-27

1. OWNER: Barry John Palumbo

Box 123

Golden, BC V0A 1H0

2. This permit applies only to the land described below:

Lot 1 Section 35 Township 25 Range 21 W5M, KD, EPP68187 (PID:_____) which property is more particularly shown outlined in bold on the map attached hereto as Schedule A.

3. The Subdivision Servicing Bylaw No. 641, as amended is hereby varied as follows:

Schedule A – Levels of Service, Minimum parcel size for new subdivisions where serviced by on-site sewage disposal and on-site Independent water system is varied from 1 ha to a minimum of 0.674 ha for Lot 1, EPP68187 of the proposed 3 lot subdivision, as shown on Schedule B.

4. This is NOT a building permit.

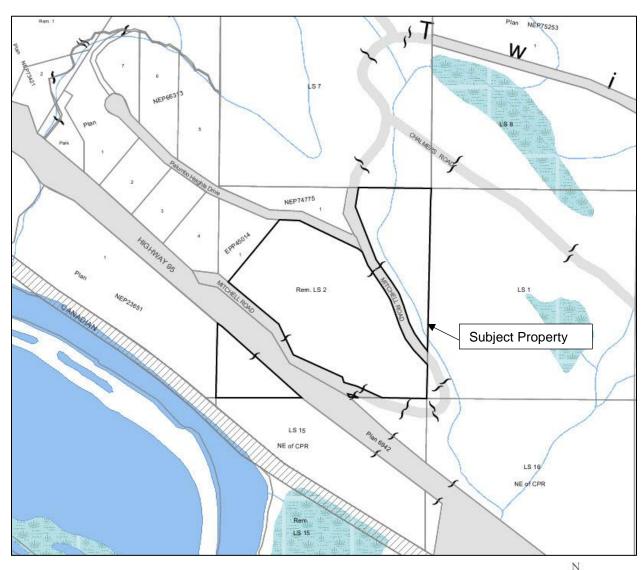
AUTHORIZED FOR ISSUANCE BY RESOLUTION of the Columbia Shuswap Regional District Board on the 18th day of May, 2017.

CORPORATE OFFICER

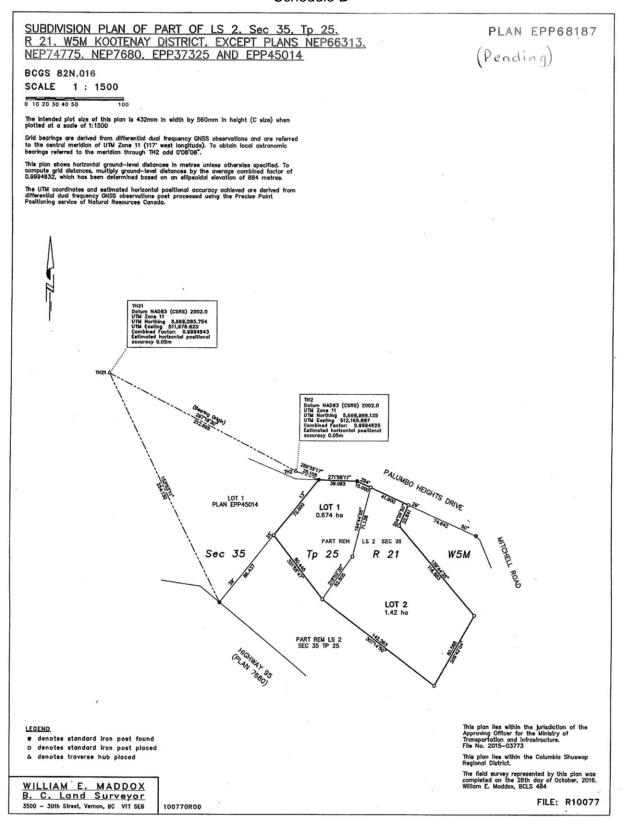
NOTE: Subject to Section 504 of the Local Government Act, if the development of the subject property is not substantially commenced within two years after the issuance of this permit, the permit automatically lapses.

This Permit addresses Local Government regulations only. Further permits or authorizations may be required from Provincial or Federal governments. It is the owner's responsibility to call FrontCounterBC at 1-877-855-3222 regarding this project.

Schedule A



Schedule B



Jennifer Sham

From:

Bill < goldenbill50@gmail.com>

Sent:

May 12, 2017 8:16 AM

To:

Jennifer Sham

Subject:

Development variance permit submission 641-27

Categories:

CityView Planning Attachment

To whom it may concern,

I object to this applicants request for a variance of smaller lot sizes.

When I purchased in yr 2000 the smallest lot available was 2.5 acres. Allowing smaller lots is going to put much further strain on "our" existing aquifer which I can prove is already strained with shortages of reliable flow.

Also I purchased acreage with the knowledge that I wouldn't have a sprouting neighborhood growing beside me. I/we moved here for the rural ambiance not a town experience.

Again I am vehemently against reducing lot sizes!

Thank you,

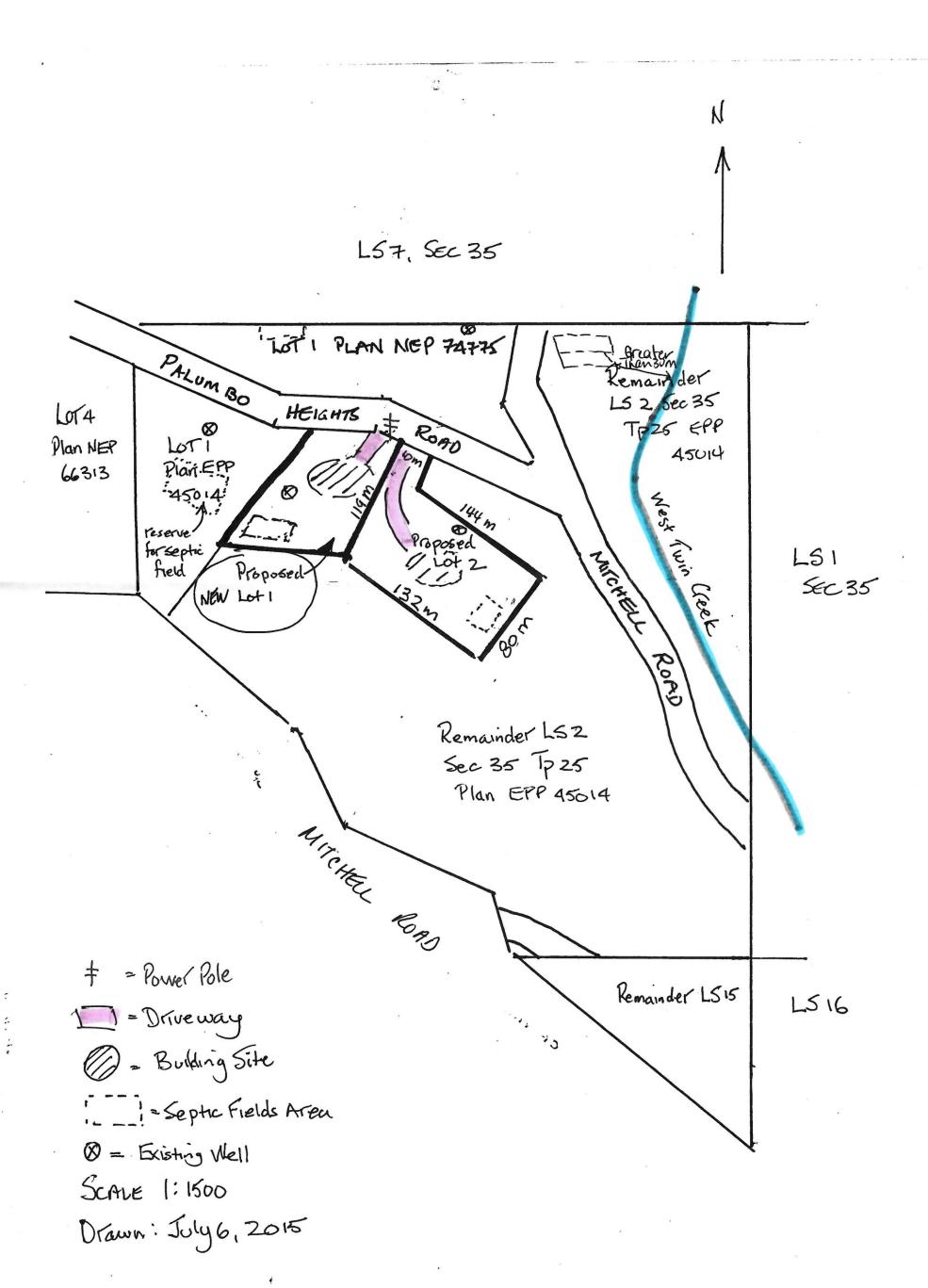
Signed,

William Cathcart

1937 & 1931 Palumbo Hgts, Golden, BC

Sent from the nimble fingers of my iPhone

□ CAO	☐ Agenda:	Ownership:
□-Works	☐ Reg Board	1
ÆSIDS	☐ In Camera	File#
☐ Fin/Adm	☐ Other Mtg.	
l		
	MAY 1 2 2017	
☐ Ec Day ☐ IT ☐ Parks	MAY 1 2 2017 Received Staff to Report Staff to Respond	Ack Sent:





Associated Environmental Consultants Inc. Suite 200, 2800 29 Street Vernon, B.C., Canada V1T 9P9

TEL: 250.545.3672 FAX: 250.545.3654

www.ae.ca | ISO 9001 & 14001 Certified

August 17, 2016 File: 2016-8114.000

Barry Palumbo Box 123 Golden, BC V0A 1H0

Re: HYDROGEOLOGICAL ASSESSMENT OF PROPOSED SUBDIVISION OF SECTION 35, TOWNSHIP 25, EXCEPT PLAN 66313 & 7

Dear Mr. Palumbo:

Associated Environmental Consultants Inc. (Associated) is pleased to provide this hydrogeological assessment of two wells and one surface water source for a three lot subdivision on the above-mentioned property in the Columbia Shuswap Regional District (CSRD).

1 BACKGROUND AND OBJECTIVES

We understand that you are planning to subdivide your property into three lots with each lot serviced by its own water supply well or surface water source as follows:

- Lot A will be serviced by Well Plate Identifier [WPID] 40252.
- Lot B will be serviced by WPID 40253.
- The Remainder Lot will be serviced by West Twin Creek.

To complete the subdivision application, the CSRD requires a water quality and quantity report be prepared by a professional engineer or geoscientist who is registered with the Association of Professional Engineers and Geoscientists of B.C. (APEGBC). The report is intended to satisfy the applicable sections of CSRD Subdivision Servicing Bylaw No. 641 (the Bylaw) regarding assessment and demonstration of potable water (CSRD 2014). The Bylaw requirements for subdivisions that require this professional-directed approach (i.e. assessments by a Qualified Professional) and will use groundwater are listed in Table 1. We understand an authorization for a surface water license from West Twin Creek has recently been received and accepted as proof of quantity by CSRD. Therefore, only a quality assessment is required for the creek. The requirement for *Proof of Water Quality* is the same for surface water sources as it is for groundwater sources (Table 1).



-2-

Table 1: Proof of water quantity and quality requirements for groundwater sources under CSRD Bylaw 641

	Bylaw Requirements
Source Yield	A Qualified Professional has submitted written confirmation that the sustainable Well yield is at least 2,275 L/day.
Well Recovery	A Qualified Professional has submitted written confirmation that well recovery is adequate to support the intended use of the well (minimum 2,275 L/day).
Drawdown Interference	 A Qualified Professional has submitted written confirmation that the operation of the proposed well at the desired rate (minimum 2,275 L/day) will not: reduce the amount of available water for any well within 250 m of the tested well; or result in changes to the water balance of the aquifer, considering cumulative impacts that could result in long-term environmental changes and/or reduced yield on a regional scale.
Proof of Water Quality	A Qualified Professional has reviewed the water quality results, prepared a water system design, including treatment and disinfection system components if required, and provided written confirmation that the water will be potable water as defined in this bylaw when the recommended system is properly installed and operated.

Source: Requirements for Independent On-site Water System (CSRD 2014)

2 METHODS

2.1 SOURCE YIELD AND WELL RECOVERY

To meet the *Source Yield* and *Well Recovery* Bylaw requirements (Table 1), Associated coordinated and performed aquifer pumping tests on WPID 40252 and WPID 40253 on June 27 and June 28, 2016. Each well was pumped at a rate of 8 L/minute for 5 hours, producing 2,400 L each. The pump was supplied and set by you and operated by Associated's field hydrogeologist. Groundwater was discharged downgradient, approximately 30 m downhill of the wellheads for both tests. Groundwater levels were monitored with electronic well sounders during pumping and after pump shut-off (recovery) at set intervals laid out by Associated prior to the tests.

The data from the pumping tests followed the Guidelines for Evaluating Longterm Well Capacity for a Certification of Public Convenience and Necessity (CPCN) (MOE 2007). This method extrapolates drawdown in pumping wells and observation wells during pumping to 100 days and calculates a sustainable

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- 3 -

pumping rate based on this extrapolation. The sustainable pumping rate is then reduced by a safety factor, often 30%, to account for changes in water levels over seasons, and over longer periods in cases where water level fluctuations are unknown.

2.2 DRAWDOWN INTERFERENCE

To meet the *Drawdown Interference* Bylaw requirement (Table 1), Associated completed a search of the BC Water Resources Atlas (MOE 2016) and interviewed you to assess the number of wells within 250 m your property. There are four wells within 250 m: the two on your proposed lots (i.e., WPID 40252 and WPID 40253) and two neighbouring wells. The two neighbouring wells are located at 11U 0512221 5669008 (OBS 2) and UTM 11U 0512119 5668985 (OBS 3). To assess interference effects when WPID 40252 is pumping, Associated measured and recorded groundwater levels in the nearest well (WPID 40253) prior to the start of the test and towards the end of the test. To assess interference effects when WPID 40253 is pumping, Associated measured and recorded groundwater levels in WPID 40252, OBS 2, and OBS 3 prior to the pumping test and just before pump shut-off.

2.3 WATER QUALITY

To meet the *Proof of Water Quality* Bylaw requirement (Table 1), Associated reviewed existing water quality data and coordinated further sample collection. You collected water quality samples from WPID 40252 and WPID 40253 in December 2015 and submitted those samples to WSH Labs in Calgary. A signed affidavit with details on how those samples were collected is included in Appendix A. Associated compared the list of parameters tested with those required by the CSRD. All required parameters were tested except turbidity and true colour. To address this data gap, Associated instructed you to collect a second set of samples from each well and submit them to ALS Laboratories in Calgary for analysis of the missing parameters. For WPID 40252, total coliforms were also re-tested because they were detected in the December 2015 sample. To ensure the pumping test equipment was decontaminated before sampling, you chlorinated the wells to a chlorine concentration of 50 ppm 24 hours prior to the pumping test (as per Associated's instructions). Prior to collecting groundwater samples, the chlorine concentration was determined to be 0 ppm using LaMotte™ InstaTest 6 Chlorine Strips.

Additionally, to meet the *Proof of Water Quality* for the surface water source, Associated collected a sample on June 28 from West Twin Creek at UTM coordinates 11U 5669001.75 m N, 512390.27 m E. The initial sample bottle collected from West Twin Creek was not preserved in the field, which causes sample integrity issues. A second set of samples for the creek were collected and preserved in the field. Standard sampling procedures were used by Associated (MOE 2013) and the samples were submitted to an accredited laboratory (ALS Laboratories in Calgary, AB) for analysis.



-4-

Based on the Bylaw requirements and Associated's recommendations, water samples WPID 40252, WPID 40253, and West Twin Creek were ultimately analyzed for the following parameters:

•	total coliforms	•	colour	•	manganese	•	sodium
•	E. coli	•	conductivity	•	nitrate-N	•	sulfate
•	alkalinity	•	fluoride	•	nitrite-N	•	total dissolved solids
•	arsenic		hardness (total)	•	рН	•	turbidity
•	calcium	•	iron	•	potassium	•	uranium
•	chloride	•	magnesium	•	silicon		

The results were compared with the Guidelines for Canadian Drinking Water Quality (GCDWQ) (Health Canada 2014). Guideline levels specified in the GCDWQ are designated as either "maximum acceptable concentrations" (MAC) or "aesthetic objectives" (AO). The MAC guidelines are health-based, and are determined based on the known health effects associated with the substance. The AO guidelines apply to those variables that affect taste or laundry (e.g., by staining) but do not pose a health hazard.

3 RESULTS

3.1 SOURCE YIELD AND WELL RECOVERY

During the pumping tests, a total of 2,400 L of water was removed each from WPID 40252 and WPID 40253. WPID 40252 recovered to greater than 92%¹ of the original static water level within 1,280 minutes of pump shut-off and WPID 40253 recovered to 97% of the original static water level within 409 minutes of pump shut-off. The pumping test specifications and results are summarized in Table 3-1. The data from the pumping test, including raw data and figures showing drawdown extrapolated to 100 days, are attached in Appendix B. The sustainable pumping rates, calculated using the CPCN method as mentioned in the methods section above, exceed the Bylaw-required amount of 2,275 L/day for both wells. Therefore, both WPID 40252 and WPID 40253 meet the Bylaw requirement regarding source yield and well recovery.

Table 3-1 Summary and results of constant rate pumping test of WPID 40252 and 40253

	WPID 40252	WPID 40253
PUMPING SPECIFICATIONS		
Pumping rate (L/s)	0.13	0.13
Test duration (hours)	5	5

¹ The groundwater level in WPID 40252 was recorded immediately after the pump was removed from the well which likely caused the groundwater level to drop. Therefore, recovery in WPID 40252 is anticipated to be greater than 92% at 1280 minutes.

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- 5 -

	WPID 40252	WPID 40253
Depth of pump intake (mbtoc)	73.76	73.76
Static water level (mbtoc)	15.58	15.83
Depth to top of screen (mbtoc)	68.88	68.88
Depth of well (mbgl)	72.84	72.84
RECOVERY		
Length of recovery (min)	1280	409
% recovered	92	97
CPCN INPUTS		
Pumping rate (L/s)	0.13	0.13
Available drawdown (m) ¹	52.30	52.05
Drawdown at 100 days (m) ²	20.98	10.65
CPCN OUTPUTS		
100-day specific capacity (L/s/m)	0.006	0.012
Sustainable pumping rate (L/d)³	2,400	2,400
Sustainable well yield meets Bylaw rate of 2,275L/d	YES	YES

Notes

m btoc = metres below top of casing

3.2 DRAWDOWN INTERFERENCE

3.2.1 WPID 40252 Pumping Test

During the pumping test at WPID 40252, the groundwater level in the pumping well dropped from an initial static level of 15.58 m below top of casing (btoc) to a maximum of 24.45 m btoc. This equates to a total drawdown of 8.87 m or 17% of available drawdown. This drawdown extrapolated to 100 days is 20.8 m.

The observation well WPID 40253 had a total drawdown of 0.01 m prior to pump shut-off. This drawdown, extrapolated to 100 days, is 0.18 m. To assess well interference, this observation well drawdown was combined with the 100-day drawdown in WPID 40252 when calculating the sustainable yield.

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¹The available drawdown is the difference between the static water level and 1 metre above the top of the perforated section of the bedrock liner.

² The 100-day drawdown is the sum of the 100-day drawdown in the pumping well and the 100-day drawdown in the observation well(s), and in this way includes well interference.

³ The CPCN theoretical capacity for WPID 40252 was 20,100 L/day and 38,400 L/day for WPID 40253. However, a well cannot be rated higher than it was tested. Therefore, the maximum yield at which WPID 40252 and WPID 40253 could be rated is 8 L/min for 5 hours (or 2,400 L/day). If higher pumping rates are required from the well, additional pumping tests would be required.

-6-

3.2.2 WPID 40253 Pumping Test

During the pumping test at WPID 40253, the groundwater level in the pumping well dropped from an initial static of 15.83 m btoc to a maximum of 22.89 m btoc. This equates to a total drawdown of 7.06 m or 13% of available drawdown. This drawdown extrapolated to 100 days is 10.4 m. The rate of drawdown decreased towards the end of the test. This is inferred to be a positive boundary, which is presumed to be due to a hydraulic connection between the aquifer and the nearby West Twin Creek. West Twin Creek is approximately 130 m east of WPID 40253.

The observation wells monitored during the test were WPID 40252, OBS 2, and OBS 3. Groundwater levels in WPID 40252 increased during the test (from 16.26 m btoc at the start to 15.99 m btoc before pump shutoff), indicating it was still recovering from the previous day's test. Groundwater levels in OBS 2 well increased throughout the test from an initial water level of 24.37 m btoc to 21.48 m btoc prior to pump shut off; an increase of 2.89 m. Groundwater levels in OBS 3 dropped by 0.15 m during the test from an initial level of 13.62 m btoc prior to the test to 13.79 m btoc prior to pump shut off. This drawdown extrapolated to 100 days is approximately 0.25 m, which has been accounted for when calculating the sustainable yield, to assess well interference.

3.3 WATER QUALITY

Laboratory reports showing all water quality data are included in Appendix C.

3.3.1 Groundwater (WPID 40252 and WPID 40253)

Total dissolved solids (TDS) concentrations in both WPID 40252 and WPID 40253 exceeded the GCDWQ AO of 500 mg/L, with measured concentrations of 523 and 564 mg/L, respectively. At high levels, TDS can affect water hardness and unpalatability (Health Canada 1991). At levels above 500 mg/L, TDS can cause scaling in pipes, water heaters, and appliances (Health Canada 1991). The water hardness (as CaCO₃) was 257 and 140 mg/L for WPID 40252 and 40253, respectively. These levels are considered hard (for WPID 40253) and very hard (for WPID 40252) (Health Canada 1995). Turbidity, which was measured in the field towards the end of the pumping tests, was 8.05 NTU in WPID 40252 and 18.6 NTU in WPID 40253. Although turbidity does not have a MAC or AO guideline, Health Canada suggests that turbidity in groundwater should generally be below 1 NTU to ensure levels do not interfere with disinfection or water supply distribution (Health Canada 2013).

Total aluminum in WPID 40253 was 0.261 mg/L, which exceeds Health Canada's operational guidance value of 0.100 mg/L; however, this guidance value is neither an AO or an MAC. The guideline technical document for aluminum states that there is no "consistent, convincing evidence that aluminum in drinking water causes adverse health effects in humans, and aluminum does not affect the acceptance of drinking

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-7-

water by consumers or interfere with practices for supplying good water. Therefore, a health-based guideline or aesthetic objective has not been established for aluminum in drinking water" (Health Canada 1998). The guidance value of 0.100 mg/L applies to treatment plants using aluminum based coagulants. For conventional treatment plants, the recommended value is less than 0.200 mg/L (Health Canada 1998).

No GCDWQ MAC exceedances were found in the results from either well. As described in Section 2.3, total coliforms were detected at 1 CFU/100 mL in the December 2015 sample from WPID 40252. Total coliforms were retested on July 13, after the well was chlorinated and pumped until all chlorine was removed from the system (see methods in Section 2.3 for further details). No coliforms were detected, suggesting that the presence of coliforms in the December sample was likely a result of contamination from the sampling methods (for example, insufficient purging before collecting the sample).

3.3.2 Surface Water (West Twin Creek)

None of the tested parameters from West Twin Creek exceeded the GCDWQ AO. The water hardness (as CaCO₃) was 257 mg/L, which is considered very hard.

The only exceedance of the GCDWQ MAC was total coliforms in West Twin Creek, which exceeded the guideline value of 0 MPN/100mL with a concentration of 580 MPN/100mL. The results confirmed that total coliforms are present in West Twin Creek. This is a common finding for most surface waters, which are generally not considered safe for human consumption without treatment. See Section 4 for recommended treatment options.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1.1 Groundwater (WPID 40252 and WPID 402053)

Based on the above results, WPID 40252 and WPID 40253 are each capable of producing the Bylaw required rate of 2,275 L/day with consideration of drawdown in neighbouring wells. The water from the wells can be considered potable because no health-based (MAC) guideline exceedances were found in the water samples. However, we recommend testing the water from both WPID 40252 and WPID 40253 for total coliforms and *E. coli* two or three times per year, as per Health Canada's standard recommendations for wells (Health Canada 2008). Additionally, you may want to treat for TDS to reduce scaling and increase palatability.

4.1.2 Surface Water (West Twin Creek)

Because an authorization for a surface water license from West Twin Creek has recently been received and accepted as proof of quantity by the CSRD, only a quality assessment was required for West Twin Creek.

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-8-

The results of the quality assessment indicated total coliforms are present. Therefore, we recommend that water drawn from West Twin Creek be treated for microbiological parameters prior to consumption. Best practice for any surface water is a multi-barrier approach to water treatment. This includes filtration to remove solids (particulate matter and some microorganisms) and disinfection to kill and/or inactivate disease-causing parasites, bacteria, and viruses.

Treatment objectives for potable water should include filtration and disinfection to achieve a minimum 3-log (99.9%) removal and inactivation of *Giardia* and *Cryptosporidium* and 4-log (99.99%) inactivation of viruses (MOH 2012).

Filtration with conventional filters should achieve a turbidity of 0.3 NTU in 95% of samples with conventional filters (0.1 NTU with membrane filtration). This can be achieved using a 5-micron cartridge filter to remove larger particles, followed by a 1-micron absolute cartridge filter to remove smaller particles. This two-step process should extend the life of the filters by reducing clogging of fine filters with large particles. Turbidity in a stream varies over time, and replacement of the cartridges are expected be more frequent after heavy precipitation events when solids in the stream may be stirred up. The filters also have a finite capacity (maximum filtration volume), which will impact the service life of the filter depending on water use.

After removal of particulate matter with filtration, the water needs to be disinfected to inactivate any potential pathogenic microorganisms in the water. UV disinfection is very effective against parasites in the water and is recommended for *Giardia* and *Cryptosporidium* inactivation. At sufficient doses, UV can also be used to inactivate viruses; however, it does not produce a residual to maintain the water quality in the plumbing system. However, chlorination is very effective for bacteria and virus inactivation, but does require sufficient contact time for inactivation. The two disinfection processes in combination are recommended to inactivate parasites, bacteria, and viruses. We recommend maintaining a small (>0.1 mg/L) chlorine concentration in any water storage and using a distribution/plumbing system to reduce bacterial regrowth in the system.

The treatment processes described above are those recommended for potable (drinking) water. The treatment can be applied to all of the water entering a household (Point of Entry), or can be modified to provide treatment only to drinking water faucets (Point of Use), or a combination of the two. The most comprehensive approach is to treat all of the water entering the dwelling to potable standards using filtration, UV disinfection, and chlorine. This requires larger and more expensive equipment to treat a larger volume of water for all uses (e.g., faucets, showers, toilets, etc.). Alternatively, to reduce costs, treatment could include filtration and chlorination before water enters the dwelling, followed by a point of use UV disinfection system applied directly at the source that will be used for drinking water (e.g., under kitchen sinks).



-9-

When selecting a treatment system, only consider those that are NSF (National Sanitation Foundation) certified (NSF International 2016). Note that all components in contact with water must be NSF 61 certified, and all products added to the water must be NSF 60 certified. Point of Use (POU) devices fall under NSF Residential Drinking Water Treatment Standards. At minimum, the filters should meet NSF 53: Drinking Water Treatment Units — Health Effects and UV should meet NSF 55: Ultraviolet Microbiological Water Treatment Systems (Class A). Because of the natural variability of surface water quality, we recommend that the water be periodically tested especially for microbiological parameters to confirm that water is safe to drink.

5 CLOSURE

The services provided by Associated in the preparation of this report were conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty expressed or implied is made.

We trust this completes our assessment to your satisfaction. Please contact the undersigned if you have any questions.

Yours truly,

Michael Weldon, GIT Hydrogeologist Marta Green, P.Geo. Senior Hydrogeologist

Attachments

Appendix A: Signed Affidavit Appendix B: Pumping Test Data Appendix C: Laboratory Reports



- 10 -

References:

- BC Ministry of Environment (MOE). 2007. Evaluating Long-term Well Capacity for a Certificate of Public Convenience and Necessity: A Guidance Document. Available at:

 http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/library/eval_well/index.html
- BC Ministry of Environment (MOE). 2013. British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples. 2013 Edition. Available at:

 http://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/monitoring/emre/field_sample_man2013.pdf
- BC Ministry of Environment (MOE). 2016. BC Water Resources Atlas. Available at: http://maps.gov.bc.ca/ess/sv/wrbc/
- Columbia Shuswap Regional District (CSRD). 2014. Subdivision Servicing Bylaw No. 641-1. February 3, 2014. Available at: http://www.csrd.bc.ca/inside-csrd/bylaws/subdivision-servicing-bylaw-no-641
- Health Canada 1991. Guidelines for Canadian Drinking Water Quality: Guideline Technical Document Total Dissolved Solids (TDS). Available at: http://healthycanadians.gc.ca/publications/healthy-living-vie-saine/water-dissolved-solids-matieres-dissoutes-eau/index-eng.php
- Health Canada. 1995. Guidelines for Canadian Drinking Water Quality: Guideline Technical Document Hardness. Available at: http://healthycanadians.gc.ca/publications/healthy-living-vie-saine/water-hardness-durete-eau/index-eng.php
- Health Canada 1998. Guidelines for Canadian Drinking Water Quality: Guideline Technical Document Aluminum. Available at: http://healthycanadians.gc.ca/publications/healthy-living-vie-saine/water-aluminum-eau-eng.pdf
- Health Canada. 2008. What's in Your Well? A Guide to Well Water Treatment And Maintenance. Available at: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/well-puits-eng.php
- Health Canada. 2013. Guidelines for Canadian Drinking Water Quality. Guideline Technical Document Turbidity. Prepared by the Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment.

 http://healthycanadians.gc.ca/publications/healthy-living-vie-saine/water-turbidity-turbidite-eau/eng.pdf



- 11 -

- Health Canada. 2014. Guidelines for Canadian Drinking Water Quality. Prepared by the Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment. Available at: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/sum_guide-res_recom/index-eng.php
- Ministry of Health (MOH). 2012. Drinking Water Treatment Objectives (Microbiological) for Surface Water Supplies in British Columbia. Available at: http://www2.gov.bc.ca/assets/gov/environment/air-land-water/surfacewater-treatment-objectives.pdf.
- NSF International. 2016. NSF Residential Drinking Water Treatment Standards. Available at:

 http://www.nsf.org/services/by-industry/water-wastewater/residential-water-treatment/residential-drinking-water-treatment-standards



August 17, 2016 Barry Palumbo

APPENDIX A - SIGNED AFFIDAVIT



CANADA) IN THE MATTER OF PID 016-556-003,
PROVINCE OF) Legal Subdivision 2 Section 35 Township 25
BRITISH) Range 21 W5M Kootenay District Except Plans
COLUMBIA) NEP66313, NEP74775, EPP27115, and EPP45014
) (the "Lands")

TO WIT:

- I, Barry John Palumbo, businessman, of Box 123, Golden, British Columbia DO HEREBY SOLEMNLY DECLARE THAT:
- 1. I am the owner of the Lands and therefore have personal knowledge of the facts discussed herein.
- 2. Well #40252/110330, Well #40253/110332 and West Twin Creek 1 are water sources located on the Lands
- 3. On December 13, 2015 at 2:00 p.m., I collected a water sample ("Sample #1") from Well #40252/110330 by dipping Well #40252/110330 and then collecting Sample #1 in a bottle from the lanyard line. While collecting Sample #1 I wore nitrile gloves and filled the bottle without touching the inside or the lip of the bottle.
- 4. On December 13, 2015 at 2:30 p.m., I collected a water sample ("Sample #2") from Well #40253/110332 by dipping Well #40253/110332 and then collecting Sample #2 in a bottle from the lanyard line. While collecting Sample #2 I wore nitrile gloves and filled the bottle without touching the inside or the lip of the bottles.
- 5. On July 13, 2016 at 4:00 p.m., I collected a water sample ("Sample #3") from Well #40252/110330 by pumping Well #40252/110330 for 30 minutes and then collecting Sample #3 in a bottle from the discharge line. While collecting Sample #3 I wore nitrile gloves provided by ALS Laboratories and filled the bottle without touching the inside or the lip of the bottle.
- 6. On July 13, 2016 at 5:45 p.m., I collected a water sample ("Sample #4) from West Twin Creek 1 at the northern boundary of the property line by dipping a bottle provided by ALS Laboratories into West Twin Creek 1 and filling it. Once the said bottle was almost full I added HNO₃, a preservative provided by ALS Laboratories, to the bottle. While collecting Sample #4 I wore nitrile gloves provided by ALS Laboratories and filled the bottle without touching the inside or the lip of the bottle
- 7. All of the equipment that I used when collecting the samples was sterilized before use.
- 8. I did not apply any water treatment to any of the water sources before collecting any of the samples.
- 9. I submitted Sample #1 and Sample #2 to WSH Labs in Calgary, Alberta.

10. I submitted Sample #3 and Sample #4 to ALS Laboratories in Calgary, Alberta.

AND I make this solemn declaration, conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath:

DECLARED before me, at the Town of)	
Golden, in the Province of British)	
Columbia this 11 th day of August, 2016)	
A Commissioner for taking Affidavits for)	Barn John Palumbo
British Columbia	,	Daily John I munio

HESTER SOLES
ARTICLED STUDENT
102 - 509 9th Ave. N. Box 989
Golden, B.C. VOA 1H0
Ph: (250) 344-2241 Fax (250) 344-6118

August 17, 2016 Barry Palumbo

APPENDIX B - PUMPING TEST DATA



Table 1 Pumping Test Data

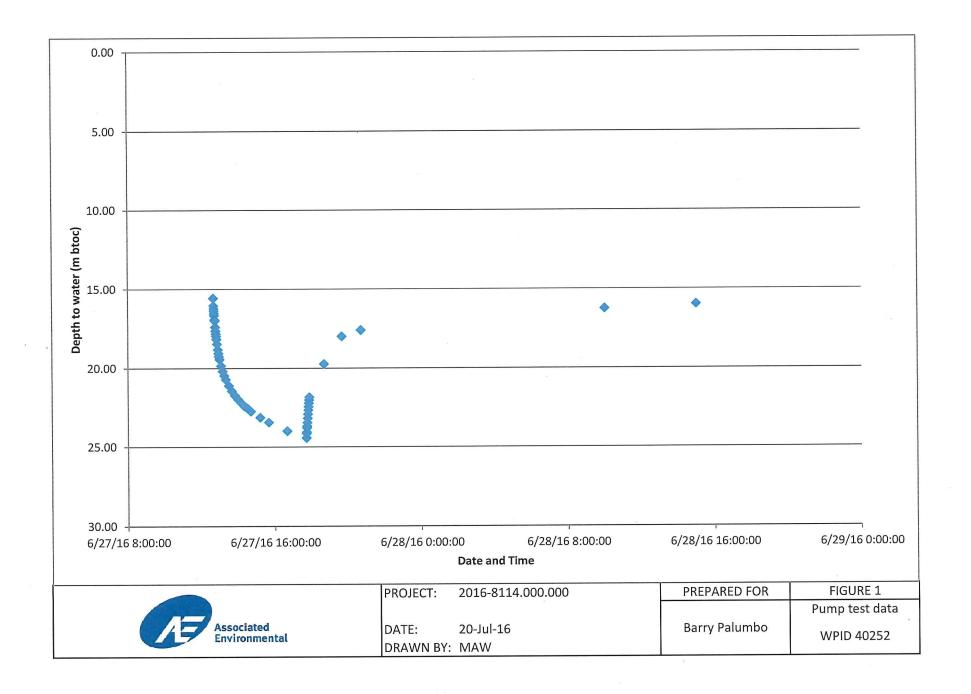


w. II ib	WPID 40252	Static Water Level (mbtoc)	15.58		
Well ID:	6/27/16 12:40 PM		15.58		
Start Date/Time		Pre-Test Water Level (mbtoc)	72.84		
Client	Barry Palumbo	Total Well Depth (m)	64.92		
Project	2016-8114.000.000	Pump Intake Depth (mbtoc)	Submersible 0.5 HP		
Test	Constant Rate Test	Pump Used	31 - AMA SERVICE AND THE SERVI		
Contractor	Barry Palumbo	Pumping Rate (L/s)	0.13		
	T		- , ,		
Clock Time	Time Elapsed (min)	Depth to Water (m)	Drawdown (m)	Comments	
6/27/16 12:40:00	0.00	15.58	0.00		
6/27/16 12:41:00	1.00	16.06	0.48		
6/27/16 12:41:30	1.50	16.24	0,66		
6/27/16 12:42:00	2.00		0.79	×.	
6/27/16 12:42:30	2.50		0.95		
6/27/16 12:43:00	3.00	16.66	1.08		
6/27/16 12:44:00	4.00			Flow rate = 0.13 L/s	
6/27/16 12:45:00	5.00		1.42	(ka)	
6/27/16 12:46:00	6.00	17.40	1.82		
6/27/16 12:47:00	7.00	17.64	2.06	į.	
6/27/16 12:48:00	8.00	17.83	2.25		
6/27/16 12:49:00	9.00	17.98	2.40		
6/27/16 12:50:00	10.00	18.16	2.58		
6/27/16 12:52:00	12.00	18.47	2.89		
6/27/16 12:54:21	14.35	18.83	3.25		
6/27/16 12:56:17	16.28	19.07	3.49		
6/27/16 12:58:00	18.00	19.27	3.69		
6/27/16 13:00:00	20.00	19.45	3.87		
6/27/16 13:05:00	25.00	19.85	4.27		
6/27/16 13:10:15	30.25	20.20	4.62		
6/27/16 13:15:00	35.00	20.48	4.90		
6/27/16 13:20:00	40.00	20.72	5.14		
6/27/16 13:30:00	50.00	21.11	5.53		
6/27/16 13:40:00	60.00	21.45	5.87		
6/27/16 13:50:00	70.00	21.74	6.16		
6/27/16 14:00:00	80.00	21.98	6.40		
6/27/16 14:11:00	91.00	22.22	6.64		
6/27/16 14:20:00	100.00	22.41	6.83		
6/27/16 14:30:00	110.00	22.54	6.96		
6/27/16 14:41:00	121.00	22.74	7.16		
6/27/16 15:12:00	152.00	23.13	7.55		
6/27/16 15:40:00	180.00	23.45	7.87		
6/27/16 16:40:00	240.00	24.01	8.43		
6/27/16 17:43:00	303.00	24.45	8.87	Shut off pump. Start recovery.	
6/27/16 17:43:30	303.50	24.16	8.58		
6/27/16 17:44:03	304.05	24.08	8.50		
6/27/16 17:44:30	304.50				
6/27/16 17:45:08	305.14		8.12		
6/27/16 17:46:00	306.00				

Table 1 Pumping Test Data



Clock Time	Time Elapsed (min)	Depth to Water (m)	Drawdown (m)	Comments
6/27/16 17:47:00	307.00	23.19	7.61	
6/27/16 17:48:00	308.00	22.92	7.34	
6/27/16 17:49:00	309.00	22.66	7.08	
6/27/16 17:50:00	310.00	22.45	6.87	
6/27/16 17:51:00	311.00	22.23	6.65	
6/27/16 17:52:00	312.00	22.03	6.45	
6/27/16 17:53:00	313.00	21.84	6.26	
6/27/16 18:41:28	361.46	19.74	4.16	
6/27/16 19:40:00	420.00	18.00	2.42	
6/27/16 20:42:00	482.00	17.60	2.02	Recovered to 77% of static water level.
6/28/16 10:00:00	1280.0	16.26	0.68	Recovered to 92% of static water level.
6/28/16 15:00:00	1580.0	15.99	0.41	Recovered to 95% of static water level.



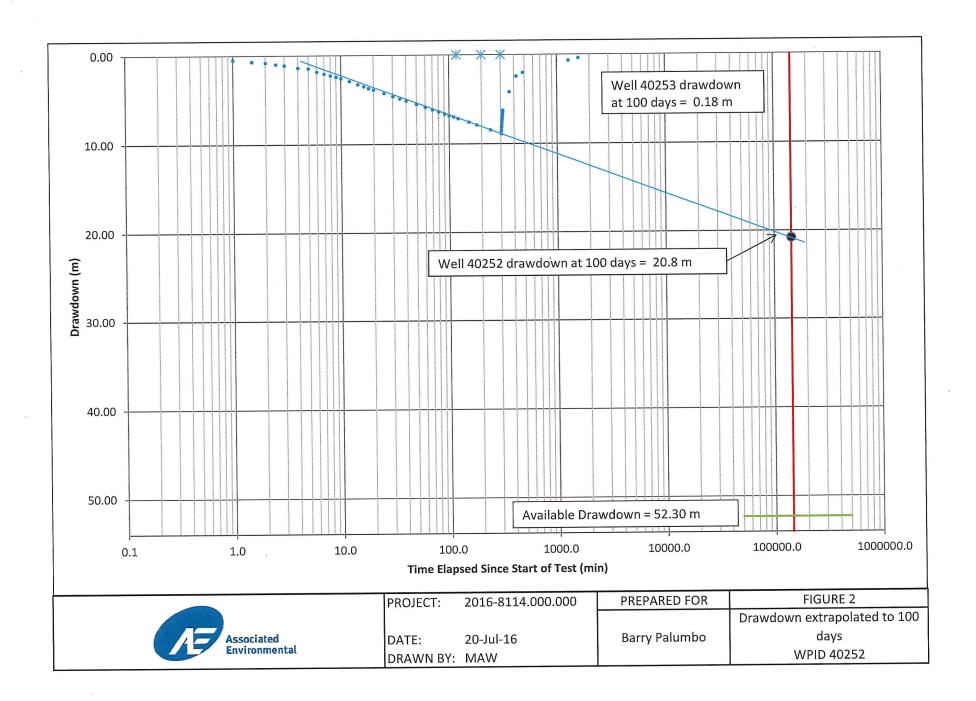


Table 1 Pumping Test Data

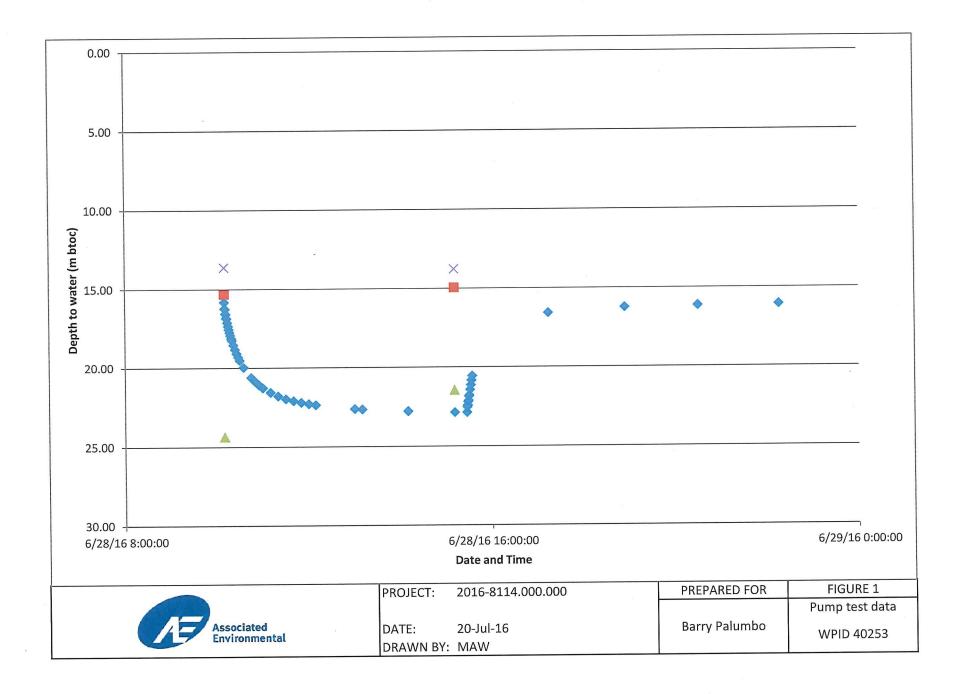


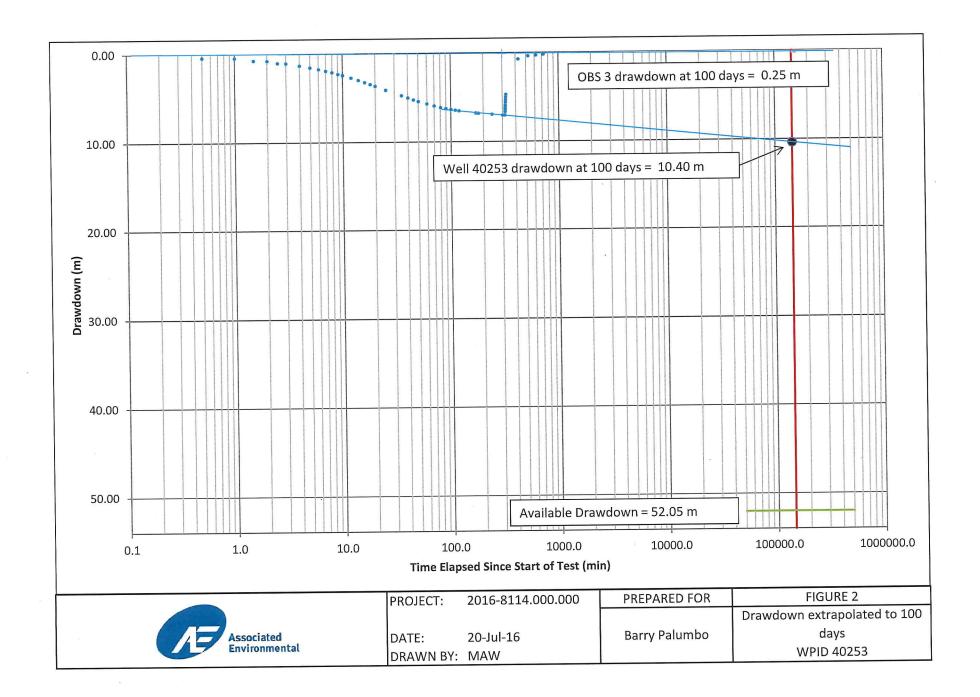
W-II ID.	WPID 40253	Static Water Level (mbtoc)	15.83			
Well ID:	6/28/16 10:10 AM		15.83			
Start Date/Time	Barry Palumbo	Total Well Depth (m)	72.84			
Client	2016-8114.000.000	Pump Intake Depth (mbtoc)	Approximately 60 m			
Project	Constant Rate Test		Submersible 0.5 HP			
Test		Pump Used	0.13			
Contractor	Barry Palumbo	Pumping Rate (L/s)	0.13			
		Double to Water (m)	Drawdown (m)	Comments		
Clock Time	Time Elapsed (min)	Depth to Water (m) 15.83	0.00	Comments		
6/28/16 10:10:00	0.00	16.23	0.40			
6/28/16 10:10:30	0.50	16.27	0.44			
6/28/16 10:11:00	1.00	16.56	0.73			
6/28/16 10:11:30	1.50	16.60	0.73			
6/28/16 10:12:00	2.00		1.00			
6/28/16 10:12:30	2.50					
6/28/16 10:13:00	3.00		1.30			
6/28/16 10:14:00	4.00					
6/28/16 10:15:00	5.00		2 2 20			
6/28/16 10:16:00	6.00			-		
6/28/16 10:17:00	7.00					
6/28/16 10:18:00	8.00					
6/28/16 10:19:04	9.07		le cale			
6/28/16 10:20:00	10.00					
6/28/16 10:22:00	12.00	200000000				
6/28/16 10:24:00	14.00					
6/28/16 10:26:00	18.00					
6/28/16 10:28:00	20.00					
6/28/16 10:30:00	25.00					
6/28/16 10:35:00	35.00					
6/28/16 10:45:00 6/28/16 10:50:00	40.00					
	45.00	2000 1000				
6/28/16 10:55:00 6/28/16 11:00:00	50.00					
6/28/16 11:00:00	60.00					
6/28/16 11:10:00	70.00					
6/28/16 11:20:00	80.12	2000 200				
6/28/16 11:30:07	90.00					
6/28/16 11:40:00	100.18					
6/28/16 11:50:11	110.00					
6/28/16 12:00:00	119.10					
6/28/16 13:00:00	170.00		0.000			
6/28/16 13:10:00	180.00					
6/28/16 14:10:00	240.00		 			
6/28/16 15:11:00	301.00					
6/28/16 15:11:00	317.00			Pump shut off. Start recovery		
6/28/16 15:27:00	317.5					
	318.:					
6/28/16 15:28:06	318.					
6/28/16 15:28:30	318.	22.2.	1 0.30			

Table 1 Pumping Test Data



Clock Time	Time Elapsed (min)	Depth to Water (m)	Drawdown (m)	Comments
6/28/16 15:29:00	319.0	22.14	6.31	
6/28/16 15:29:30	319.5	21.87	6.04	
6/28/16 15:30:03	320.1	21.80	5.97	
6/28/16 15:31:04	321.1	21.46	5.63	
6/28/16 15:32:00	322.0	21.16	5.33	2
6/28/16 15:33:00	323.0	20.86	5.03	
6/28/16 15:34:00	324.0	20.58	4.75	
6/28/16 17:14:00	424.0	16.58	0.75	
6/28/16 18:54:00	524.0	16.24	0.41	
6/28/16 20:30:00	620.0	16.14	0.31	±
6/28/16 22:16:00	726.0	16.07	0.24	Recovered to 97% of original static.





August 17, 2016 Barry Palumbo

APPENDIX C - LABORATORY REPORTS





Associated Environmental Consultants Inc.

ATTN: NICOLE PENNER 200 2800 29 TH STREET VERNON BC V1T 9P9

Date Received: 14-JUL-16

21-JUL-16 12:38 (MT) Report Date:

Version:

FINAL

Client Phone: 250-545-3672

Certificate of Analysis

Lab Work Order #: L1798223

Project P.O. #:

NOT SUBMITTED

Job Reference:

2016-8114.000

C of C Numbers:

Legal Site Desc:

Nelson Kwan, B.Sc. Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 2559 29 Street NE, Calgary, AB T1Y 7B5 Canada | Phone: +1 403 291 9897 | Fax: +1 403 291 0298 ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

L1798223 CONTD.... PAGE 2 of 3 Version: FINAL

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units Ext	racted Analyzed	Batch
L1798223-1 WEST TWIN CREEK 1					i L	
Sampled By: BP on 13-JUL-16 @ 17:45						
Matrix: WATER						
Hardness						
Hardness			0.50	ma/l	20-JUL-16	
Hardness (as CaCO3)	257		0.50	mg/L	20 002 10	
Total Metals in Water by CRC ICPMS					19-JUL-16	R3506945
Arsenic (As)-Total	0.00012		0.00010	mg/L mg/L	19-JUL-16	R3506945
Calcium (Ca)-Total	56.7		0.050 0.010	mg/L	19-JUL-16	R3506945
Iron (Fe)-Total	0.121		0.010	mg/L	19-JUL-16	R3506945
Magnesium (Mg)-Total	28.0		0.00010	mg/L	19-JUL-16	R3506945
Manganese (Mn)-Total	0.00679		0.00010	mg/L	19-JUL-16	R3506945
Potassium (K)-Total	0.726	ł	0.050	mg/L	19-JUL-16	R3506945
Sodium (Na)-Total	1.74		0.00010	mg/L	19-JUL-16	R3506945
Uranium (U)-Total	0.000880		0.000010	mg/L		
L1798223-2 WPID 40252						
Sampled By: BP on 13-JUL-16 @ 16:00					1	
Matrix: WATER						
Miscellaneous Parameters						5050750
Colour, True	<5.0		5.0	CU	14-JUL-16	1
Turbidity	26.3		0.10	NTU	14-JUL-16	1
UV Absorbance (254 nm)	0.051		0.005	Abs/cm	15-JUL-16	R3504059
Transmittance, UV (254 nm)	88.9		1.0	%T/cm	15-JUL-16	
Total Coliforms and E. Coli by MPN MPN - E. Coli	<1		1	MPN/100mL	14-JUL-16	
MPN - Total Coliforms	<1		1	MPN/100mL	14-JUL-16	R3504111

^{*} Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1798223 CONTD....

PAGE 3 of 3 Version: FINAL

Reference Information

Test Method References:

ALS Test Code

Matrix **Test Description** Method Reference**

COLOUR-TRUE-CL

Water

Colour (True) by Spectrometer

APHA 2120 Color

True Colour is measured spectrophotometrically by comparison to platinum-cobalt standards using the single wavelength method (450 - 465 nm) after filtration of sample through a 0.45 um filter. Colour measurements can be highly pH dependent, and apply to the pH of the sample as received (at time of testing), without pH adjustment. Concurrent measurement of sample pH is recommended.

HARDNESS-CALC-CL

Water

Hardness

APHA 2340 B

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

MET-T-CCMS-CL

Water

Total Metals in Water by CRC ICPMS

EPA 200.2/6020A (mod)

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

TC-EC-MPN-CL

Total Coliforms and E. Coli by MPN

APHA METHOD 9223

This analysis is carried out using procedures adapted from APHA Method 9223 "Enzyme Substrate Coliform Test". E. coli and Total Coliform are

determined simultaneously. The sample is mixed with a mixture hydrolyzable substrates and then sealed in a multi-well packet. The packet is incubated for 18 or 24 hours and then the number of wells exhibiting a positive response are counted. The final result is obtained by comparing the positive responses to a probability table.

TURBIDITY-CL

Water

Turbidity

APHA 2130 B-Nephelometer

This analysis is carried out using procedures adapted from APHA Method 2130 "Turbidity". Turbidity is determined by the nephelometric method.

UV-ABS-ED

Water

UV Absorbance (Spectrometry)

APHA 5910 B

Test method is adapted from APHA Method 5910B. A sample is filtered through a 0.45 um filter and its UV Absorbance is measured in a quartz cell at 254 nm and reported as UV Absorbance per cm. The analysis is carried out without pH adjustment.

Water

UV Transmittance (Calculated)

APHA 5910 B-Spectrophotometer

Test method is adapted from APHA Method 5910B. A sample is filtered through a 0.45 um filter and its UV Absorbance is measured in a quartz cell at 254 nm. UV Transmittance is calculated from the UV Absorbance result and reported as UV Transmittance per cm. The analysis is carried out without pH adjustment.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
ED	ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA
CL	ALS ENVIRONMENTAL - CALGARY, ALBERTA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample mg/kg wwt - milligrams per kilogram based on wet weight of sample mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory. UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION. Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L1798223

Report Date: 21-JUL-16

Page 1 of 3

Client:

Associated Environmental Consultants Inc.

200 2800 29 TH STREET VERNON BC V1T 9P9

Contact:

NICOLE PENNER

COLOUR-TRUE-CL	Water					
Batch R350375	9					
WG2348011-2 LCS Colour, True			98.0	%	85-115	14-JUL-16
WG2348011-1 MB Colour, True			<5.0	CU	5	14-JUL-16
MET-T-CCMS-CL	Water					
Batch R350434	13					
WG2348699-2 LCS Arsenic (As)-Total	i	TMRM	98.7	%	80-120	15-JUL-16
Calcium (Ca)-Total			100.6	%	80-120	15-JUL-16
Iron (Fe)-Total			97.1	%	80-120	15-JUL-16
Magnesium (Mg)-Tota	al		97.4	%	80-120	15-JUL-16
Manganese (Mn)-Tot	al		99.0	%	80-120	15-JUL-16
Potassium (K)-Total			100.3	%	80-120	15-JUL-16
Sodium (Na)-Total			102.2	%	80-120	15-JUL-16
Uranium (U)-Total			90.4	%	80-120	15-JUL-16
WG2348699-1 MB Arsenic (As)-Total			<0.00010	mg/L	0.0001	15-JUL-16
Calcium (Ca)-Total			<0.050	mg/L	0.05	15-JUL-16
Iron (Fe)-Total			<0.010	mg/L	0.01	15-JUL-16
Magnesium (Mg)-Tot	al		<0.0050	mg/L	0.005	15-JUL-16
Manganese (Mn)-Tot			<0.00010	mg/L	0.0001	15-JUL-16
Potassium (K)-Total			<0.050	mg/L	0.05	15-JUL-16
Sodium (Na)-Total			<0.050	mg/L	0.05	15-JUL-16
Uranium (U)-Total			<0.000010	mg/L	0.00001	15-JUL-16
Batch R35084	36					
WG2348699-6 LC		TMRM			00.400	00 1111 40
Arsenic (As)-Total			99.3	%	80-120	20-JUL-16
Calcium (Ca)-Total			96.2	%	80-120	20-JUL-16
Iron (Fe)-Total			93.9	%	80-120	20-JUL-16
Magnesium (Mg)-To	tal		96.3	%	80-120	20-JUL-16
Manganese (Mn)-To	tal		96.8	%	80-120	20-JUL-16
Potassium (K)-Total			98.0	%	80-120	20-JUL-16
Sodium (Na)-Total			95.6	%	80-120	20-JUL-16
Uranium (U)-Total			91.9	%	80-120	20-JUL-16
WG2348699-5 ME Arsenic (As)-Total	3		<0.00010	mg/L	0.0001	20-JUL-16



Workorder: L1798223

Report Date: 21-JUL-16

Page 2 of 3

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-CCMS-CL	Water							
Batch R3508436								-
WG2348699-5 MB Calcium (Ca)-Total			<0.050		mg/L		0.05	20-JUL-16
Iron (Fe)-Total			<0.010		mg/L		0.01	20-JUL-16
Magnesium (Mg)-Total			<0.0050		mg/L		0.005	20-JUL-16
Manganese (Mn)-Total			<0.00010		mg/L		0.0001	20-JUL-16
Potassium (K)-Total			<0.050		mg/L		0.05	20-JUL-16
Sodium (Na)-Total			<0.050		mg/L		0.05	20-JUL-16
Uranium (U)-Total			<0.000010)	mg/L		0.00001	20-JUL-16
TC-EC-MPN-CL	Water							
Batch R3504111 WG2348464-5 DUP		L1798223-2	.4	DDD NA	MPN/100mL	N/A	65	14-JUL-16
MPN - E. Coli		<1	<1	RPD-NA	MPN/100mL	N/A	65	14-JUL-16
MPN - Total Coliforms		<1	<1	RPD-NA	MFN/TOOTIL	IN/A	00	11002 10
WG2348464-4 MB MPN - E. Coli			<1		MPN/100mL		1	14-JUL-16
MPN - Total Coliforms			<1		MPN/100mL		1	14-JUL-16
TURBIDITY-CL	Water							
Batch R3503865								
WG2348156-2 LCS Turbidity			96.0		%		85-115	14-JUL-16
WG2348156-1 MB Turbidity			<0.10		NTU		0.1	14-JUL-16
UV-ABS-ED	Water							
Batch R3504059)							
WG2348342-2 DUP UV Absorbance (254 n	ım)	L1798223-2 0.051	0.048		Abs/cm	6.1	10	15-JUL-16
WG2348342-1 MB UV Absorbance (254 r	ım)		<0.005		Abs/cm		0.005	15-JUL-16

Workorder: L1798223

Report Date: 21-JUL-16

Page 3 of 3

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Descrption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate
	·

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

3º 168 187

Chain of Custody (COC) / Analytical Request Form

Affix Ales Control (III)

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ALS Lab W	ork Order # (lab use only)	ALS Contact:	Nelson Kwan	Sampler:		otal metals ("	Fotal handness	otal coliforms	and turbidity	JV transmissivily							
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Drinki	ng Water (DW) Samples¹ (client use)	Special Instructions / Sp	ecify Criteria to add	on report (client	Jse) 	Froz	en.			A			servatio		88		
Are samples i	aken from a Regulated DW System? *Fo	r total metals only include the follow	ving: arsenic, calciu	n, iron, magnesi	ım, manganese,	ice"	packs	Y	a C	10		Custod	sea in	lact	(B) (G	No	- ا
	Yes □ No pota	assium, sodium, and uranium.				Coo	ling in	itiatėd		<u>/</u>				<u></u>	کان د	<u> </u>	
_	·	etection limit on total coliforms and	E coli must meet 1	count/100 ml		#-{\bar{1}}	(DDAL (OOLE	RIEMP	ERATUR	ES C		FINAL	COOLE	TEMPER		
•	Yes Di No	election mair out total comovins and	C,Con mas most .				24	12				#1 7					Signer / ,
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REFER TO PACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

REFER TO PACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY, By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.



Ship out July 7th

Bottle O



Page 1 of 1

06/07/2016 6:46 PM

Associated Environmental Consultants

Barry Palumbo (250-344-8288)

Nicole Penner (AE) c/o Greyhound

Greyhound Depot 1050 TransCanada

BR168187

Lab:

CALGARY

Account #:

11329

Order Created By:

Expected Date: Order Priority:

Emergency

Ship/Pickup Via: Waybill Numbers

Prepared Date: Prepared By:

Nelson Kwan, B.Sc.

08/07/2016 12:00

GREYHOUND'

Phone Number: Fax Number:

Company:

Address:

Client Contact:

403-262-4500 403-269-7640

Golden, BC, V0A 1H1

HFPU

Express

Highway

Client Job Number: 2016-8114

Checked By:

7- Jum - 2016 Rel Date Initials

Comments:

Prelabel all bottles

Prelabel all	bottles		Colour	Preservative	Instructions #
Qty 2	Item (Analysis) Bacteriological (TC-EC)	Container 250 mL Sterilized Plastic		Sodium Thiosulfate	3,5,9,27
<u> </u>	Cooler	Cooler with Ice Packs			
<u></u>	Nitrile Gloves	1 pair			2.0
2	Routine (colour, turbidity, UV)	500 mL Polyethylene		No Preservative	3,8
□ 2	Total Metals (As, U, majorions)	r 250 mL HDPE Bottle	Blue	3 mL 1:3 Nitric Acid	13, 3
D 2	pre-printed COC				

Please note the "Instructions #" above for the sample containers and items shipped to you. Find the corresponding number below and follow the instructions/guidelines.

····
Guideline
Keep cool (40C).
CAUTION: preservative already in container.
No preservative.
Sodium Thiosulphate (Na2O3S2): irritant- in case of contact with skin, rinse affected area
several times with cold water. Nitric acid (HNO3): highly toxic/corrosive- in case of contact with skin, rinse affected area with excess cold water.
Submit samples to the laboratory IMMEDIATELY after sampling.

ADDRESS: 2559 29 Street NE, Calgary, AB T1Y 7B5 Canada | Phone: +1 403 291 9897 | Fax: +1 403 291 0298 ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company



Associated Environmental Consultants Inc.

ATTN: Nicole Penner

200, 2800 29 TH STREET

VERNON BC .

Date Received: 29-JUN-16

Report Date: 08-JUL-16 14:07 (MT)

Version:

FINAL

Client Phone: 250-545-3672

Certificate of Analysis

Lab Work Order #: L1790907

Project P.O. #:

NOT SUBMITTED

Job Reference:

2016-8114.000

C of C Numbers:

14-478931

Legal Site Desc:

Nelson Kwan, B.Sc. Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 2559 29 Street NE, Calgary, AB T1Y 7B5 Canada | Phone: +1 403 291 9897 | Fax: +1 403 291 0298 ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

L1790907 CONTD.... PAGE 2 of 4 Version: FINAL

ALS ENVIRONMENTAL ANALYTICAL REPORT

4700007 4 NADID 4000E2			Ì				
.1790907-1 WPID 402053 Sampled By: NP on 28-JUN-16 @ 15:30							
Matrix: WATER							
Miscellaneous Parameters	<5.0		5.0	cu		29-JUN-16	R3492547
Colour, True	24.9		0.10	NTU		29-JUN-16	R3492723
Turbidity	21.0						
_1790907-2 WEST TWIN CREEK 7							
Sampled By: NP on 28-JUN-16 @ 15:30							
Matrix: WATER							
Hardness							
Dissolved Metals by ICPOES Dissolved Metals Filtration Location	LAB	1		j		05-JUL-16	R3496255
	59.8	1 1	0.10	mg/L		05-JUL-16	R3496265
Calcium (Ca)-Dissolved Magnesium (Mg)-Dissolved	26.8		0.10	mg/L		05-JUL-16	R3496265
-	20.0						
Hardness Hardness (as CaCO3)	260		0.50	mg/L		07-JUL-16	
Miscellaneous Parameters							
Chloride (CI)	1.47		0.50	mg/L		29-JUN-16	R3493728
Colour, True	<5.0		5.0	CU		29-JUN-16	R3492547
Fluoride (F)	0.040		0.020	mg/L		29-JUN-16	R3493728
Sulfate (SO4)	15.6		0.30	mg/L		29-JUN-16	R3493728
,	235	DLHC	20	mg/L		04-JUL-16	R3496522
Total Dissolved Solids	2.68		0.10	NTU		29-JUN-16	R3492723
Turbidity	0.057		0.005	Abs/cm		30-JUN-16	R3492874
UV Absorbance (254 nm)	87.7		1.0	%T/cm		30-JUN-16	
Transmittance, UV (254 nm)	01.1		1,0	70170111			
pH, Conductivity and Total Alkalinity	8.48		0.10	pН		29-JUN-16	R3492749
pH	445		2.0	uS/cm		29-JUN-16	R3492749
Conductivity (EC) Bicarbonate (HCO3)	257		5.0	mg/L		29-JUN-16	R3492749
Carbonate (CO3)	9.5		5.0	mg/L		29-JUN-16	R3492749
Hydroxide (OH)	<5.0		5.0	mg/L		29-JUN-16	R3492749
Alkalinity, Total (as CaCO3)	226		5.0	mg/L		29-JUN-16	R3492749
Total Coliforms and E. Coli by MPN							
MPN - E. Coli	<1		1	MPN/100mL		29-JUN-16	R3493373
MPN - Total Coliforms	580		1	MPN/100mL		29-JUN-16	R3493373
Total Metals in Water by CRC ICPMS						00 11 11 40	D0 40700
Arsenic (As)-Total	0.00013		0.00010	mg/L		06-JUL-16	R3497064
Calcium (Ca)-Total	54.9		0.050	mg/L		06-JUL-16 06-JUL-16	R3497064 R3497064
Iron (Fe)-Total	0.099		0.010	mg/L		06-JUL-16	R3497064
Magnesium (Mg)-Total	26.4		0.0050	mg/L	}	06-JUL-16	R3497064
Manganese (Mn)-Total	0.00547		0.00010	mg/L		06-JUL-16	R3497064
Potassium (K)-Total	0.659		0.050	mg/L mg/L		06-JUL-16	R349706
Sodium (Na)-Total	1.37		0.050	mg/L		06-JUL-16	R349706
Uranium (U)-Total	0.000986		0.000010	IIIg/L		00001	1.0.07.07
NO2, NO3 and Sum of NO2/NO3					Ì		
Nitrate in Water by IC	0.494		0.020	mg/L		29-JUN-16	R349372
Nitrate (as N)	0.131		0.020				
Nitrate+Nitrite	0.131		0.050	mg/L		07-JUL-16	
Nitrate and Nitrite (as N)	0.101						
Nitrite in Water by IC	<0.010		0.010	mg/L		29-JUN-16	R349372
Nitrite (as N) Total Si (reported as Silica) by ICPOES							
Total Silicon (reported as Silica)							1
Silicon (as SiO2)-Total	7.22		0.11	mg/L		07-JUL-16	

^{*} Refer to Referenced Information for Qualifiers (if any) and Methodology.

L1790907 CONTD....

PAGE 3 of 4 Version: FINAL

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier Description

SPL

TOTAL METALS - Sample was Preserved at the laboratory

SFPL

HARDNESS - Sample was Filtered and Preserved at the laboratory

Sample Parameter Qualifier Key:

Qualifier

Description

DLHC

Detection Limit Raised: Dilution required due to high concentration of test analyte(s).

Test Method References:

ALS Test Code

Matrix **Test Description** Method Reference**

CL-IC-N-CL

Water

Chloride in Water by IC

EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

COLOUR-TRUE-CL

Water

Colour (True) by Spectrometer

APHA 2120 Color

True Colour is measured spectrophotometrically by comparison to platinum-cobalt standards using the single wavelength method (450 - 465 nm) after filtration of sample through a 0.45 um filter. Colour measurements can be highly pH dependent, and apply to the pH of the sample as received (at time of testing), without pH adjustment. Concurrent measurement of sample pH is recommended.

F-IC-N-CL

Water

Fluoride in Water by IC

EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

HARDNESS-CALC-CL

Water

Hardness

APHA 2340 B

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

Water

Dissolved Metals by ICPOES

APHA 3030B/EPA 6010B

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedure involves filtration (EPA Method 3005A) and analysis by inductively coupled plasma optical emission spectrophotometry (EPA Method 6010B).

MET-T-CCMS-CL

Water

Total Metals in Water by CRC ICPMS

EPA 200.2/6020A (mod)

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

MET-TOT-ICP-CL

Water

Total Metals in Water by ICPOES

APHA 3030E/EPA 6010B

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion using a hotblock (APHA Method 3030E). Instrumental analysis is by inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B)

N2N3-CALC-CL

Water

Nitrate+Nitrite

CALCULATION

NO2-IC-N-CL

Water

Nitrite in Water by IC

EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

NO3-IC-N-CL

Water

Nitrate in Water by IC

EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

PH/EC/ALK-CL

pH, Conductivity and Total Alkalinity

APHA 4500H,2510,2320

All samples analyzed by this method for pH will have exceeded the 15 minute recommended hold time from time of sampling (field analysis is recommended for pH where highly accurate results are needed)

pH measurement is determined from the activity of the hydrogen ions using a hydrogen electrode and a reference electrode.

Alkalinity measurement is based on the sample's capacity to neutralize acid

Conductivity measurement is based on the sample's capacity to convey an electric current

SIO2-T-CALC-CL

Water

Total Silicon (reported as Silica)

ICP/CALCULATION-ICP/CALCULATION

SO4-IC-N-CL

Water

Sulfate in Water by IC

EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

SOLIDS-TDS-CL

Total Dissolved Solids

APHA 2540 C

A well-mixed sample is filtered through a glass fibre filter paper. The filtrate is then evaporated to dryness in a pre-weighed vial and dried at 180 – 2 C. The increase in vial weight represents the total dissolved solids (TDS).

L1790907 CONTD....

PAGE 4 of 4 Version: FINAL

Reference Information

Test Method References:

ALS Test Code

Matrix **Test Description** Method Reference**

TC-EC-MPN-CL

Water

Total Coliforms and E. Coli by MPN

APHA METHOD 9223

This analysis is carried out using procedures adapted from APHA Method 9223 "Enzyme Substrate Coliform Test". E. coli and Total Coliform are determined simultaneously. The

sample is mixed with a mixture hydrolyzable substrates and then sealed in a multi-well packet. The packet is incubated for 18 or 24 hours and then the number of wells exhibiting a positive response are counted. The final result is obtained by comparing the positive responses to a probability table.

TURBIDITY-CL

Water

Turbidity

APHA 2130 B-Nephelometer

This analysis is carried out using procedures adapted from APHA Method 2130 "Turbidity". Turbidity is determined by the nephelometric method.

UV-ABS-ED

UV Absorbance (Spectrometry)

APHA 5910 B

Test method is adapted from APHA Method 5910B. A sample is filtered through a 0.45 um filter and its UV Absorbance is measured in a quartz cell at 254 nm and reported as UV Absorbance per cm. The analysis is carried out without pH adjustment.

UV-TRANS-CALC-ED

UV Transmittance (Calculated)

APHA 5910 B-Spectrophotometer

Test method is adapted from APHA Method 5910B. A sample is filtered through a 0.45 um filter and its UV Absorbance is measured in a quartz cell at 254 nm. UV Transmittance is calculated from the UV Absorbance result and reported as UV Transmittance per cm. The analysis is carried out without pH adjustment.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code Laboratory Location

ED

ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA

ALS ENVIRONMENTAL - CALGARY, ALBERTA, CANADA CL

Chain of Custody Numbers:

14-478931

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample mg/kg wwt - milligrams per kilogram based on wet weight of sample mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory. UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION. Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L1790907

Report Date: 08-JUL-16

Page 1 of 5

Client:

Associated Environmental Consultants Inc.

200, 2800 29 TH STREET

VERNON BC .

Contact:

Nicole Penner

Contact: Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
		SERVICE S						
CL-IC-N-CL	Water							
Batch F WG2339412-6 Chloride (CI)	R3493728 LCS		96.3		%		90-110	29-JUN-16
WG2339412-5 Chloride (CI)	s МВ		<0.50		mg/L		0.5	29-JUN-16
COLOUR-TRUE-	CL Water							
Batch F	R3492547							
WG2338204-2 Colour, True	2 LCS		98.4		%		85-115	29-JUN-16
WG2338204-1 Colour, True	I MB		<5.0		CU		5	29-JUN-16
F-IC-N-CL	Water							
Batch	R3493728							
WG2339412- 6 Fluoride (F)	6 LCS		95.1	e	%		90-110	29-JUN-16
WG2339412 -5 Fluoride (F)	5 MB		<0.020		mg/L		0.02	29-JUN-16
MET-DIS-ICP-CI	_ Water		9					
Batch	R3496265							
WG2340981- Calcium (Ca		TMRM	103.4		%		80-120	05-JUL-16 05-JUL-16
Magnesium	(Mg)-Dissolved		98.7		%		80-120	05-JOL-10
WG2340981-		TMRM	107.3		%		80-120	05-JUL-16
Calcium (Ca			107.3		%		80-120	05-JUL-16
	(Mg)-Dissolved		100.0					
WG2340981- Calcium (Ca			<0.10		mg/L		0.1	05-JUL-16
	(Mg)-Dissolved		<0.10		mg/L		0.1	05-JUL-16
WG2340981							0.4	05-JUL-16
Calcium (Ca	a)-Dissolved		<0.10		mg/L		0.1 0.1	05-JUL-16 05-JUL-16
Magnesium	(Mg)-Dissolved		<0.10		mg/L		0.1	00-00L-10
MET-T-CCMS-C	CL Water							
Batch	R3496343							
WG2340922		TMRM	94.7		%		80-120	05-JUL-16
Arsenic (As) Calcium (Ca			99.1		%		80-120	05-JUL-16
Iron (Fe)-To			94.0		%		80-120	05-JUL-16
Magnesium			99.4		%		80-120	05-JUL-16
Magnesiani	(9)							



Workorder: L1790907

Report Date: 08-JUL-16

Page 2 of 5

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-CCMS-CL	Water							
Batch R3496343								
WG2340922-2 LCS		TMRM	07.4		%		80-120	05-JUL-16
Manganese (Mn)-Total			97.1		%		80-120	05-JUL-16
Potassium (K)-Total			94.7		%		80-120	05-JUL-16
Sodium (Na)-Total			97.1		%		80-120	05-JUL-16
Uranium (U)-Total			94.1		70		00 120	00 002 10
WG2340922-1 MB Arsenic (As)-Total			<0.00010) · · · · ·	mg/L		0.0001	05-JUL-16
Calcium (Ca)-Total			<0.050		mg/L		0.05	05-JUL-16
Iron (Fe)-Total			<0.010		mg/L		0.01	05-JUL-16
Magnesium (Mg)-Total			<0.0050		mg/L		0.005	05-JUL-16
Manganese (Mn)-Total			<0.00010)	mg/L		0.0001	05-JUL-16
Potassium (K)-Total			<0.050		mg/L		0.05	05-JUL-16
Sodium (Na)-Total			<0.050		mg/L		0.05	05-JUL-16
Uranium (U)-Total			<0.0000	10	mg/L		0.00001	05-JUL-16
Batch R3497064 WG2340922-5 LCS		TMRM						
Arsenic (As)-Total			108.6		%		80-120	06-JUL-16
Calcium (Ca)-Total			98.0		%		80-120	06-JUL-16
Iron (Fe)-Total			93.4		%		80-120	06-JUL-16
Magnesium (Mg)-Total			110.5		%		80-120	06-JUL-16
Manganese (Mn)-Total	ţ		111.2		%		80-120	06-JUL-16
Potassium (K)-Total			110.5		%		80-120	06-JUL-16
Sodium (Na)-Total			110.9		%		80-120	06-JUL-16
Uranium (U)-Total			90.5		%		80-120	06-JUL-16
WG2340922-4 MB			<0.0001	0	mg/L		0.0001	06-JUL-16
Arsenic (As)-Total			<0.050	.0	mg/L		0.05	06-JUL-16
Calcium (Ca)-Total					mg/L		0.01	06-JUL-16
Iron (Fe)-Total			<0.010	1	mg/L		0.005	06-JUL-16
Magnesium (Mg)-Tota			<0.0050		mg/L		0.0001	06-JUL-16
Manganese (Mn)-Tota	ıl		<0.0001	10	mg/L		0.05	06-JUL-16
Potassium (K)-Total			<0.050		mg/L		0.05	06-JUL-16
Sodium (Na)-Total			<0.050	240			0.00001	06-JUL-16
Uranium (U)-Total			<0.0000	טוע	mg/L		0.00001	00 001 10

NO2-IC-N-CL

Water



Workorder: L1790907

Report Date: 08-JUL-16

Page 3 of 5

Test Matrix NO2-IC-N-CL Water Batch R3493728 WG2339412-6 LCS Nitrite (as N) WG2339412-5 MB Nitrite (as N) NO3-IC-N-CL Water Batch R3493728 WG2339412-6 LCS Nitrate (as N)	Reference	97.8 < 0.010 96.2	Wnits % mg/L	RPD	90-110 0.01	29-JUN-16 29-JUN-16
Batch R3493728 WG2339412-6 LCS Nitrite (as N) WG2339412-5 MB Nitrite (as N) NO3-IC-N-CL Water Batch R3493728 WG2339412-6 LCS		<0.010	mg/L			
WG2339412-6 LCS Nitrite (as N) WG2339412-5 MB Nitrite (as N) NO3-IC-N-CL Water Batch R3493728 WG2339412-6 LCS		<0.010	mg/L			
Nitrite (as N) WG2339412-5 MB Nitrite (as N) NO3-IC-N-CL Water Batch R3493728 WG2339412-6 LCS		<0.010	mg/L			
WG2339412-5 MB Nitrite (as N) NO3-IC-N-CL Water Batch R3493728 WG2339412-6 LCS	,	<0.010	mg/L		0.01	29-JUN-16
Nitrite (as N) NO3-IC-N-CL Water Batch R3493728 WG2339412-6 LCS			,		0.01	29-JUN-16
Batch R3493728 WG2339412-6 LCS		96.2				
WG2339412-6 LCS		96.2				
		96.2				
			%		90-110	29-JUN-16
WG2339412-5 MB Nitrate (as N)		<0.020	mg/L		0.02	29-JUN-16
PH/EC/ALK-CL Water						
Batch R3492749						
WG2338522-8 LCS		- a.	»U		6.9-7.1	29-JUN-16
рН		7.01	pH %		90-110	29-JUN-16
Conductivity (EC)		108.8			85-115	29-JUN-16
Alkalinity, Total (as CaCO3)		96.7	·%		00-110	29-0011-10
WG2338522-7 MB Conductivity (EC)		<2.0	uS/cm		2	29-JUN-16
Bicarbonate (HCO3)		<5.0	mg/L		5	29-JUN-16
Carbonate (CO3)		<5.0	mg/L		5	29-JUN-16
Hydroxide (OH)	Ŧ	<5.0	mg/L		5	29-JUN-16
Alkalinity, Total (as CaCO3)		<5.0	mg/L		5	29-JUN-16
SO4-IC-N-CL Water						
Batch R3493728						
WG2339412-6 LCS Sulfate (SO4)		96.3	%		90-110	29-JUN-16
WG2339412-5 MB						
Sulfate (SO4)		<0.30	mg/L		0.3	29-JUN-16
SOLIDS-TDS-CL Water						
Batch R3496522						
WG2339993-3 DUP Total Dissolved Solids	L1790907-2 235	235	mg/L	0.0	20	04-JUL-16
WG2339993-2 LCS Total Dissolved Solids	v	99.4	%		85-115	04-JUL-16
WG2339993-1 MB Total Dissolved Solids		<10	mg/L		10	04-JUL-16
TC-EC-MPN-CL Water						



Workorder: L1790907

Report Date: 08-JUL-16

Page 4 of 5

		VV OTITO						
Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TC-EC-MPN-CL	Water							
Batch R3493	373							
WG2339120-4 M	В	1	<1		MPN/100mL		1	29-JUN-16
MPN - E. Coli			<1		MPN/100mL		1	29-JUN-16
MPN - Total Colifor	ms		<1					
TURBIDITY-CL	Water							
Batch R3492	723							
WG2338484-3 D Turbidity	UP	L1790907-2 2.68	2.67		NTU	0.4	15	29-JUN-16
WG2338484-2 L Turbidity	cs		97.5		%		85-115	29-JUN-16
WG2338484-1 N Turbidity	IB		<0.10		NTU		0.1	29-JUN-16
UV-ABS-ED	Water							
Batch R349	2874							
WG2338504-2 L UV Absorbance (2	DUP :54 nm)	L1790907-2 0.057	0.052		Abs/cm	9.2	10	30-JUN-16
	ИВ		<0.005		Abs/cm		0.005	30-JUN-16

Workorder: L1790907

Report Date: 08-JUL-16

Page 5 of 5

Legend:

Li	mit	ALS Control Limit (Data Quality Objectives)
D	UP	Duplicate
R	PD	Relative Percent Difference
Ν	/A	Not Available
L	CS	Laboratory Control Sample
S	RM	Standard Reference Material
N	1S	Matrix Spike
M	1SD	Matrix Spike Duplicate
Α	DE	Average Desorption Efficiency
N	1B	Method Blank
IF	RM	Internal Reference Material
С	RM	Certified Reference Material
C	CV	Continuing Calibration Verification
C	:VS	Calibration Verification Standard
L	CSD	Laboratory Control Sample Duplicate

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Chain of Custody (COC) / Analytical Request Form



Number: 14 - 478931

Environmental

Canada Toll Free: 1 800 668 9878

www.alsglobal.com		إ													
Report To		Report Format /	Distribution	1	1	Salo	t Servica L	eval Belon	w (Rush Turña	round Time	e (TAT) is no	t avallab	ile for all tost	s)	\neg
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Contact: Vicola Dennar) Report with Repor	t Ves	No.	P	Prioris	y (2-4 busin	ess days if	received by 3	pm)					
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Vernon BC	Select Distribution:	EM.		FAX	E2 [Same	day or weel	end omer	gency if recei	ved by 10a	ım – contac	ALS for	surcharge.		
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ALS Sample # Sample Identification and/or Coordinates		Date	Time	Sample Type		1/2	5 à	8	910	الإسالا	-€1:	M 3	30 30	-5	ı
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Drinking Water (DW) Samples¹ (client use) Specia	Instructions / Specify	y Criteria to add on r	eport (client Use)		Frozen	-i	U.			bservati		Yes	l No	7	77
Are samples taken from a Regulated DW System?		11011	Tura	0400 129	ice paci	ks Ye		No		dy seal		Yes		-	7 I
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Total Coliforms	cont/10	DMI	- 1 OI (IOPO)	v	1-	-3 4	0								
SHIPMENT RELEASE (client use)		IPMENT RECEPTI	ON (lab use only)) : ·	Η-	(/)		NAL SH	IPMENT RI	CÉPTIC	ON (lab u	se aniv			\neg
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Falaring to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY, By the use of this form like user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

^{1.} If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.



Associated Environmental Consultants Inc.

ATTN: Marta Green

#200-2800 29TH STREET

VERNON BC .

Date Received: 28-JUN-16

Report Date:

05-JUL-16 16:41 (MT)

Version:

FINAL

Client Phone: 250-503-7330

Certificate of Analysis

Lab Work Order #: L1790164

Project P.O. #:

NOT SUBMITTED

Job Reference:

2016-8114

C of C Numbers:

14-479279

Legal Site Desc:

Nelson Kwan, B.Sc. Account Manager

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ADDRESS: 2559 29 Street NE, Calgary, AB T1Y 7B5 Canada | Phone: +1 403 291 9897 | Fax: +1 403 291 0298 ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

L1790164 CONTD.... PAGE 2 of 3 Version: FINAL

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result (Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1790164-1 WPID 40252 Sampled By: CLIENT on 27-JUN-16 @ 17:40 Matrix: WATER Miscellaneous Parameters Colour, True Turbidity UV Absorbance (254 nm) Transmittance, UV (254 nm)	<5.0 6.85 0.017 96.2		5.0 0.10 0.005 1.0	CU NTU Abs/cm %T/cm		28-JUN-16 28-JUN-16 29-JUN-16 05-JUL-16	R3491644 R3494353 R3495995
Transmittance, OV (204 mm)	00.2						
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^{*} Refer to Referenced Information for Qualifiers (if any) and Methodology.

Page 101 of 137 L1790164 CONTD....

PAGE 3 of 3 Version: FINAL

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier Description EHT UV Transmittance, Colour True, Turbidity - Exceeded Recommended Holding Time Prior To Analysis

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

True Colour is measured spectrophotometrically by comparison to platinum-cobalt standards using the single wavelength method (450 - 465 nm) after filtration of sample through a 0.45 um filter. Colour measurements can be highly pH dependent, and apply to the pH of the sample as received (at time of testing), without pH adjustment. Concurrent measurement of sample pH is recommended.

TURBIDITY-CL

COLOUR-TRUE-CL

Water

Water

Turbidity

APHA 2130 B-Nephelometer

This analysis is carried out using procedures adapted from APHA Method 2130 "Turbidity". Turbidity is determined by the nephelometric method.

UV-ABS-ED

UV Absorbance (Spectrometry)

Colour (True) by Spectrometer

APHA 5910 B

APHA 2120 Color

Test method is adapted from APHA Method 5910B. A sample is filtered through a 0.45 um filter and its UV Absorbance is measured in a quartz cell at 254 nm and reported as UV Absorbance per cm. The analysis is carried out without pH adjustment.

UV-TRANS-CALC-ED

Water

UV Transmittance (Calculated)

APHA 5910 B-Spectrophotometer

Test method is adapted from APHA Method 5910B. A sample is filtered through a 0.45 um filter and its UV Absorbance is measured in a quartz cell at 254 nm. UV Transmittance is calculated from the UV Absorbance result and reported as UV Transmittance per cm. The analysis is carried out without pH adjustment.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
ED	ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA
CL	ALS ENVIRONMENTAL - CALGARY, ALBERTA, CANADA

Chain of Custody Numbers:

14-479279

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory. UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION. Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L1790164

Report Date: 05-JUL-16

Page 1 of 3

Client:

Associated Environmental Consultants Inc.

#200-2800 29TH STREET

VERNON BC .

Contact:

Marta Green

Contact:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			2 1161	Units	 RPD	Limit	Analyzed
Test	Matrix	Reference	Result	Qualifier	Units	 		
TURBIDITY-CL	Water							
Batch R349435 WG2339088-2 LCS Turbidity			96.5		%		85-115	30-JUN-16
WG2339088-1 MB Turbidity			<0.10		NTU		0.1	30-JUN-16
UV-ABS-ED	Water							
Batch R349599 WG2337609-1 DUF UV Absorbance (254	•	L1790164-1 0.017	0.017		Abs/cm	0.0	10	29-JUN-16
WG2337609-2 MB UV Absorbance (254	nm)		<0.005		Abs/cm		0.005	29-JUN-16

Workorder: L1790164

Report Date: 05-JUL-16

Page 2 of 3

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Quality Control Report

Workorder: L1790164

Report Date: 05-JUL-16

Page 3 of 3

Hold Time Exceedances:

	Sample						
ALS Product Description	ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
UV Transmittance (Calculated	d) 1	27-JUN-16 17:40	05-JUL-16 13:04	48	187	hours	EHT

Legend & Qualifier Definitions:

EHTR-FM:

Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.

EHTR:

Exceeded ALS recommended hold time prior to sample receipt.

EHTL:

Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.

Exceeded ALS recommended hold time prior to analysis.

EHT: Rec. HT:

ALS recommended hold time (see units).

Notes*:

Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes. Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L1790164 were received on 28-JUN-16 12:50.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

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Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Environmental www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form



14 - 479279

Canada Toll Free: 1 800 668 9878

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Contact: MARIA-OLEEN				٠ السا	E				ays if receive				
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the state of the s													

^{1.} If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.



3851B – 21 Street NE • Calgary, Alberta, Canada • T2E 6T5

Phone: (403) 250-9164 • Fax: (403) 291-4597 • www.wshlabs.com

Barry Palumbo

Phone:

250-344-8288

Lab Number:

78744

Email: barrypalumbo@gmail.com

shellybott@yahoo.ca

PO Number:

Sample Info: Akremzede

LS2 - Sec 35 - TWP 25 - RGE 21 - W5

P1 66313 & 7477 Well # 40252/110330 Sampled By:

BP

Date Sampled: Date Received: 12/13/2015

Date Reported:

12/15/2015 12/17/2015

Analyte	Units	Result	Canadian Drinking Water Guideline Maximum
Calcium	mg/L	56.9	No Guideline
Iron	mg/L	0.09	0.3
Magnesium	mg/L	27.9	No Guideline
Manganese	mg/L	< 0.01	0.05
Potassium	mg/L	3.7	No Guideline
Sodium	mg/L	114	200
Bicarbonates	mg/L	452	No Guideline
Bromides	mg/L	2.6	No Guideline
Carbonates	mg/L	0	No Guideline
Chlorides	mg/L	30.1	250
Fluorides	mg/L	0.32	1.5
Nitrates as N	mg/L	0.1	10
Nitrites as N	mg/L	< 0.02	1
NO ₃ + NO ₂ as N	mg/L	0.1	No Guideline
Sulfates	mg/L	67	500
Parameter	Units	Result	Canadian Drinking Water Guideline Maximum
Electrical Conductivity	μS/cm	864	No Guideline
pH	pН	7.88	6.5 - 8.5
Hardness (as CaCO ₃)	mg/L	257	No Guideline
Total Alkalinity (as CaCO ₃)	mg/L	371	No Guideline
P-Alkalinity (as CaCO ₃)	mg/L	0	No Guideline
Hydroxide (as CaCO ₃)	mg/L	0	No Guideline
Total Dissolved Solids (calculated)	mg/L	523	500
Microbiology	Units	Result	Canadian Drinking Water Guideline Maximum
Total Coliform	CFU/100 mL	1	Zero / Absent
Escherichia Coliform	CFU/100 mL	0	Zero / Absent

Sum of Cations	10.18	TDS / EC Ratio	0.61
Sum of Anions	9.69	Sodium Adsorption Ratio	3.09
Ion Balance	1.05	Saturation Index	0.73

On-Site Sewerage System Feasibility Report for Subdivision

Date: May 9, 2016

Legal Description: Sec 35, Twp 25, Rg 21, W5M, Ld 26, LS 2.

Property Owner: Barry Palumbo.

Please note that all percolation testing, soils analysis and calculations are based on information Ministry of Health "Sewerage System Standard Practice Manual").

The daily effluent discharge calculations for each proposed lot are based on a 4-bedroom house using a Type 1 System with 0.6m wide trenches spaced 1.8m on-centre and slopes under 5% as per the provided by the Interior Health – Health Protection "Subdivision Guidelines".

Proposed Lot # _1 Field #_2_ Slope: _5_%

Calculated Hydraulic Loading Rate: __25__ litres / m² / day
Total trench length necessary would be: _113_m.
The Secondary field (Field 2) would consist of #_5_ lines at __22.7__ m long.
(If the Reserve field has different variables they must also be listed).

The minimum total area that would be required for field 1 for a 4-bedroom house using a Type 1 System on this Proposed Lot would be: _163_m²

The additional 10% area for construction increases the required total area to: _180_ m² (If additional area is required due to slopes over 5% they must also be identified). The 5% slope would bring the total area needed to: _189_m²

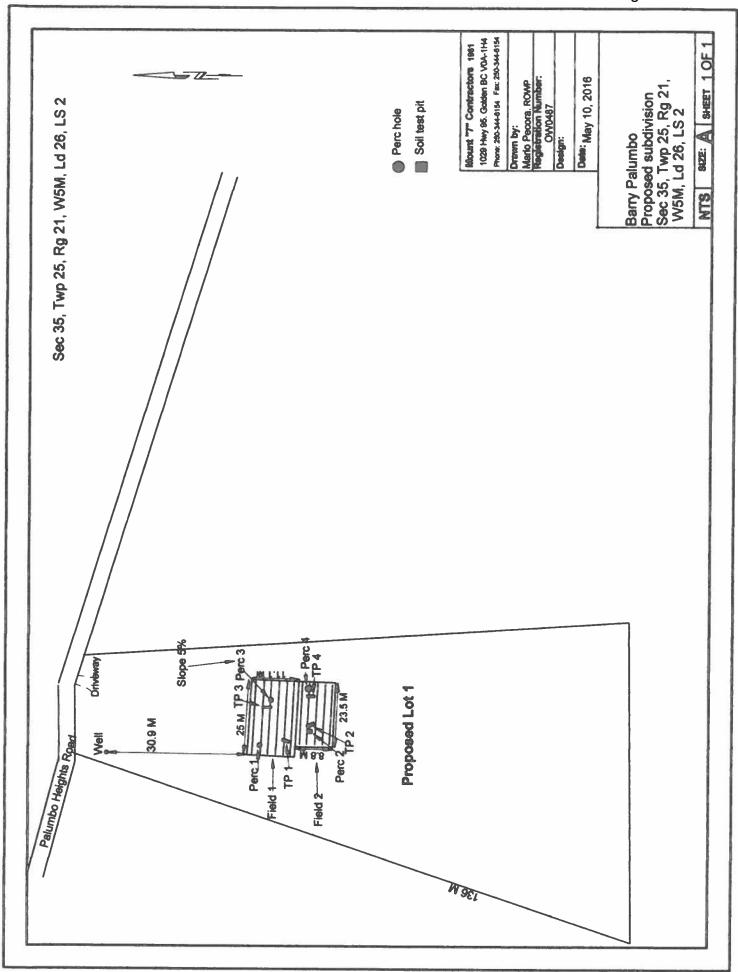
An example of a possible size for the 'field 2' area for this Proposed Lot would be: _23.5_m long by _8.8_ m wide.

Attached is the soils analysis for the Proposed Lot # 1. Field # 2. As the Authorized Person for this site evaluation, I confirm, to the best of my ability, that the soils on this proposed lot are appropriate for a Type 1 discharge system serving a 4 bedroom house as per the requirements of the Ministry of Health "Sewerage System Standard Practice Manual" and the Interior Health Subdivision Guidelines.

Signed and Stamped,



The information provided is NOT a septic system design. It is provided for the use of the Public Health Officer for subdivision review purposes ONLY. If you have any questions or require additional information, please contact the undersigned.



Page 109 of 137

Observed Soil Conditions Test Pit Logs

NAME: Barry Palumbo

Date: May 3, 2016

P#	1 P	it Location	on: Proposed L	P# 1 Pit Location: Proposed Lot 1. Field 1.					e: 5 %
			Soil Hori	zons (depths	measured	in cm/m/in/	ft)		
from	pth to	Colour	Texture	Structure	Rupture resistance (or density)		Roots depth & quantity	Mottles depth & quantity	Moistur
			Relative portions of various soil e.g. Silt, clay, sand.	Structureless 0 Weak 1 Moderate 2 Strong 3	Notes Below	35-60% Very 60-90% Extremely >90% if <10% fine earth use size class ROCK>75mm			
0	2	Black	Organic	-	-	-	Many fine	-	-
2	6	Brown	Sandy loam	1	L	-	Few fine	•	-
6	18	Brown	Loamy coarse sand	1	L	Ext	Very few fine	-	-
18	23	Grey	Coarse sandy loam	1	L	Ext	Very few fine	•	-
23	25.5	Grey	Sandy loam	1	L	-		•	-
23.5	26	Grey	Sandy loam	1	S	-	-	-	-
26	26.5	Black	Organic	-	-	-	-	-	-
26.5	28	Tan	Sandy loam	1	L	-	-	-	-
28	31	Tan	Coarse sand	0	L	-	-	-	-
31	35	Tan	Sandy loam	1	L	-	-	-	-
35	36.5	Tan- yellow	Sandy clay loam	2	S	-	-	-	-
36.5	44	Grey	Fine sand	0	L	-	-	-	-
44	45	Orange	Sandy clay loam	0	L	-	-	-	_
45	48.5	Grey	Sandy loam	0	L		-	-	-
OTES:		on prese	nt at:>48.5"_	N	lottling pres	sent at: _> 48.5	·		
HWT: _	> 48.5				Rooting De	epth: _21"			

DRY: Loose (L) Soft (S) Slightly Hard (SH) Mod Hard (MH)

Hard (HA)

Molst: Loose (L) Very Friable (VFR) Friable (FR) Firm (FI)

Very Firm (VFI)

Cementation: NA

Non-Cemented Extremely Weak (EW) Very Weak Cemented (VW) Weakly Cemented (W) Block Specimen: NA

Very Slight Force Slight Force Mod Force Strong Force

Observed Soil Conditions Test Pit Logs

NAME: Barry Palumbo

Date: May 3, 2016

P# :	2 Pi	t Locatio		Topoda Lot 7. Flore L.				Slope	: 5 %
-			Soil Hori	zons (depths		in cm/m/in/			
from	to	Colour	Texture	Structure	Rupture resistance (or density)		Roots depth & quantity	Mottles depth & quantity	Moistur seepag
			Relative portions of various soil e.g. Silt, clay, sand.	Structureless 0 Weak 1 Moderate 2 Strong 3	Notes Below	35-60% Very 60-90% Extremely >90% if <10% fine earth use size class ROCK>75mm			
0	4	Black	Organic	-	-	-	Many fine	-	-
4	8	Brown	Sandy clay loam	0	L	Very	Very few fine	-	-
8	14.5	Brown	Coarse sandy loam	0	L	Ext	Very few fine	•	-
14.5	22	Grey	Fine sandy loam	1	S	-	Very few fine	-	-
22	27.5	Grey	Sandy clay loam	1	S	-	Very few fine	~	-
27.5	29	Black	Organic	-	-	-	Very few fine	-	-
29	35.5	Grey	Sandy clay loam	1	S	-	-	-	-
35.5	43	Grey	Fine sandy loam	0	L	-	-	-	-
43	43.5	Grey	Silty loam	0	S	-	-	-	-
43.5	45.5	Grey	Fine sandy loam	0	L	-	-	-	-
45.5	47	Grey	Sandy clay loam	0	S	-	-	-	-
			t at:>47*			it at: _> 47" : _28"			

DRY: Loose (L) Soft (S) Slightly Hard (SH) Mod Hard (MH) Hard (HA) Molst: Loose (L) Very Friable (VFR) Friable (FR) Firm (FI) Very Firm (VFI)

Cementation: NA

Non-Cemented
Extremely Weak (EW)
Very Weak Cemented (VW)
Weakly Cemented (W)

Block Specimen:

Very Slight Force Slight Force Mod Force Strong Force

Page 111 of 137

Observed Soil Conditions Test Pit Logs

NAME: Barry Palumbo

Palumbo Haighte

Civic Address

Date: May 3, 2016

P# 3) F1	Locatio	n: Proposed Lo					Slope:	5 %
Day	pth to	Colour	Texture	Structure	Rupture resistance	in cm/m/in/ Coarse gravel	Roots depth &	Mottles depth &	Moistur
			Relative portions of various soil e.g. Silt, clay, sand.	Structureless 0 Weak 1 Moderate 2 Strong 3	Notes Below	(%) 35-60% Very 60-90% Extremely >90% if <10% fine earth use size class ROCK>75mm	quantity	quantity	seepage
0	6	Black	Organic	-	-		Many fine	•	-
6	15.5	Brown	Sandy clay loam	1	SH	-	Some fine	-	-
15.5	26	Grey	Silty clay loam	1	S	-	Very few fine	-	-
26	26.5	Black	Organic	-	-	-	Very few fine	-	-
26.5	30	Brown	Fine sandy loam	1	L	-	-	-	•
30	47.5	Grey	Silty loam	3	МН	-	-	-	-
OTES:	e horizo	n presen	t at:>47.5*	M	ottling pres	ent at: _> 47.5"			
HWT:	× 47.5°_		•	F	Rooting Dep	th: 26.5"			

DRY: Loose (L) Soft (S) Slightly Hard (SH) Mod Hard (MH) Hard (HA) Moist: Loose (L) Very Friable (VFR) Friable (FR) Firm (FI) Very Firm (VFI)

Cementation:
NA
Non-Cemented
Extremely Weak (EW)
Very Weak Cemented (VW)
Weakly Cemented (W)

NA
Very Slight Force
Slight Force
Mod Force
Strong Force

Observed Soil Conditions

Test Pit Logs

NAME: Barry Palumbo

Date: May 3, 2016

Page 112 of 137

CIVIC AC	agress:	Palum	ibo Heights				Logged by: Mar	io Pecora, R	OWP
TP# 4	Pit	Location	: Proposed Lot	1. Field 2.				Slope:	5 %
			Soil Hori	zons (depths	measured	in cm/m/in/	ft)		
from	pth to	Colour	Texture	Structure	Rupture resistance (or density)		Roots depth & quantity	Mottles depth & quantity	Moisture
			Relative portions of various soil e.g. Silt, clay, sand.		Notes Below	35-60% Very 60-90% Extremely >90% if <10% fine earth use size class ROCK>75mm			
0	9	Brown	Sandy loam	0	L	-	Med-fine	-	-
9	13	Tan	Sandy loam	1	L	-	Few fine	-	-
13	24	Grey	Coarse sandy loam	0	L	Very	Very few fine	-	•
24	31	Grey	Silty clay loam	2	SH	-	Very few fine	-	-
31	38	Grey	Coarse sand	0	L	Ext	-	-	-
38	43	Grey	Coarse sand	1	L	-	-	-	-
43	43.5	Black	Organic	0	L	-	Few med	-	-
43.5	50	Grey	Loamy sand	1	S	-	-	-	-
-									
NOTES:									
Restrictiv	e horizo	on preser	nt at:>50*	Mot	tling preser	nt at: _> 50"	·		
HWT:	> 50"			Ro	oting Depth	n: _43"			
									÷.

Rupture Resistance:

DRY: Loose (L) Soft (S) Slightly Hard (SH) Mod Hard (MH)

Hard (HA)

Moist: Loose (L) Very Friable (VFR) Friable (FR) Firm (FI) Very Firm (VFI)

NA Non-Cemented Extremely Weak (EW) Very Weak Cemented (VW) Weakly Cemented (W)

Cementation:

Block Spacimen: NA Very Slight Force Slight Force Mod Force Strong Force

Percolation Tests

NAME: Barry	Palumbo		Date: _May 4, 2016_
Civic Address:	Palumbo Heights Road		
Legal Address	•		
Location: Prop	osed Lot 1. Field 1 and 2		
Perc.	Hole # 1	Perc. H	lole # 3
Locati	ion: Field 1	Location	on: Field 1
5	min. / inch	5	min. / inch
7	min. / inch	7	min. / inch
8	min. / inch	9	min. / inch
9	min. / inch	11	min. / inch
Depth	: _27_ inches, cm	Depth:	_26_ inches, cm
Perc.	Hole # 2	Perc. H	tole # 4
Locati	on: Field 2	Location	on: Field 2
		1	

Perc. Hole # 2
Location: Field 2

3 min. / inch
5 min. / inch
5 min. / inch
min. / inch
Depth: _27_ inches, ___ cm

Perc. Hole # 4				
Location: Field 2				
2	min. / inch			
4	min. / inch			
4	min. / inch			
	min. / inch			
Depth: _24_	inches, cm			

Average Perc. Rate: _7.25_ min/inch or 2.5 cm

TUP 830-2



BOARD REPORT

Chair and Directors TO: File No: PL20170067 **SUBJECT:** Electoral Area F Temporary Use Permit No. 830-2 (Darroch/Isley) **DESCRIPTION:** Report from Dan Passmore, Senior Planner, dated April 7, 2017. 6929 Squilax-Anglemont Road, Magna Bay **RECOMMENDATION** THAT: In accordance with Section 493 of the Local Government Act, Temporary Use Permit No. 830-2 for Part W1/2 of the NW 1/4, Section #1: 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633 (PID: 014-009-552), for an approximately 7,500 m2 portion of the subject property for outdoor boat and trailer parking for registered quests of Magna Bay Resort on the subject property from May 19, 2017 until May 19, 2020, be issued this 18th day of May, 2017 **SHORT SUMMARY:** The applicant has submitted this application for a Temporary Use Permit to allow an approximately 7,500 m² portion of the subject property in the southwest corner of the part of the property north of Ross Creek and outside the Riparian Areas Regulation 30 m Streamside Protection and Enhancement Area (SPEA) to be used for boat and trailer parking for registered guests of the adjacent Magna Bay Resort only, for a period of 3 years. LGA Part 14 Stakeholder Unweighted \boxtimes Weighted **VOTING:** Corporate (Unweighted) Corporate (Weighted)

BACKGROUND:

PROPERTY OWNERS: Robert and Evelyn Isley

APPLICANT: Greg Darroch

ELECTORAL AREA: F

CIVIC ADDRESS: 6929 Squilax-Anglemont Road, Magna Bay

LEGAL DESCRIPTION: Part W1/2 of the NW 1/4, Section 17, Township 23, Range 9, W6M,

KDYD, Except Plan B7633 (PID: 014-009-552)

SIZE OF PROPERTY: 30.53 ha (79.3 ac)

DESIGNATION: RSC Rural and Resource

ZONE: A - Agriculture

CURRENT USE: Ross Creek General Store and Campground/Gravel Pit/Vacant

PROPOSED USE: Approximately 7,500 m2 for Boat and Trailer storage

SURROUNDING LAND USE PATTERN:

North: Gravel Pit

South: Rural Residential

East: Agricultural/Rural Resource/Rural Residential

West: Residential/Resort Campground

POLICY:

Electoral Area 'F' Official Community Plan Bylaw No. 830

11.4 Rural and Resource Lands (RSC)

Objective 1

To support forestry, agricultural, mining and recreational uses provided they follow all Provincial regulatory requirements, and avoid conflicts with residential areas.

Policy 1

The Rural and Resource land use designation is established on Schedules B & C.

Policy 2

Forestry, mineral, and aggregate extraction and outdoor recreational uses are appropriate in this area.

Policy 3

Lands designated as Rural and Resource should be maintained as large land parcels.

Policy 4

The Regional District encourages responsible land use practices on Rural and Resource lands:

Forestry should be managed in accordance with the Okanagan Shuswap Land and Resource Management Plan (OSLRMP). The Ministry of Forests, Lands and Natural Resource Operations is encouraged to use its regulatory authority to ensure that best management practices are followed by logging operations in order to minimize erosion and protect, to the greatest extent possible, the attractive viewscapes associated with the natural tree cover in the area. There should be no clear-cutting of large tracts of forest land that are visible from Shuswap Lake.

Aggregate operations are subject to the licensing requirements of the Ministry of Energy and Mines. Aggregate operators must conduct their activities in accordance with the Aggregate Operators Best Management Practices Handbook for British Columbia which addresses specific community issues such as noise, dust, traffic, hours of operation, viewscapes and sets out specific practices designed to minimize impact on the environment. Schedule E, showing the extent of aggregate potential, is sourced from the Ministry of Energy and Mines.

Policy 5

The Regional District encourages the Ministry of Energy and Mines to refer sand and gravel/quarry proposals to the Regional District and give due consideration to the impact of extraction and processing activities on surrounding land uses and developments. In particular, the Regional District encourages the Ministry not to issue new surface permits for sand and gravel/quarry processing near

residential areas unless the applicant demonstrates how mitigation measures will minimize or nullify the effects of the proposed activity.

Policy 6

Resource extraction operations, including forestry and mining, are responsible for restoring the landscape upon completion of the operations.

Section 14 Temporary Use Permits

The Regional District may consider issuing Temporary Use Permits through the authority of the *Local Government Act*.

Area

Temporary Use Permits are allowed in all designations.

Guidelines

For all temporary use permits:

Applicants must demonstrate how the proposed use will not markedly impact adjacent residents, local services and the environment. Where impacts are expected, applicants must provide details of those impacts and mitigative measures.

Magna Bay Zoning Bylaw No. 800

Section 5.2 Agriculture - A

Permitted Uses

- (a) Agriculture
- (b) Aquaculture
- (c) Bed and breakfast, permitted on a parcel 1 ha (2.47 ac.) or larger.
- (d) Home business
- (e) Home industry, permitted on a parcel 4000 m² (0.99 ac.) or larger.
- (f) Kennel, permitted on a parcel 2 ha (4.94 ac) or larger. Buildings and structures, including runs must be a minimum of 30 m (98.43 ft.) from a parcel boundary.
- (g) Residential campsite
- (h) Single family dwelling
- (i) Standalone residential campsite
- (j) Accessory use

FINANCIAL:

The TUP application is the result of a Bylaw Enforcement action. Should the Board consider the application and decide not to issue the TUP, Bylaw Enforcement action will re-commence. The cost of preparing TUP legal documents will be borne by the applicant/property owners.

KEY ISSUES/CONCEPTS:

Access:

Access will be from the Magna Bay Resort, an adjacent neighbouring property to the west.

Sewer Servicing and Drinking Water

The boat and trailer storage area would not be required to have servicing.

Riparian Area Regulation Issues/History

As a condition of the rezoning of the part of the property south of Ross Creek for the Ross Creek General Store and Campground, the property owner applied for a Development Permit (DP 830-45). DP 830-45 was issued for RAR and for flood hazard issues concerning Ross Creek. The applicant had a Riparian Area Assessment Report (RAAR) completed by a Qualified Environmental Professional (QEP), dated March 29, 2011, by Bill Rublee, R.P.Bio. of Triton Environmental Consultants Ltd. Use of the area for boat and trailer storage will be outside of the established Streamside Protection and Enhancement Area (SPEA) of 30.0 m for Ross Creek, and the SPEA will be protected with silt fencing and staked out.

Rezoning and Subdivision

The owner has made an application to subdivide the subject property in combination with another property Lot 1, Plan KAP56704, northwest of the subject property. The proposed subdivision will create a new lot in the area where this temporary use is being contemplated, that will be accessed from McClaskey Road via a panhandle.

Because the current zoning of the subject property and the neighbouring lot do not permit the lot sizes proposed in the subdivision the applicant has also submitted an application to rezone the portion of the subject property north of Ross Creek to allow for the subdivision, as well as an expansion of the uses contemplated in this TUP.

SUMMARY:

The applicant has applied for a temporary use permit which would allow boat and trailer storage for registered guests of the adjacent Magna Bay Resort only. Staff are recommending that the Board consider issuing the Temporary Use Permit, subject to the applicant providing details for staff review and approval regarding surface treatments for the parking area, drainage control measures, silt fencing demarcation of the SPEA area, and access limited from the Magna Bay Resort property only.

IMPLEMENTATION:

Neighbouring property owners will become aware of the proposal when the applicant posts a notice of development sign on the subject property and when required notifications from this office are received by property owners within 100 m of the subject property. An advertisement will be placed in the May 12, 2017 edition of the Shuswap Market News.

COMMUNICATIONS:

If the Board approves issuance of TUP 830-2, the owner and agent will be advised of the decision, and upon satisfying any necessary conditions, the TUP will be registered at the Land Title Office.

DESIRED OUTCOMES:

That the Board endorse staff recommendation.

BOARD'S OPTIONS:

- 1. Endorse the Recommendation. TUP 830-2 will be issued.
- 2. Decline issuance of the Permit.
- 3. Defer.
- 4. Any other action deemed appropriate by the Board.

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. N/A

Report Approval Details

Document Title:	2017-05-18_Board_DS_TUP830-2_IsleyDarroch.docx
Attachments:	- TUP830-2-Permit2.docx - TUP830-2-Report Attachments.docx
Final Approval Date:	May 8, 2017

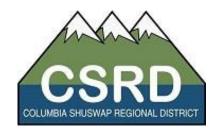
This report and all of its attachments were approved and signed as outlined below:

Corey Paiement - May 2, 2017 - 4:13 PM

Gerald Christie - May 8, 2017 - 6:52 AM

Lynda Shykora - May 8, 2017 - 9:36 AM

Charles Hamilton - May 8, 2017 - 2:30 PM



TEMPORARY USE PERMIT NO. 830-1

Registered Owners: Robert and Evelyn Isley 6197 Line 17 Road

Magna Bay BC V0E 1M7

1. This Temporary Use Permit is issued subject to compliance with all the Bylaws of the Regional District applicable thereto, except as specifically varied or supplemented by this Permit.

2. This Permit applies only to the lands described below:

Legal Description: Part W1/2 of the NW 1/4, Section 17, Township 23, Range 9, W6M,

KDYD, Except Plan B7633

PID: 014-009-552

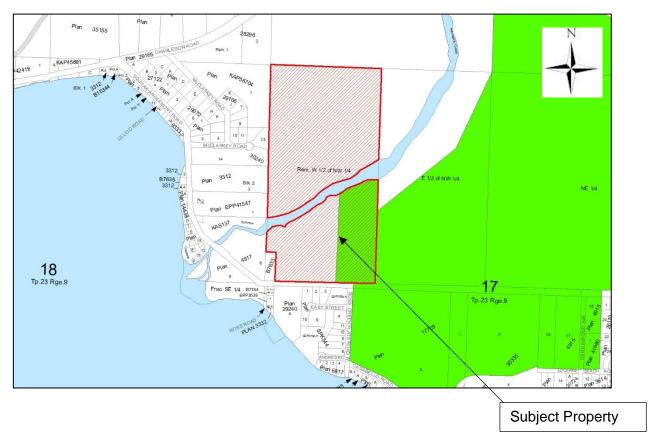
which property is more particularly shown on the map attached hereto as Schedule 'A'.

- 3. The owners of the subject property have applied for a Temporary Use Permit to allow a portion of the subject property in the southwest corner of the part of the property north of Ross Creek to be used for boat and trailer parking for registered guests of the adjacent Magna Bay Resort only, for a period of 3 years from the date of issuance. The portion of the property affected is shown on the sketch plan attached hereto as Schedule 'B'
- 4. The use authorized by this Temporary Use Permit may be carried out only in accordance with the terms and conditions set out herein.
- 5. If the terms of this permit are not adhered to, this permit may be revoked prior to the expiry date of the permit.
- 6. In addition to the permitted uses in the A Agriculture Zone in the Electoral Magna Bay Zoning Bylaw No. 800, the subject property may be used for a boat and boat trailer storage for the registered guests of Magna Bay Resort only, subject to the following conditions:
 - a) Only registered guests of the Magna Bay Resort will be permitted to park boats and boat trailers on the area indicated in Schedule B;
 - b) The owner must provide details regarding surface treatments for the parking area, drainage control measures, silt fencing, and demarcation of the SPEA area;
 - c) Access to the boat and trailer parking area is limited to the hours of 7:00 am until 8:00 pm daily;
 - d) No signage for the boat storage will be permitted;
 - e) The owner is wholly responsible for the proper disposal of all garbage, recycling, and waste left in the boat and trailer parking area; and,

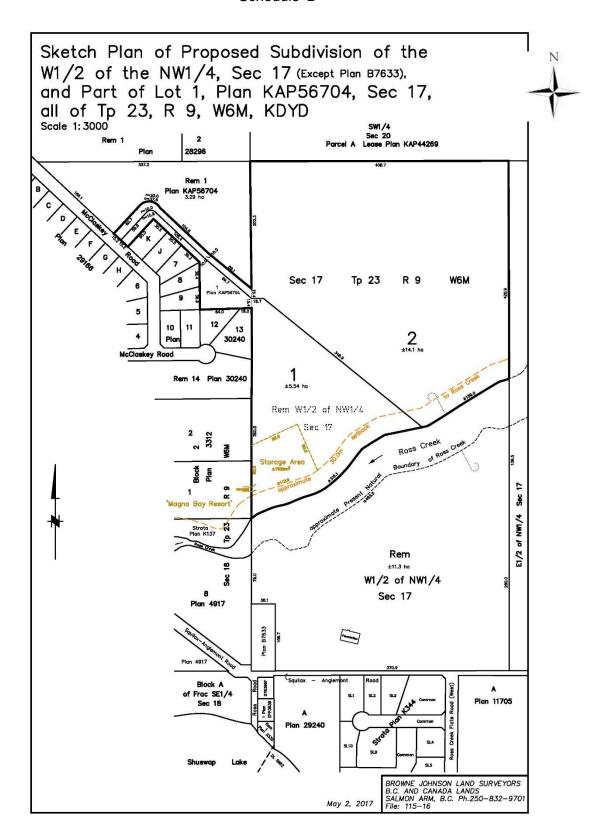
- f) Access to the boat and trailer parking area shall be from the Magna Bay Resort property only.
- 7. This Temporary Use Permit is not a Building Permit, nor shall it be construed as providing warranty or assurance that the property or any of the structures complies with the BC Building Code or any other applicable enactments.
- 8. Issuance of a Temporary Use Permit does not relieve the property owner of the responsibility to comply with applicable acts, regulations, or bylaws of the CSRD, or other agencies having jurisdiction under an enactment (e.g. Interior Health, Ministry of Transportation).
- 9. This permit, issued as per Section 493 of the Local Government Act, is valid from May 19, 2017, until May 19, 2020 only. This permit may be extended only up to 3 years in duration, upon application and subsequent approval by the CSRD Board of Directors.
- 10. This permit is valid from May 19, 2017, and shall expire on May 19, 2020.

	RESOLUTION of the Columbia Sh	uswap Regional District Board on
the <u>18th</u> day of <u>May</u> , 201	7.	
CORPORATE OFFICER		

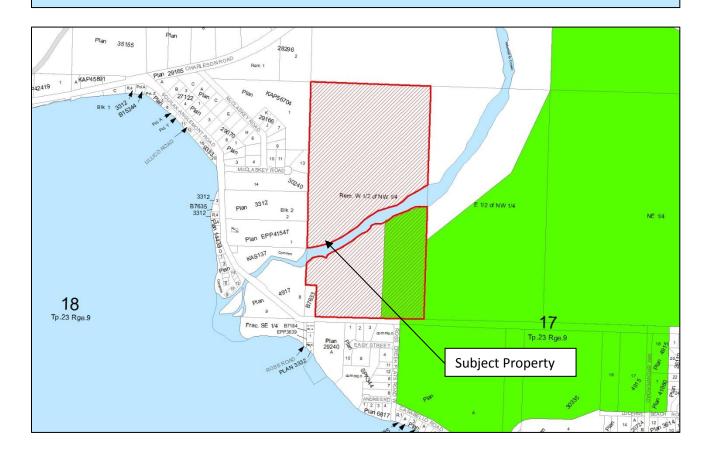
TUP 830-2 Schedule 'A'



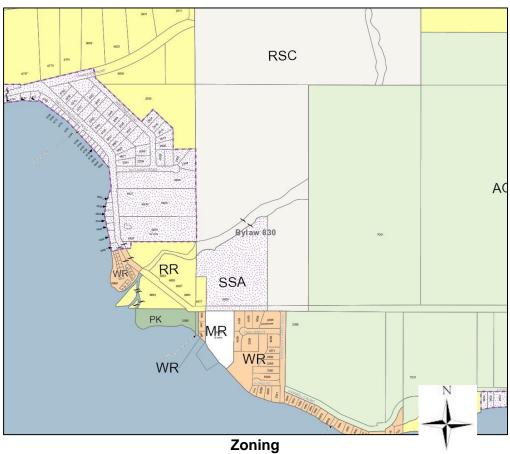
TUP830-2 Schedule 'B'

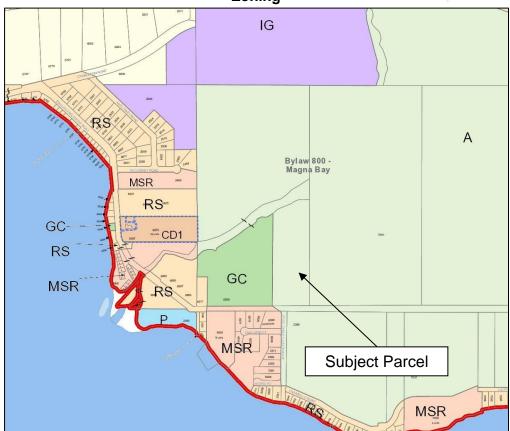


Location No. 3.10 d go 16 No



OCP

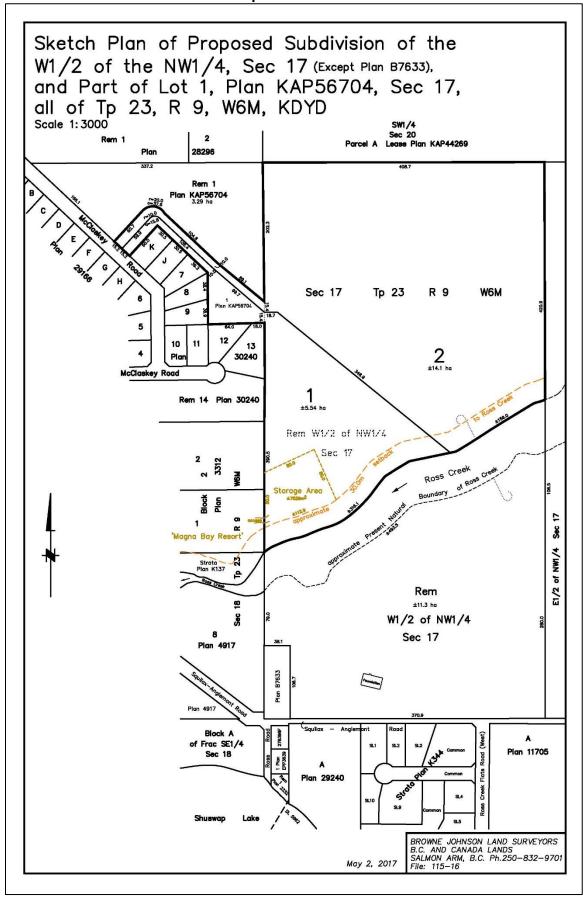








Proposed Site Plan



Dan Passmore

From:

Nick <nrimac@shaw.ca>

Sent:

Wednesday, May 3, 2017 3:59 PM

To:

Dan Passmore

Cc:

Corey Paiement; Gerald Christie

Subject:

Re: Regarding permit number 830-2

Dear Mr. Passmore,

First, thank you for the opportunity to revise and resubmit my response regarding the following circumstances.

I am writing to you/CSRD in confidence to object, and to protest this notice submitted by Mr. Greg Darroch, on behalf of Mr. Bob Isley to prevent any further disturbance and commercial developments in the Magna Bay Area of Electorial area 'F' legally described as Part W 1/2 of the NW 1/4, section 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633 (PID:014-009-552).

Please be advised that Mr. Isley had already wrongfully altered a considerable amount of this flood plain land since March 2016 and is currently continuing with his land alterations and development as of April 28th & 29th, 2017. This work was initially started without plan, permit, or notice and my concerns include the following:

- potential flood risks to the adjacent residential properties due to disturbance and diversion of water flow of under-ground and surface natural springs, and without even considering culverts as an example where they may be applicable,
- significant land and hillside alterations already causing ongoing landslides and posing risk to adjacent properties, including clearing many trees and shrubs that helped prevent erosion,
- persistent continuation to complete the new road access beginning at GEM gravel to significantly enlarged
 parking lot beside Magna Bay resort even though he was asked to seize work in March 2016 and to comply with
 regulations, (does this temporary permit consideration now allow for Mr. Isley to continue with land alteration
 and development?)
- unethical approach, not caring and no consideration how this impacts the community and specifically the neighboring residential properties,
- lack of overall community planning and how this activity may affect the community landscape, and it is still not clear what and how much exactly is to be constructed, and to what extent,
- assuming it is for boat and RV storage, etc., this will now cause additional traffic flow issues and the public
 accessing this area will impact the residential community, including privacy concerns,
- increased risks and security concerns to the community due to additional public access that may be storing boats, RV's, etc., and potentially attract theft,
- potential impacts from servicing and contaminants associated with the stored items and/or equipment, such as; chemicals that may leak and affect the drinking water, feeding the nearby wells and streams (of which one of the streams is protected by BC fisheries, Lot #9 McClaskey Rd.) and the creeks flowing into the Shuswap lake,
- lack of community planning that determines how the Magna Bay community will be impacted,
- Magna Bay community specifically the McClaskey region already has a significant amount of commercial zoning and land available to suit Mr. Isley's initiatives. Why disturb more sensitive environment and wildlife, especially where altering a flood plain and water course that may negatively impact the adjacent residential properties?

Background: Prior to or on March 2016, Mr. Isley began this unlawful activity and significant land alteration including the disturbance of hillside, filling and leveling of natural springs, and significant forestry removal thereby providing road access and an enlarged parking/storage area behind the Magna Bay Resort used for outdoor boat and RV storage. Building the road access required many loads of gravel recklessly tearing away at a hill side now causing landslides,

potentially endangering adjacent properties, and causing an unsightly landscape, and potential water diversion posing risks to adjacent residential properties.

I eagerly look forward to your/CSRD response and outcome regarding this unpleasant issue. I thank you for your time and attention regarding this matter.

Sincerely,

Nick Rimac

From: Dan Passmore <dpassmore@csrd.bc.ca>

Date: Friday, April 28, 2017 at 12:35 PM

To: Nick < nrimac@shaw.ca>

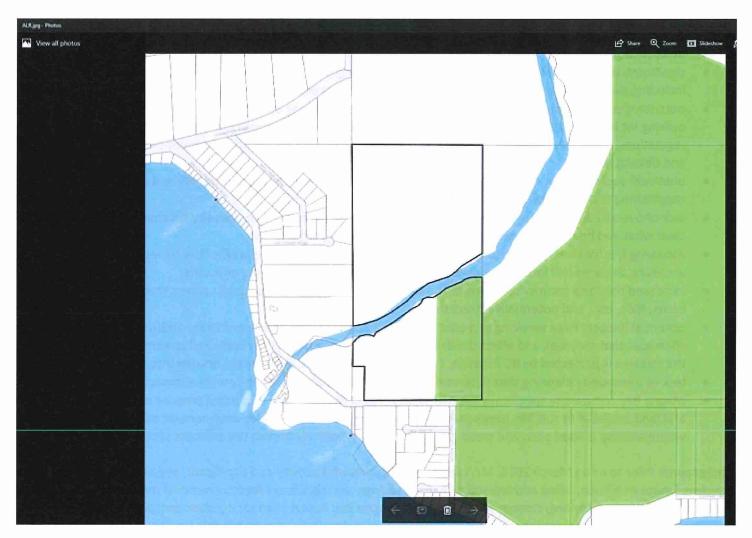
Cc: Corey Paiement < CPaiement@csrd.bc.ca>, Gerald Christie < gchristie@csrd.bc.ca>

Subject: RE: Regarding permit number 830-2

Good Morning Mr. Rimac;

You seem to be missing some vital information.

The following is a map showing the area that is in the ALR on Mr. Isley's property.



You will note that the ALR only impacts the portion south of Ross Creek and east of the general store and campground. It does not impact on the area of the current Temporary Use Permit.

Also, the area north of Ross Creek is the area where the works you refer to have occurred.

Here is an orthophoto of the property for reference.



The property owner has applied to subdivide the subject property.

The CSRD has received an application for a Temporary Use Permit (TU 830-02) for an area of approximately 8,000 m2, as shown on the attached proposed plan of subdivision.

The CSRD has also received an application to rezone the areas impacted by the subdivision.

As a condition of the rezoning which permitted the Ross Creek Store and Campground, the applicant was required to engage a Qualified Environmental Professional (QEP) to conduct a Riparian Area Assessment Report (RAAR). This report indicated that the Streamside Protection and Enhancement Area (SPEA) for Ross Creek is 30.0 m from High Water Mark. No development activities can occur within the SPEA. The applicant has indicated that the SPEA has been staked and that no works are being conducted within it.

Site visits by CSRD staff bear this out.

Under the bylaw enforcement policy in effect when the CSRD received your complaint, all Bylaw Enforcement action was held in abeyance, pending the result of the applications. As the applications are ongoing, no further action has been taken against the property owner.

I am providing you with this information so that you can consider it, and potentially to edit your comments accordingly, particularly with respect to the impact of the ALR.

Otherwise, I will include your correspondence, as is, for the Board's consideration at the May 18 regular Board meeting to consider the TuP application. All correspondence received are public documents and will be available for the public and the applicant to review.

Please note, that both the TuP and the rezoning involve the opportunity for public input.

Please be mindful that the Board of the CSRD, and by extension staff are required under the Local Government Act to consider all applications made. All applications are subjected to the same processes and procedures, and staff are empowered to make recommendations to the Board, in accordance with good planning practices, and the policies of the Board. The Board then considers the staff recommendation, together with input from the public, and renders a decision. Staff is required to give each application due process and are not empowered to simply not consider them.

Regards

Dan Passmore | Senior Planner **Development Services**

Columbia Shuswap Regional District

T: 250.833.5915 | F: 250.832.3375 | TF: 1.888.248.2773 E: dpassmore@csrd.bc.ca | W: www.csrd.bc.ca









📤 Please consider the environment before printing this e-mail

This e-mail is CONFIDENTIAL. If you are not the intended recipient, please notify me immediately and delete this communication, attachment or any copy. Thank you.

From: Nick [mailto:nrimac@shaw.ca] Sent: Friday, April 28, 2017 10:01 AM

To: Dan Passmore <dpassmore@csrd.bc.ca> Subject: Regarding permit number 830-2

Importance: High

Dear Mr. Passmore,

I am writing to you/CSRD in confidence to object and to protest this notice submitted by Mr. Greg Darroch, on behalf of Mr. Bob Isley and to prevent any further ALR disturbance and developments in the Magna Bay Area of Electorial area 'F' legally described as Part W 1/2 of the NW 1/4, section 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633 (PID:014-009-552). I also request that Mr. Isley is currently subject to a reclamation project in effort to return this sensitive and already significantly altered ALR land to its original state due to his previously unlawful and inconsiderate actions that may impose significant risks and already negatively affects the adjacent properties including the overall Magna Bay community landscape.

It is my understanding that the ALC can also apply to the Supreme Court of British Columbia to assist in enforcing orders for the following reasons which Mr. Isley had already neglected and avoided. According to ALC, unauthorized uses of ALR land may include, but are not limited to:

- Fill placement or removal of soil on ALR land;
- Aggregate extraction;
- Parking or storage of commercial or industrial vehicles;

- Operating a commercial business unrelated to farming;
- Construction of buildings other than a principal residence without a permit;
- Impacting/obstructing a watercourse.

Please be advised that Mr. Isley had already wrongfully altered a considerable amount of this land since March 2016 and is currently continuing with his land alterations in preparation for additional potential commercial development even though he was asked to seize work, and comply with CSRD bylaw enforcement. This work on ALR land was initially started without permit, notice or even complying to bylaw enforcement visits. It is in my opinion that this work is simply not following any CSRD governance or regulatory protocols and from my perspective it is now showing favoritism to Mr. Isley by the CSRD. This includes, but is not limited to filling, placement and removal of soil/gravel, trees, impacting/obstructing a watercourse and the continuation of completing a road and parking lot even after being reprimanded by the bylaw. Mr. Isley did not even consider including any culverts as an example and now poses a significant risk/impact to the landscape, environment, community, adjacent residential properties, landscape, development and community planning, or perhaps others yet to be determined that may require additional natural resource studies, risk and impact analysis.

I am saddened to see that yourself, the CSRD, and the board of directors are now considering and allowing for this issuance to continue regarding Mr. Isley's initiatives regardless of approach used to get this ALR to the existing state of completion in preparation for further business development. This has already caused many significant and negative impacts due to Mr. Isley's unethical and inconsiderate actions, now to be supported by the CSRD board. My concerns include, but are not limited to:

- current disturbance and diversion of wetlands, wildlife, natural springs, water flow and without even considering culverts where applicable,
- significant land and hillside alterations already causing erosion/landslides, and posing risk to adjacent properties,
- CSRD allowing for continuation and completion of previously unwarranted development of substantial road access since reported on March 2016,
- an illegally constructed and significantly enlarged parking lot that is already being used for boat and RV storage without prior approval or permits,
- lack of community consideration, and overall planning and effect on community,
- unsightly landscape, risks and potential security concerns to the community due to additional traffic flow, access, and altered land usage,
- now potential risks to the adjacent residential properties that may be caused by diversion of disturbed water flow,
- potential impacts from storage and associated contaminants from stored equipment and chemicals that may be leaking and affecting the drinking water, wells and creeks flowing into the Shuswap lake,
- further environmental impacts to and now unstable and active landslides caused by this unlawful and significant alteration of <u>ALR</u> land without even properly surveying, or seeking permit
- public risks associated with potential land use, such as attraction of theft, including security and safety concerns
 to neighboring residents, and overall impacts to the entire Magna Bay landscape and impact to future
 community planning,
- negligent and overall lack of study that determines how this development will be impacting the adjacent properties, just to name a few areas of concern.
- Magna Bay community specifically the McClaskey region already has significate commercial zoning.

Background: Prior to or on March 2016, Mr. Isley began the unlawful and significant land alteration including the disturbance of hillside, filling and leveling of natural springs, and significant forestry removal thereby providing access and an enlarged parking/storage area behind the Magna Bay Resort that is being used for outdoor boat and RV storage. Building the road access required many loads of gravel tearing away at a hill side now causing landslides and threats to nearby properties, and altering/clearing a significant portion of the area having large sections of trees, brush removed

and filling in and leveling off the areas having natural springs. The trees and brush are currently piled on the property. Additional information including pictures is recorded with the bylaw.

I eagerly look forward to your/CSRD response regarding this subject to formally object to, and protest this action plan. I thank you for your time and attention to this matter.

Sincerely,

Nick Rimac

Dan Passmore

From:

Cindy Parker <cindy.l.parkerville@gmail.com>

Sent:

Monday, May 15, 2017 8:54 PM

To:

Dan Passmore

Subject:

Temporary Use Permit No. 830-2

Regarding: Temporary Use Permit No. 830-2

We, Dean and Cindy Parker, have been going to the Shuswap since the early '80's'. We purchased Lot 13 on McClaskey Road in 1988 from Cindys uncle.

Over the years we have noticed changes with the area becoming more populated. Most changes have been understandable. However when it starts to disrupt the integrity of the hillsides and waterways we find this totally unacceptable. The amount of activity with heavy equipment, trailers, boats and RVs has caused noise, dust and far less privacy.

In short we are against this application.

Yours truly, Dean / Cindy Parker P.O. Box 1106 Crossfield, Alta TOM 0S0

☐ CAO ☐ Works ☐ DS ☐ Fin/Adm	☐ Agenda ☐ Reg Boerd ☐ In Camera ☐ Other Mtg	Ownership:		
MAY 17 2017				
☐ Ec Dev ☐ IT ☐ Parks ☐ SEP ☐ HR ☐ Other	HECENCED Staff to Respond Staff into Only Dir Mallbox ED Dir Circulate	Ack Sent:		

Dan Passmore		☐ CAO ☐ Works ☐ DS	☐ Agenda ☐ Reg Board	Ownership:
		☐ Fin/Adm	☐ Other Mtg	Tile #
From:	Greg Darroch < gldarroch@shaw.ca>		The state of the s	
Sent:	Tuesday, May 16, 2017 8:45 AM		MAY 17 2017	7
To:	Dan Passmore	:c <	17 201	'
Subject:	Re: Public Input TuP 830-2	□ SEP □ HR	RECEIVED Staff to Report Staff to Respond Staff Info Only Dir Mailbox	Ack Sent:
Dan, I will address both submissions, First the e mail from Mr Rimac		☐ Other	☐ Dir Circulate	☐ Email

Should applicants not provide there property address and location of there property owned and they are legal owner of record.

Mr Rimac commented on 10 points which I will address in number order

- 1) Potential flood risks, I have walked the property in question along with my consultants Golder and associates. We never noticed any excising water channels. There is very likely underground water due to Ross Creek.. Should our application be accepted for re zoning and at that time a building permit is submitted we would have to get a Geo Tec report at that time which would deal with any issues. I would be happy to meet with Mr. Rimac on site and discuss his concerns further
- 2) Significant ongoing landslides, I don't recall any prior landsides. Removing and of the sloped portion of the present lot to the East will provide further setback from residential properties and provide more protection should there be a slide
- 3) Construction of a new Road is not yet registered as a approved entrance by Government. Work completed to date is at the expense of the land owner and should just be considered as lot improvements which is within the CSRD bylaws
- 4) Unethical approach- No sure what Mr. Rimac is commenting here.
- 5) Overall planning would be a process at time of re zoning
- 6) Assuming boat storage this would again be addressed in re zoning process
- 7) Increased Security risk at this time are not a concern as storage is limited just to Magna Bay Resort Guests. Many of these guests keep a look out for any persons that are not registered at the resort
- 8) Should zoning be approved and a construction permit is applied for protection of any fisheries concerns would be dealt with. Mr. Rimac talks about Lot 9. A rezoning would help this concern as this portion would be residential for office etc. Present zoning is Industrial which I think is a greater risk
- 9) Rezoning would allow public input
- 10) I'm not sure low leveling the present land effects the flood plain and water course.

Letter

Mr. Ambler lives on Lot 11 McClusky Rd, Mr. Ambler would benefit from the rezoning as his back corner of the lot back onto present Industrial zoning

Work started was only a private land owner clearing and filling his land within CSRD bylaws. Many of Mr. Amblers concerns will be addressed at re zoning

Greg

---- Original Message -----

From: Dan Passmore

To: Greg Darroch (gldarroch@shaw.ca) Sent: Monday, May 15, 2017 4:26 PM

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5	Ross Creek.
	Koss Creek.
7.	Doubt who are a classic Cil la
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8	Want if vil changes and. Services on RV. Storge water Done There. close To Ross creek. and Well
	Services on Rv. Storge water Done
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