



Electoral Area Services Committee
Thursday, March 11, 2021 - 10:30 am
Via Zoom Video-Conference

Zoom Meeting Details:

<https://zoom.us/j/92625564446?pwd=MzlrS0dkWEducUxuaXBXMU55NWQ0dz09>

Meeting ID: 926 2556 4446

Passcode: 866592

1-778-907-2071

A G E N D A

1. CALL TO ORDER

2. LAND ACKNOWLEDGEMENT

- a) We acknowledge and appreciate that the land on which we gather is the converging, traditional and unceded territory of the Syilx, Secwepemc, Sinixt and Ktunaxa Peoples as well as the Metis Peoples whose footsteps have also marked these lands.

3. ACCEPTANCE OF AGENDA (ADDITIONS/DELETIONS)

- a) March 11, 2021

Recommendation: That the March 11, 2021 Electoral Area Services Agenda be adopted as presented.

4. MINUTES

- a) **February 11, 2021**

[Electoral Area Services Committee - 11 Feb 2021 - Minutes - Pdf](#)

Recommendation: That the February 11, 2021 Electoral Area Services meeting minutes be adopted as presented.

5. CONSENT AGENDA

- a) The Consent Agenda will be presented at a future meeting.

6. DELEGATIONS

7. UNFINISHED BUSINESS

a) Vehicle Removal Assistance

Verbal Update to be provided by Donna Dean

b) Bylaw Enforcement Potential for Municipal Partnerships

Verbal Update to be provided by Donna Dean

c) Bylaw Enforcement File Summary

[Active Bylaw Enforcement Files as of February 28](#)

Recommendation: That the Bylaw Enforcement Summary be received.

d) Draft New Board of Variance Bylaw

[2021-03-11 EAS BOV](#)

Recommendation: That the Board of Variance Bylaw No. 1750, 2021 be forwarded to the Regional District of Kootenay Boundary Board of Directors for consideration.

8. NEW BUSINESS

a) Erin Lukkar

RE: Development Variance Permit

1115 King George Park Road, Electoral Area B/Lower
Columbia-Old Glory

RDKB File: B-Twp9A-10926.100

[2021-03-11 Lukkar DVP EAS](#)

Recommendation: That the Development Variance Permit application submitted by Erin Lukkar, to vary Section 609.8 – Agricultural Resource 1 Zone Setbacks of the Electoral Area B/Lower Columbia-Old Glory Zoning Bylaw No. 1540, 2015 to

decrease the required front parcel line setback for buildings and structures principal from 7.5 m to 4.5 m – a variance of 3 m, for the construction of a single family dwelling on the property legally described as Lot 1, Plan NEP6491, Township 9A, Kootenay Land District, Except Plan 18520, Electoral Area B/ Lower Columbia-Old Glory be presented to the Regional District of Kootenay Boundary Board of Directors for consideration, with a recommendation to approved, with the following conditions:

1. The applicant provide a certificate of location for the existing buildings and structures; and
2. The applicant provide a site plan that is to scale for the proposed setback variance.

b) Greg and Gail Fawley

RE: Development Variance Permit

1537 McIntyre Road, Electoral Area C/Christina Lake

RDKB File: C-317-02595.340

[2021-03-11 Fawley DVP EAS](#)

Recommendation: That the Development Variance Permit application submitted by Gail Fawley and Gregory Fawley, for the property legally described as Lot 34, Plan KAP33117, District Lot 317, Similkameen Division of Yale Land District, Electoral Area C/ Christina Lake be presented to the Regional District of Kootenay Boundary Board of Directors for consideration, with the following recommendations:

1. That the Regional Board deny the requested variance to Section 402.6 – Exterior Side Parcel Line Setback, to reduce the minimum accessory building exterior side parcel line setback from 4.5 m to 2.65 m – a variance of 1.85 m, in order allow the proposed siting of the accessory building containing the garage/storage area; and
2. That the Regional Board approve the requested variance to Section 402.6 – Front Parcel Line Setback, to reduce the minimum accessory building exterior side parcel line setback from 4.5 m to 2.75 m – a variance of 1.75 m, to allow for the electrical shed/storage space, with the following condition:
 - 2.1. The applicants submit an approved Highway Use Permit for the setback from the Ministry of Transportation and Infrastructure.

c) Waneta Expansion Power Corp
RE: Development Permit Amendment

Hwy 22, Electoral Area A
RDKB File: A-205A-00944.000
[2021-03-11 WAX DP EAS](#)

Recommendation: That the staff report regarding the Industrial and Columbia Gardens Aquifer Development Permit application submitted by Matthew Tonner of Columbia Power Corporation, on behalf of Waneta Expansion Power Corporation for the parcels legally described as Lot 6A and Lot 7A, District Lot 205A, Kootenay Land District, Plan 800, Except Part included in Statutory Right of Way Plans 15510 and EPP60444, Electoral Area 'A', be received.

d) Darren and Clare West
RE: Development Permit

Strata Lot 61, Electoral Area E/West Boundary-Big White
RDKB File: BW-4222-07500.905
[2021-03-11 West DP EAS](#)

Recommendation: That the staff report regarding the Alpine Environmentally Sensitive Landscape Reclamation Development Permit application submitted by Shauna Wizinsky of Weninger Construction & Design, on behalf of Clare West and Darren West for the parcel legally described as Strata Lot 61, Plan KAS3134, District Lot 4222, Similkameen Division of Yale Land District, Big White, Electoral Area 'E'/West Boundary, be received.

e) Ronald and Tara Manson
RE: MOTI Subdivision

3041 East Lake Drive, Electoral Area C/Christina Lake
RDKB File: C-963-043610.000
[2021-03-11 Manson MOTI EAS](#)

Recommendation: That the staff report regarding the Ministry of Transportation and Infrastructure referral for a proposed seven lot conventional subdivision, for the parcels legally described as Lot 1, Plan KAP6813, District Lot 963, Similkameen Division of Yale Land District, Except Plan 29141,

located in Electoral Area 'C'/Christina Lake be received;
And that staff communicate with the property owner that park dedication in the form of land or cash must be secured, to be determined by the Regional District, for this proposed subdivision to move forward.

f) Grant in Aid Report
[Grant in Aid Report](#)

Recommendation: That the Grant in Aid report be received.

9. LATE (EMERGENT) ITEMS

10. DISCUSSION OF ITEMS FOR FUTURE AGENDAS

11. CLOSED (IN CAMERA) SESSION

a) Meeting Closed to the Public

In the opinion of the Board - and in accordance with Section 90 of the *Community Charter* - the public interest so requires that persons other than DIRECTORS, ALTERNATE DIRECTORS, DELEGATIONS AND STAFF be excluded from the meeting; AND FURTHER, in accordance with Section 90 of the *Community Charter*, the meeting is to be closed on the basis identified in the following subsections:

- i. the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose;

Recommendation: That the Electoral Area Services Committee proceed to a closed meeting pursuant to Sec. 90 (1)(i) of the *Community Charter*.

12. ADJOURNMENT



**Electoral Area Services Committee
Minutes
Thursday, February 11, 2021
Via Zoom Online Video Conferencing**

Committee Members Present:

Director A. Grieve- Chair
Director G. McGregor - Vice Chair
Director V. Gee
Director L. Worley
Director D. O'Donnell

Staff Members Present:

M. Andison, CAO, Regional District of Kootenay Boundary
J. Chandler, Deputy CAO / General Manager of Operations
B. Ihlen, General Manager of Finance
D. Dean, Manager of Planning and Development
S. Surinak, Recording Secretary

CALL TO ORDER

The Chair called the meeting to order at 10:00 a.m.

LAND ACKNOWLEDGEMENT

We acknowledge and appreciate that the land on which we gather is the converging, traditional and unceded territory of the Syilx, Secwepemc, Sinixt and Ktunaxa Peoples as well as the Metis Peoples whose footsteps have also marked these lands.

ACCEPTANCE OF AGENDA (ADDITIONS/DELETIONS)

February 11, 2021

A request was made to move the discussion of 003 Grant in Aid 2021-2025 Five Year Financial Plan to follow 002 Electoral Area Administration Budget; and to add a discussion item regarding VOVID-19 Restart Funds.

Moved / Seconded

That the February 11, 2021 Electoral Area Services Agenda be adopted as amended.

Carried.

MINUTES

January 14, 2021

Moved / Seconded

That the January 14, 2021 Electoral Area Services meeting minutes be adopted as presented.

Carried.

CONSENT AGENDA

The Consent Agenda will be presented at a future meeting.

DELEGATIONS

There were no delegations.

UNFINISHED BUSINESS

002 Electoral Area Administration Budget

The committee reviewed the budget for 002 Electoral Administration as presented and it was recommended that the \$10,000 per year to reserves for the general election to continue.

Moved / Seconded

That the Regional District of Kootenay Boundary Board of Directors approve the Electoral Area Administration Budget (002) 2021-2025 Five Year Financial Plan as presented to the Electoral Area Services Committee on February 11, 2021 and including minor changes for adjustments for year end totals. **FURTHER** that the Plan be included in the overall RDKB 2021-2025 Five Year Financial Plan.

Carried.

003 Grant in Aid-moved from New Business

Moved / Seconded

That the Regional District of Kootenay Boundary Board of Directors approve the Grant in Aid (003) 2021-2025 Five Year Financial Plan as presented to the Electoral Area Services Committee on February 11, 2021 and including minor changes for adjustments for year end totals. **FURTHER** that the Plan be included in the overall RDKB 2021-2025 Five Year Financial Plan.

Carried.

005 Planning and Development Budget

The Committee discussed the prospect of bringing GIS hosting in house including the short-term costs and long-term savings of doing so.

Director Worley joined the meeting at 10:32 a.m.

Moved / Seconded

That the Regional District of Kootenay Boundary Board of Directors approve the Planning and Development (005) 2021-2025 Five Year Financial Plan as presented to the Electoral Area Services Committee on February 11, 2021 and including minor changes for adjustments for year end totals. **FURTHER** that the Plan be included in the overall RDKB 2021-2025 Five Year Financial Plan.

Carried.

Bylaw Enforcement File Summary

The Committee requested monthly updates including types of complaints.

Director Grieve suggested sending letters to long-term offenders about the new ability to ticket for offences along with the press release. Also discussed was the possibility of creating a program whereby the RDKB works with an auto-recycler(s) to encourage residents to have derelict vehicles removed from their property.

Attendance at the next meeting by the bylaw enforcement officer was discussed as well as inviting our solicitor to discuss the Board's role with regard to bylaw enforcement.

Moved / Seconded

That the Bylaw Enforcement Statistics Report be received.

Carried.

Bylaw Enforcement - Municipal Participation Discussion

Donna Dean gave a verbal update on her discussions with two of the east end municipalities. The committee wishes to explore the possibility of municipal partnerships while not compromising the ability to enforce RDKB bylaws.

Moved / Seconded

That Donna Dean, Manager of Planning & Development send a letter to Montrose, Fruitvale and Warfield to solicit expressions of interest in joining the Bylaw Enforcement Service.

Carried.

NEW BUSINESS

Kevin Sawyer

RE: Development Variance Permit

2019 Carol Crescent, Electoral Area C/Christina Lake
RDKB File: C-970-04396.020

Moved / Seconded

That the Development Variance Permit application submitted by Kevin Sawyer, to vary Section 402.6 – “Setbacks” of the Electoral Area C / Christina Lake Zoning Bylaw No. 1300, 2007 to decrease the required front parcel line setback for a principal building from 4.5 m to 3.2 m – a reduction of 1.3 m, for the construction of a carport attached to the garage on the property legally described as Lot 5, Plan KAP25978, District Lot 970, Similkameen Division of Yale Land District, Electoral Area C/Christina Lake be presented to the Regional District of Kootenay Boundary Board of Directors for consideration, with a recommendation to approve.

Carried.

Dean and Christine Tremaine

RE: Development Permit

3473 East Lake Drive, Electoral Area C/Christina Lake
RDKB File: C-2104-05038.000

Moved / Seconded

That the staff report regarding the Development Permit application submitted by WSA Engineering Ltd. on behalf of Christine Tremaine and Dean Tremaine to install an onsite sewerage disposal system for a single family dwelling in the Environmentally Sensitive Waterfront Development

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Permit Area on the parcels legally described as Lot 13, Plan KAP6703, District Lot 2104, Similkameen Division of Yale Land District and the Northerly 30 Feet of Lot 14 Measured Along the Easterly and Westerly Boundaries Thereof by the Full Depth of Said Lot: District Lot 2104 Similkameen Division of Yale Land District Plan 6703, Electoral Area 'C'/Christina Lake, be received.

Carried.

Andrea and Mark Ormandy

RE: Development Permit

1644 West Lake Drive, Electoral Area C/Christina Lake
RDKB File: C-317-02592.000

Moved / Seconded

That the staff report regarding the Development Permit application submitted by Mark Ormandy on behalf of Andrea Ormandy and Mark Ormandy to install an onsite sewerage disposal system for a single family dwelling in the Environmentally Sensitive Waterfront Development Permit Area on the parcel legally described as Lot 2, Plan KAP5025, District Lot 317, Similkameen Division of Yale Land District, Electoral Area 'C'/Christina Lake, be received.

Carried.

Kevin and Sharla Blackett

RE: Development Permit

460 Feathertop Way, Big White
RDKB File: BW-4222-07500.865

Concerns were expressed regarding the siting of the parking spaces, snow storage, and the skier easement.

Moved / Seconded

That the staff report regarding the Alpine Environmentally Sensitive Landscape Reclamation Development Permit application submitted by Kevin Blackett and Sharla Blackett for the parcel legally described as Strata Lot 53, Plan KAS3134, District Lot 4222, Similkameen Division of Yale Land District, Big White, Electoral Area 'E'/West Boundary, be received.

Carried.

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Permpaul and Pamela Deol

RE: Development Permit

Strata Lot 26, Feathertop Way, Big White

RDKB File: BW-4222-07500.730

Moved / Seconded

That the staff report regarding the Alpine Environmentally Sensitive Landscape Reclamation Development Permit application submitted by Pamela Deol and Permpaul Deol for the parcel legally described as Strata Lot 26, Plan KAS3134, District Lot 4222, Similkameen Division of Yale Land District, Big White, Electoral Area 'E'/West Boundary, be received.

Carried.

Grant in Aid Report

Moved / Seconded

That the Grant in Aid report be received.

Carried.

LATE (EMERGENT) ITEMS

COVID-19 Restart Funds

The Committee discussed the following matters:

- The funds allocated to regional districts compared to municipalities. Values of restart funds were presented showing that municipalities received significantly more funding per resident than the regional district.
- Guidelines regarding the use of the funds.
- Forwarding concerns directly to UBCM.

DISCUSSION OF ITEMS FOR FUTURE AGENDAS

- Review the formula to determine the cost to municipalities for building inspections services.

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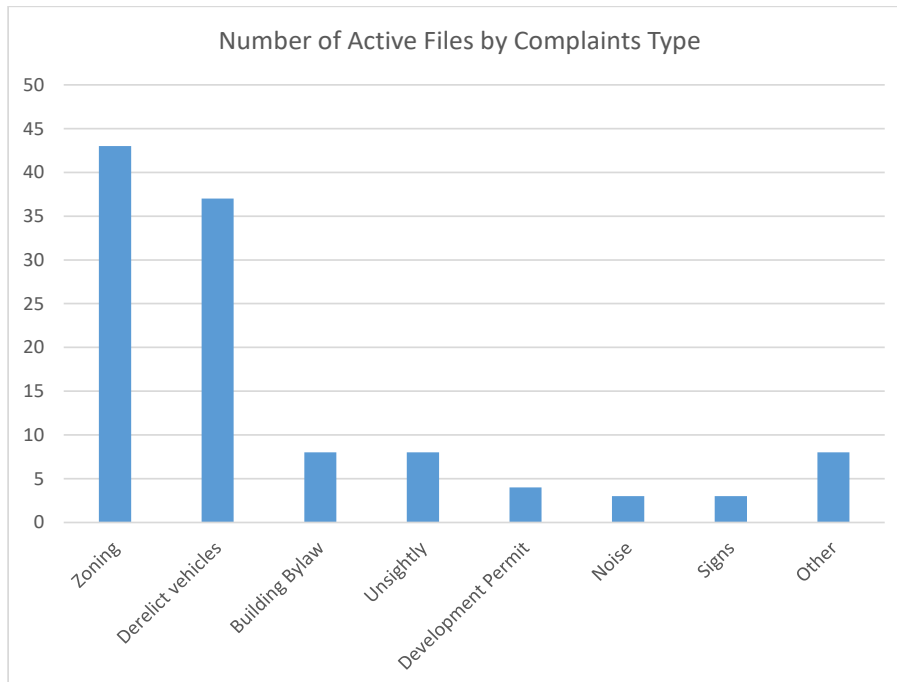
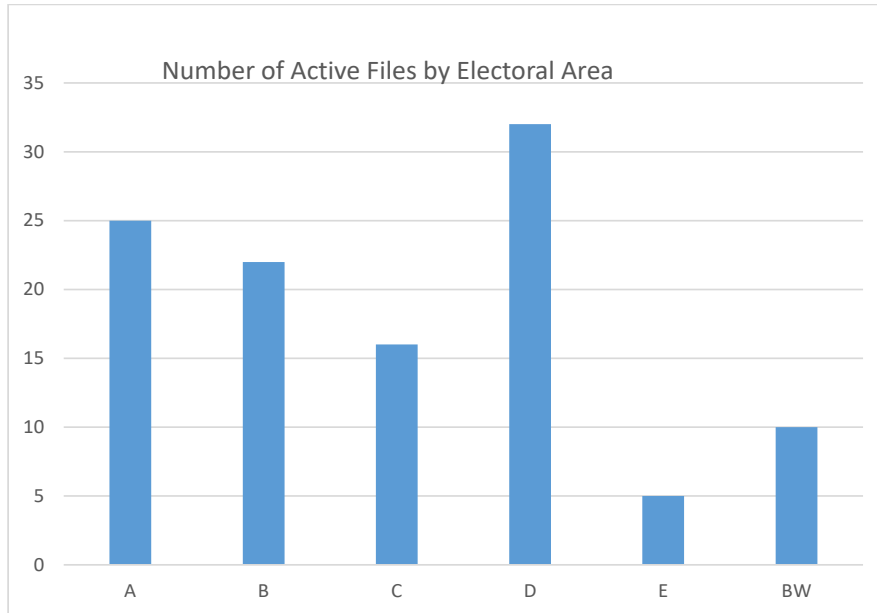
- Discuss possible cost sharing for bylaw enforcement.
- Determine the location of an off-site board meeting when in-person meetings are allowed.

CLOSED (IN CAMERA) SESSION

A closed (in camera) session was not required.

ADJOURNMENT

There being no further business to discuss, the Chair adjourned the meeting at 11:35 a.m.

Active Bylaw Enforcement Files as of February 28, 2021



Electoral Area Services Committee

Prepared for meeting of March 11, 2021

Draft Revised Board of Variance Bylaw

Report Prepared by: Donna Dean, Manager of Planning and Development

File No.B-55

ISSUE INTRODUCTION

Review and replacement of the two existing Board of Variance Bylaws (1145 and 1146) was discussed by the Electoral Area Services Committee in November 2016. Various events have postponed the drafting and presentation of the revised bylaw.

HISTORY / BACKGROUND FACTORS

The *Local Government Act* requires that Boards of Variance (BOV), which provide a variance procedure for zoning bylaws, be established where there are zoning bylaws in place. The RDKB currently has two Boards of Variance; one for the 'East End' and one for the 'Boundary Area'. The Board of Variance process has been used infrequently in recent years with most applicants choosing the Development Variance permit process. The table below outlines the differences between the Board of Variance and Development Variance permit processes:

	Board of Variance	Development Variance Permit
<i>Local Government Act</i>	Sections 536-544	Section 498
Decision Body	Board of Variance by vote	Board of Directors by resolution
Decision Making Process	Staff report goes directly to the Board of Variance	Staff report to Advisory Planning Commission, Electoral Area Services Committee.
Membership	Appointed by the RDKB board of directors; may not be a member of an Advisory Planning Commission or an officer or employee of the regional district.	Elected officials that make up the Board of Directors
What can be varied?	<ul style="list-style-type: none"> • Zoning bylaw regulations for the siting, size or dimensions of a building or other structure • Manufactured Home Park Bylaw regulations regarding the siting of a manufactured home in a manufactured 	<ul style="list-style-type: none"> • All zoning bylaw regulations unless prohibited in the Official Community Plan • Manufactured home park bylaws

	home park <ul style="list-style-type: none"> • The prohibition of a structural alteration or addition for a non-conforming use • Determination of extent of damage by a building inspector, which affects non-conforming use protection 	
Hardship	A hardship must be demonstrated	Applicants are asked to demonstrate hardship however it is not a requirement of the legislation.

PROPOSAL

Draft Bylaw No. 1750 would apply to the entire regional district with two distinct Boards identified:

- Boundary Area Board, and
- East End Board.

The bylaw reflects updates to the *Local Government Act* that have taken place since the current bylaws were adopted.

IMPLICATIONS

A revised bylaw will allow the Board of Directors to appoint new members to the Boards of Variance and we can make this type of application available.

RECOMMENDATION

That the Board of Variance Bylaw No. 1750, 2021 be forwarded to the Regional District of Kootenay Boundary Board of Directors for consideration.

ATTACHMENT

Draft Bylaw No. 1750

**REGIONAL DISTRICT OF KOOTENAY BOUNDARY
BYLAW NO. 1750**

A Bylaw to establish a Board of Variance for
the Regional District of Kootenay Boundary
pursuant to the *Local Government Act*

WHEREAS the Board of Directors of the Regional District of Kootenay Boundary has adopted zoning bylaws and other applicable bylaw(s);

AND WHEREAS, under the *Local Government Act*, the Board of Directors of the Regional District of Kootenay Boundary must establish, by bylaw, a Board of Variance;

AND WHEREAS, under the *Local Government Act*, the Board of Directors may establish more than one Board of Variance if the area to which each Board of Variance has jurisdiction is specified in the establishing bylaw, and those areas of jurisdiction do not overlap;

AND WHEREAS, excerpts from the *Local Government Act and Community Charter* are included in this Bylaw for convenience, and this Bylaw is intended to reflect and implement the Board of Variance requirements contained in provincial legislation;

NOW THEREFORE the Regional District of Kootenay Boundary Board of Directors, in open and public meeting assembled, enacts as follows:

1. CITATION

- 1.1. This Bylaw may be cited as "Regional District of Kootenay Boundary Board of Variance Bylaw No. 1750, 2021" or "BoV Bylaw 2021".

2. INTERPRETATION AND DEFINITIONS

- 2.1. In this Bylaw, the following terms have the following meanings:

- a) **"Acting Chair"** means a member of Boundary Area Board or East End Board appointed to preside over Meetings and Hearings of their Board in the absence of their Board's Chair;
- b) **"Application"** means an application for a Variance, Board Order, or Exemption, made in accordance

with this Bylaw, to the Boundary Area Board or the East End Board;

- c) **"Board of Directors"** means the Board of Directors of the Regional District of Kootenay Boundary;
- d) **"Board"** means either the Boundary Area Board or the East End Board and **"Boards"** means the Boundary Area Board and the East End Board, collectively;
- e) **"Board Order"** means an order of a Board to set aside a determination of a building inspector regarding the amount of damage to a non-conforming use structure and to make a determination of the amount of damage in its place, sought through Application to a Board in accordance with this Bylaw and the *Local Government Act*;
- f) **"Boundary Area Board"** means the Board of Variance having sole jurisdiction over Electoral Areas C/Christina Lake, D/Rural Grand Forks and E/West Boundary of the Regional District;
- g) **"Chair"** means either the Chair of the East End Board or the Chair of the Boundary Area Board;
- h) **"Chair of Boundary Area Board"** means the Board member elected to preside over Meetings and Hearings of the Boundary Area Board by majority vote of the members of the Boundary Area Board;
- i) **"Chair of East End Board"** means the Board member elected to preside over Meetings and Hearings of the East End Board by majority vote of the members of the East End Board;
- j) **"East End Board"** means the Board of Variance having sole jurisdiction over Electoral Areas A and B/Lower Columbia-Old Glory of the Regional District;
- k) **"Exemption"** means an exemption from *Local Government Act* restrictions on structural alterations or additions while a non-conforming use is continued in all or any part of it, sought through Application to a Board in accordance with this Bylaw and the *Local Government Act*;

- l) **"Hearing"** means a meeting of a Board to review, receive submissions for, and determine an Application;
 - m) **"Meeting"** means any meeting of a Board other than a Hearing;
 - n) **"Regional District"** means the Regional District of Kootenay Boundary;
 - o) **"Secretary"** means one or more employees of the Regional District appointed to act as secretary for the Boards; and
 - p) **"Variance"** means a minor variance from the requirements of a bylaw in order to relieve undue hardship to an Applicant, sought through Application to a Board in accordance with this Bylaw and the *Local Government Act*.
- 2.2. Any enactment referred to in this Bylaw is a reference to an enactment of British Columbia and its regulations, as amended, revised, consolidated or replaced from time to time, and any bylaw referred to in this Bylaw is a reference to an enactment of the Board of Directors of the Regional District of Kootenay Boundary as amended, revised, consolidated or replaced from time to time.
- 2.3. Any section, subsection, sentence, clause, paragraph or phrase of this Bylaw, which is for any reason held to be invalid by the decision of any Court of competent jurisdiction, may be severed from the balance of this Bylaw without affecting the validity of the remaining portions of this Bylaw.
- 2.4. Nothing contained within this Bylaw shall relieve any person from the responsibility to seek and comply with applicable legislation and Regional District bylaws.
- 2.5. The failure of the Board of Directors or Regional District staff to observe the provisions of this Bylaw does not affect the validity of resolutions passed or decisions by the Board of Directors or the Boards otherwise in compliance with statutory requirements.

3. ESTABLISHMENT

- 3.1. This Bylaw establishes, pursuant to the *Local Government Act*, two (2) Boards of Variance for the Regional District, having jurisdiction within the Regional District as follows:
- a) "East End Board" will have sole jurisdiction over Electoral Areas A and B/Lower Columbia-Old Glory of the Regional District; and
 - b) "Boundary Area Board" will have sole jurisdiction over Electoral Areas C/Christina Lake, D/Rural Grand Forks and E/West Boundary of the Regional District.

4. MEMBERSHIP

- 4.1. Each Board shall consist of three (3) members appointed by, and at the pleasure of, the Board of Directors, by Resolution. Furthermore,
- a) minimum eligibility criteria for Board membership is established by provincial legislation and the Board of Directors may consider further lawful criteria in making their appointments, whether such further lawful criteria is identified by policy, advertisement or determined at the time of consideration of the appointments, whether identified by Resolution or not;
 - b) nothing restricts the Board of Directors from appointing the same person(s) to both Boards;
 - c) in accordance with the *Local Government Act*, employees, officers, Board of Directors members or members of an advisory planning commission may not be appointed as a member of the Board, but they may attend Meetings and Hearings in an observatory or resource capacity;
 - d) Only persons who regularly reside in the Regional District may be appointed as Board members;
 - e) members of the Boards may or may not be reappointed for a further term or terms;
 - f) upon resignation, death or removal of a Board member during his or her term of office, the Board

of Directors may by resolution appoint a successor who shall hold office during the remainder of term of the former Board member;

- g) unless the Board of Directors specifically identifies otherwise, the term of office for person(s) appointed shall be consistent with provincial legislation; and
 - h) Board members serve at the will of the Board of Directors and may be removed, individually or collectively, without notice or cause.
- 4.2. Board members shall serve without remuneration except for any reasonable and necessary expenses that arise directly out of the performance of their duties and paid at rates determined by the Board or Directors by bylaw or policy, or otherwise at the discretion of the Corporate Administrator, if not specified by bylaw or policy.
- 4.3. Board members must be reimbursed for necessary travel expenses within Regional District boundaries only, but shall not be reimbursed for travel to or from the Regional District.

LOCAL GOVERNMENT ACT EXCERPTS INCLUDED FOR CONVENIENCE – ESTABLISHMENT & MEMBERSHIP:

Requirement for board of variance

536 ... (2) A person is not eligible to be appointed to a board of variance if the person is
 (a) a member of the local government or the advisory planning commission, or
 (b) an officer or employee of the local government.

(3) Subject to subsections (4) and (5) and to the rules established under section 538 (2) (b) (i) [rules for joint board of variance], an appointment to a board of variance is for a 3 year period.

(4) If no successor has been appointed at the end of the 3 year period referred to in subsection (3), the appointment continues until the time that a successor is appointed.

(5) A local government may rescind an appointment to a board of variance at any time.

(6) If a member of a board of variance ceases to hold office, the person's successor is to be appointed in the same manner as the member who ceased to hold office, and, until the appointment of the successor, the remaining members constitute the board of variance.

(7) Members of a board of variance must not receive compensation for their services as members, but must be paid reasonable and necessary expenses that arise directly out of the performance of their duties.

(8) A local government must provide in its annual budget for the necessary funds to pay for the costs of the board of variance.

Board of variance for municipality or regional district

537 ... (3) A regional district board of variance is to consist of 3 persons appointed by the board.

(4) The board of a regional district may establish one or more boards of variance for the regional district, but, if more than one board of variance is established, the bylaw establishing them must specify the area of the regional district over which each board of variance has jurisdiction and those areas must not overlap.

5. **BOARD CHAIRS**

- 5.1. The members of the respective Boards shall each elect at the first Meeting in each and every year, by majority vote of all members of the respective Board, a Chair from each Board's respective members to preside over their Board's Meetings and Hearings, and for this purpose:
 - a) the members of Boundary Area Board shall elect one of their members to serve as Chair of Boundary Area Board; and
 - b) the members of East End Board shall elect one of their members to serve as Chair of East End Board.
- 5.2. The respective Chairs shall each appoint a member of their respective Board as Acting Chair to preside over Meetings and Hearings of their Board in the absence of the Chair.
- 5.3. The Chair may be removed from their position as Chair by:
 - a) majority vote of all Board members present at a Board Meeting, or
 - b) majority vote of the Board of Directors.
- 5.4. If a Chair is removed from their position as Chair, a new Chair shall be elected by majority vote of the members of that Board at the next Meeting of the Board.

In the event the Chair is not in attendance within fifteen (15) minutes after the time appointed for a Meeting or Hearing, and has not previously appointed another member Acting Chair to preside in the absence of the Chair, the Board shall appoint an Acting Chair for the duration of the Meeting or Hearing.

LOCAL GOVERNMENT ACT EXCERPTS INCLUDED FOR CONVENIENCE – BOARD CHAIR AND PROCEDURES:

Chair and procedures for board of variance

539 (1) *The members of a board of variance must elect one of their number as chair.*

(2) *The chair may appoint a member of the board of variance as acting chair to preside in the absence of the chair.*

(3) *A bylaw establishing a board of variance must set out the procedures to be followed by the board of variance, including the manner in which appeals are to be brought and notices under section 541 [notice of application for variance] or 543 (2) [notice of application in relation to early termination of land use contract] are to be given.*

(4) *A board of variance must maintain a record of all its decisions and must ensure that the record is available for public inspection during regular office hours.*

6. BOARD SECRETARY

- 6.1. The Board of the Regional District shall appoint one or more employees of the Regional District to act as Secretary for each of the Boards.
- 6.2. The Secretary of each Board shall be responsible for:
 - a) receiving applications for Variances, Board Orders, or Exemptions made to the Board;
 - b) notifying the members of the Board of the receipt of Applications;
 - c) preparing the Agenda for Board Meetings and Hearings;
 - d) attending Board Meetings and Hearings;
 - e) preparing, maintaining, and preserving the minutes of all Board Meetings and Hearings;
 - f) maintaining a record of all Board decisions and making this record available for public inspection during normal business hours;
 - g) providing written notice of Board Hearings in accordance with this Bylaw and the *Local Government Act*; and
 - h) giving written notice of Board decisions in accordance with this Bylaw.

7. APPLICATIONS FOR VARIANCE, BOARD ORDER, OR EXEMPTION

- 7.1. A person seeking a Variance, Board Order, or Exemption for land within the jurisdiction of a Board of Variance must make written application to that Board in accordance with this Bylaw.
- 7.2. All Applications for a Variance, Board Order, or Exemption must:
 - a) be made in writing to the office of the Regional District;
 - b) be made in the form that is provided by the Regional District, as amended or replaced from time to time; and

- c) be accompanied by:
 - (i) the fee for the Application as prescribed by bylaw, and
 - (ii) the information requested on the Application form and in this Bylaw;
- 7.3. All applications must provide the following information, but only if relevant to the Variance, Board Order, or Exemption requested:
- a) the grounds upon which the Application is based and the relief sought;
 - b) a written statement outlining the details of the undue hardship that would be caused if the Variance, Board Order, or Exemption is not granted;
 - c) if applicable, which regulation within the Zoning Bylaw or other applicable bylaw, or bylaws, is proposed to be varied;
 - d) a Title Search for the property dated no more than 2 weeks prior to the date of the Application with copies of any covenants, easements, rights of way, and other non-financial encumbrances registered on title;
 - e) a copy of the most recent Property Assessment, Tax Notice, or Certificate of Title for the applicable property;
 - f) a detailed site plan showing:
 - (i) the legal boundaries and dimensions of the subject property,
 - (ii) any physical or topographic constraints on the subject property such as watercourses, ravines, wetlands, steep slopes, and bedrock outcrops,
 - (iii) the buildings and structures on the subject property and the distances of the buildings and structures to the property lines,
 - (iv) the proposed buildings, structures or additions and the distances of the proposed buildings and structures to the property lines,
 - (v) existing or proposed access roads, driveways, screening and fences, and
 - (vi) covenant, easement, or right of way areas;

- g) an address to which all notices may be mailed; and
 - h) if the Application is submitted by an agent, written authorization from the owner must accompany the Application.
- 7.4. The Applicant, where directed by the Secretary in order to deal with issues that arise in the context of a particular Application, shall also provide such other information relating to the Application as the Secretary or the applicable Board considers to be of assistance for a proper consideration of the Application.
- 7.5. If there is a change of ownership of a parcel of land that is the subject of an application pursuant to this Bylaw, the Applicant must provide an updated Title Search and written authorization from the new owner prior to proceeding further with the Application.

LOCAL GOVERNMENT ACT EXCERPTS INCLUDED FOR CONVENIENCE – TYPES OF APPLICATIONS:

Application for variance or exemption to relieve hardship

540 A person may apply to a board of variance for an order under section 542 [board powers on application] if the person alleges that compliance with any of the following would cause the person hardship:

- (a) a bylaw respecting
 - (i) the siting, size or dimensions of a building or other structure, or
 - (ii) the siting of a manufactured home in a manufactured home park;
- (b) a subdivision servicing requirement under section 506 (1) (c) [provision of water, sewer and other systems] in an area zoned for agricultural or industrial use;
- (c) the prohibition of a structural alteration or addition under section 531 (1) [restrictions on alteration or addition while non-conforming use continued];
- (d) a bylaw under section 8 (3) (c) [fundamental powers — trees] of the [Community Charter](#), other than a bylaw that has an effect referred to in section 50 (2) [restrictions on authority — preventing all uses] of that Act if the council has taken action under subsection (3) of that section to compensate or mitigate the hardship that is caused to the person.

...

Exemption to relieve hardship from early termination of land use contract

543 (1) The owner of land subject to a land use contract that will be terminated by a bylaw adopted under section 548 [early termination of land use contracts] may apply to a board of variance for an order under subsection (5) of this section if

- (a) the owner alleges that the timing of the termination of the land use contract by the bylaw would cause the owner hardship, and
- (b) the application is received by the board of variance within 6 months after the adoption of the bylaw.

...

Extent of damage to non-conforming use property

544 (1) A person may apply to a board of variance for an order under subsection (2) if the person alleges that the determination by a building inspector of the amount of damage under section 532 (1) [end of non-conforming use protection if building of other structure is seriously damaged] is in error.

8. ABANDONED OR EXPIRED APPLICATIONS, AND RE-APPLICATION

- 8.1. Every Application that has outstanding information requirements for a period greater than twelve (12) months from the date the Applicant is advised of outstanding information requirements is deemed to have been abandoned, with fees forfeited.
- 8.2. Every Application not decided within eighteen (18) months of the date of Application is deemed to have expired, with fees forfeited.
- 8.3. All Applications abandoned or expired shall be considered closed, and shall require a new Application with a new fee, unless waived by Resolution of the Board of Directors.
- 8.4. No application shall be made for the same Variance, Board Order, or Exemption within six (6) months of the date of a previous decision.

9. PRE-HEARING PROCEDURES

- 9.1. A Hearing for an Application shall be scheduled as soon as is practicable after receipt of a complete Application, accompanied by the required information and application fee.
- 9.2. The Secretary, or other Regional District Staff, may, but is not obligated to:
 - a) circulate the Application to Regional District staff and relevant agencies for comment; and
 - b) prepare a report to the applicable Board regarding the Variance, Board Order, or Exemption requested.
- 9.3. The Secretary shall give notice of a Board Hearing when required and in accordance with provincial statutory requirements.
- 9.4. A notice required under this Section shall be sent by mail at least five (5) days before the date of the Hearing or, if necessary, by other delivery in accordance with this bylaw and the *Local Government Act*.
- 9.5. Board members may view a property that is the subject of an Application and surrounding properties, but:

- a) no Board member is entitled to trespass on private land, and
- b) while casual contact with the Applicant or interested parties may be inevitable, a Board member shall not hear oral evidence or discuss the merits of an Application with any person, except at a scheduled Hearing.

LOCAL GOVERNMENT ACT EXCERPTS INCLUDED FOR CONVENIENCE - NOTICE:

Notice of application for variance

541 (1) If a person makes an application under section 540, the board of variance must notify all owners and tenants in occupation of

- (a) the land that is the subject of the application, and
- (b) the land that is adjacent to land that is the subject of the application.

(2) A notice under subsection (1) must state the subject matter of the application and the time and place where the application will be heard.

(3) The obligation to give notice under subsection (1) is satisfied if the board of variance made a reasonable effort to mail or otherwise deliver the notice.

...

Exemption to relieve hardship from early termination of land use contract

543 ... (2) If an application is made under subsection (1), the board of variance must notify all owners and tenants in occupation of

- (a) the land that is the subject of the application, and
- (b) the land that is adjacent to land that is the subject of the application.

(3) A notice under subsection (2) must state the subject matter of the application and the time and place where the application will be heard.

(4) The obligation to give notice under subsection (2) must be considered satisfied if the board of variance made a reasonable effort to mail or otherwise deliver the notice.

10. PROCEDURES AT MEETINGS AND HEARINGS

- 10.1. The Chair of the respective Board shall call Hearings of the Board as reasonably required to deal with Variance, Board Order, and Exemption Applications to that Board.
- 10.2. Where Notice for a Hearing was given, the Chair of the applicable Board shall convene the Board at the date, time and place set out in the notice for a Hearing.
- 10.3. The Board may conduct all or part of a meeting by means of electronic or other communication facilities, subject to and in accordance with applicable provincial requirements.
- 10.4. The Chair, in consultation with the Secretary and all available members of their respective Board, may call a special Meeting of their respective Board to be held at any time.

- 10.5. A quorum for a Board Meeting or Hearing is two (2) members of the respective Board.
- 10.6. In the event that a quorum is not present within thirty (30) minutes after the time appointed for a Meeting or Hearing, the names of those present will be recorded and the Meeting or Hearing shall be adjourned to the same time on the following day or to such other date and time as determined by the Chair or Acting Chair.
- 10.7. The Chair, or in the Chair's absence, the Acting Chair, shall preside at the Hearing for an Application and shall decide all questions of procedure and order, in accordance with this Bylaw, and other bylaws of the Regional District as appropriate. Furthermore:
 - a) For circumstances not provided for under this Bylaw or applicable legislation, the most recent edition of Robert's Rules of Order, Newly Revised applies to the extent that those rules are:
 - (i) applicable in the circumstances; and
 - (ii) not inconsistent with provisions of this Bylaw, the *Local Government Act*, or the *Community Charter*.
 - b) Any one or more of the procedures in this Bylaw, except those that are governed by statutory provisions, may be temporarily suspended by unanimous vote of the applicable Board.
- 10.8. The Board shall consider the Applications in the sequence identified on the Agenda, or otherwise presented by the Secretary, however the Board may amend the sequence that Applications will be considered by majority vote.
- 10.9. Hearings and deliberations of a Board shall be open to the public.
- 10.10. A Board may only go into closed meeting for reasons provided by legislation in accordance with statutory procedures.

LOCAL GOVERNMENT ACT EXCERPTS INCLUDED FOR CONVENIENCE:

Board proceedings: application of Community Charter

226 (1) The following provisions of the [Community Charter](#) apply to regional districts in relation to meetings:

- (a) Division 3 [Open Meetings] of Part 4 [Public Participation and Council Accountability];
- (b) section 133 [expulsion from meetings];
- (c) section 282 (2) (c) [regulations related to meeting rules].

COMMUNITY CHARTER EXCERPTS INCLUDED FOR CONVENIENCE:**General rule that meetings must be open to the public**

89 (1) A meeting of a council must be open to the public, except as provided in this Division.

(2) A council must not vote on the reading or adoption of a bylaw when its meeting is closed to the public.

Meetings that may or must be closed to the public

90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

- (a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality;
- (b) personal information about an identifiable individual who is being considered for a municipal award or honour, or who has offered to provide a gift to the municipality on condition of anonymity;
- (c) labour relations or other employee relations;
- (d) the security of the property of the municipality;
- (e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality;
- (f) law enforcement, if the council considers that disclosure could reasonably be expected to harm the conduct of an investigation under or enforcement of an enactment;
- (g) litigation or potential litigation affecting the municipality;
- (h) an administrative tribunal hearing or potential administrative tribunal hearing affecting the municipality, other than a hearing to be conducted by the council or a delegate of council;
- (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose;
- (j) information that is prohibited, or information that if it were presented in a document would be prohibited, from disclosure under section 21 of the [Freedom of Information and Protection of Privacy Act](#);
- (k) negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public;
- (l) discussions with municipal officers and employees respecting municipal objectives, measures and progress reports for the purposes of preparing an annual report under section 98 [annual municipal report];
- (m) a matter that, under another enactment, is such that the public may be excluded from the meeting;
- (n) the consideration of whether a council meeting should be closed under a provision of this subsection or subsection (2);
- (o) the consideration of whether the authority under section 91 [other persons attending closed meetings] should be exercised in relation to a council meeting.

(2) A part of a council meeting must be closed to the public if the subject matter being considered relates to one or more of the following:

- (a) a request under the [Freedom of Information and Protection of Privacy Act](#), if the council is designated as head of the local public body for the purposes of that Act in relation to the matter;
- (b) the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party;
- (c) a matter that is being investigated under the [Ombudsperson Act](#) of which the municipality has been notified under section 14 [Ombudsperson to notify authority] of that Act;
- (d) a matter that, under another enactment, is such that the public must be excluded from the meeting;
- (e) a review of a proposed final performance audit report for the purpose of providing comments to the auditor general on the proposed report under section 23 (2) of the [Auditor General for Local Government Act](#).

(3) If the only subject matter being considered at a council meeting is one or more matters referred to in subsection (1) or (2), the applicable subsection applies to the entire meeting.

...

Requirements before meeting is closed

92 Before holding a meeting or part of a meeting that is to be closed to the public, a council must state, by resolution passed in a public meeting,

- (a) the fact that the meeting or part is to be closed, and

(b) the basis under the applicable subsection of section 90 on which the meeting or part is to be closed.

Application of rules to other bodies

93 In addition to its application to council meetings, this Division and section 133 [expulsion from meetings] also applies to meetings of the following:

... (d) a board of variance established under Division 15 of Part 14 of the [Local Government Act](#);

- 10.11. A Board shall hear all submissions made to the Board, regarding the Application that is the subject of the Hearing, at the scheduled Hearing for the Application.
- 10.12. Submissions at a Hearing for an Application may be made orally or in writing.
- 10.13. The order of presentations at a Hearing shall be as follows:
 - a) the Applicant;
 - b) Regional District staff;
 - c) all other parties in such sequence as the respective Chair, acting reasonably, may direct until all parties who were provided with notice of the Hearing or who have an interest in property located within the applicable Electoral Areas over which the respective Board has jurisdiction have been afforded an opportunity to present their submissions, in accordance with this Bylaw and the *Local Government Act*; and
 - d) such further presentations of the above parties, but only in response to previous representations made at the Hearing, in an order and subject to such reasonable procedures and time limitations determined by the Chair.
- 10.14. If the Applicant does not appear at the Hearing, and has not advised the Secretary in advance that they wish to be heard at another time, the respective Board may proceed to consider the Application in their absence.
- 10.15. A Board may, by Resolution, adjourn a Meeting or Hearing from time to time and may reconvene without further notice if the time, date, and place of reconvening is announced with the adjournment.

11. DECISIONS AND VOTING

- 11.1. All Applications shall be decided by Resolution, put forward by Motion.
- 11.2. Any Board member may put forward a Motion.
- 11.3. If a Motion put forward by a Board member is seconded by another member of the applicable Board, the Motion must be considered by the Board.
- 11.4. All members of a Board, including the Chair, must vote on every motion unless they have declared a conflict of interest.
- 11.5. The conflict of interest provisions of the Community Charter applicable to the Board of Directors are also applicable to members of the respective Boards.

COMMUNITY CHARTER EXCERPTS INCLUDED FOR CONVENIENCE – CONFLICT OF INTEREST:

Disclosure of conflict

100 ...*(2) If a council member attending a meeting considers that he or she is not entitled to participate in the discussion of a matter, or to vote on a question in respect of a matter, because the member has*

(a) a direct or indirect pecuniary interest in the matter, or

(b) another interest in the matter that constitutes a conflict of interest,

the member must declare this and state in general terms the reason why the member considers this to be the case.

(3) After making a declaration under subsection (2), the council member must not do anything referred to in section 101 (2) [restrictions on participation].

(4) As an exception to subsection (3), if a council member has made a declaration under subsection (2) and, after receiving legal advice on the issue, determines that he or she was wrong respecting his or her entitlement to participate in respect of the matter, the member may

(a) return to the meeting or attend another meeting of the same body,

(b) withdraw the declaration by stating in general terms the basis on which the member has determined that he or she is entitled to participate, and

(c) after this, participate and vote in relation to the matter.

(5) For certainty, a council member who makes a statement under subsection (4) remains subject to section 101 [restrictions on participation if in conflict].

(6) When a declaration under subsection (2) or a statement under subsection (4) is made,

(a) the person recording the minutes of the meeting must record

(i) the member's declaration or statement,

(ii) the reasons given for it, and

(iii) the time of the member's departure from the meeting room and, if applicable, of the member's return, and

(b) unless a statement is made under subsection (4), the person presiding at that meeting or any following meeting in respect of the matter must ensure that the member is not present at any part of the meeting during which the matter is under consideration.

Restrictions on participation if in conflict

101 *(1) This section applies if a council member has a direct or indirect pecuniary interest in a matter, whether or not the member has made a declaration under section 100.*

(2) The council member must not

(a) remain or attend at any part of a meeting referred to in section 100(1) during which the matter is under consideration,

(b) participate in any discussion of the matter at such a meeting,

- (c) vote on a question in respect of the matter at such a meeting, or
 (d) attempt in any way, whether before, during or after such a meeting, to influence the voting on any question in respect of the matter.

(3) A person who contravenes this section is disqualified from holding office as described in section 108.1 [disqualification for contravening conflict rules] unless the contravention was done inadvertently or because of an error in judgment made in good faith.

- 11.6. Any Board member present at a Meeting or Hearing, excluding those who have declared a conflict of interest, who does not vote is counted as having voted in the affirmative.
- 11.7. A tie vote on a motion results in that motion being defeated.
- 11.8. The decision of all or the majority of the members of a respective Board is a decision of that Board.
- 11.9. A decision of a Board is final.
- 11.10. Board decisions shall be recorded by the Secretary in the minutes of Board Meetings and Hearings.
- 11.11. The Secretary shall provide written notice of a Board decision to:
- a) the Applicant;
 - b) all those who made oral or written representations to the Board; and
 - c) the Board of Directors.

LOCAL GOVERNMENT ACT EXCERPTS INCLUDED FOR CONVENIENCE – BOARD POWERS:

Board powers on application

- 542** (1) On an application under section 540, the board of variance may order that a minor variance be permitted from the requirements of the applicable bylaw, or that the applicant be exempted from section 531 (1) [alteration or addition while non-conforming use continued], if the board of variance
- (a) has heard the applicant and any person notified under section 541,
 - (b) finds that undue hardship would be caused to the applicant if the bylaw or section 531 (1) is complied with, and
 - (c) is of the opinion that the variance or exemption does not do any of the following:
 - (i) result in inappropriate development of the site;
 - (ii) adversely affect the natural environment;
 - (iii) substantially affect the use and enjoyment of adjacent land;
 - (iv) vary permitted uses and densities under the applicable bylaw;
 - (v) defeat the intent of the bylaw;
 - (vi) vary the application of an applicable bylaw in relation to residential rental tenure.
- (2) The board of variance must not make an order under subsection (1) that would do any of the following:
- (a) be in conflict with a covenant registered under section 219 of the [Land Title Act](#) or section 24A of the Land Registry Act, R.S.B.C. 1960, c. 208;
 - (b) deal with a matter that is covered in a land use permit or covered in a land use contract;
 - (c) deal with a matter that is covered by a phased development agreement under Division 12 [Phased Development Agreements];
 - (d) deal with a flood plain specification under section 524 (3);
 - (e) apply to a property
 - (i) for which an authorization for alterations is required under Part 15 [Heritage Conservation],
 - (ii) for which a heritage revitalization agreement under section 610 is in effect, or

(iii) that is scheduled under section 614 (3) (b) [protected heritage property] or contains a feature or characteristic identified under section 614 (3) (c) [heritage value or character].

(3) In relation to an order under subsection (1),

(a) if the order sets a time within which the construction of the building, structure or manufactured home park must be completed and the construction is not completed within that time, or

(b) if that construction is not substantially started within 2 years after the order was made, or within a longer or shorter time period established by the order,

the permission or exemption terminates and the bylaw or section 531 (1), as the case may be, applies.

(4) A decision of the board of variance under subsection (1) is final.

...

Exemption to relieve hardship from early termination of land use contract

543 ... (5) On an application under subsection (1), the board of variance may order that, despite the termination of the land use contract and despite any zoning bylaw, the provisions of that land use contract continue to apply in relation to the applicant for a specified period of time ending no later than June 30, 2024, if the board of variance

(a) has heard the applicant, and

(b) finds that the timing of the termination of the land use contract by the bylaw would cause undue hardship to the applicant.

(6) An order under subsection (5) does not run with the land.

(7) The board of variance must make a decision on an application under subsection (1) within 6 months after the application is received by the board of variance.

(8) A decision of the board of variance under subsection (5) is final.

...

Extent of damage to non-conforming use property

544 ... (2) On an application under subsection (1), the board of variance may set aside the determination of the building inspector and make the determination under section 532 (1) in its place.

12. REPEAL AND CONSEQUENTIAL AMENDMENTS

- 12.1. Regional District of Kootenay Boundary Board of Variance No. 3, Bylaw No. 1145, 2001, as amended, and Regional District of Kootenay Boundary Board of Variance No. 4, Bylaw No. 1146, 2001, as amended, are repealed.
- 12.2. Any reference to Regional District of Kootenay Boundary Board of Variance No. 3, Bylaw No. 1145, 2001 or to Regional District of Kootenay Boundary Board of Variance No. 4, Bylaw No. 1146, 2001 in the Regional District of Kootenay Boundary Fees and Procedures Bylaw No. 1231, 2004, or any other Regional District Bylaw, is to be interpreted as being a reference to this Bylaw, and those Bylaws shall be amended accordingly.

READ A FIRST AND SECOND TIME this day of , 2021.

READ A THIRD TIME this day of , 2021.

ADOPTED this day of , 2021.

Chair

Manager of Corporate Administration

I, Anitra Winje, Manager of Corporate Administration of the Regional District of Kootenay Boundary, certify that this is a true and correct copy of Bylaw No. 1750, cited as "Regional District of Kootenay Boundary Board of Variance Bylaw No. 1750, 2021".

Manager of Corporate Administration



Electoral Area Services (EAS) Committee Staff Report

RE:	Development Variance Permit – Lukkar (670-21V)		
Date:	March 11, 2021	File #:	B-9A-TWP-10926.100
To:	Chair Grieve and members of the EAS Committee		
From:	Danielle Patterson, Planner		

Issue Introduction

The Regional District of Kootenay Boundary (RDKB) has received a Development Variance Permit application to reduce front parcel line setback for a building from 7.5 to 4.5 m, for a property located in Paterson (see Attachment 1 - Site Location Map).

Property Information	
Owner:	Erin Lukkar
Location:	1115 King George Park Road
Electoral Area:	Electoral Area B/Lower Columbia-Old Glory
Legal Description:	Lot 1, Plan NEP6491, Township 9A, Kootenay Land District, Except Plan 18520
Area:	2.75 ha (6.8 ac)
Current Use:	Agriculture and Residential
Land Use Bylaws	
OCP Bylaw: 1470	Agricultural Resource 1
DP Area:	NA
Zoning Bylaw: 1540	Agricultural Resource 1 (AGR1)
Other	
ALR:	Within
Service Area:	NA
Planning Agreement Area:	City of Rossland

History / Background Information

The subject property is located across from King George Provincial Park, between King George Park Road and Highway 22 (see Attachment 2 – Subject Property Map). The subject property was created through subdivision in 1989. The subject property is somewhat triangular in shape, narrowing where King George Park Road and Highway 22 meet. The majority of the buildings on the subject property are concentrated at this narrowed portion of the property.

The surrounding land use to the north, south, and west is mostly agriculture. The subject property is located in the Agricultural Land Reserve. The land is currently farmed, with pastureland, farm outbuildings, a shop, and a single detached dwelling on the property.

Proposal

The applicant is planning to build a 233.7 m² (2,516 ft²) addition to their existing 89.3 m² (961 ft²) single detached dwelling. The applicant wants to build this addition between the existing dwelling to the west and King George Park Road to the East (see Attachment 3 – Applicant Submission). The proposed site plan and area of the single detached dwelling addition would require the front parcel line setback to be less than permitted in the Zoning Bylaw.

Section 609.8 of Zoning Bylaw 1540 sets the minimum front parcel line setback for buildings at 7.5 m. Due to this, the applicant is requesting a variance to Section 609.8 to vary the permitted front parcel line setback of a building from 7.5 m to 4.5 m – a variance of 3 m to accommodate the proposed house addition.

Advisory Planning Commission (APC)

At their March 1, 2021 meeting, the Electoral Area B/Lower Columbia-Old Glory APC reviewed the application and recommended it be supported.

Staff note that the applicant contacted the Planning and Development Department to adjust their requested variance on March 1, 2021. The applicant had originally requested a variance to reduce the front parcel line setback to 4 m. After the applicant spoke with the Ministry of Transportation and Infrastructure about the potential timelines of a Setback Highway Use Permit and their contractor about the feasibility of design change, the applicant decided to reduce their request to 4.5 m. Staff were able to provide the Chair of the APC with an email update with the changes prior to the meeting.

Implications

The RDKB application requests a clear rationale for Development Variance Permit requests. Each Development Variance Permit application is to be reviewed based on its own merit.

The application states that the proposed addition to the house is sited in such a way as to, 1) ensure the existing infrastructure (septic field and well pump) can be utilized, 2) keep farmland intact, and 3) allow the owner to live in the existing portion of the single detached dwelling while building the addition. The applicant intends to keep their existing driveway location as is.

The applicant noted that the reduced front parcel line setback would not directly effect neighbours as the property line faces King George Provincial Park.

When considering the proposed Development Variance Permit, staff note the following:

1. Other than the requested variance, the proposal and existing development on the subject property, based on the information provided by the applicant, meet Zoning

Bylaw requirements, including parcel coverage building setbacks, parking, density, and land use.

2. Agriculture Policy 7.1 of the Area B Official Community Plan (OCP) is to *"[e]ncourage farm operators to conduct farming activities in a manner that minimizes impact on water quality, conserves soil, and where possible protects wildlife habitat."* The applicant has stated part of their siting request is based upon keeping farmland intact. Another viable option would be to reduce the size¹
3. The Agriculture Land Commission (ALC) limits the gross floor area of a single detached dwelling to no more than 500 m² (5,382 ft²). The applicant has not stated if they plan to have a two storey addition. If two storeys are planned, any approval of the Development Variance Permit would be related to the setback and not the gross floor area of the single detached dwelling.
4. The distance between the proposed addition and the existing shop has not been provided by the applicant. The proximity of residences to other dwellings or structures on a property may have building standards implications as per the BC Building Code. For example, it can affect the type of insulation required or the location of type of windows used. The applicant has been informed of this and has been encouraged to connect with an RDKB Building Official to discuss any implications to the proposed build plans.
5. Due to the proximity of the existing buildings/structures and the proposed addition to the property line, staff were not able to confirm whether there is enough space on the subject property to site the addition where it is proposed based on the applicant's site plan and the RDKB's orthophotography. Building/Structure location would need to be confirmed by the applicant in the form of a Certificate of Location prior to approval of a Development Variance Permit.

Communications

Notices will be sent to property owners within a 60 metre radius of the subject property, notifying them of the proposed Development Variance Permit and the opportunity to provide comment.

Recommendation

That the Development Variance Permit application submitted by Erin Lukkar, to vary Section 609.8 – Agricultural Resource 1 Zone Setbacks of the Electoral Area B/Lower Columbia-Old Glory Zoning Bylaw No. 1540, 2015 to decrease the required front parcel line setback for buildings and structures principal from 7.5 m to 4.5 m – a variance of 3 m, for the construction of a single family dwelling on the property legally described as Lot 1, Plan NEP6491, Township 9A, Kootenay Land District, Except Plan 18520, Electoral Area B/Lower Columbia-Old Glory be presented to the Regional District of Kootenay Boundary Board of Directors for consideration, with a recommendation to approved, with the following conditions:

1. The applicant provide a certificate of location for the existing buildings and structures; and
2. The applicant provide a site plan that is to scale for the proposed setback variance.

Attachments

1. Site Location Map
2. Subject Property Map
3. Applicant Submission

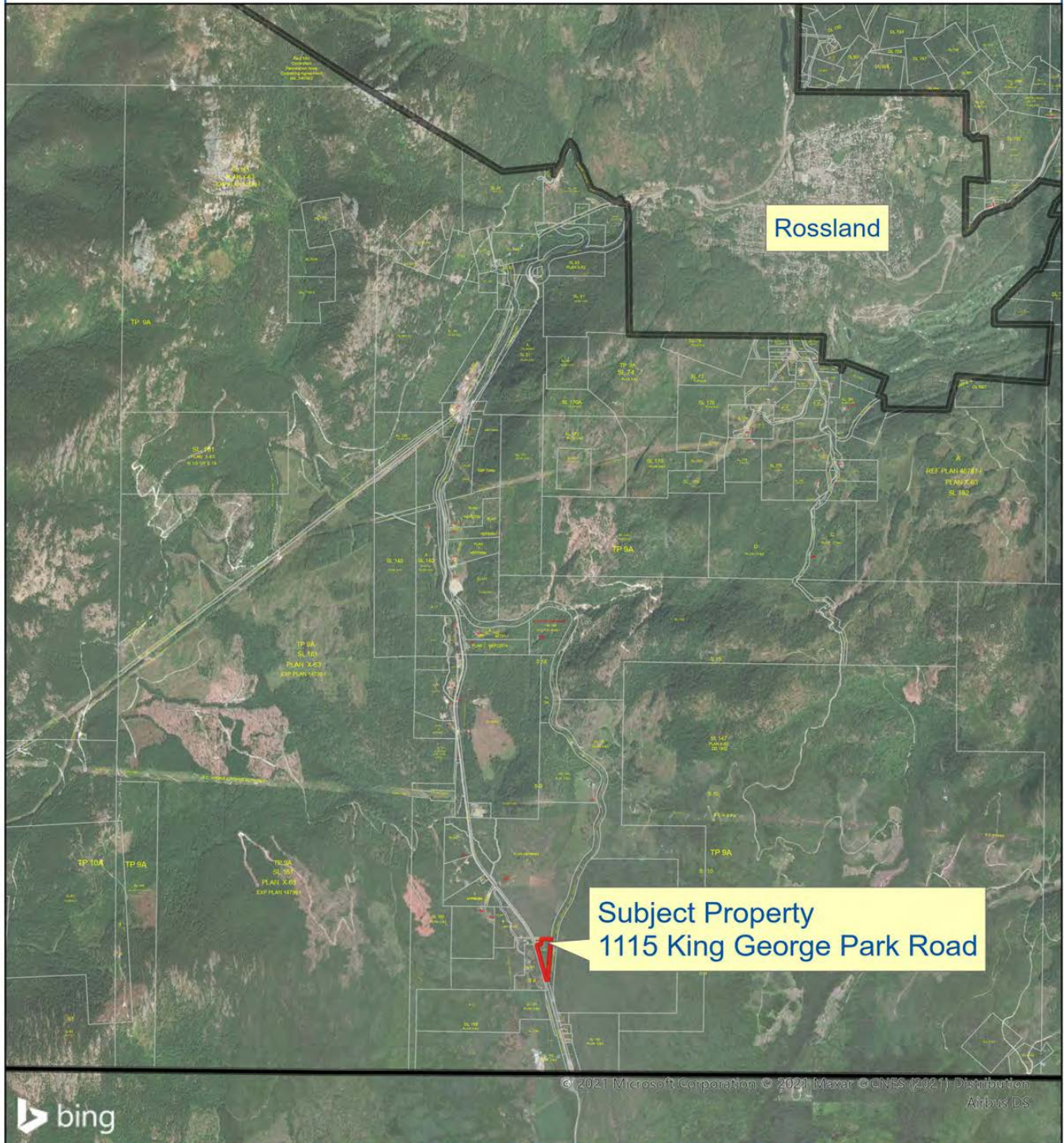
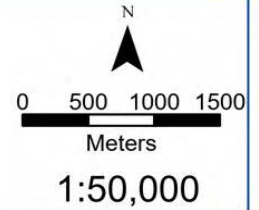


Regional District of
Kootenay Boundary

Date: 2021-02-16

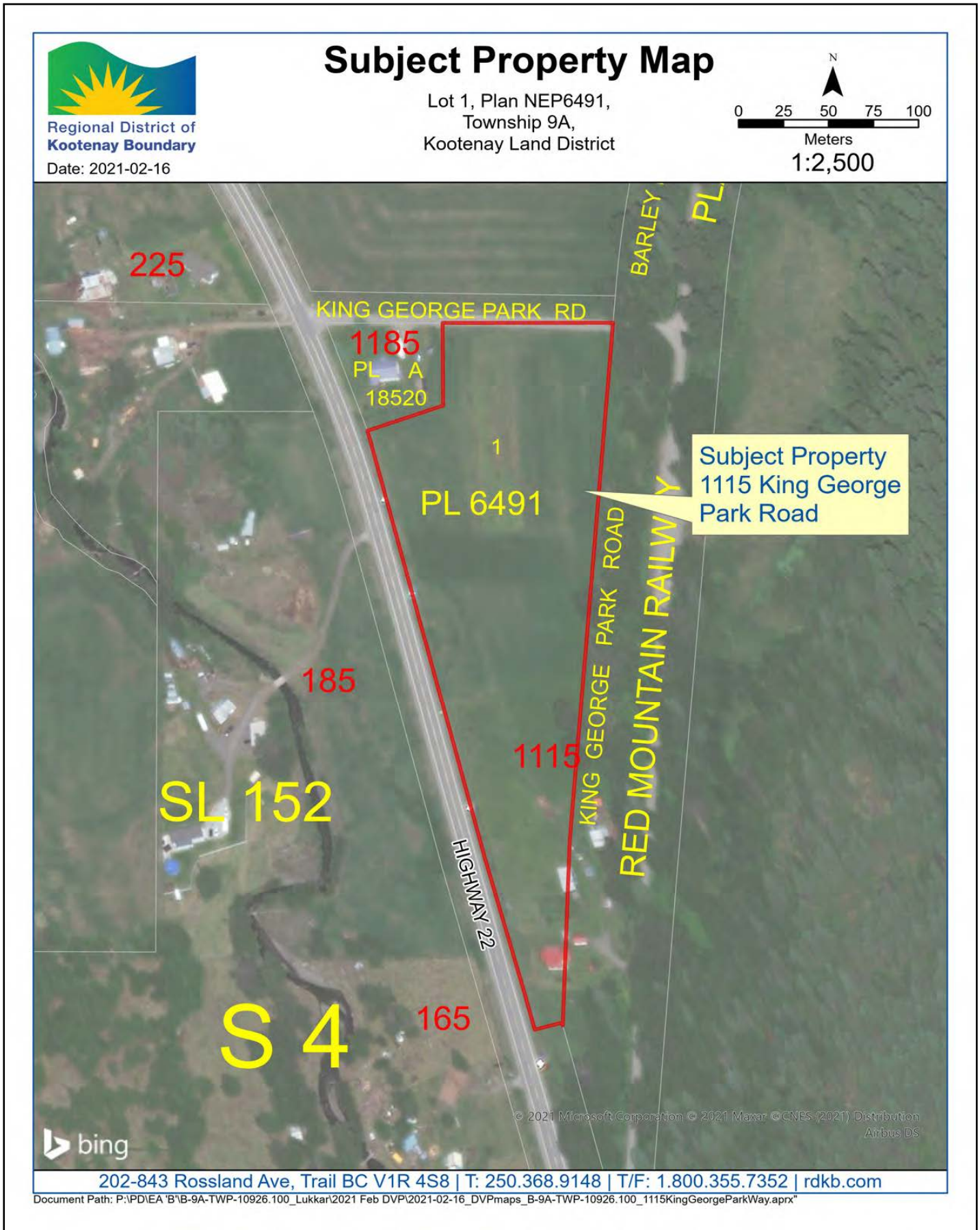
Site Location Map

Lot 1, Plan NEP6491,
Township 9A,
Kootenay Land District



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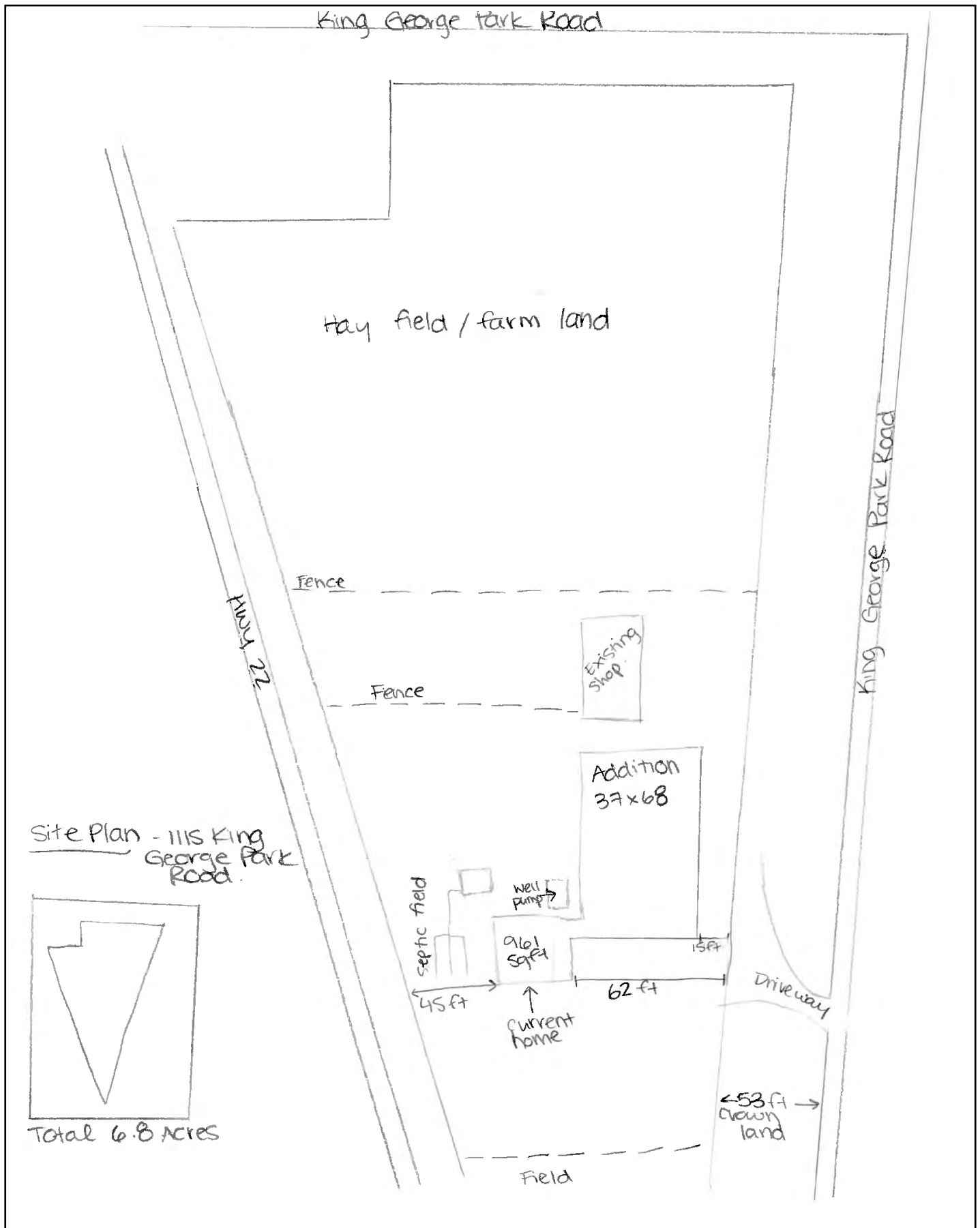
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The space below is provided to describe the proposed development. Additional pages may be attached.

we are building an addition onto the current house and are requesting a variance in regards to the front parcel line setback of 7.5m. This property line is closest to King George Park Rd and away from Highway 22. We are hoping to build 10ft from the property line in order to preserve existing infrastructure - see site map in regards to well pump building. This will resolve a hardship because ~~with~~ we can use the current water system & can remain in the house during construction. This will improve the development because we can do an addition further from the main highway & ~~stay~~ preserve farmland on the property. This will have no negative impacts as there are no neighbouring properties on this property line. Current driveway will remain in place.

Request amended to 15 ft rather than 10 ft on March 1, 2021





Electoral Area Services (EAS) Committee Staff Report

RE:	Development Variance Permit – Fawley (672-21V)		
Date:	March 11, 2021	File #:	C-317-02595.340
To:	Chair Grieve and members of the EAS Committee		
From:	Danielle Patterson, Planner		

Issue Introduction

The Regional District of Kootenay Boundary (RDKB) received a Development Variance Permit application for a property located at Christina Lake (see Attachment 1 - Site Location Map).

Property Information	
Owners:	Gail Fawley and Gregory Fawley
Agent:	Gail Fawley
Location:	1537 McIntyre Road
Electoral Area:	Electoral Area C/Christina Lake
Legal Description:	Lot 34, Plan KAP33117, District Lot 317, Similkameen Division of Yale Land District
Area:	1,618 m ² (0.4 ac)
Current Use:	Seasonal dwelling (recreational)
Land Use Bylaws	
OCP Bylaw No.: 1250	Residential
Zoning Bylaw No.: 1300	Single Family Residential 1 Zone (R1)
Development Permit Area:	NA
Other	
Waterfront / Floodplain:	NA
Service Area:	Christina Lake Water Utility Service

History / Background Information

The subject property is located south of Christina Lake and north of Highway 3 at the junction of McIntyre Road and Chase Road (see Attachment 2 – Subject Property Map). In 2020 the civic address was changed from a Chase Road address to a McIntyre Road address to align with the McIntyre Road access to the subject property.

At this time there is an electrical shed (referenced in the applicant's variance request), a recreational vehicle, and two c-cans located on the subject property.

Proposal

The application states the subject property owners plan to locate a single detached dwelling or modular home on the subject property and plan to build an accessory building as well (see Attachment 3 – Applicant Submission). The intent of the property owners is to build the accessory building first, and then build the dwelling. The accessory building would contain a garage, storage space, and a washroom with plans to add a studio space after their residence is built.

The electrical utility shed has already been installed on the subject property and does not conform to the setback requirements of the Zoning Bylaw.

In order to build and site the buildings and structures as proposed, the applicant is requesting two variances to the Zoning Bylaw, as follows:

- **Section 402.6 – Front Parcel Line Setbacks:** Reduce the minimum accessory building setback from 4.5 m to 2.75 m – a variance of 1.75 m, to allow for the electrical shed/storage space. The applicant stated they chose to install the shed at this location to give a clear run for their power line and to keep the shed out of the way of the location of a future dwelling.
- **Section 402.6 – Exterior Side Parcel Line:** reduce the minimum accessory building exterior side parcel line setback from 4.5 m to 2.65 m – a variance of 1.85 m, in order allow the proposed siting of the accessory building containing the garage/storage area.

The applicant has stated in their letter of rationale that they have made improvements to the site in preparation for building, including installing rock retain walls, moving of fill, and site grading. The applicant has provided the following to support their proposal:

- The subject property is an unusual shape, placing restrictions on siting of buildings;
- The property has significant sloping that limits appropriate sites for single storey buildings and structures. The applicant wants to avoid a second storey for future use as the owners age;
- The requested variances would reduce the need to remove trees and reduce impacts on site drainage; and
- The applicant believes the requests related to their garage would have minimal impact on the view or snow load on the neighbouring property at 144 Chase Road based on the vegetation and their proposed design.

Advisory Planning Commission (APC)

At their March 2, 2021 meeting, the Electoral Area C/Christina Lake APC reviewed the application. In attendance were Gail Fawley, to speak on behalf of her application and Gunter Retterath, neighbour to applicants, to speak in opposition to the application. Please see APC meeting minutes for details.

While the APC voted on the requested variances, since the APC meeting, the applicant submitted amendments to their application. Staff have shown in bold and brackets the changes in the request as they relate to the APC vote:

1. Front parcel line setback reduced to 2.75 m for existing shed: 5 support/4 opposed;
2. Front parcel line setback reduced to 2.75 m to site future dwelling (**no longer being requested**): 1 support/8 opposed; and
3. Rear side parcel line setback reduced to 1.87 m (**no longer being requested**) and exterior side parcel line setback reduced to 1.83 m (**requested changed to 2.65 m**), to site future accessory building: 1 support/8 opposed.

Implications

When considering the proposed Development Variance Permit, staff note the following:

1. The applicant has noted that they are aware that the neighbours at 144 Chase Road may have concerns related to the siting and size of the garage/accessory building.
2. The applicant has stated that without the requested variances, including the exterior parcel line setback it, "*may render [the] lot almost unbuildable for at least an average sized home and garage without removing a vast number of trees.*" Staff note the proposed garage is 58.8 m² (644 ft²). It may be feasible to design a garage that meets the setback and size requirements. The average area of a single detached dwelling in British Columbia, is 133 m² (1,430 ft²)¹, which aligns with the size of home the owners wish to have.
3. The requested variances to reduce the front parcel line setback of the electric shed and the dwelling as well as the request to reduce the exterior side yard setback for the garage/studio would require a permit from the Ministry of Transportation and Infrastructure (MoTI). In communications with staff the applicant has stated they have applied for a permit from MoTI and will keep staff informed on the progress. The applicant provided photos to show the terrain around the electric shed.

¹ Government of Canada. *Statistics Canada: Canadian Housing Statistics Program*. Available from <https://www150.statcan.gc.ca/n1/daily-quotidien/190503/dq190503b-eng.htm>. Last updated May 3, 2019.

Recommendation

That the Development Variance Permit application submitted by Gail Fawley and Gregory Fawley, for the property legally described as Lot 34, Plan KAP33117, District Lot 317, Similkameen Division of Yale Land District, Electoral Area C/ Christina Lake be presented to the Regional District of Kootenay Boundary Board of Directors for consideration, with the following recommendations:

1. That the Regional Board deny the requested variance to Section 402.6 – Exterior Side Parcel Line Setback, to reduce the minimum accessory building exterior side parcel line setback from 4.5 m to 2.65 m – a variance of 1.85 m, in order allow the proposed siting of the accessory building containing the garage/storage area; and
2. That the Regional Board approve the requested variance to Section 402.6 – Front Parcel Line Setback, to reduce the minimum accessory building exterior side parcel line setback from 4.5 m to 2.75 m – a variance of 1.75 m, to allow for the electrical shed/storage space, with the following condition:
 - 2.1. The applicants submit an approved Highway Use Permit for the setback from the Ministry of Transportation and Infrastructure.

Attachments

1. Site Location Map
2. Subject Property Map
3. Applicant Submission

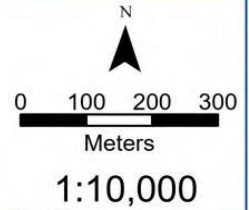


Regional District of
Kootenay Boundary

Date: 2021-02-16

Site Location Map

Lot 34, Plan KAP33117,
District Lot 317,
Similkameen Div of Yale Land District



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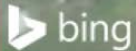
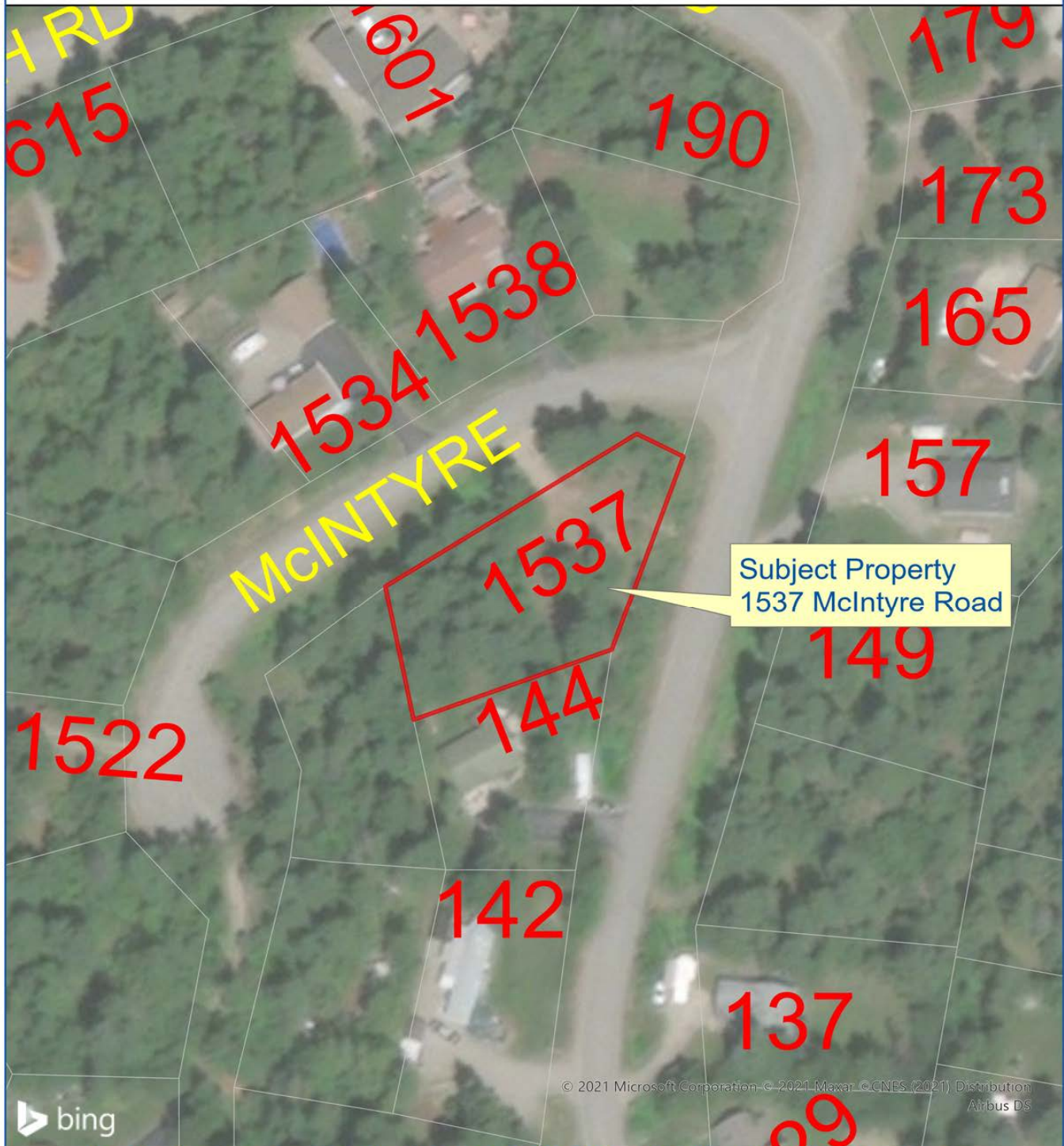
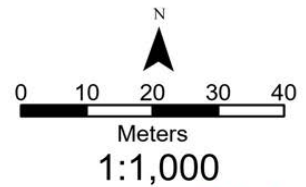


Regional District of
Kootenay Boundary

Date: 2021-02-16

Subject Property Map

Lot 2, Plan KAP5025,
District Lot 317,
Similkameen Div of Yale Land District



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January 26, 2021

Development Variance Permit Application for –

1537 McIntyre Road, Christina Lake
Lot 34, Plan KAP 33117, DL 317, SDYD

We are requesting setback variances for our lot at 1537 McIntyre Road at Christina Lake. Due to the odd shape of this lot bordering on 3 sides by road and with the resulting required setbacks, along with the terrain which slopes from a high point at “A” (as designated on the attached site plan) towards the low point at “C”, there leaves little room to accommodate a dwelling building, garage/accessory structure, and the required septic field/system.

There are two lots that neighbor our property: 144 Chase Road and next to us – Lot 3 McIntyre Road. We have tried to leave the west area treed as this is the steeper part of the lot and also gives a buffer from both neighboring properties. We prefer not to remove any more trees in this area than required.

The area that we’d like to build in, we’ve had some re-grading done to give us a more level building area: some fill taken out of the possible house location and moved to the lower garage area, with having some rock retaining walls put in to facilitate this.

There is a 6+ ft drop from the west corner “A” to the shed, and a further 6+ ft drop to the possible house location - ‘reference point X’. From the proposed location of the garage there is a further 3+ ft drop from X. The rest of the lot gently slopes towards the lot corner C, with the front of the garage to the end of the septic field being ~6” lower. From the lot line D-C it drops down significantly to Chase Road with a good buffer of trees & shrubs in between.

1. We request variance of 1.75m at the front parcel line (Site plan line A-B) setback of 4.5m to 2.75m for the 8’x12’ shed (for electrical and storage). We have tried to locate this shed out of the way of the possible location for a dwelling and also have a clear run from the Fortis power pole to the shed. The edge of the paved road on McIntyre is in excess of 31 ft (9+ m) from Lot line A-B of which there are many trees and natural shrubs in this buffer between our lot and the road.
2. ~~We request variance of 1.75m at the front parcel line (Site plan line A-B) setback of 4.5m to 2.75m for possible location for a house (or double wide modular home). As the lot next on McIntyre is a vacant and there are no other buildings on this side of the street, we are not trying to align the orientation of the home to other existing homes.~~
3. ~~We request variance of the garage/accessory building size by 2.43m² from 60m² (645.83 sq ft) to 62.43m² (672 sq ft), to optimize the size of the building using standard building products (24 ft x 28 ft) in 4 ft increments.~~
4. We request variance of the parcel line setbacks of
~~- 3.0m (neighboring 144 Chase) by 1.17m (~ 4 ft) to 1.83m (~ 6 ft) (Site plan line D-E), and~~
~~- 4.5m (neighboring Chase Road) by 2.67m to 1.83m (~ 6 ft) (Site plan line D-C) ,~~
 to build a 24’ x 28’ garage/accessory building.

The applicants are no longer requesting a variance to the setback neighbouring 144 Chase Road. The Applicants have adjusted their exterior side parcel line setback request to 2.65 m rather than 1.83 m. The garage/storage building internal design and area has been adjusted to 23 ft by 28 ft, meeting zoning requirements.

The applicants are no longer requesting items #2 & #3

In trying to leave room for a 1400-1500 sq ft home, and with the odd shape of the lot and required setbacks due to having road along 3 sides, there would be no room for a reasonable size garage if we need to stay within those boundaries. We prefer to have a standalone structure for the garage and to not incorporate it into the house design as it then would require an upstairs to the house to keep about the same footprint. We are getting to an age that stairs are becoming an issue, and prefer to have all the living space on one level.

The road along Chase is lower quite a bit in elevation compared to our lot, and the paved edge of the road is in excess of 47 ft away.

In speaking with our neighbors Gunter & Amy at 144 Chase Road, he expressed concerns about snow load sliding onto his fence/property. To address this, we have oriented the slope of the roof perpendicular to that property and will be using regular asphalt shingles instead of metal roofing.

Currently most the rain runoff flows towards the Chase Road lot line (Site plan D-C), with the low end of the property being nearer corner "C". For any rain coming from the garage roof, this will be directed toward this same area and with normal amounts of rain will not flow towards the neighbor's property (Site plan E-D).

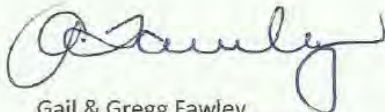
As to the view from Gunter & Amy's house, their home is oriented parallel with our common lot line (E-D) with the back facing our undeveloped area of trees. Any view from their house will not be impeded by a structure on our side of the property, no matter what setback there is.

In the area behind where our proposed garage will be built Gunter recently built a fence and a shed. He has expressed concerns about how far our garage should be away from our shared lot property line, but at the same time didn't seem too concerned on whether his fence straddled the line (it does encroach slightly into our property in places), with one section of fence actually being on crown land at one end, and his shed does not have the required setbacks.

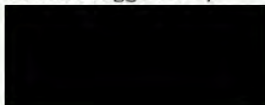
We don't believe there would be a negative impact to the neighbors if we are granted a variance for this garage. If there are other concerns that Gunter & Amy have that a smaller setback would seriously hinder the use and enjoyment of their property, we could reasonably address these. Whereas if we are not granted a variance in the building setbacks for our unusual shaped lot, it may render our lot almost unbuildable for at least an average sized home and garage without removing a vast number of trees (which then may cause other drainage problems without the retention aspects of trees and shrubs).

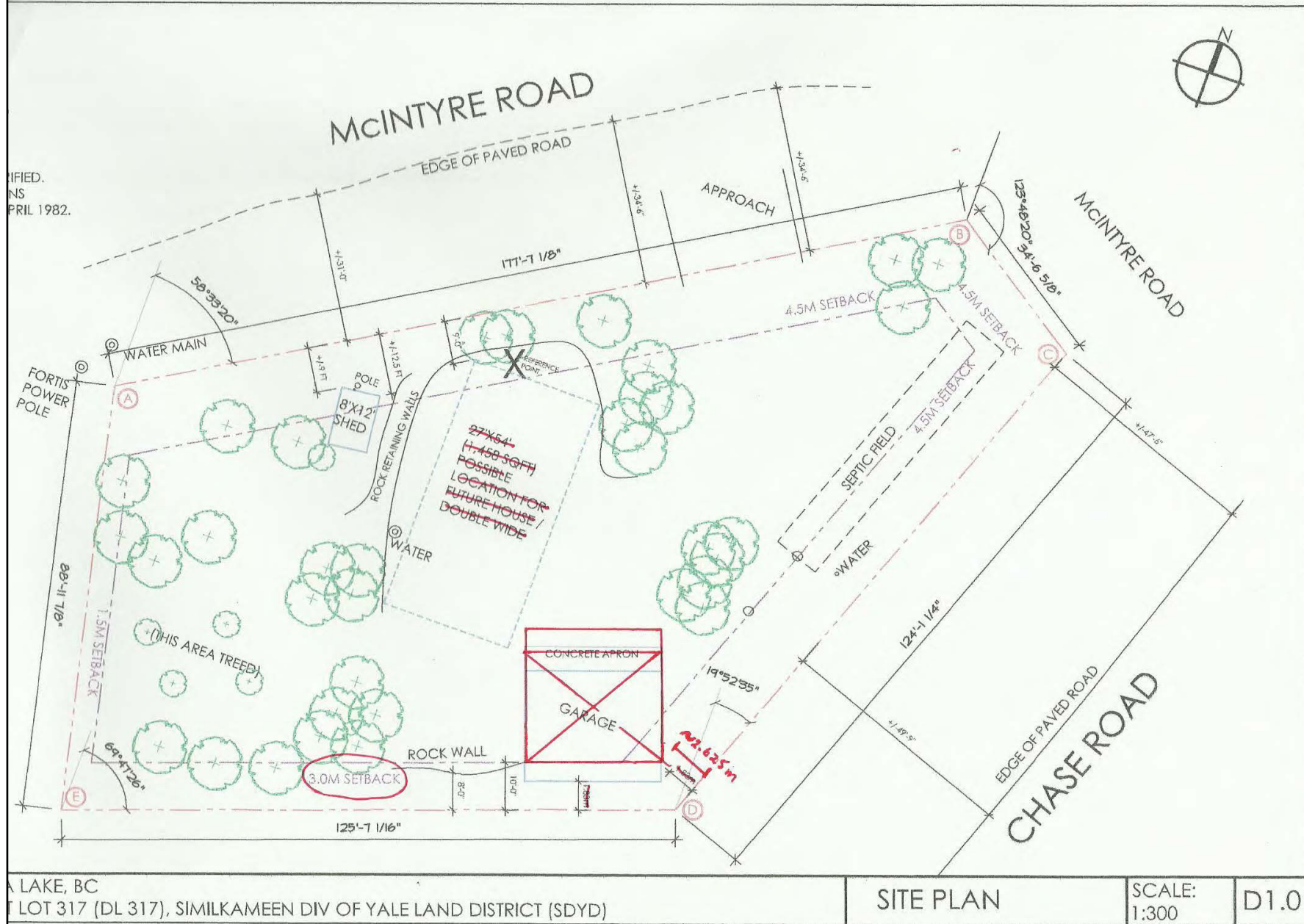
Included with this submission is a photo of the proposed garage location.

Sincerely,



Gail & Gregg Fawley





RDKB Planner

From: G Fawley [REDACTED]
Sent: February 20, 2021 4:25 AM
To: RDKB Planner
Subject: Re: Pics of lot for variance request

Categories: NEEDS FILED

Sorry, the first photo is where we would like to build the garage. Then reference to 1, 2 and 3 photos are next.

Gail

On Fri., Feb. 19, 2021, 12:54 p.m. G Fawley, [REDACTED] wrote:
 Danielle,

Re: RDKB File C-317-02595.340 - 1537 McIntyre Road Christina Lake.

I managed to find a few photos of our lot on McIntyre Road that might give you an idea of the 'lay of the land' for this odd shaped lot. Here is a quick explanation of each photo -

#1 Coming in on the road access off of McIntyre Road looking right:

- on the far left is our vehicle near where the septic tanks are located
- right of that area is where we'd like to build the garage (wood pile is at back of where the garage would be)
- to the right are the rock walls & shed
- the "1537" sign post is approximately on our lot line

#2 View towards the short lot line along McIntyre/Chase:

- of septic tanks and field
- access road from McIntyre on the left
- cargo container will be removed once the garage is built

#3 Looking roughly parallel with McIntyre Road

- rock walls, shed, pole - there is approx 6.5+ feet from the lower ground level from where the pic was taken to the shed ground level (and about another 6+ ft from the shed to the corner lot line ("A").

Last photo is the one we submitted earlier with our application, showing where we'd like to locate the garage.

Hopefully this gives you a better idea of what the lot looks like. If there are any other views you'd like, let me know and I'll see if I can find a picture.

Gail Fawley

Ph: [REDACTED]

RDKB Planner

From: G Fawley [REDACTED]
Sent: March 3, 2021 2:42 PM
To: RDKB Planner
Subject: Re: Revised garage plans for 1537 McIntyre Rd, Christina Lake
Attachments: 1537 McIntyre Road Christina Lake garage floor plan 23x28.pdf; 1537 McIntyre Road Christina Lake Site Plan revision.pdf

Danielle,

We wish to revise our variance request as follows:

- remove the Front Parcel Line Setback variance request for the possible house/double wide location
- garage/accessory building - remove the Rear Parcel Line variance request for the setback along the lot line with the neighbor (E-D on site plan), and change the Exterior Side Parcel Line variance request for the garage setback along Chase Road (D-C on site plan) to a setback of 2.625 m from 4.5 m. Attached is a scan of the changes in the Site Plan - moving the garage 3.0 meters from the Rear Parcel Line.
- garage/accessory building - as previously stated, remove the variance request for an increase to the maximum permitted area of an accessory building, as plans have now been changed to 23' x 28' - keeping it under the 60 square meters allowable. (revised floor plan attached)

If you have any questions, please give me a call.

Gail Fawley
 [REDACTED]

On Wed, Mar 3, 2021 at 10:45 AM RDKB Planner <planner@rdkb.com> wrote:

Many thanks Gail,

This updated plan will be in the staff report to the Electoral Area Services Committee that I am writing. Your application will be on the March 11, 2021 EASC agenda.

Regards,

Danielle

From: G Fawley [REDACTED]
Sent: March 1, 2021 10:38 AM
To: RDKB Planner <planner@rdkb.com>; Doug Arnott <darnott@rdkb.com>







Electoral Area Services (EAS) Committee Staff Report

RE:	Development Permit – Waneta Expansion Power Corporation (647-21D)		
Date:	March 11, 2021	File #:	A-205A-00944.000
To:	Chair Grieve and members of the EAS Committee		
From:	Danielle Patterson, Planner		

Issue Introduction

The Regional District of Kootenay Boundary (RDKB) has received an application for an Industrial and Columbia Gardens Aquifer Development Permit from Waneta Expansion Power Corporation site location along Highway 22A, in Electoral Area A (See Attachment 1 – Site Location Map).

Property Information	
Owner:	Waneta Expansion Power Corporation
Agent:	Columbia Power Corporation c/o Matthew Tonner
Location:	Highway 22A
Electoral Area:	Electoral Area A
Legal Description(s):	Lot 6A and Lot 7A, District Lot 205A, Kootenay Land District, Plan 800, Except Part Included in Statutory Right of Way Plans 15510 and EPP60444
Area:	11.8 ha (29.2 ac)
Current Use:	Vacant
Land Use Bylaws	
OCP Bylaw No.: 1410	Industrial
DP Area:	Industrial and Columbia Gardens Aquifer
Zoning Bylaw No.: 1460	Industrial 2 (IN2)
Other	
Waterfront / Floodplain:	Sayward Creek
ALR:	NA
Service Area:	Columbia Gardens Industrial Park Water
Planning Agreement Area:	Montrose Planning Agreement Area

History / Background Information

The subject properties, Lots 6A and 7A on Highway 22A, located across from the Trail Airport lands (see Attachment 2 – Subject Property Map), were used as the field headquarters for the Waneta Expansion Project on the Pend d'Orielle River from 2010 to 2015. They were used for site offices, a carpentry shop, warehousing, parking for

Page 1 of 5

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approximately 400 employees, and a laydown area for the materials used for the dam expansion.

Prior to using the subject lands for the Waneta Expansion Project, they were used for agricultural purposes. Sayward Creek enters the properties at the northeast, utilizing much of the area for drainage to the ground and into the Columbia Gardens Aquifer. Similarly, Langford Creek utilizes the retention pond on the property to the south (Lot 8A) for overflow drainage.

It is thought that when the Columbia Gardens Industrial Park was developed in the 1980s, the natural drainage pattern of Langford Creek was altered. Sayward Creek's natural drainage pattern was altered as a result of the creation of the laydown area for the expansion project.

The Industrial and Columbia Gardens Aquifer Development Permit Area was created in 2011 to protect the water quality and quantity of the aquifer in the Columbia Gardens Industrial Park. The aquifer is a water source for the Industrial Park water system. This water system is owned and operated by the RDKB. Properties located in the Industrial and Columbia Gardens Aquifer Development Permit are also required to meet the applicable requirements of the Industrial Development Permit Area.

Original Development Permit Approval - 2010

The subject properties were within the Columbia Gardens Industrial Park Development Permit Area when Development Permit #416-10D was issued on October 14, 2010. The Columbia Gardens Industrial Park Development Permit Area was designated to guide the form and character of development including, "*landscape rehabilitation measures to be taken post-construction in order to reclaim disturbed sites, making them suitable for vegetation.*" While the site was reclaimed and seeded with perennial plants, the site drainage was not returned to pre-development conditions, thereby inhibiting the natural drainage of Sayward Creek.

In 2017, significant runoff and rain events coupled with Lots 6A and 7A's limited ability to absorb water resulted in significantly more water travelling to the retention pond on Lot 8A to the south, which eventually spilled its banks and the Columbia Gardens Industrial Park flooded. The flooding event resulted in an investigation by the Environmental Assessment Office at the Province.

Conditions 1 and 16 of the Environmental Assessment Certificate issued for the project required:

- Implementation of the project in an environmentally sensitive manner; and,
- The restoration of all site drainage features and facilities or designing and installing new facilities.

The Environmental Assessment Office Compliance and Enforcement Branch conducted site inspections on the properties in the fall and winter of 2018 and determined that the Certificate Holder (Columbia Power Corporation) was non-compliant with Conditions 1 and 16. As such, an Order of Non-Compliance was issued ordering the Certificate Holder to:

1. Develop and implement an interim Sayward Creek Flow Emergency Response Plan to prevent further flood events in Columbia Gardens Industrial Park;
2. Develop a Sayward Creek Drainage Management Plan to fully and permanently restore the drainage function of the Sayward Creek alluvial fan; and,
3. Implement the long term Sayward Creek Drainage Management Plan.

Land Remedial Works - 2020

In 2020, as part of the Environmental Assessment Office orders, earthworks took place on the subject lands to create a new retention pond on Lot 7A to mitigate the risk of flooding in the Industrial Park until the flood risk was low again at the end of spring. The applicant requested development permit approval to allow land remedial works to reclaim the natural drainage patterns on the parcels as part of their long-term solution. At that time, the RDKB had not received the final Sayward Creek Drainage Management Plan (Plan). This Plan would be considered the proponent's long term solution. In its absence, a Development Permit was not issued to the proponent.

The application was forwarded to the Electoral Area A APC for information and general comments. They considered the application at their April 7, 2020 meeting and provided the following comments:

"RDKB staff and Director Grieve provided information and answered questions in regard to the permit application. The committee unanimously agreed that they are pleased to see a drainage plan implemented and are looking forward to seeing the final plan."

The APC provided a recommendation of support for the application and on April 7, 2020 the Electoral Area Services Committee received the staff report.

Proposal

The applicant is requesting an Industrial and Columbia Gardens Aquifer Development Permit for the subject property. In support of the requested permit, the applicant has submitted a Plan completed by Northwest Hydraulic Consultants Ltd. The intent of the Plan is to further document and refine the design of the constructed earthworks following the interim work completed in spring 2020. Further, the applicant seeks to demonstrate how the earthworks restores drainage and function of Sayward Creek on the subject lands.

The Plan states that based on the applicants' interpretation of the RDKB Development Permit Guidelines, the *British Columbia Water Sustainability Act*, Environmental Assessment Orders, and a variety of other guides related to storm water management, the earthworks design criteria adopted for this project were to:

1. Restore the hydrologic performance of the lots 6A and 7A of the subject lands so site drainage features attenuate, store, or infiltrate incoming flow in a similar or greater capacity than the property did prior to the WAX project development; and,
2. Ensure stable conveyance is provided for overflow past the project site for extreme events (up to a 100-year event).

The Plan states it exceeds moderate flood events, and is therefore considered by the applicant to be consistent with the guidelines to maximize groundwater recharge stated

by the RDKB Development Permit Guidelines. The following works are proposed to be implemented prior to the 2021 freshet:

- The defined channel from Sayward Creek alluvial fan to lot 8A is to be diverted to the excavated infiltration pond. This is to include diversion of both the undisturbed natural channel as well as the northwest-to-southeast interceptor ditch; and,
- A flow path is to be established to convey Langford Creek flow from lot 8A to the excavated infiltration pond, consisting of ditching near the southeast corner of lot 7A and a 600 mm diameter CMP culvert at invert Elevation 426.0 m. A flow control gate (i.e. flap gate) is to be installed on the end of the culvert entering the pond to inhibit backflow for lot 7A to lot 8.

The applicant updated their submission on March 1, 2021 to include re-vegetation plan that was previously implemented on site with the applicant stating that they will re-implement this plan once the drainage work is complete. It includes the details of surface oil preparation, removal of any site debris, and the use of the use of a hydroseed of broad cast seeding at the site of the final grades. This includes a mix of tall wheatgrass, crested wheatgrass, hard fescue, alfalfa, Canada bluegrass, and redtop grasses in order to make the site suitable for grazing.

Advisory Planning Commission (APC)

At their March 2, 2021 meeting, the Electoral Area A APC reviewed the application and passed the following motion:

"The committee supports the concept of the application but requires clarification on the site grading/topsoil placement, vegetation type and placement. There needs to be more detail on the monitoring and maintenance of the works and a firm commitment on the diversion of Langford Creek."

Staff can follow-up with concerns related to grading in finalizing the permit details.

Implications

The subject property has an existing development permit issued in 2010 and this proposal has a narrow scope, focusing on the drainage management relating to Sayward Creek, rather than the entire industrial operations of the subject property. As such, the majority of the items in the Official Community Plan (OCP) Industrial Development Permit Area and Industrial and Columbia Gardens Aquifer Development Permit do not apply to this development. Items of consideration that do apply are the following:

Industrial Permit Area: Re-vegetation of areas disturbed during construction activities is encouraged. Coverage by other permeable, dust free surfaces may be acceptable in some cases, however vegetation is preferred.

While the Plan states that the fill slope ratio (2:1) was established to maintain stability and allow for the establishment of vegetation comprised of native grasses and plants, no details are provided for the siting, types, or quantities of plantings for the site.

Industrial and Columbia Gardens Aquifer Development Permit Area: The report submitted with the application will form part of the Development Permit Terms and Conditions. Much of the review of the Development Permit relies on the expertise in the provided Drainage Management Plan and the requirement of the proponent to meet Provincial and Federal regulations. Further considerations for meeting the Development Permit Area guidelines is whether the proposal adequately meets the OCP objectives of maximizing potential for groundwater recharge and addressing how storm water may be retained on site for maximum recharge.

Recommendation

That the staff report regarding the Industrial and Columbia Gardens Aquifer Development Permit application submitted by Matthew Tonner of Columbia Power Corporation, on behalf of Waneta Expansion Power Corporation for the parcels legally described as Lot 6A and Lot 7A, District Lot 205A, Kootenay Land District, Plan 800, Except Part included in Statutory Right of Way Plans 15510 and EPP60444, Electoral Area 'A', be received.

Attachments

1. Site Location Map
2. Subject Property Map
3. Applicant Submission



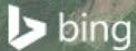
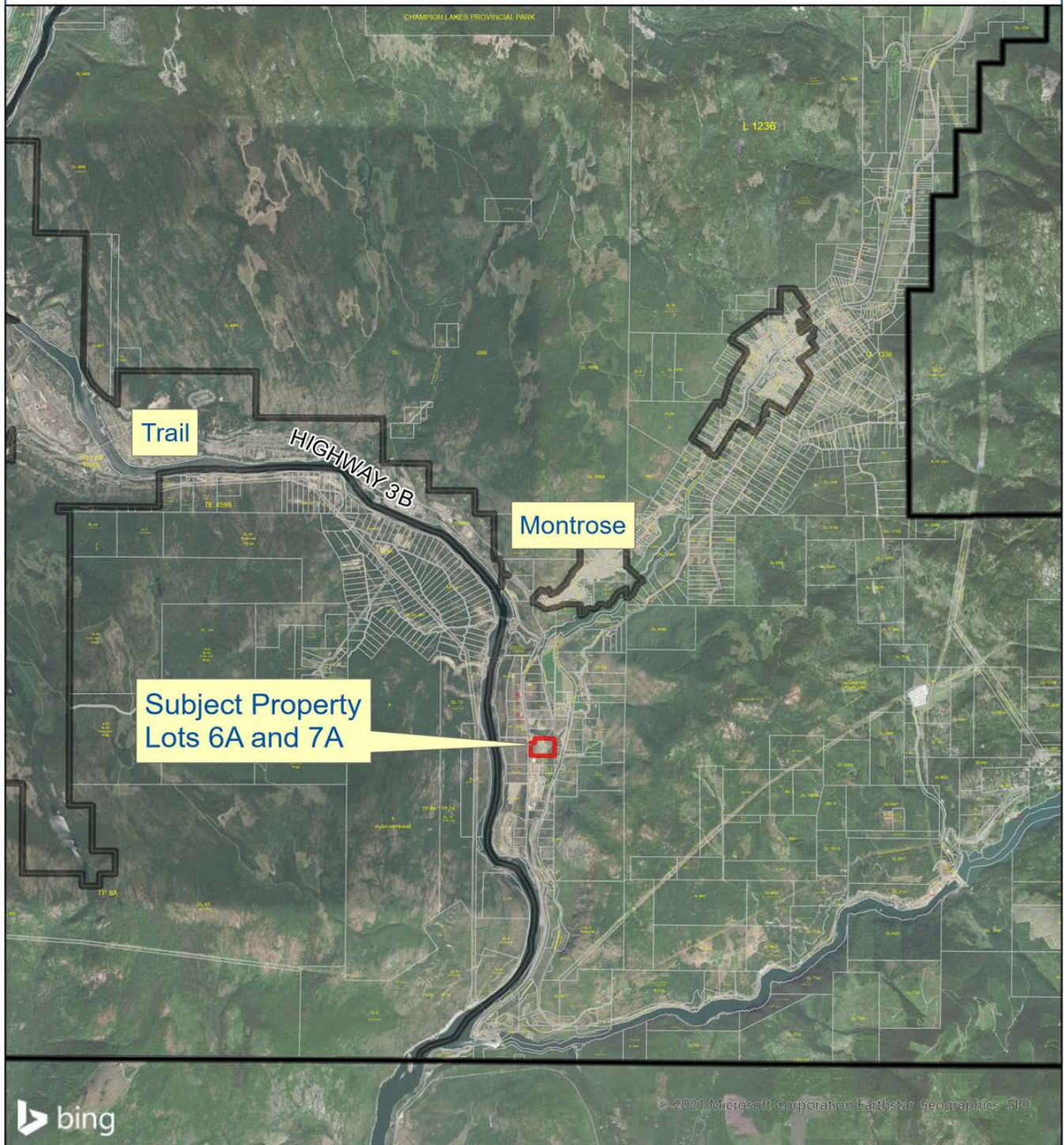
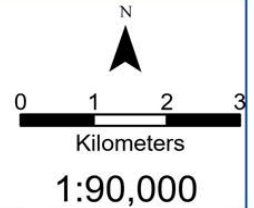
Regional District of
Kootenay Boundary

Date: 2021-02-18

Site Location Map

Lot 6A, Plan NEP800,
District Lot 205A,
Kootenay Land District,
Except Plan SRW PL 15510 AND EPP60444

Lot 6A, Plan NEP800,
District Lot 205A,
Kootenay Land District,
Except Plan SRW PL 15510 AND EPP60444



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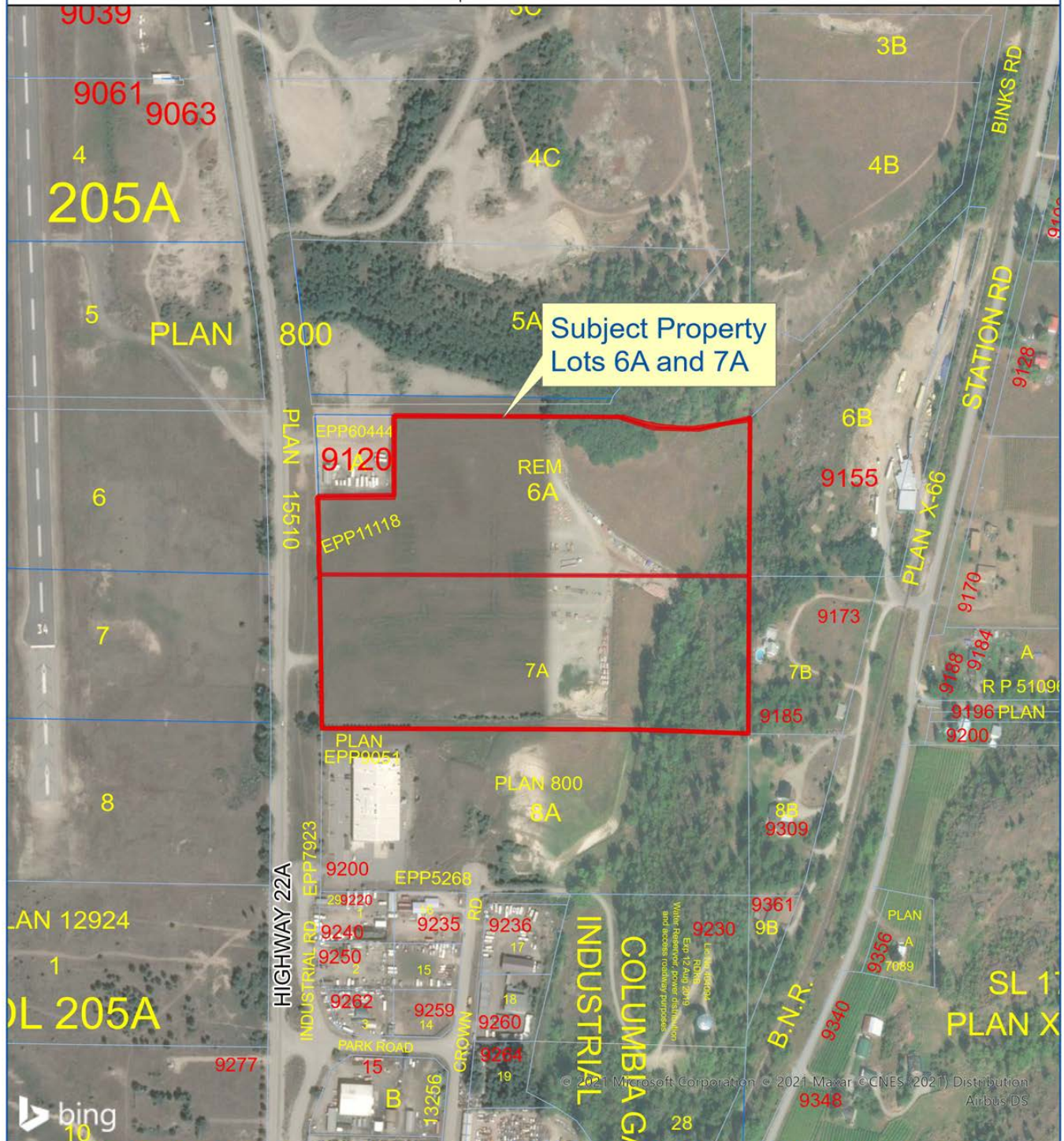
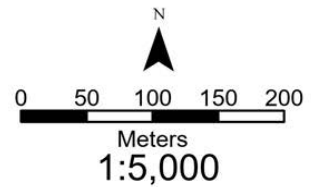


Date: 2021-02-18

Subject Property Map

Lot 6A, Plan NEP800,
District Lot 205A,
Kootenay Land District,
Except Plan SRW PL 15510 AND EPP60444

Lot 6A, Plan NEP800,
District Lot 205A,
Kootenay Land District,
Except Plan SRW PL 15510 AND EPP60444



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Required Section: the space below is provided to describe the proposed development. Additional pages may be attached.

The attached hydrologist report and drawing describes the drainage management feature proposed for the 6a 7a lot. This feature will restore infiltration of surface water, in particular overflow of Sayward Creek which ponds on lot 6a/7a without a defined outlet. See attachments for more details.



Worksite D3/D4 prior to the commencement of construction.



Worksite D3/D4 as of October 2014.

19-4 SITE RESTORATION EWP

Worksite D3/D4

The on-Site Project Manager or Representative will be in charge of on-Site work and is responsible for implementation of this EWP. This EWP is to be read in conjunction with the Contract and the Owner's Requirement together with relevant drawings and specifications which have received Status Code 1 under the Contract.

General Restoration Guidelines

- Restore or re-design all drainage features in order to ensure adequate Site drainage.
- Clean the Worksite of any construction garbage and debris, leftover materials and domestic waste.
- Remove all Contractor installed temporary structures foundations and materials unless otherwise agreed to in writing from the Owner.
- Prepare (e.g., loosened via ripping to 300mm) all surface soils that have been altered by construction activities and are designated for re-vegetation so that they are suitable for vegetation establishment on an area-specific basis.
- Address any contaminated soil or base materials in accordance with the Spill Prevention, Preparedness and Response EWP prior to the commencement of Site Restoration activities.
- Commence site restoration activities as soon as practicable, when the site is inactive or as portions of the site are no longer active.
- Hydroseed or broadcast seed areas where final grading has occurred using the specified seed blend (see Table 1) and fertilizer.

Worksite D3/D4 Specific Restoration Guidelines

- Use the topsoil stockpile as a topping material throughout the worksite targeting a depth of 100 mm to provide for a suitable substrate for vegetation establishment.
- The seed mix (see Table 1) has been developed for Worksite D3/D4 with the intention of providing suitable cover for livestock grazing and/or hay production as is specified in the Owner's Requirements (OR 19.2.4 (a)).
- Prepare and seed with the intent of deterring invasive weeds all areas used or disturbed by the Owner and/or Contractor as soon as practicable after the conclusion of use of the Worksite.
- Remove all internal access roads within Worksites D3 and D4 and leave the main highway entrance to these areas in an accessible and serviceable condition for access by agricultural equipment.
- Finish grading within Worksite D3/D4 will be uniform with no elevations exceeding 433 m.

Table 1: Seed mix developed for Worksite D3/D4. The seed mix will be broadcast seeded at a rate of 35 kg per hectare along with 100 kg per hectare of 14-16-10 fertilizer.

Species	% by dry Weight
Tall Wheatgrass	38%
Crested Wheatgrass	25%
Hard Fescue	15%
Alfalfa	10%
Canada Bluegrass	10%
Redtop	2%

Definitions
EWP – Environmental Work Plan
EMP – Environmental Management Plan
OR – Owner's Requirements
EM – Environmental Manager

Text References
• OR's Section 19
• Noxious and Nuisance Weed EWP

Waneta Expansion Project

19-4 Worksite D3/D4 Site Restoration EWP

Dated: April 8, 2015

Prepared By:

Environmental Manager

Michael Hounjet, PAg

Approved for Use by:
Construction Manager

Joe Stagliano

EMERGENCY CONTACTS
ASL JV Construction Manager: Scott Marshall – 1-250-251-1702
ASL JV Safety Manager: Don Wilson – 1-250-251-2071
ASL JV Project Manager: Joe Stagliano – 1-250-251-3700
SL Expansion Project Manager: Mike Perre – 1-250-251-5184
HCP Environmental Manager: Michael Hounjet – 1-250-364-9606
G24
SL Project Safety Manager: Doug Sennett – 1-250-221-0919
SL JV Office – 1-250-265-6600
SL JV Mobile Office – 1-250-265-6600
Provincial Emergency Program (PEP) – 1-800-483-3456
Department of Forestry and Game Warden – 250-365-3691
Conservation Officer (Wildlife) – 250-365-6333
Wildfire – 1-800-955-5226

EWP's will be updated and revised by the EM and Construction Manager as required by changing site and environmental conditions, and changes in Contractor procedures and methods of construction. Revised EWP's will be submitted to the Owner for prompt review (e.g., five working days for straight forward revisions, and not greater than four weeks for major revisions).

Time Frame
This EWP is valid through substantial completion of the project.

Table of Contents
EWP 19-1 Powerplant Worksite
EWP 19-2 Worksite A1
EWP 19-3 Worksite F
EWP 19-4 Worksite D3/D4
EWP 19-5 Worksite B

Hatfield
CONSULTANTS

SNC-LAVALIN
16Apr15 sub2
RECEIVED



northwest hydraulic consultants ltd

30 Gostick Place | North Vancouver, BC V7M 3G3 | 604.980.6011 | www.nhcweb.com

NHC Ref. No. 3005476

2021 January 13

COLUMBIA POWER CORPORATION

Suite 200, 445-13th Avenue

Castlegar, BC V1N 1G1

Attn: Brandon Haney, P.Eng., M.Eng., Executive Director, Power Operations

via: bhaney@columbiapower.org

**RE: COLUMBIA GARDENS INDUSTRIAL PARK, LOT 6A/7A
DRAINAGE MANAGEMENT PLAN**

1 INTRODUCTION

This report documents the drainage management plan for lot 6A and 7A located at the north end of the Columbia Gardens Industrial Park (Columbia Gardens), Trail, British Columbia. The design for the proposed earthworks has been prepared for Columbia Power Corporation (CPC) by Northwest Hydraulic Consultants Ltd. (NHC) with support from Core6 Environmental Ltd. The associated drainage works are in response to Province of British Columbia's Environmental Assessment Office (EAO) Orders EN2019-007 and EN2020-007 (**Attachment No. 2**).

2 BACKGROUND

Two water courses flow to the Columbia Gardens, Sayward Creek and Langford Creek. Sayward Creek enters Columbia Gardens at the northeast corner of lot 6A. The creek approaches the property within a defined single thread channel confined within a ravine. Channel slope decreases as the ravine opens to the lower gradient unconfined lot 6A where the flow path(s) become poorly defined. This transition to an expanding potential flow path(s) resembles a fan and has been referred to as an alluvial fan. A poorly defined channel exists along the eastern edge of lot 6A and 7A conveying flow south to lot 8A. Alternative, less defined overflow paths direct flow west across lot 6A and 7A. No additional defined flow outlet from lot 6A/7A or lot 8A have been identified from past air photos or drawings. However, based on survey data collected in 2010 and past satellite images it appears that overflow from the site may have flowed west to Highway 22A along the southern border of lot 7A and potentially south through lot 8A. However, these potential flow paths are not well defined and no record of such flow has been uncovered.

Langford Creek reaches Columbia Gardens as three tributaries. The northern most tributary was diverted in the early 1980's to flow north to a small storage pond immediately south of the southeast

water resource specialists



corner of lot 8A. Similar to Sayward Creek, no defined outlet appears to exist for the northern tributary of Langford Creek since Columbia Gardens was established. The southern tributaries of Langford Creek join at the southeast corner of Columbia Gardens and then flow south under 7 Mile Dam Road through a 600 mm diameter corrugated metal pipe (CMP) culvert.

Between 2010 and 2015 the Waneta Expansion Generating Station (WAX) was constructed on the Pend d'Oreille River, south of Trail BC. The project was constructed by a joint venture between SNC Lavalin Inc. and AECON (ASL-JV) with project ownership shared between Fortis Inc., CPC Waneta Holdings, and Columbia Basin Trust (CBT) Waneta Expansion Power Corporation. During the construction, the lot 6A/7A property was used as a laydown / work area. The majority of the property, previously a hay field, was stripped and replaced with a compacted gravel surface. A northwest-to-southeast ditch was constructed along lot 6A's northeastern edge of the gravel work area, to convey stormwater from the worksite. The ditch then headed south and then west around the lot 7A portion of the work area., conveying flow towards Highway 22A.

Upon completion of the WAX project in 2015, the gravel laydown area was restored; that is, the area was de compacted by ripping and the stripped topsoil spread over the site. The northwest-to-southeast ditch across lot 6A was left in place, potentially intercepting and conveying overflow from Sayward Creek. The ditch was later plugged by someone other than the owners in trespass. This forced flow overland over the resurfaced 6A/7A property. Comparison of elevations of lot 6A, 7A, and 8A prior to the WAX project and elevations surveyed in 2018 indicates that, in general, lot 6A/7A was roughly 0.5 m higher in elevation in 2018 versus 2010 with localized areas potentially 1 m higher and other locations with little to no change in elevation (Figure 1).

Since the site was reclaimed, two flood events occurred within Columbia Gardens (2017 and 2018). Flooding is expected to have originated from both Sayward and Langford creek. The EAO order originates from these flood events, and makes a number of statements including the following:

- The certificate holder (*Environmental Assessment Certificate E07-04*) is not compliant with conditions 1 and 16, which state that the certificate holder is to restore all site drainage features and facilities or design and install new facilities.
- A qualified professional is to develop a drainage management plan for Sayward Creek with measures that fully restores the drainage function of the Sayward Creek alluvial fan or otherwise addresses the WAX project changes to Sayward Creek drainage such that Sayward Creek does not contribute to the flooding of properties in the Columbia Gardens or other lands to the satisfaction of the EAO Compliance and Enforcement.

Interim measures were implemented as an emergency response plan (ERP) and with site earthworks in the spring of 2020. Flow remained low throughout spring 2020. This report further documents and refines the design of the constructed earthworks to demonstrate how the earthworks restores the drainage function of Sayward Creek at lot 6A/7A.

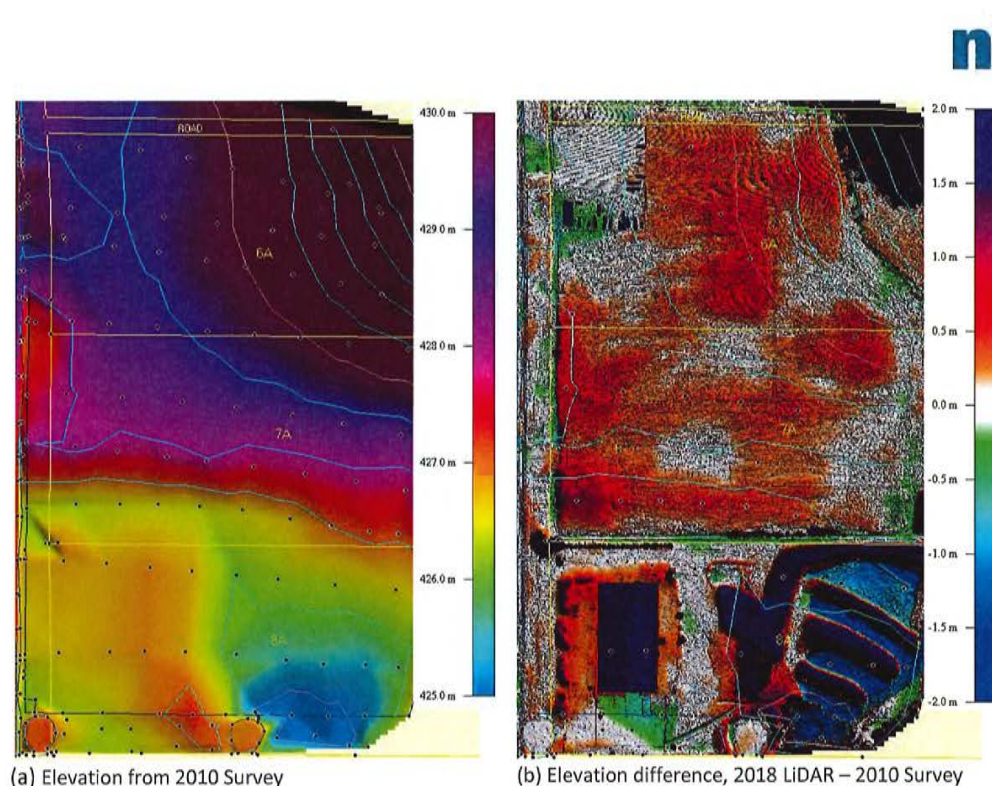


Figure 1 Lot 6A, 7A, 8A (a) elevation based on 2010 survey (b) change in elevation between 2010 and 2018. The 2010 survey is coarse (data spaced at ≈ 30 m as shown by black dots) and the 2018 data is a full feature data set, which includes buildings and trees. Difference between 2018 and 2010 should be considered approximate based on the data spacing and full feature nature of the data.

3 DESIGN CRITERIA

This drainage management plan has been developed with consideration for the following:

- *British Columbia Water Sustainability Act* (2014 May 29)
No changes in and about a stream or to an aquifer are to be made without a government issued order or authorization.
- *Land Development Guidelines for the Protection of Aquatic Habitat, Fisheries and Oceans Canada* (1993)
Guidelines identify the primary stormwater management objective as the following “limit the post-development 2 year storm offsite runoff rate to the predevelopment 2 year rate and to maintain, as closely as possible, the natural predevelopment flow pattern and water quality in the receiving watercourse”
- *Urban Stormwater Guidelines and Best management Practices for Protection of Fish and Fish Habitat, Draft Discussion Document, Rev. 4* (2001)



Expand on previous guidelines to suggest downstream hydrographs are similar post development to predevelopment for the 6-month, 2-year, and 5-year 24-hour precipitation events.

- *Stormwater Planning: A Guidebook for British Columbia (2002)*
Suggest a broader spectrum of events considered and addressed, that is local rainfall captured for small frequent events (*tier A*), flow detained to mimic pre-development conditions for large storms (*tier B*), and extreme floods (up to the 100-year event) are safely conveyed off site (*tier C*). This guideline retracts from the previous guidelines, suggesting tier A events are based on precipitation less than half the mean annual rainfall (MAR), tier B are half MAR to MAR, and tier C extreme events are those greater than MAR. MAR is loosely define as the average annual maximum rainfall event.
- *Environmental Assessment Certificate E07-04 (2001)*
Appendix 9A, Section G, Site Restoration
G2.1(f): "The Contractor shall restore all site drainage features and facilities, confirming their adequacy, and/or shall design and install new drainage facilities, including but not limited to ditches, swales, culverts and creek crossings. The Contractor shall submit designs and design calculations for all site restoration drainage facilities on Site with its Site Restoration EWP for review by Owner."
G2.2(b): "... All restored areas shall be graded to have positive drainage...."
G2.2(c)(iii): "Worksites D3 and D4 shall be uniform across both worksites and shall not be higher than El. 433 without the written permission of the Owner."
- *Environmental Assessment Order EN2019-007 (2019)*
Restore the drainage function of the Sayward Creek alluvial fan or otherwise addresses the WAX project changes to Sayward Creek drainage such that Sayward Creek does not contribute to the flooding of properties in the Columbia Gardens or other lands to the satisfaction of the EAO Compliance and Enforcement.
- *Environmental Assessment Order EN2020-007 (2020)*
"...include consideration of Langford Creek flows and the impact of Langford Creek drainage in the Drainage Management Plan..."
- *Regional District of Kootenay Boundary Official Community Plan (OCP) Bylaw No. 1410 Electoral Area 'A'*
19. Industrial and Columbia Gardens Aquifer Development Permit Area (Bylaw 1525)
Proposed earthworks are to "maximize potential for groundwater recharge:" and "address how stormwater may be retained on site for maximum recharge"

The majority of standards with respect to the handling or management of water on site, such as detention and retention, relates to stormwater; that is the water that arrives on site as precipitation (rain and or snow). This contribution is small in comparison to the potential flow from Sayward Creek (less than 5% based on area). Standard practice for creek flow is that flow entering a property from upstream is safely conveyed to the receiving channel downstream without negatively impacting water quality. Withdrawal or storage of creek flow is regulated in British Columbia through a water license for specific use of the water. A water license is likely to be required to fully enact this drainage management plan, however the *Water Sustainability Act* and associated regulations do not directly dictate the free passage or, alternatively, the forced retention of creek flow on a property.



Based on our interpretation of the above listed guiding documents, the following design criteria were adopted for this project:

- 1) Restore the hydrologic performance of the lot 6A/7A property so that lot 6A/7A drainage features attenuate, store, or infiltrate incoming flow in a similar or greater capacity than the property did prior to the WAX project development.
- 2) Ensure stable conveyance is provided for overflow past the project site for extreme events (up to the 100-year event).

Recharge of the local aquifer is reliant on infiltration of typical rainfall and flow events and is not expected to be reliant on extreme, infrequent flood events (2-year and greater). The storage proposed by this drainage management plan exceeds moderate flood events, and therefore is considered to be consistent with the guidance to maximize groundwater recharge stated by the Regional District Kootenay Boundary (RDKB) development permit area (DPA).

Due to the lack of continued channel conveyance for Sayward Creek or Langford Creek through or beyond Columbia Gardens, it is expected that flooding is likely to occur within Columbia Gardens for the more extreme events regardless of development of lot 6A/7A or implementation of this drainage management plan.

4 HYDROLOGY

Sayward Creek is a small ephemeral creek that generally flows east to west with a moderately sized watershed contribution of 3.1 km². Despite this size, flow is intermittent; that is, surface flow within Sayward Creek reaches lot 6A and 7A only for a short duration of time in response to sizable precipitation events or events with precipitation and snowmelt. The upstream watershed is characterized by rocky terrain, with terraces of natural forest and pockets of farmland. The watershed ranges in elevation from 1400 m to 480 m.

Sayward Creek is not gauged. The only flow record known for these creeks is a month of flow measurements collected by CPC in March and April 2020.

Langford Creek is the second creek that contributes flow to Columbia Gardens. It is similar to Sayward Creek in that it flows east to west from the same naturally forested rock ridge, with a similar aspect, elevation range, and watershed size. However, Langford Creek approaches Columbia Gardens as four tributaries which become three before they reach Columbia Gardens. The Langford Creek tributaries are expected to have historically combined within the area that is now the Columbia Gardens and flowed south and then west towards the Columbia River. The two northern most tributaries combine downstream of Station Road with a total watershed area of roughly 2.2 km².

Two typical approaches to estimate flow in ungauged creeks are i) regional analysis and ii) hydrologic modelling. Both approaches were applied for this project. The regional analysis was used to determine suitable design conditions and the hydrologic modelling was used to approximate the 2017 and 2018 events to verify the design with respect to these events.



Unfortunately, the flow measured in 2020 was relatively low and is therefore not particularly suitable for correlating with regional gauge data or calibrating high flood flow models. The collected data is however useful for defining the loss in flow as it approaches lot 6A/7A. During the spring of 2020, daily flow measurements were made along Sayward Creek from Columbia Gardens Road to the project site. Measured flow was as high as 0.15 m³/s. Despite this flow observed upstream of the project site, flow never reached lot 6A as it infiltrated to ground within the 800 m between the measuring location and lot 6A. This suggests this reach is a losing reach, a reach where the surface flow conveyed by the creek is decreasing in magnitude as it progresses downstream. Further loss could be expected upstream or downstream of this measured reach.

4.1.1 Regional Frequency Analysis

For a regional analysis, data from a similar watershed with long term flow data is transposed to the watershed(s) of interest. For this project, data from four gauges were considered as presented in **Table 1**. None of the gauged creeks are intermittent or ephemeral streams and the highest flow events for 2017 did not occur at the same time as the flooding at Sayward and Langford creek. Despite this, a frequency analysis was applied to the data and transposed by watershed area (using an exponent of 0.795) to Sayward Creek (3.1 km²) and the north tributaries of Langford Creek (2.2 km²). **Table 2** (below) presents the results. Due to the intermittent nature of Sayward and Langford creek, it is expected that these results may suggest a higher magnitude of flow for the flood events, particularly for the more frequent floods.

Table 1 Summary of gauges used in regional frequency analysis

Gauge ID	Station Name	Drainage Area (km ²)	Peak Record Length (Years)	Distance to Project Location (km)
08NH115	Sullivan Creek near Canyon	6.22	58	85
08NJ129	Fell Creek near Nelson	4.4	37	55
08NJ130	Anderson Creek near Nelson	9.07	59	55
08NN028	Lost Horse Creek near Christian Valley	28.5	22	97

Table 2 Daily peak flow estimates based on regional analysis

Event	Sayward Cr (m ³ /s)	North Trib of Langford Cr (m ³ /s)
2-yr	0.30	0.23
5-yr	0.43	0.33
10-yr	0.52	0.40
20-yr	0.61	0.46
50-yr	0.73	0.55
100-yr	0.82	0.62
200-yr	0.91	0.68



4.1.2 Hydrologic Model of 2017 and 2018 Events

The modified rational method was used to model the expected conditions that occurred 2017 March 21 to 24. Temperature data for this time period was obtained and used from the Warfield Environment Canada and Climate Change (ECCC) climate station, the Pend d'Oreille climate station operated by BC Ministry of Forests, Lands, Natural Resource Operations, and Rural Development (FLNRORD), and the Trail Regional Airport. Precipitation data was obtained and used from the Warfield and Pend d'Oreille stations. Snowmelt was estimated from *snow water equivalent* (SWE) data from the *snow data assimilation system* (SNODA) operated by the United States National Operational Hydrologic Remote Sensing Centre (NOHRSC). When snow depth data exists for Warfield, it was converted to SWE and compared to the SNODAS data. Infiltration within Sayward Creek is expected to occur upstream of lot 6A similar to that measured in 2020, that is $0.15 \text{ m}^3/\text{s}$. Infiltration was also noted for the north tributaries of Langford Creek in 2020, but water also appeared to return to surface prior to reaching Columbia Gardens.

Both creeks exhibit a potential for substantial loss of flow upstream of Columbia Gardens. Anthropogenic changes to the channel (lining, realignment along ditches, crossings etc) as well as potential sediment loading from adjacent lands, are likely to have impacted the infiltration rate upstream of Columbia Gardens. However, it is difficult to quantify the potential loss or gain in infiltration that has occurred with the range of channel changes.

Results of this analysis suggests the following regarding the **2017 March 24 event**:

- Precipitation was on the order of 14.6 mm in 24 hours on this day. This is not a particularly extreme precipitation event, roughly half of the 2-yr precipitation event (based on regional intensity-duration-frequency (IDF) curves).
- Snowmelt during the event is estimated at 20 mm per day for two days during this event.
- Flow from Sayward Creek upstream of lot 6A was estimated to be $0.76 \text{ m}^3/\text{s}$ (peak daily flow), roughly a **65-yr event**. Infiltration loss would reduce this to $0.61 \text{ m}^3/\text{s}$ by the time it reached lot 6A.
- Flow from the north tributary of Langford Creek reaching lot 8A was estimated to be $0.53 \text{ m}^3/\text{s}$ (peak daily flow), roughly a **45-yr event**. The flow reaching lot 8A is expected to have been similar to that reach lot 6A from Sayward Creek, despite the smaller watershed, due to the expected less loss in flow due to infiltration.

Results of the analysis suggest the following regarding the **2018 April 16 event**:

- Precipitation was on the order of 14.4 to 21 mm on April 16 as observed at Warfield and Pend d'Oreille climate stations. This is not a particularly extreme precipitation event, nearly a 2-yr precipitation event (based on regional IDF curves). No rainfall was seen April 18, the date this event was initially stated as occurring.
- Snowmelt during the event is estimated at 17 mm per day for two days during this event.
- Flow from Sayward Creek upstream of lot 6A was estimated to be $0.64 \text{ m}^3/\text{s}$ (peak daily flow), roughly a **25-yr event**. Infiltration loss would reduce this to $0.49 \text{ m}^3/\text{s}$ by the time it reached lot 6A.



- Flow from the north tributary of Langford Creek reaching lot 8A was estimated to be **0.44 m³/s** (peak daily flow), roughly a **15-yr event**.

The estimate in flow for the 2017 event is based on the high end of the range of reasonable values calculated using the hydrology model. This was deemed appropriate based on the antecedent conditions and site observations, which include:

- Lengthy period of above freezing temperatures prior to the events (roughly 2 weeks) suggest that snowpack and soils were at least partially saturated.
- Snow throughout the watershed was observed during the event, suggesting a large snowmelt contribution.
- Upstream property owners (Mr. and Mrs. Green who reside on the “upper most driveway east of Station Road”) were reported to have said that they had never seen flows as high in the 20-years that they resided at that location.
- Recent, upstream scour, erosion, and flooding was seen following the 2017 event (**Figure 2**).



Figure 2 Photos of erosion and overland flow on the Green property east of Station Road (Forbes & Boyer, 2017 March 27)

The 2018 flood appeared less extreme than the 2017 flood. The estimate for the 2018 flood was based on the low end of the range of reasonable values from the hydrology model.

Further information on the hydrologic analysis is attached (see **Attachment 4**).

5 HYDROGEOLOGY

Surface flow loss upstream of lot 6A/7A was measured in spring of 2020. This loss is expected to continue downstream on lot 6A/7A. The rate of loss is dependent on the area of ponding or flowing water and the hydraulic conductivity of the underlying soil. The hydraulic conductivity of the soil across lot 6A/7A were estimated based on published values selected from the provided characterizations of the soil. The soil characterizations are based on site descriptions, photographs, and previous geotechnical



assessments (Golder Associates, 2010),(SVH Contracting, 2015). Based on this information the following infiltration rates were established and used for evaluation of the 2020 earthworks;

▪ Dense silty sand:	3.2E-06 m ³ /s/m ²
▪ Loose coble, gravel, and sand:	1.2E-05 m ³ /s/m ²
▪ Topsoil and loam:	2.1E-06 m ³ /s/m ²
▪ Compacted gravel and sand:	7.4E-06 m ³ /s/m ²
▪ Colluvium, fine to medium sand	5.6E-06 m ³ /s/m ²

The following figure illustrates the expected distribution of the dense silty sand and loose cobble, gravel, and sand which underlay, and locally has been exposed, across the site (**Figure 3**). The topsoil is representative of the layer of soil that previously covered the site prior to the WAX project (while it was a hay field). Whereas compacted gravel and sand is the layer that covered the disturbed portions of the site during the WAX project and continues to cover the project where it is not altered by the works outlined in this drainage management plan.

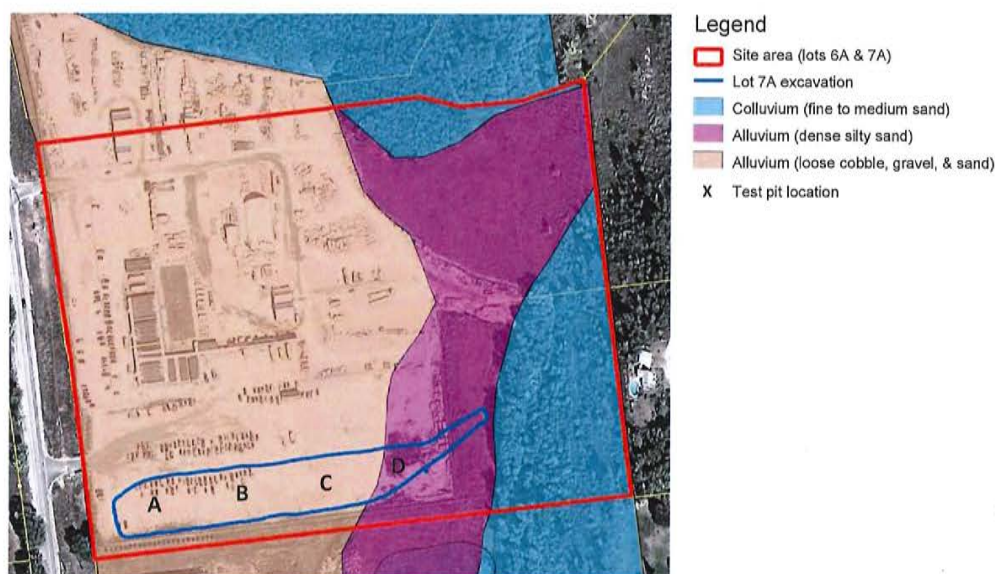


Figure 3 Estimated soil distribution, lot 6A/7A, along with locations of 2020 test pits, overlying GoogleEarth image of site during WAX project.

During the spring 2020 earthworks 4 test pits were excavated and permeability tests conducted within the excavation. These observations noted two zones within the excavation, the northern quarter of the excavation was characterized as dense silty sand and the remaining southern three quarters of the site was loose cobble, gravel, and sand (**Figure 4**). The onsite tests suggested infiltration slightly different than the published values; that is 3.0E-06 m³/s/m² for the dense silty sand, and 1.6E-05 m³/s/m² for loose cobble, gravel, and sand, but not sufficiently different to substantially alter results of this design.



A western quadrant sample



B west-centre quadrant sample



C east-centre quadrant sample



D eastern quadrant sample

Figure 4 Photo of test pits associated with permeability tests (2020 April 23, CPC).

6 DESCRIPTION OF PROPOSED WORKS

The 2020 earthworks and remaining works are illustrated in the attached drawings (**Attachment 3**).

6.1 Capacity

The design of this drainage management plan is to restore drainage features so that they attenuate, store, or infiltrate incoming flow in a similar or greater capacity than the property did prior to the WAX project.



6.1.1 Inundation Area

Both the storage and infiltration are based on the area of the site that is inundated during a particular flow event. The inundation extent prior to WAX project was estimated based on a topographic survey from 2010 (grid of data spaced at 30 m to 60 m), 2D hydraulic model results of flow over a surface created from this survey, and historic air photos. The following figures illustrate these data sources (Figure 5 and Figure 6).

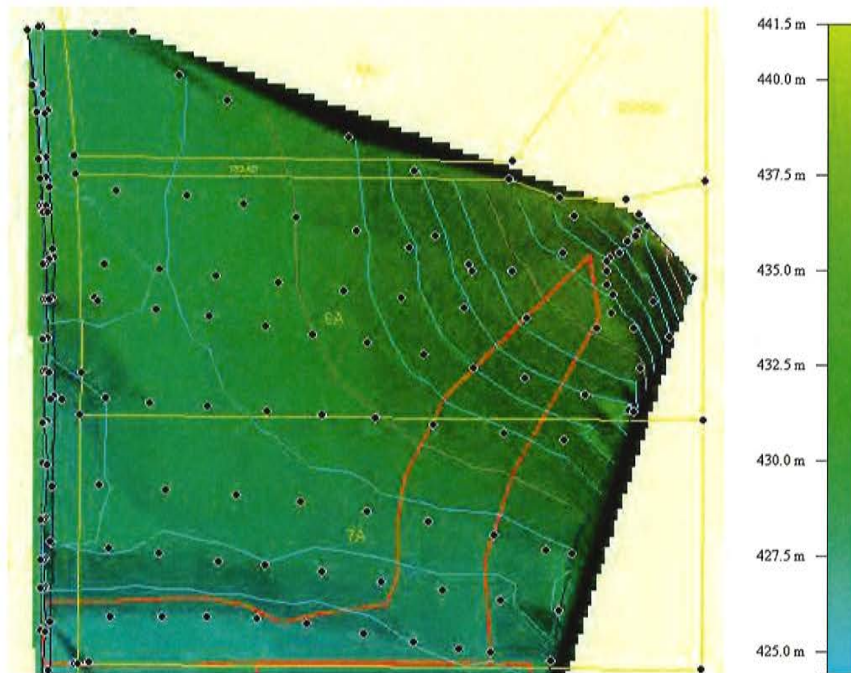


Figure 5 Topographic survey, elevation of surface generated from survey, and approximated inundation extent based on surface.

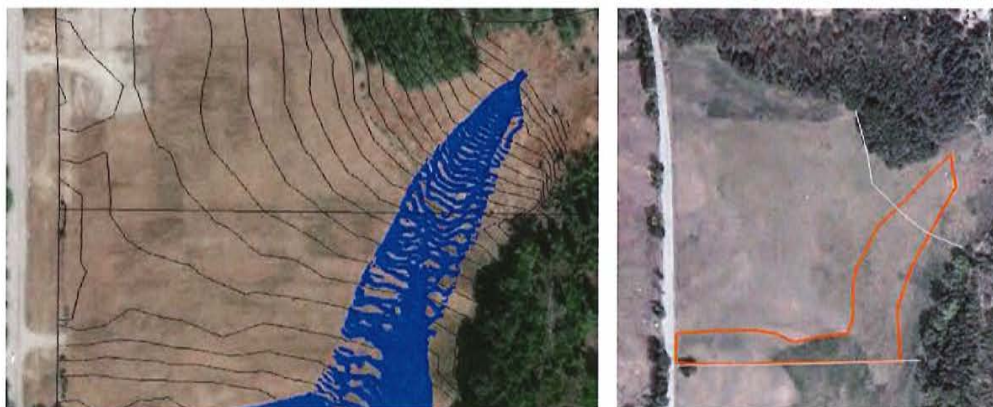


Figure 6 Inundation extents (a) Telemac 2D hydraulic model results (16,000 m²) using 2010 survey and estimated daily maximum flow for the 2017 March 24 event and (b) extent based on survey (24,300 m²) projected on 2004 December 30 GoogleEarth satellite image.

The following figure illustrates surfaces developed from the 2010 and 2018 survey and the approximated inundation areas (**Figure 7**). The inundation areas were delineated from the figures as tabulated in the following table (**Table 2**).

The inundation area across lot 6A/7A prior to project disturbance suggested from the 2D model results was 16,000 m². Review of the 2010 survey data suggested an area closer to 24,000 m² as shown in **Figure 6b**. The inundation area adopted for analysis was further increased to 36,000 m² to ensure the area is conservatively large to address uncertainties in the pre-WAX condition (roughly 1/3 of the property).

Post WAX the area of inundation was limited to undisturbed area upstream of WAX (3,600 m²) and the drainage channels. Following the drainage management plan the inundated area was expanded to include the excavation. The area in the excavation at spill elevation (El. 428 m), that is, when flow is begins to pond outside of the excavation (north side of excavation) but prior to it flow north towards lot 6A, is taken from the AutoCAD Civil3D drawing developed from a 2020 survey taken post excavation. This area is 17,210 m². This includes the inundated area of the excavation and that approaching the excavation (upstream channel).

The area estimated for post development inundation assumes all Sayward Creek flow is intercepted by the cross ditch. Infiltration rates were calculated by multiplying the inundated area over each soil type by the hydraulic conductivity. The resulting area-averaged hydraulic conductivity and infiltration capacity are listed in the following table.



Table 3 Inundation areas pre and post WAX used for assessment.

Period	Lot 6A / 7A Infiltration Area (m ²)	Lot 8A Infiltration Area (m ²)	Lot 6A / 7A Hyd. Cond. (m/s)	Lot 8A Hyd. Cond. (m/s)	Lot 6A / 7A Infilt. Capacity (m ³ /s)	Lot 8A Infilt. Capacity (m ³ /s)
2010	36,000	27,000	9.3E-06	6.6E-06	0.34	0.18
2017	6,000	27,000	3.2E-06	6.6E-06	0.02	0.18
2018	6,000	16,000	3.2E-06	3.2E-06	0.02	0.05

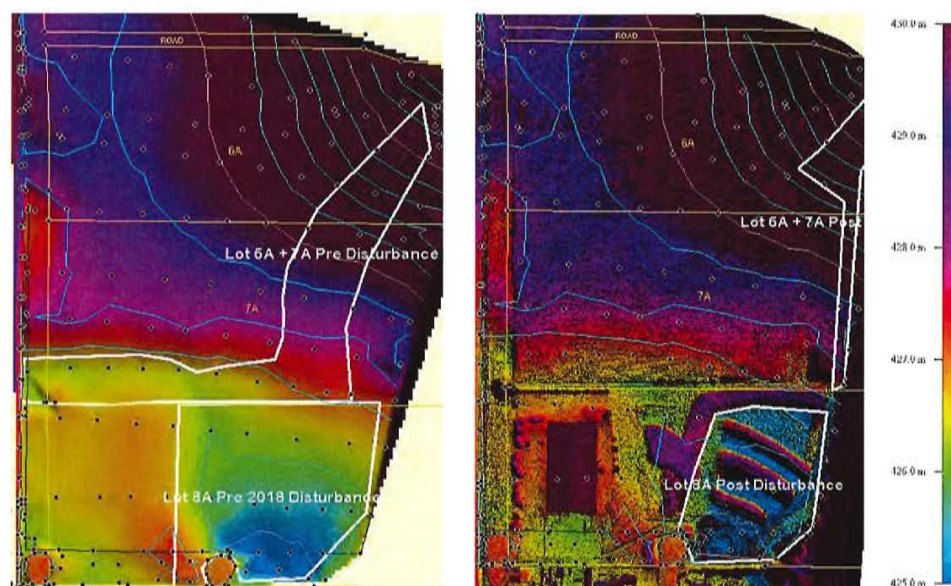


Figure 7 Approximated inundation areas (a) prior to and (b) following site disturbance.

6.1.2 Storage

Based on review of historic air photos and the 2010 survey, there were no structures or substantial grade brakes to retain water on site prior to the WAX project. Therefore, the depth of storage across the inundation extent was estimated as 0.1 m for pre-WAX inundation. This results in a storage volume of 3,600 m³. In comparison, the storage volume post implementation of the drainage management plan is 20,400 m³. For both pre- and post-project conditions, storage was assumed to be empty at the start of the event and full at the end of 24 hours.

6.1.3 Infiltration

Infiltration was approximated based on the soil distribution presented in **Figure 3** and the estimated extents of inundation (**Figure 5** and **Attachment 3**). To remain conservative, that is to suggest the



greatest pre-project infiltration, it was assumed that the pre-project topsoil layer was adequately thin to not reduce infiltration.

It was assumed that the inundation area was at its maximum area at the start of the event and remained constant within this area for 24 hours. Infiltration was assumed to be consistent for the 24-hour period. The inundation area is expected to be more consistent with the current defined structure of the excavated pond than prior to the project, and hence this is expected to be a conservative approach.

6.1.4 Comparison of Storage, Infiltration, and Overflow

The following table presents the area averaged hydraulic conductivity, calculated infiltration, storage, and spill from lot 6A/7A under the pre-WAX conditions and conditions following the implementation of this drainage management plan (Table 3). The comparison is shown for a range of flow events. Inflow to site has been reduced for each scenario by 0.15 m³/s assuming a consistent loss of flow upstream of lot 6A as per that measured in 2020. Hydraulic conductivity is area- average based on the intersection of soil type and inundation area. As illustrated by these results the drainage management plan is expected to sufficiently store and infiltrate inflow up to the 10-yr event, and manage similar inflow to that estimated prior to disturbance (Table 4).

Table 4 Comparison of surface outflow from lot 6A/7A pre-WAX to post drainage management plan (DMP).

Condition	Creek Inflow (m ³ /s)	Inflow to Site (m ³ /s)	Storage (m ³)	Area (m ²)	Hyd. Cond. (m/s)	Infiltration (m ³ /s)	Outflow (m ³ /s)
2-yr Pre-WAX	0.3	0.15	3,600	36,000	9.3E-06	0.34	0.00
2-yr Post DMP	0.3	0.15	20,443	17,210	8.5E-06	0.15	0.00
5-yr Pre-WAX	0.43	0.28	3,600	36,000	9.3E-06	0.34	0.00
5-yr Post DMP	0.43	0.28	20,443	17,210	8.5E-06	0.15	0.00
10-yr Pre-WAX	0.52	0.37	3,600	36,000	9.3E-06	0.34	0.00
10-yr Post DMP	0.52	0.37	20,443	17,210	8.5E-06	0.15	0.00
2017 Pre-WAX	0.76	0.61	3,600	36,000	9.3E-06	0.34	0.23
2017 Post DMP	0.76	0.61	20,443	17,210	8.5E-06	0.15	0.23
2018 Pre-WAX	0.64	0.49	3,600	36,000	9.3E-06	0.34	0.11
2018 Post DMP	0.64	0.49	20,443	17,210	8.5E-06	0.15	0.11

Some Langford Creek flows may have historically reached lot 7A, combining with Sayward Creek flows. The design includes a path for excess Langford Creek flow to reach the lot 7A infiltration pond from lot 8A. The design criteria for storage and infiltration on lot 6A/7A is based on meeting or exceeding the storage and/or infiltration capacity pre-WAX, regardless of flow source. The following table presents the excess capacity beyond Sayward Creek flow which is calculated to be able to be handled by the lot 6A and 7A prior to disturbance (Pre-WAX) and following implementation of the drainage management plan (post DMP). The excess capacity available is somewhat theoretical, as much of lot 6A/7A is at an elevation greater than lot 8A (and the rest of the Columbia Gardens industrial park), thus limiting the area available for storage and infiltration of Langford Creek flow. The excavation developed under the



drainage management plan, lowers a large area of lot 7A adjacent to lot 8A below the elevation of lot 8A, suggesting that there is more opportunity to handle Langford Creek flows after the drainage management plan is implemented than prior to disturbance.

Table 5 Difference in surface outflow (m³/s and %) and excess capacity (m³/s) from lot 6A/7A between pre-WAX and post drainage management plan.

Outflow Comparison	2-yr	5-yr	10-yr	2017 Event	2018 Event
(Post DMP) – (Pre-WAX)	0.00	0.00	0.00	0.00	0.00
(Post DMP) / (Pre-WAX)	N/A	N/A	N/A	98%	96%
Excess Capacity (Pre-WAX)	0.23	0.10	0.01	0.00	0.00
Excess Capacity (Post DMP)	0.23	0.10	0.01	0.00	0.00

6.2 Overflow

Development of the area has resulted in Sayward Creek and Langford Creek reaching the Columbia Gardens industrial park without a flow path to continue conveyance onwards. Development of the area relies on these properties (lot 6A, 7A, and 8A) for storage and infiltration of natural and diverted inflows. For the most extreme events the capacity of these properties will likely be overwhelmed. Due to the lack of suitable outlet, no specific overflow location has been incorporated in the drainage management plan, instead the property will be left to flood lot 6A and 7A, predominantly the southwest corner. Under the most extreme events, this flooding may encroach onto adjacent properties.

6.3 Design Basis

The lot 6A/7A earthworks of spring of 2020 were constructed to store and infiltrate Sayward Creek inflow and local site stormwater water. The earthworks consisted of a 1 to 2 m deep excavation along the southern side of lot 7A with an area of 10,000 m² and a volume of 15,500 m³. Excavated material was placed south of the excavation as a 1.0 to 1.5 m high berm (428.3 m) to further contain stored water. Remaining excavated material was stockpiled north of the excavation.

As suggested by the analysis, the capacity of the structure meets or exceeds the pre-WAX project conditions and has capacity to handle flow events in excess of the 10-yr return period event.

6.3.1 Additional Design Considerations

Fill slopes were kept less than 2H:1V to maintain stability, allow for establishment of vegetative cover, and enable any individuals who enter the excavation to be able to easily walk out of the excavation. Excavated soils have been kept separate from the bulk excavation and subsequently used to surface the disturbed ground to allow for revegetation of native grasses and plants.

6.3.2 Remaining works

The following works are proposed to be implemented prior to the 2021 freshet. These items are required to ensure the project passively works as intended. That is, the current eastern flow path of



Sayward Creek has not yet been diverted, as approval is required under the *Water Sustainability Act* to make such a diversion. For project completion the following works are required:

- The defined channel from Sayward Creek alluvial fan to lot 8A is to be diverted to the excavated infiltration pond. This is to include diversion of both the undisturbed natural channel as well as the northwest-to-southeast interceptor ditch.
- A flow path is to be established to convey Langford Creek flow from lot 8A to the excavated infiltration pond, consisting of ditching near the southeast corner of lot 7A and a 600 mm diameter CMP culvert at invert El. 426.0 m. A flow control gate (i.e. flap gate) is to be installed on the end of the culvert entering the pond to inhibit backflow for lot 7A to lot 8.

If these actions are not able to be permitted and constructed by spring 2021, then preparations should be made to implement these measures in the event that high flows in Sayward and/or Langford creek appear imminent.

7 MONITORING AND MAINTENANCE

There appears to be little sediment transported within Sayward Creek and Langford Creek. Despite this, the excavation may over time become surfaced with fine sediment that reduces infiltration. If this occurs, the material may need to be removed. Such sedimentation is not expected to occur except during an extreme flood event or potentially following many years of operation during moderate flows. The site should be monitored the first 2 years and the 5th year following construction (2021, 2022, 2025), during extreme floods, and following extreme floods (i.e. 10-year or greater flows). Monitoring should be used to identify any signs of:

- Sedimentation
- Local erosion
- Overflow
- Site changes
- Culvert/ditch plugging or impeded function of flap gate

If any of these conditions are identified (either due to natural or anthropogenic influences) then maintenance may be required to ensure effectiveness and safety of the site. If substantial changes or areas of concern are identified, a qualified professional may need to be engaged to further assess.

Alternative design revisions may be warranted in the future to further allow development of the site. This may include converting the excavated infiltration pond into a subsurface infiltration pond (i.e. *rain garden*) by infilling with coarse rock, installing a designed outlet (pipe or rockfill), adding appropriate filter layers (granular material and/or geotextiles), and covering with supporting fill. The current drainage management plan is intended to be modifiable in the future if such changes are required.



8 CLOSURE

We hope this document meets your immediate needs, however feel free to contact Dale Muir or Dan Maldoff by email (dmuir@nhcweb.com | dmaldoff@nhcweb.com) or telephone (604.980.6011) to discuss further.

Sincerely,

Northwest Hydraulic Consultants Ltd.

Prepared by:



Dale Muir, M.Eng, P.Eng.
Principal

Prepared with support from: Dan Maldoff, EIT, Hydrotechnical Engineer

DISCLAIMER

This report has been prepared by Northwest Hydraulic Consultants Ltd. for the benefit of Columbia Power Corporation for specific application to drainage management of lot 6A and 7A of Columbia Gardens Industrial Park, Trail, BC. The information and data contained herein represent Northwest Hydraulic Consultants Ltd. best professional judgment in light of the knowledge and information available to Northwest Hydraulic Consultants Ltd. at the time of preparation, and was prepared in accordance with generally accepted engineering practices.

Except as required by law, this report and the information and data contained herein are to be treated as confidential and may be used and relied upon only by Columbia Power Corporation, its officers and employees. Northwest Hydraulic Consultants Ltd. denies any liability whatsoever to other parties who may obtain access to this report for any injury, loss or damage suffered by such parties arising from their use of, or reliance upon, this report or any of its contents.



Attachment 01
DPA Map from Bylaw 1525



**OFFICIAL COMMUNITY PLAN
BYLAW NO. 1410
ELECTORAL AREA 'A'
SCHEDULE '9'
DEVELOPMENT PERMIT AREAS**

Legend

- Administrative Boundary
- Columbia Gardens Aquifer
- Industrial and Columbia Gardens Aquifer DP Area
- Industrial DP Area

Plot Date: November 13, 2013

P:\GIS\RDKB\Map Documents\Area A\OCPL2013

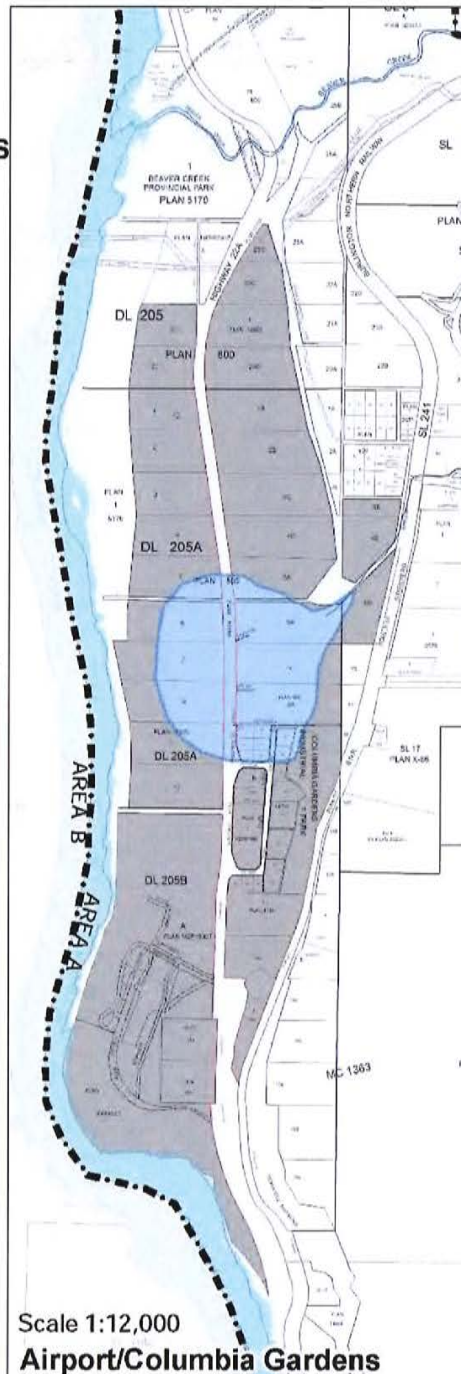
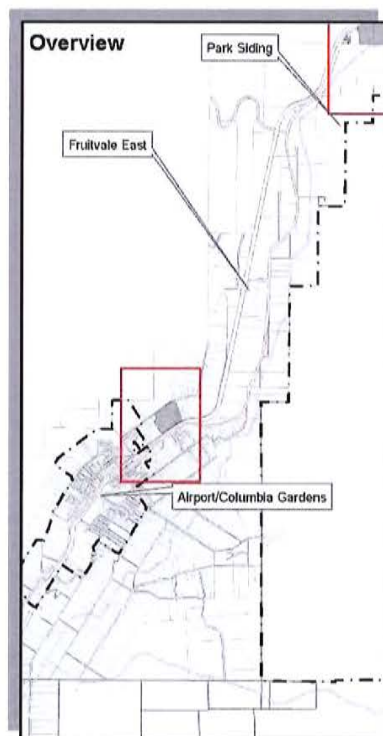


Figure 8. Columbia Garden Aquifer DPA as illustrated in RDKB bylaw 1525.

*Columbia Gardens Industrial Park
Drainage Management Plan*



Attachment 02
Environmental Assessment Office Orders

**IN THE MATTER OF THE ENVIRONMENTAL ASSESSMENT ACT S.B.C. 2002, c.43
(ACT)
AND
NON-COMPLIANCES
WITH ENVIRONMENTAL ASSESSMENT CERTIFICATE E07-04
ORDER UNDER SECTION 34(1)**

WHEREAS:

- A. The Waneta Hydroelectric Expansion Project (Project) is a reviewable project under the *Environmental Assessment Act* (the Act).
- B. Environmental Assessment Certificate E07-04 (Certificate) was issued to Waneta Expansion General Partner Ltd. (Certificate Holder) on November 13, 2007.
- C. Conditions 1 and 16 of the Certificate require that the Certificate Holder implement the Project in an environmentally sensitive manner; restore all site drainage features and facilities, or design and install new facilities; prepare for and respond to accidents and malfunctions; and comply with each and every commitment or requirement in Schedule B to the Certificate to the satisfaction of EAO.
- D. On October 11, 2018 and December 20 and 21, 2018, EAO Compliance and Enforcement conducted site inspections of the Project. Based on observations during those inspections and review of additional information, the undersigned has determined that the Certificate Holder is not compliant with Conditions 1 and 16 of EAC E07-04.
- E. Section 34 of the Act specifies that the Minister may order the Certificate Holder to carry out measures to mitigate the effects of non-compliance.
- F. The undersigned has received written delegation of the Minister's powers under Section 34 of the Act.

DEFINITIONS:

In this Order, "Qualified Professional" means a person who has training, experience and expertise in a discipline relevant to the field of practice set out in this Order, who is registered with the appropriate professional organization in British Columbia, is acting under that organization's code of ethics, and is subject to disciplinary action by that organization.

NOW THEREFORE:

Pursuant to Section 34(1) of the Act, I order that the Certificate Holder must:

1. By September 3, 2019, cause a Qualified Professional to develop and implement an interim Sayward Creek Flow Emergency Response Plan. The Plan must address and fully mitigate the potential for Sayward Creek flows to contribute to or cause flooding of properties within the Columbia Gardens Industrial Park and other lands off the Worksite D3/D4 footprint, until such time as the measures developed under clause 2 of this Order are fully implemented. The Plan must be developed and implemented to the satisfaction of EAO Compliance and Enforcement. A copy of the competed plan must be provided to EAO Compliance and Enforcement upon request;
2. By September 13, 2019, cause a Qualified Professional to develop a Sayward Creek Drainage Management Plan. The Plan must identify measures to fully restore the drainage function of the Sayward Creek alluvial fan or prescribe such other measures that permanently address Project changes to Sayward Creek drainage such that Sayward Creek does not contribute to the flooding of properties in the Columbia Gardens Industrial Park or other lands, to the satisfaction of EAO Compliance and Enforcement. A copy of the competed plan must be provided to EAO Compliance and Enforcement upon request; and
3. The measures prescribed by the Sayward Creek Drainage Management Plan required by clause 2 of this Order must be completed by December 15, 2019, unless otherwise authorized by EAO Compliance and Enforcement, and to the satisfaction of EAO Compliance and Enforcement.



Chris Parks
Director, Compliance and Enforcement
Environmental Assessment Office

Dated July 23, 2019
Order Ref: EN2019-007

**IN THE MATTER OF THE ENVIRONMENTALASSESSMENT ACT,
SBC 2018, c. 51
AND
NON-COMPLIANCES
WITH ENVIRONMENTAL ASSESSMENT CERTIFICATE E07-04
ORDER UNDER SECTION 53(1)**

WHEREAS:

- A. The Waneta Hydroelectric Expansion Project (Project) is a reviewable project under the *Environmental Assessment Act* (the Act).
- B. Environmental Assessment Certificate E07-04 (Certificate) was issued to Waneta Expansion General Partner Ltd. on November 13, 2007. The Certificate was amended on April 10, 2019, naming the Waneta Expansion Power Corporation as the Certificate Holder (Certificate Holder).
- C. Conditions 1 and 16 of the Certificate require that the Certificate Holder implement the Project in an environmentally sensitive manner; restore all site drainage features and facilities, or design and install new facilities; prepare for and respond to accidents and malfunctions; and comply with each and every commitment or requirement in Schedule B to the Certificate to the satisfaction of the Environmental Assessment Office (EAO).
- D. EAO Inspection FY18/19-39 determined that the Certificate Holder is not compliant with Conditions 1 and 16 of the Certificate with respect to Sayward Creek drainage.
- E. On July 23, 2019 the undersigned issued an Order under section 34 of the Act, requiring that the Certificate Holder undertake measures to mitigate the risk of flooding of properties within the Columbia Gardens Industrial Park. As of July 23, 2020, the Certificate Holder has not fully complied with that Order.
- F. EAO Inspection IR2020-0012 has determined that the Certificate Holder is not compliant with Conditions 1 and 16 of the Certificate with respect to Langford Creek drainage.
- G. Section 53(1)(b) of the Act specifies that the Minister may order the Certificate Holder to carry out measures to mitigate the effects of non-compliance.
- H. The undersigned has received written delegation of the Minister's powers under section 53 of the Act.

DEFINITIONS:

In this Order, "Qualified Professional" means a person who has training, experience and expertise in a discipline relevant to the field of practice set out in this Order, who is registered with the appropriate professional organization in British Columbia, is acting under that organization's code of ethics, and is subject to disciplinary action by that organization.

NOW THEREFORE:

Pursuant to Section 53(1) of the Act, I order that the Certificate Holder must, to the satisfaction of EAO Compliance and Enforcement:

1. Cause a Qualified Professional to include consideration of Langford Creek flows and the impact of Project works on Langford Creek drainage in the Drainage Management Plan required by Clause 2 of order EN2019-007, to the satisfaction of EAO Compliance and Enforcement.
2. Provide a draft of the Sayward Drainage Management Plan to EAO Compliance and Enforcement by end of day Friday, August 14th. Update the Drainage Management Plan as directed by EAO Compliance and Enforcement.
3. Implement the updated Drainage Management Plan under the supervision of a Qualified Professional, and to the satisfaction of EAO Compliance and Enforcement.
4. Provide the "pre-development 2010 ground survey, 30 m point spacing" referred to on page 4 of the July 10, 2020 Northwest Hydraulic Consultants Report NHC Reference 3005476 to EAO Compliance and Enforcement by end of day, Friday July 31.



Chris Parks
Director, Compliance and Enforcement
Environmental Assessment Office

Dated July 23, 2020
Order Ref: EN2020-007



Attachment 03
Hydrologic Analysis



1 INTRODUCTION

In March 2017 and April 2018 runoff events from Sayward and Langford creek resulted in an increase in runoff to the Columbia Gardens Industrial Park. In the case of 2017, the water backed up and flooded adjacent industrial properties. Based on observations and reports of the events, it is assumed that peak flow occurred on March 24, 2017 and April 18, 2018. However, regional climate data indicates the 2018 event is likely to have peaked April 16.

Sayward and Langford creek are ephemeral creeks which typically flow only during the spring freshet. The watersheds are characterized by rocky terrain, with terraces of natural forest and pockets of farmland. The watersheds range from an elevation of 480 m to 1400 m. Sayward Creek has a contributing area of 3.1 km² which reaches lot 6A/7A. The north tributary of Langford Creek, which reaches lot 8A, has a contributing area of 2.2 km².

The climatic and hydrologic processes which led to the 2017 and 2018 events were characterized using several regional data sources for temperature, precipitation, and snowmelt. These data sources were used to inform a runoff model and provide historical context to the events.

2 EVENT CHARACTERIZATION

2.1 Temperature

The closest temperature data to the site is at the Warfield Environment Canada and Climate Change (ECCC) climate station, Forests, Lands, Natural Resource Operations (FLNRO) Pendoreille climate station, and Trail Columbia Gardens Airport climate station. The climate stations in relation to the Sayward Creek and Langford Creek watersheds are shown in Figure 2.1.

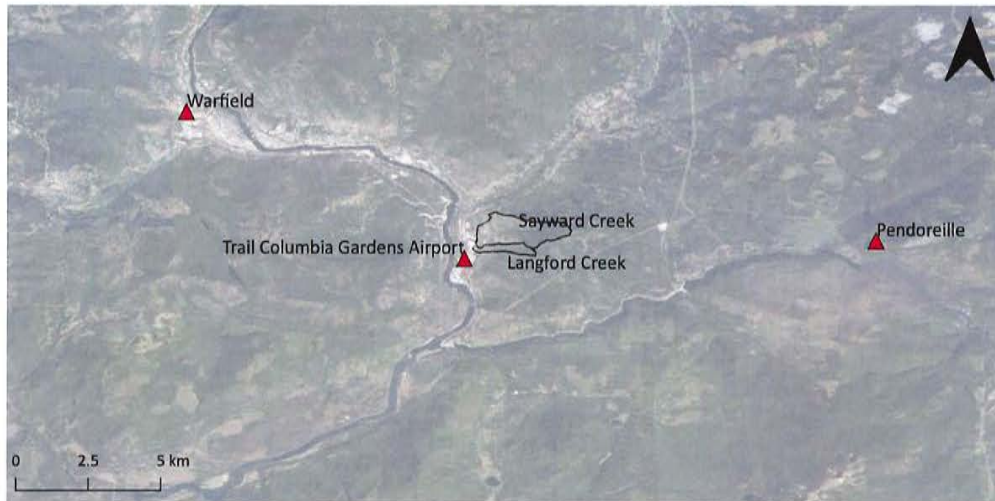


Figure 2.1 Location of Sayward and Langford Creek watersheds and climate stations used in analysis.

In the two weeks prior to both events, mean daily temperatures were reported from these records to be above 0°C (Figure 2.2). Days highlighted in yellow indicate when the 2017 and 2018 event occurred. The grey ribbon indicates daily maximum and minimum temperatures. The two weeks of above freezing temperature was likely also seen at the site, suggesting that snow would have begun to melt or had already melted sufficiently to partially or completely saturate underlying soils.

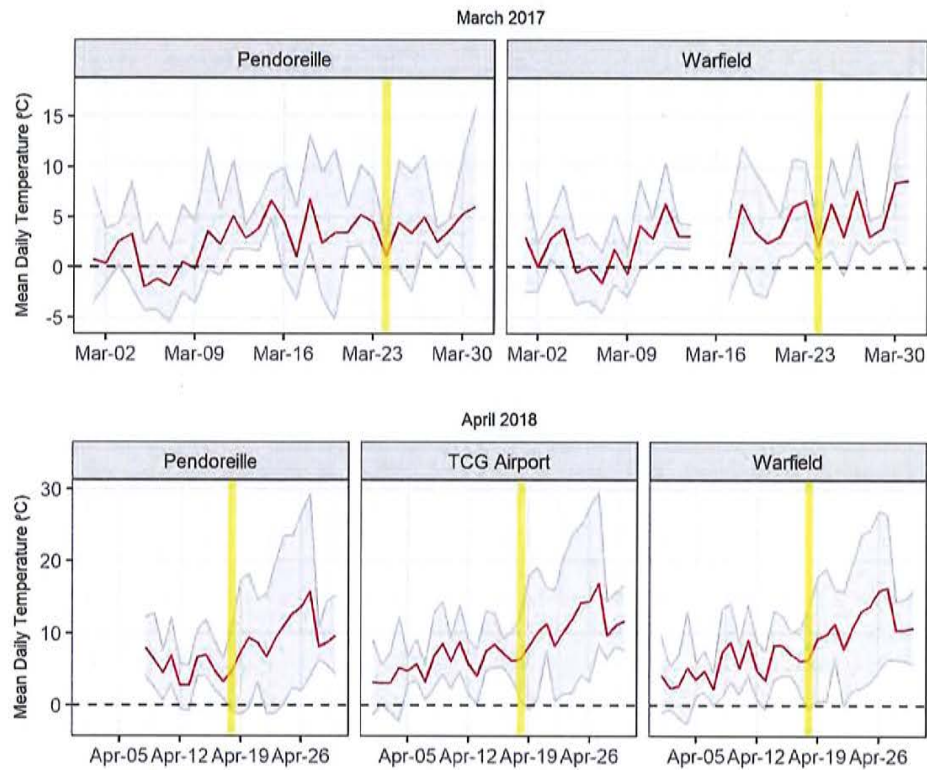


Figure 2.2 Mean daily temperatures (line) and daily minimum and maximums recorded at Pendoreille (FLNRO), Warfield (ECCC), and the Trail Columbia Garden Airport during March 2017 and April 2018.



2.2 Precipitation

The closest precipitation measurements to the site are at the Warfield and Pendoreille climate stations. The daily precipitation records for March 2017 and April 2018 are shown in Figure 2.3. Yellow was again used to highlight the specific events.

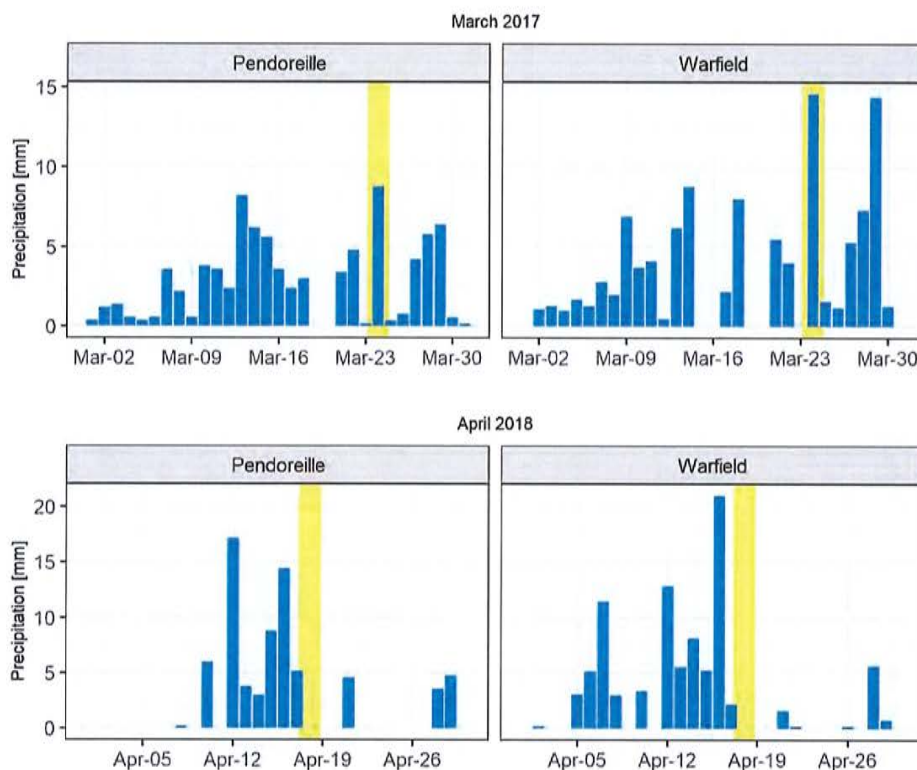


Figure 2.3 Daily precipitation at Pendoreille (FLNDRO) and Warfield (ECCC) climate stations during March 2017 and April 2018.

In 2017, the Warfield climate station recorded 14.6 mm of precipitation on March 24. Pendoreille measured slightly less with 8.8 mm.

No precipitation was recorded at either station on April 18, 2018. However, on April 16th, the Warfield and Pendoreille stations recorded 21 mm and 14.4 mm, respectively. There is some uncertainty surrounding when the peak flows occurred and given the amount of precipitation on April 16th, it is expected that the peak event would have occurred on this day.

Intensity-duration-frequency (IDF) curves, developed from historical rainfall data, are used to relate rainfall intensity and duration with the frequency of occurrence. Existing IDF curves are available at Trail-Birchbank, approximately 10 km from Warfield. The IDF curves from Trail-Birchbank were compared to



the hourly data for both years, shown in Table 2.1. In both cases, the recorded precipitation would have been less than a 2 year event. Although there would be slight differences between the Warfield IDF and Trail-Birchbank IDF curves, within a regional context it is expected that the values would be similar.

Table 2.1 Two Year IDF values for Trail-Birchbank and maximum hourly precipitation records for 2017 and 2018 at Warfield.

Duration	IDF 2 Year Precipitation [mm]	2017 Precipitation [mm]	2018 Precipitation [mm]
1 hour	9.4	1.8	4.8
2 hour	11.9	3.7	7.5
6 hour	17.7	9.4	11.7
12 hour	23.4	14.6	17.6
24 hour	29.2	14.6	21.0

Historic ECCC radar data was reviewed to determine if there was localized, intense precipitation which was not captured by either gauge. This review did not provide conclusive evidence that precipitation at the site was more intense than the local gauges during the study periods. The site is located near the edge of the radar range, which can result in less precipitation being shown as radar returns may be blocked by precipitation closer to radar origin. Figure 2.4 and Figure 2.5, shows example radar images from the 2017 and 2018 event.

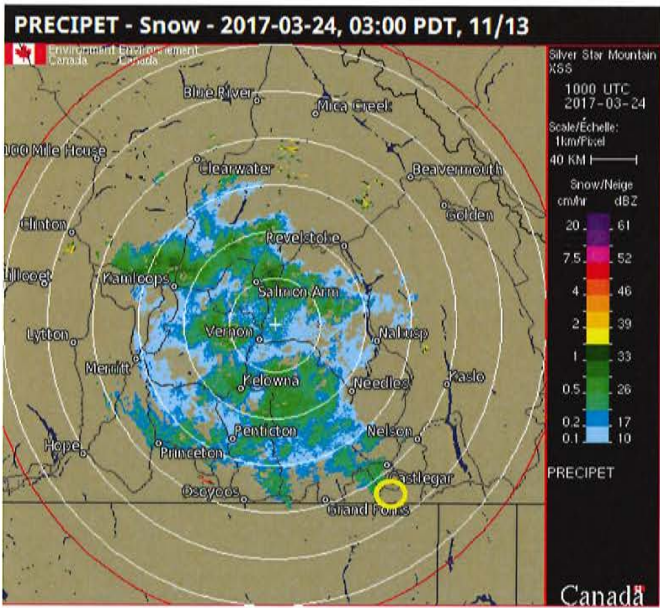


Figure 2.4 Historical radar showing intensity of precipitation on March 24, 2017. Approximate location of Columbia Gardens is shown by the yellow circle.

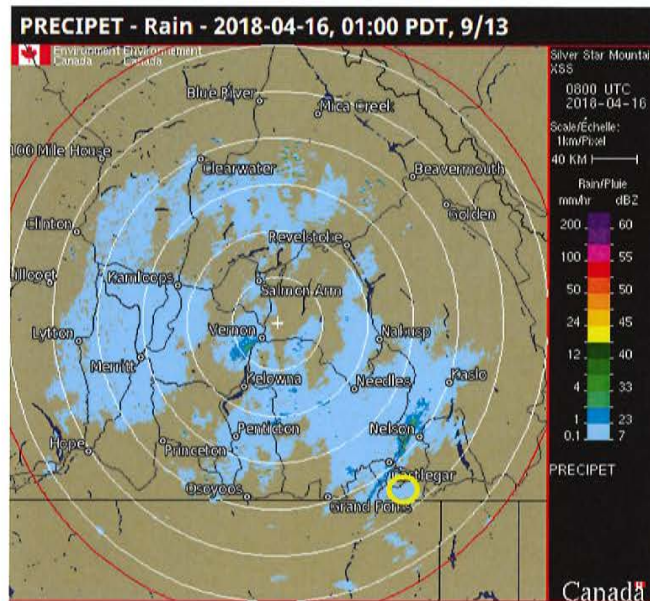


Figure 2.5 Historical radar showing intensity of precipitation on April 16, 2018. Approximate location of Columbia Gardens is shown by the yellow circle.

2.3 Snow Melt

Based on anecdotal accounts, snow was on the ground in both basins leading up to the 2017 and 2018 event. Snowmelt which occurred within the basins was estimated using the Snow Data Assimilation System (SNODAS) data produced by the United States National Operational Hydrologic Remote Sensing Center (NOHRSC). SNODAS is a modelling and assimilation system which estimates snow cover and associated parameters (NOHRSC, 2004). SNODAS calculates the snow water equivalent (SWE) across the contiguous United States and portions of Canada at a 1 km spatial resolution and daily temporal resolution based on energy and mass balance snow models which assimilate satellite derived data and ground observations. Figure 2.6 shows a snapshot of the gridded SWE data over the Sayward basin for March 22, 2017.

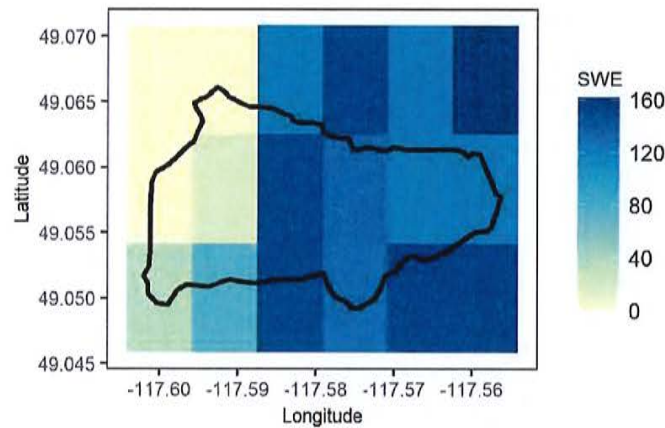


Figure 2.6 SNODAS SWE [mm] for the Sayward catchment on March 23, 2017.

The SNODAS SWE estimates for the days prior to and after the 2017 and 2018 event were obtained from NOHRSC. Figure 2.7 shows the daily basin averaged SWE values determined for the Sayward and Langford basin for 2017 and 2018.

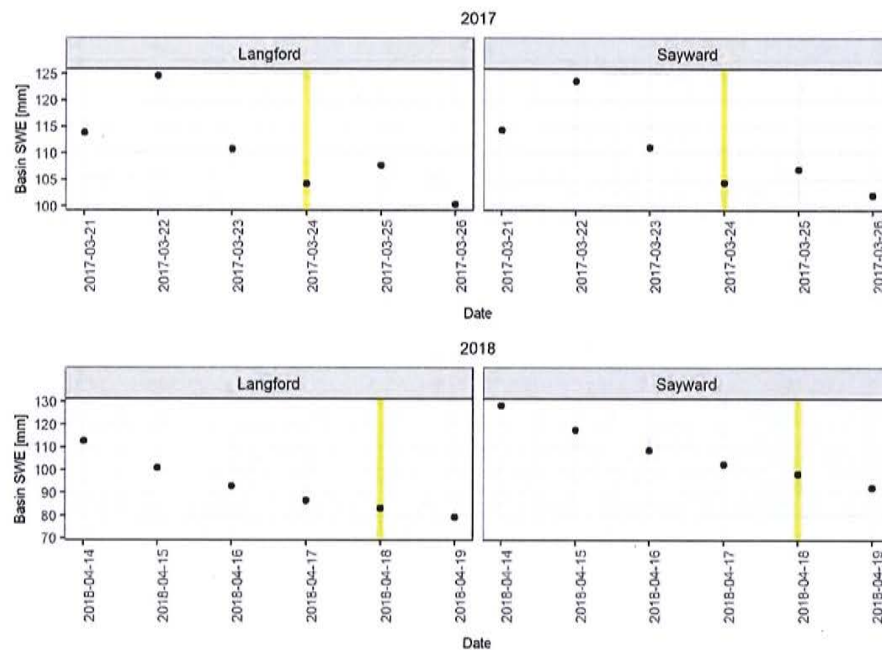


Figure 2.7 Basin averaged SWE from SNODAS data in 2017 and 2018. Days highlighted in yellow indicate when the 2017 and 2018 event occurred; however, it is expected that the peak event occurred on April 16, 2018 based on precipitation data.



Based on the SNODAS SWE estimates, 20 mm of melt occurred in the two days leading up to the March 24, 2017 event and 17 mm of melt occurred in the two days prior to April 16, 2018 event. The melt preceding the 2017 event was verified using the snow on ground observations from the Warfield ECCC station. Snow on ground was not recorded during 2018 at Warfield ECCC, therefore the melt values could not be verified for the 2018 event.

2.4 Model

Peak flows for the 2017 and 2018 events were estimated using the modified rational method (MRM) (Poertner, 1974). The modified rational method (MRM) is an extension of the rational method (Kuichling, 1889; Mulvaney, 1850) which is used to determine peak flows based on drainage area, rainfall intensity, and a coefficient that represents hydrograph abstractions and attenuation. The rational method traditionally takes the form:

$$Q = CiA$$

where Q is the peak discharge, C is the runoff coefficient, i is the rainfall intensity, and A is the drainage area. The MRM extends the idea of the rational method to form simple triangular hydrographs, where the peak flow is estimated by the rational method. The modified rational method can be used for non-uniform rainfall intensities with time (hyetographs), where the resultant hydrograph is a sum of the individual triangular hydrographs for each unique rainfall intensity. Like the rational method, the MRM is best used for applications estimating peak flows. Although more detailed hydrological models exist, they were deemed inappropriate in this context given the lack of local data to support inputs and parameter calibration and validation.

To incorporate snowmelt into the MRM model, the daily snowmelt values obtained from SNODAS were added to daily precipitation measured at the ECCC Warfield station. It was assumed that the daily snowmelt occurred at a constant rate spread over 24 hours. The combined snowmelt and precipitation was used as the input hyetograph for the MRM. Time of concentration was calculated based on the Hathway formula (BC MOT, 2007). A C value of 0.40 was assumed based on calibration to discharge measurements which were taken by CPC in 2020.

Model simulation of the 2020 data is shown in Figure 2.8. Based on this model verification simulation, the model appears to underestimate flows in the Langford basin as the SNODAS data shows that most snow had melted by the time peak flows were observed in 2020. The model could not be verified for Sayward Creek at lot 6A/7A based on the 2020 event, since no flow reached the site in 2020. The model was therefore compared with flow measurements taken at the Columbia Gardens Road crossing 1 km upstream. In contrast, Langford Creek measurements from the culvert entering lot 8A pond were used for comparison with model results for 2020. There is uncertainty associated with the SNODAS data however, local observations are not available to force the model. Additionally, the MRM is best suited for peak flows; therefore, it is not expected that the model would perform well for the moderate flows observed in 2020.

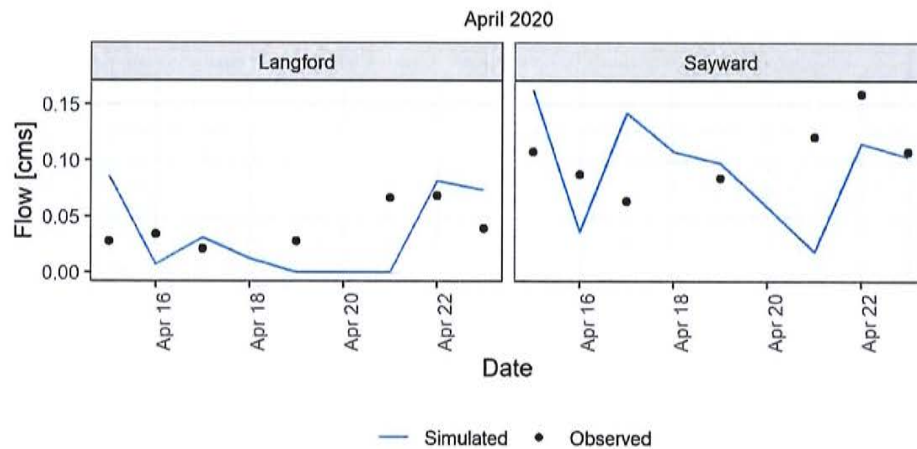


Figure 2.8 Verification of model using 2020 flows. Langford flows are based on measurements at Langford 8A pond culvert and Sayward flows are based on measurements at Sayward Station Road culvert.

In addition to model verification using the 2020 observed flows, a sensitivity analysis was conducted for the time of concentration and runoff coefficient (C). Time of concentration was varied between 1 to 3 hours and the runoff coefficient, was varied between 0.3 and 0.5. The model was more sensitive to the runoff coefficient with these values providing the high and low extremes of the sensitivity analysis. Hydrographs of the daily flows are shown in Figure 2.9 with the uncertainty bounds based on the sensitivity analysis.

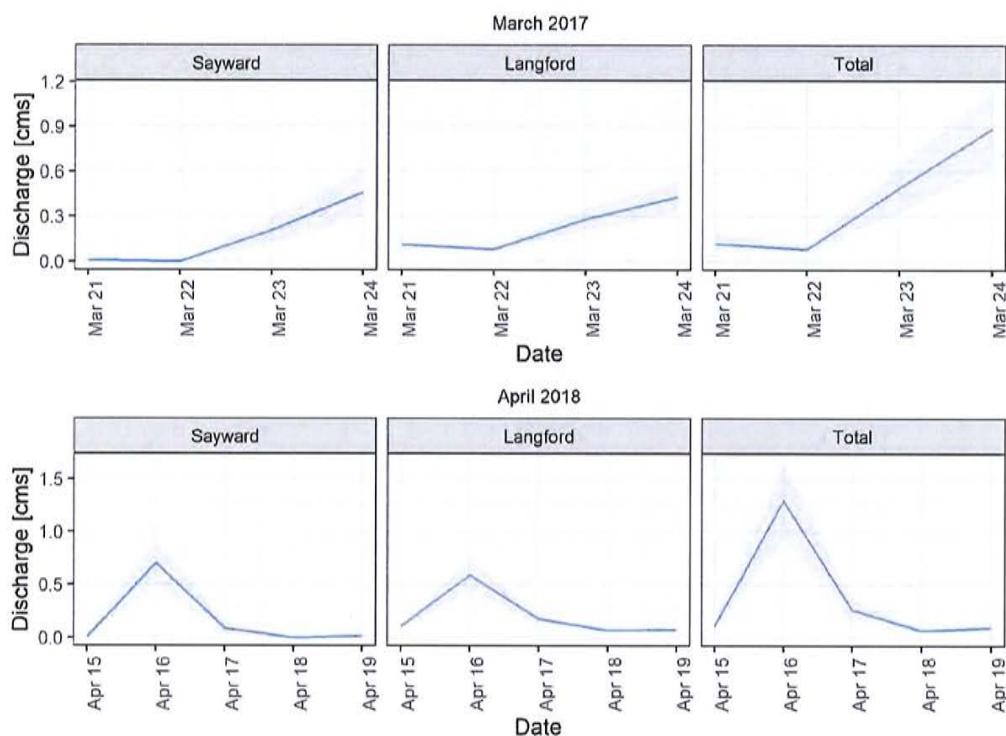


Figure 2.9 Hydrographs developed using the modified rational method for March 2017 and April 2018 events.

Significant infiltration occurs on Sayward Creek prior to the creek reaching the site. In 2020, a peak flow of $0.15 \text{ m}^3/\text{s}$ was measured at the Columbia Gardens Road (1 km upstream of lot 6A) and no flow was observed at site (lot 6A). The water table is reported to be well below grade (27 m as per Golder Associates, 2010) at site and therefore it is expected that antecedent infiltration is unlikely to impact infiltration. Similar or greater infiltration is expected to have occurred in 2017 and 2018. As a result, calculated Sayward Creek flows are reduced by $0.15 \text{ m}^3/\text{s}$ when presented as flows reaching the site.

3 FREQUENCY ANALYSIS

Initially, a frequency analysis using the flow record from one gauge (Anderson Creek) was used to determine the return period of flows from the hydrological model. This frequency analysis has since been updated to include four regional gauges. The four regional gauges are located within 100 km of the project location and all have long term records (greater than 22 years of data) and relatively small drainage areas ($< 30 \text{ km}^2$). The gauges are summarized in Table 3.1. None of the gauges are ephemeral, like Sayward and Langford creek, and therefore may be biased towards higher flows.

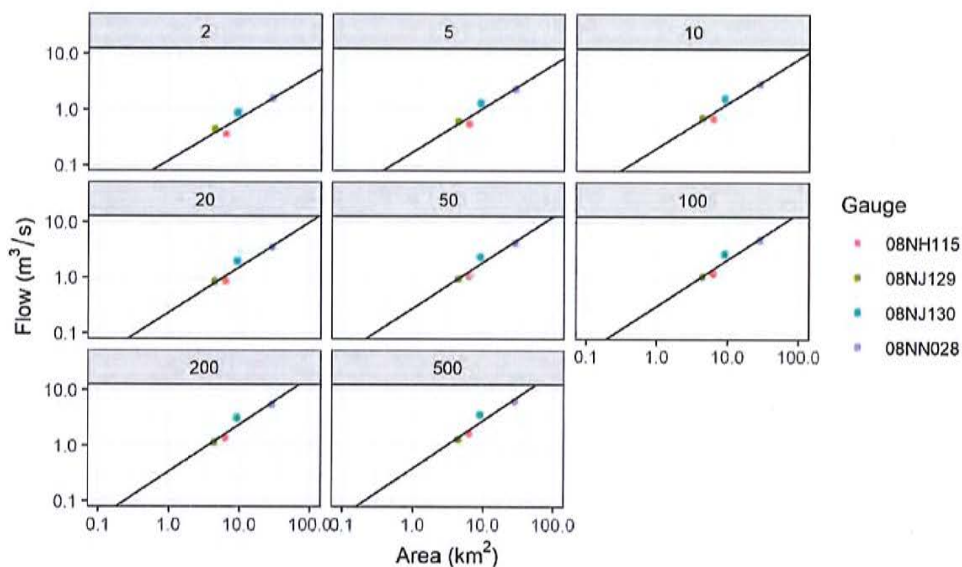
**Table 3.1** Summary of gauges used in frequency analysis.

Gauge ID	Station Name	Drainage Area (km ²)	Peak Record Length (Years)	Distance to Project Location (km)
08NH115	Sullivan Creek near Canyon	6.22	58	85
08NJ129	Fell Creek near Nelson	4.4	37	55
08NJ130	Anderson Creek near Nelson	9.07	59	55
08NN028	Lost Horse Creek near Christian Valley	28.5	22	97

For each gauge, a log-Pearson type III distribution was fit to the annual daily peaks. A power model was fit to the regional data of the form:

$$Q = a * A^b$$

Where Q is the peak flow estimate, A is the catchment area, and a and b are fitted coefficients. Figure 3.1 shows the resultant models for return periods from the 2-year to 500-year.

**Figure 3.1** Fitted models to the four regional gauges (daily peak flow to watershed area for range of average return periods).

The power models were used to estimate flood peaks for Sayward (3.1 km²) and Langford Creek (2.2 km²). Results for Sayward Creek and Langford Creek are shown in Table 3.2 and Table 3.3, respectively. The initial frequency analysis using only Anderson Creek is provided for comparison.

**Table 3.2** Frequency analysis for Sayward Creek peak daily flow (m³/s).

Return Period	Single Gauge (Anderson Creek)	Revised Regional Analysis (4 gauges)
2	0.35	0.30
5	0.55	0.43
10	0.71	0.52
20	0.88	0.61
50	1.15	0.73
100	1.39	0.82
200	1.67	0.91
500	2.10	1.38

Table 3.3 Frequency analysis for Langford Creek peak daily flow (m³/s).

Return Period	Single Gauge (Anderson Creek)	Revised Regional Analysis (4 gauges)
2	0.27	0.23
5	0.42	0.33
10	0.54	0.40
20	0.67	0.46
50	0.87	0.55
100	1.06	0.62
200	1.27	0.68
500	1.60	1.04

In general, the revised analysis using multiple gauges lowered the peak flows as Anderson Creek tends to provide a slightly higher unit area peak flow than the other gauges (particularly for the more extreme events).

4 HISTORICAL CONTEXT

The peak flows from the hydrologic model were quantified based on results from the frequency analysis (Table 3.2 and Table 3.3), as shown in Table 4.1. For each event the lower, mid, and high uncertainty bounds have been included. The low uncertainty bound relates to the lower runoff coefficient whereas the higher uncertainty bound relates to the higher runoff coefficient used in the sensitivity analysis. The runoff coefficient is related to the amount of runoff to the amount of precipitation received. Higher values could be associated with an event with initially saturated conditions, producing more runoff. The values shown in the table are presented prior to incorporating the infiltration loss observed in the lower 1 km of Sayward Creek.



Table 4.1 2017 and 2018 peak daily flow estimates and approximate average return periods.

Event	Location	Estimate	Peak Flow (m ³ /s)	Return Period
2017	Sayward	Low	0.46	6 Year
		Mid	0.61	20 Year
		High	0.76	65 Year
	Langford	Low	0.32	5 Year
		Mid	0.43	15 Year
		High	0.53	45 Year
2018	Sayward	Low	0.64	25 Year
		Mid	0.86	150 Year
		High	1.07	300 Year
	Langford	Low	0.44	15 Year
		Mid	0.59	80 Year
		High	0.74	250 Year

The range flows computed within the frequency analysis is quite low when compared to the model uncertainty. For example, for Langford Creek there is only a 0.35 m³/s difference between the 5-year peak flow and 200-year peak flow. This range of flow is similar to the uncertainty range computed by the model for the 2018 event. Without additional observational data, it is difficult to reduce the uncertainty in the model. Developing a more complex model with the data available would also not reduce uncertainty in the model results.

To better understand the event, an analysis of historical snowmelt and precipitation was undertaken to determine how frequent or infrequent climatic conditions occur which led to events experienced in 2017 and 2018. The analysis of regional climate data indicated that in both 2017 and 2018, a period of warming occurred which led to snowmelt and a rain-on-snow event. In both years, approximately 20 mm of melt occurred over a two day period as a result of the rain and warming temperatures. Furthermore anecdotal observations stated that snow was present throughout the events for most of the watershed (not just higher elevations).

The Warfield climate station was used to undertake the climate analysis. Snow water equivalent is not directly measured at the climate station; however, snow on ground was converted to SWE based on an assumed constant snow density of 200 kg/m³. To account for other sources of snow loss, aside from melt (e.g. blowing snow or sublimation), a decrease in SWE when the maximum daily temperature was less than -1°C was not considered melt. Snow on ground data is available at the climate station from 1980 to present day, with some periods of missing data.

The initial analysis looked at how many other historical events had occurred with the following criteria:

- Snow recorded on the ground
- Cumulative two day melt greater than or equal to 20 mm
- Daily precipitation greater than 5 mm

Since 1980, 13 days have occurred where these criteria have been met, as shown in Figure 4.1. When grouping consecutive days as a single event, similar climatic events have occurred ten times since 1980.

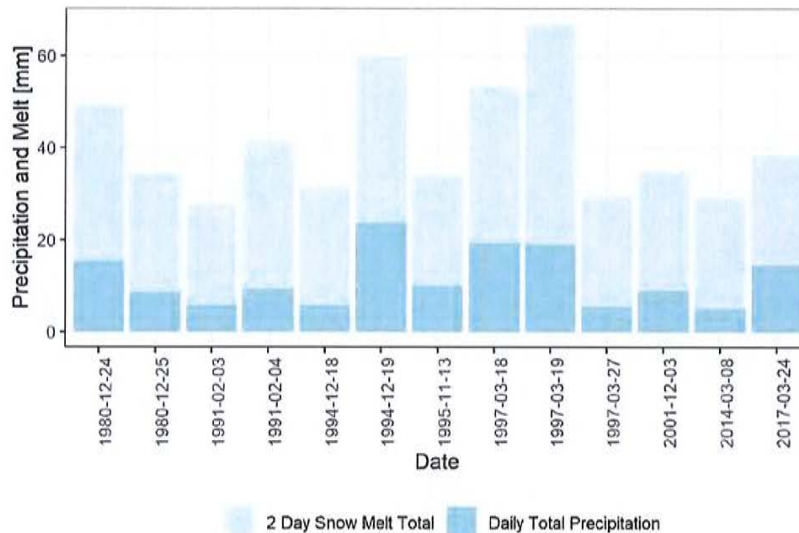


Figure 4.1 Days with daily total precipitation greater than 5 mm and cumulative two day snowmelt greater than 20 mm.

Additionally, the two day cumulative melt values recorded at the Warfield Environment Canada station were checked to determine how frequent 20 mm of melt over a two day period is. A histogram of the cumulative two day melt recorded at Warfield station is shown in Figure 4.2. Of the 905 days with recorded melt, 9% of these have two day cumulative melt values greater than or equal to 20 mm.

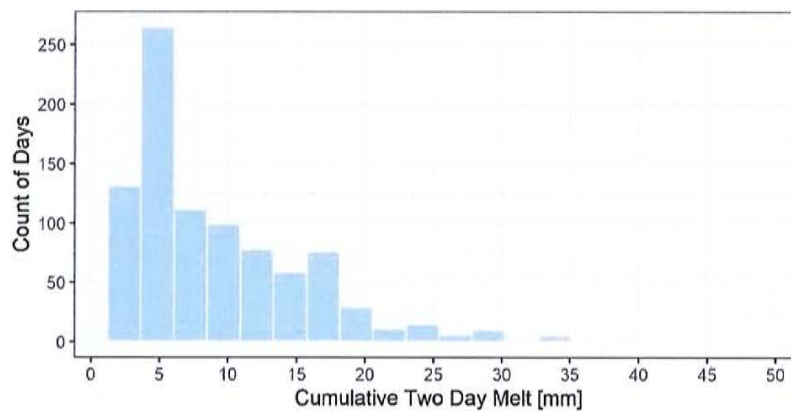


Figure 4.2 Cumulative two day melt recorded at Warfield ECCC.

The analysis of this climate data does not indicate that the 2017 and 2018 events were extreme. However, there are many limitations including a lack of accounting for antecedent conditions and local differences in precipitation, snow accumulation, and melt.



Other information collected from site includes signs of significant erosion of the creek banks (Figure 4.3). Additionally, a report¹ from the 2017 event, states that upstream property owners (Mr. and Mrs. Green who reside on the “upper most driveway east of Station Road”) were reported to have said that they had never seen flows as high as the 2017 March event in the 20-years that they resided at that location (with the second highest flow occurring 10 years earlier). Downstream flooding occurred in 2017 but not in 2018.



Figure 4.3 Photos of erosion and overland flow on the Green property east of Station Road (Forbes & Boyer, 2017 March 27).

5 CONCLUSION

Considering the following evidence:

- Two weeks of above freezing temperature prior to the 2017 and 2018 events, suggesting saturated snow and ground conditions
- Anecdotal accounts of extreme flows upstream (“greatest in 20-years”) for the 2017 event.
- Anecdotal accounts that snow covered most if not all of the watershed at the time of the event.
- Lack of evidence of past flood events at lots 6A, 7A, and 8A prior or post development.
- Extensive flooding of the Columbia Gardens industrial park.

it appears likely that the 2017 flood event was likely on the high end of the range of calculated values for peak daily flow; that is, the 2017 was an extreme event. The high values (Q) are shown below

▪ 2017		
Sayward Cr. without infiltration:	Q=0.76 m³/s	65-yr
Sayward Cr. at lot 6A (w/ infiltr.):	Q=0.61 m³/s	
Langford Cr. at lot 8A:	Q=0.53 m³/s	45-yr

There is less evidence to suggest the 2018 was as extreme; there was no report of upstream erosion and flooding, and no flooding of the Columbia Gardens industrial park (early 2018 earthworks on lot 8A is

¹ Report by Kate Forbes, P.Ag. and Dwain Boyer, P.Eng. to the Regional District of Kootenay Boundary



expected to also have reduced the extent of flooding). This suggests the event was less than or equal to the 2017 flood. The 2018 flood was therefore estimated based on the low value from the range of hydrologic model results.

▪ 2018

Sayward Cr. without infiltration:	Q=0.64 m ³ /s	25-yr
Sayward Cr. at lot 6A (w/ infilt.):	Q=0.49 m ³ /s	
Langford Cr. at lot 8A:	Q=0.44 m ³ /s	15-yr

6 REFERENCES

BC MOT (2007). *BC Supplement to TAC Geometric Design Guide, 2007 Edition*. BC Ministry of Transportation.

Golder Associates (2010). *Drilling, Construction, Hydraulic Testing, and Water Quality Sampling of New Water Supply Well, Columbia Gardens Industrial Park, Trail, British Columbia. Prepared for Regional District of Kootenay Boundary*. (09-1480-0020–5000).

Kuichling, E. (1889). The relation between the rainfall and the discharge of sewers in populous districts. *Transactions, American Society of Civil Engineers*, 20, 1–56.

Mulvaney, T. (1850). On the use of self-registering rain and flood gauges. *Proceedings of the Institute of Civil Engineers*, Dublin, Ireland, pp. 1–8.

NOHRSC (2004). *Snow Data Assimilation System (SNODAS) Data Products at NSIDC, Version 1*.

Poertner, H. (1974). *Practices in Detention of Urban Stormwater Runoff* (APWA Special Report No. 43). American Public Works Association, Washington D.C.



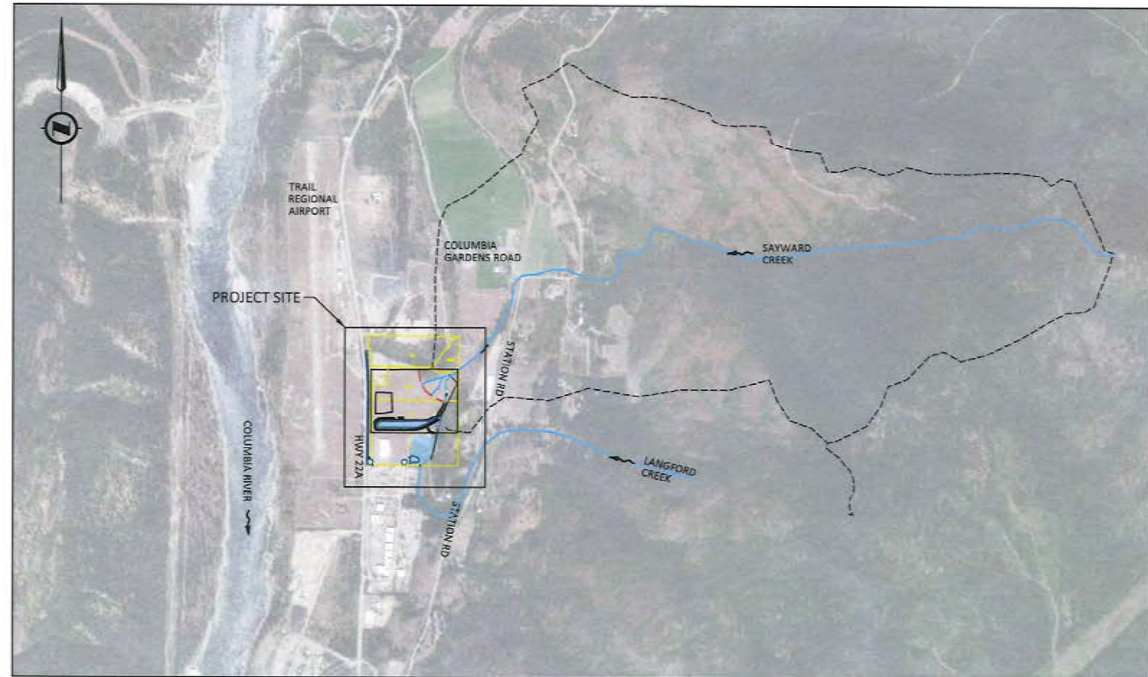
Attachment 04
Drawing of Earthworks

Columbia Gardens Industrial Park
Drainage Management Plan

COLUMBIA POWER CORPORATION

COLUMBIA GARDENS - DRAINAGE MANAGEMENT PLAN

DRAINAGE MANAGEMENT PLAN - DRAWING INDEX		
SHEET NO.	SHEET DESCRIPTION	REVISION
1	DRAWING INDEX, KEY MAP & PROPOSED LAYOUT	C
2	LOT 6A AND 7A PLAN AND PROFILE VIEWS	C
3	SECTION VIEWS	C



PLAN VIEW
1:20000



**COLUMBIA
POWER**

nhc
northwest
hydraulic
consultants

30 Gostick Place
North Vancouver, BC
Canada V7M 3G3
Office: 604.980.6011
Fax: 604.980.9264
www.nhcweb.com

REVISIONS			DRAWING INFORMATION	
A	31 JUL 2020	ISSUED WITH DMP	DATE	7 Jan 2021
B	02 DEC 2020	ISSUED WITH DMP	DESIGNED BY	DWM
C	08 JAN 2021	ISSUED WITH DMP	DRAWN BY	NRA/CZZ
			CHECKED BY	DPM
			SHEET SIZE	B (11" x 17")

**COLUMBIA GARDENS DRAINAGE
DRAINAGE MANAGEMENT PLAN**

DRAINAGE AND FLOOD MITIGATION ACTIONS
SITE PLAN AND DRAWING INDEX

PROJECT NUMBER	3005476
DRAWING NUMBER	3005476-001
SHEET NUMBER	1
REVISION	C



Electoral Area Services (EAS) Committee Staff Report

RE:	Development Permit – West (671-21D)		
Date:	March 11, 2021	File #:	BW-4222-07500.905
To:	Chair Grieve and members of the EAS Committee		
From:	Danielle Patterson, Planner		

Issue Introduction

The Regional District of Kootenay Boundary (RDKB) has received an Alpine Environmentally Sensitive Landscape Reclamation Development Permit application for a property located at Big White Resort (see Attachment 1 – Site Location map).

Property Information	
Owner(s):	Clare West and Darren West
Agent:	Shauna Wizinsky, Weninger Construction & Design
Location:	Strata Lot 61, Feathertop Way (address TBA)
Electoral Area:	Electoral Area E/West Boundary
Legal Description:	Strata Lot 61, Plan KAS3134, District Lot 4222, Similkameen Division of Yale Land District
Area:	493.7 m ² (0.1 ac)
Current Use:	Vacant
Land Use Bylaws	
OCP Bylaw 1125:	Medium Density Residential
Development Permit Area:	Commercial and Multiple Family (DP1) and Alpine Environmentally Sensitive Landscape Reclamation (DP2)
Zoning Bylaw 1166:	Chalet Residential 3 Zone

History / Background Information

The subject property is part of a bare land strata. It is located on Feathertop Way abutting other properties also sharing the Chalet Residential 3 Zone (see Attachment 2 – Subject Property Map). The subject property has a ski-in ski-out access easement.

While the subject property is located in the Commercial and Multiple Family Development Permit Area, the proposal is exempt from requiring a Commercial and Multiple Family Development Permit because it does not include a commercial development or a multi-family dwelling (defined as three or more dwellings on a single parcel of land).

Proposal

The applicant is requesting an Alpine Environmentally Sensitive Landscape Reclamation Development Permit, which is required prior to building the applicant's proposed single detached dwelling (see Attachment 3 – Applicant Submission).

Advisory Planning Commission (APC)

At their March, 2021 meeting, the Electoral Area E/West Boundary-Big White APC reviewed the application and recommended its support with no comment.

Implications

The proposal features a stepped foundation and stacked rock retaining walls on this steep parcel. The applicant stated the naturally steep grade provides the required site drainage. The driveway is planned to be asphalt, with one parking space. The proposal includes a concrete entry pad and hot tub patio, as well as single car garage.

The applicant's landscape reclamation letter states that the subject property was previously cleared of its original vegetation. The applicant intends to utilize the existing topsoil, if any, and bring in additional topsoil as needed.

The ski easement is clear of large plants and the snow storage areas are proposed to only use grass and wildflowers, due to potential vegetation damage from snow compression. Staff recommend the use of "Eco-Green Rapid Cover" for rapid erosion control and have contacted the applicant to comment that wildflower seed mixes should be avoided unless they can ensure they contain only native plants.

The applicant originally proposed the liberal use of Mugho pine shrubs at the front, rear, and sides of the subject property. Based on staff feedback related to the wildfire risk posed by these shrubs, the applicant submitted updated plans that replace all but three Mugho pine shrubs with Shrubby Cinquefoil. The three remaining Mugho Pine shrubs are on the westerly side of the property. The applicant proposes three spruce or fir trees, numerous Karl Forrester feather reeds and barberry shrubs, and plans to liberally apply grass seed and wildflowers around these plantings.

The applicant states they selected vegetation native to the area and appropriate for higher altitudes. The selected plantings will require hand watering for the first few seasons, after which the landscaping should be mostly maintenance free.

Preliminary Plan for Single Detached Dwelling

Based on applicant's proposal, the proposed dwelling has a parcel coverage of 24.3% and a floor area ratio of 0.54, meeting the requirements of the R3 Zone, which allows a maximum parcel coverage and floor area ratio of 50% and 0.8, respectively. The average height of the dwelling is 10.3 m – 1.7 m below the maximum allowable height. The side yard setback on the east side of the property is 2.99 m – 0.01 m below the requirement of the R3 Zone and two parking spaces, as required, are provided. Approval of an Alpine Environmentally Sensitive Landscape Reclamation Development Permit does not include

approval of the building design, which must meet zoning building regulations at the building permit stage.

Recommendation

That the staff report regarding the Alpine Environmentally Sensitive Landscape Reclamation Development Permit application submitted by Shauna Wizinsky of Weninger Construction & Design, on behalf of Clare West and Darren West for the parcel legally described as Strata Lot 61, Plan KAS3134, District Lot 4222, Similkameen Division of Yale Land District, Big White, Electoral Area 'E'/West Boundary, be received.

Attachments

1. Site Location Map
2. Subject Property Map
3. Applicant Submission



Date: 2021-02-16

Site Location Map

Strata Lot 61, Plan KAS3134,
District Lot 4222,
Similkameen Div of Yale Land District



0 150 300 450

Meters

1:15,000



202-843 Rossland Ave, Trail BC V1R 4S8 | T: 250.368.9148 | T/F: 1.800.355.7352 | rdkb.com

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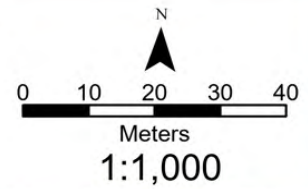


Regional District of
Kootenay Boundary

Date: 2021-02-16

Subject Property Map

Strata Lot 61, Plan KAS3134,
District Lot 4222,
Similkameen Div of Yale Land District



202-843 Rossland Ave, Trail BC V1R 4S8 | T: 250.368.9148 | T/F: 1.800.355.7352 | rdkb.com

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Statements regarding requests for variance(s)	<input type="checkbox"/>	<p>A clear statement identifying which regulation within the Zoning Bylaw is proposed to be varied (Example: rear parcel line setback variance of 1.5m - from 4m to 2.5m). A narrative which describes if the proposed variance would:</p> <ul style="list-style-type: none"> • Resolve a hardship • Improve development • Cause negative impacts to neighbouring properties
Site Survey	<input type="checkbox"/>	<p>If the Regional District believes it to be necessary for the property boundaries and the location of improvements thereon to be more accurately defined due to uncertainty over natural boundaries of watercourses or other reasons, a sketch prepared by a British Columbia Land Surveyor may be required. The voluntary submission of such a sketch may prevent a possible delay in processing the application.</p>

The space below is provided to describe the proposed development. Additional pages may be attached.

New Construction. Single Family Dwelling



January 21, 2021

RE: Development Application for Lot 61, Strata KAS 3134, DL 4222 SDYD

To Whom It May Concern,

The proposed dwelling is situated on an undeveloped parcel which was previously cleared of vegetation.

The proposed landscaping scheme focuses on sustainability, consideration of fire protection, and species selection to an alpine moderate to high altitude. The vegetation that will be planted on the site is exclusively composed of species that grow naturally in the area and are accustomed to high altitudes. Because of this, maintenance of this vegetation will only be required for the first few years until it is firmly established. The necessary maintenance is minimal and only includes watering by hand as necessary. This maintenance will be completed by the owner. After the vegetation has established on the site, no further maintenance will be required.

Every effort will be made to use the existing topsoil, however we have not yet determined if there is enough topsoil remaining on the site after the road construction to suffice for our proposed vegetation. If more is required, then we will bring it in.

This site does have a drop to it, but because we are working with the natural incline there will be no drainage required. Excavated areas will receive a rock retaining wall as required by grade to stop topsoil loss, we expect both sides of the building will require retaining walls. Retaining walls planned are large stacked rocks, which we will stack to a maximum height of 4'. Depending on final site grading, a second wall stacked at an approximate distance of 6' from the first may be required. The intention of stacking the large rocks is to stabilize the bank and when final grading is complete we will determine if one, two, or three walls are needed on each side of the building.

The stepped foundation will allow for variation in grading on site, and help manage/prevent sharp drops in grade. Plants and grass/wildflower seeds on the sides of the building will also help to stabilize the slopes.

The selection of plants, as indicated on the enclosed plans, have been chosen to respect the short growing season. The proposed building will fill much of the envelope so the landscaping design includes the side areas, leaving the ski easement clear of large plants.

As the annual snowfall can be heavy, the designated snow storage areas are generally clear of plants that could be damaged and crushed by the weight of cleared snow. Snow storage areas are to be covered with top soil and seed spread only.

The landscaping scheme planting arrangement is finished by site coverage of liberal seeding of native grass and wildflowers.

Sincerely,


Shauna Wizinsky, Project Manager
 Weninger Construction & Design Ltd

DESIGN ~ CONSTRUCT ~ DEVELOP

info@weningerconstruction.com

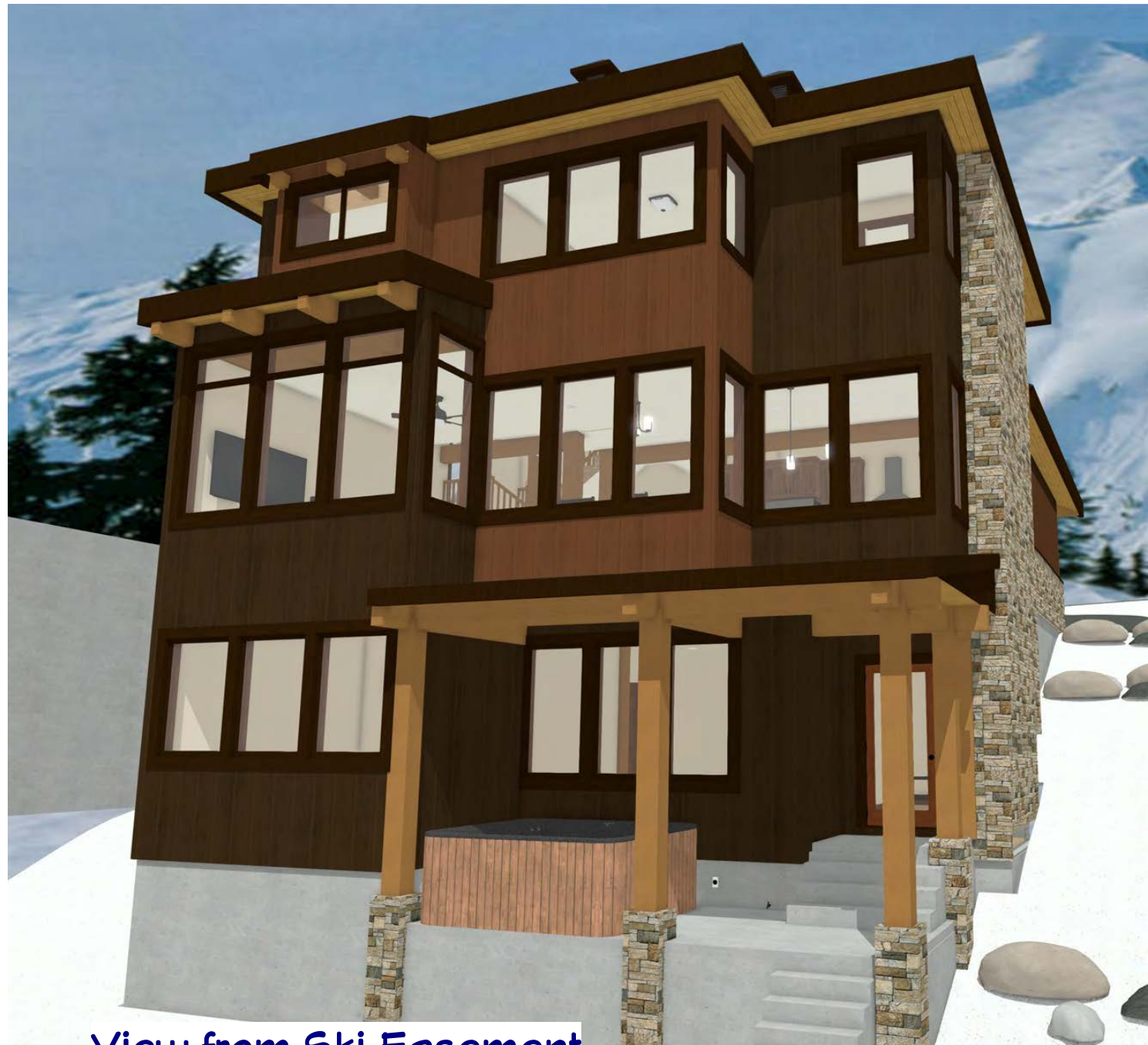
(250)765-6898

Fax(250)765-6078

#10 - 220 Neave Road, Kelowna, BC V1V 2L9



Front View



View from Ski Easement

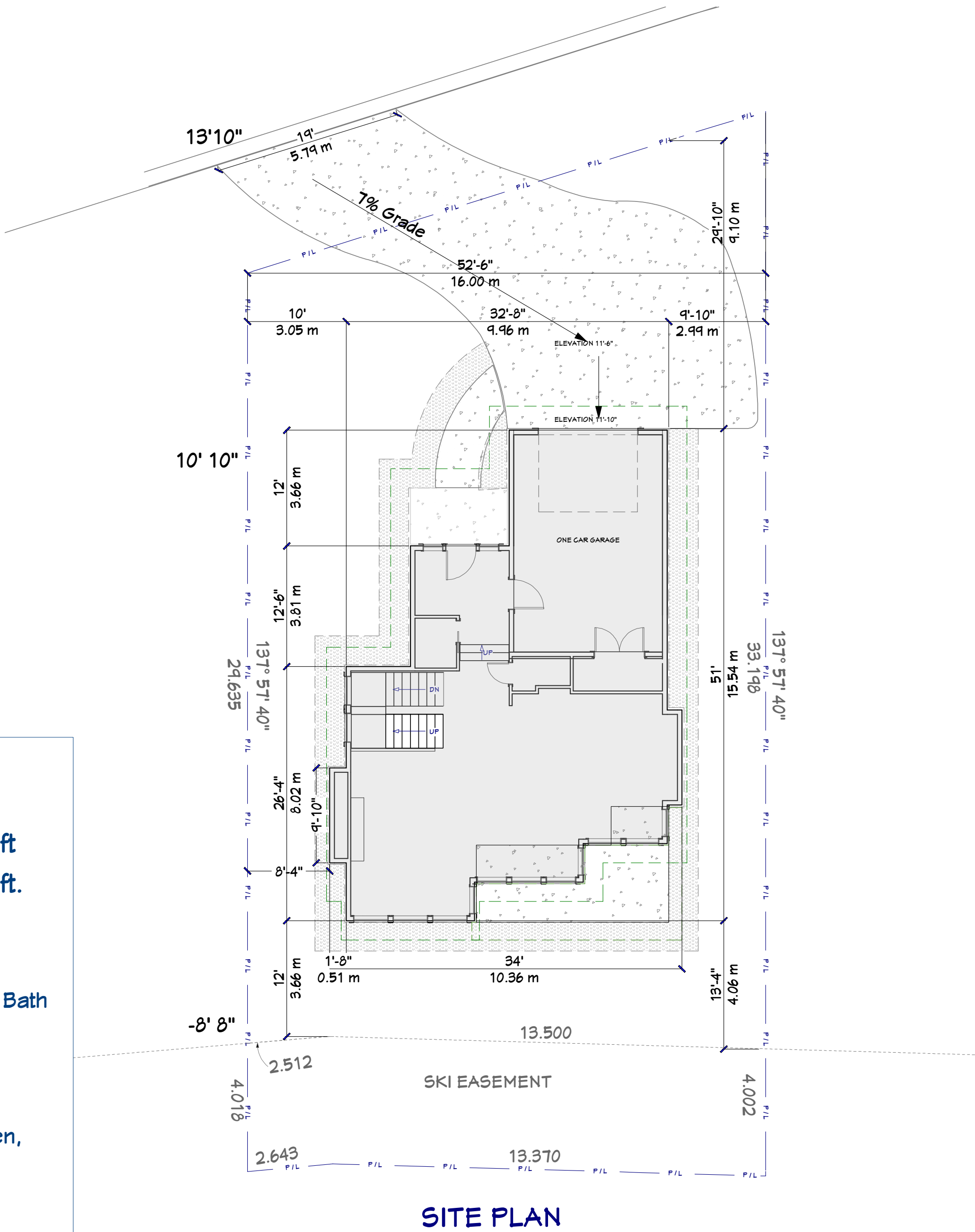


Front View 2

Layout Page Table	
Number	Title
1	SITE PLOT PLAN
2	FOUNDATION & BASEMENT FLOOR PLAN
3	MAIN & TOP FLOOR PLAN
4	ELEVATIONS
5	CROSS SECTIONS, DETAILS, & ASSEMBLIES
6	FRAMING & ROOF PLANS
7	ELECTRICAL PLANS
8	EXTERIOR FINISHES
9	LANDSCAPE PLAN

Total Interior Space: 2,999 sq.ft.
Plus
Garage: 362 sq.ft.
Exterior Covered Area: 179 sq.ft.

Lower Floor 1,212 sq.ft.
Bootroom, Family Room, Games Room, Laundry, Bath
3, Bunk Room, and Utility
Plus Covered Hot Tub Deck
Main Floor 929 sq.ft.
Entry, Powder Room, Hall, Closet, Storage, Kitchen,
Dining, and Living Room
Plus Garage
Top Floor 858 sq.ft.
2 Bedrooms, 1 Bathroom, and Master Suite with
Bedroom, Office, and Ensuite



SITE PLAN

FLOOR AREA RATIO 0.54
Parcel Size: 494.2 m. sq. or 5,320 sq.ft.

Gross Floor Area: 2,871 sq.ft.
1st floor: 722 sq.ft. above ground
(1,212 sq.ft. total 40% underground)
Main Floor: 1,291 sq.ft. above ground, including garage
Top Floor: 858 sq.ft. above ground

PARCEL COVERAGE 24.3%
Parcel Size: 5,320 sq.ft.
Building Footprint: 1,292 sq.ft.

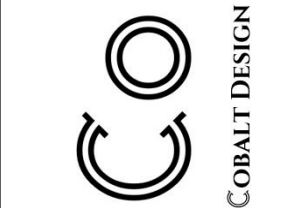
DEVELOPMENT PERMIT SET - NOT FOR CONSTRUCTION

REVISION TABLE	
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85	May 18, 2021
86	May 18, 2021
87	May 18, 2021
88	May 18, 2021
89	May 18, 2021
90	May 18, 2021
91	May 18, 2021
92	May 18, 2021
93	May 18, 2021
94	May 18, 2021
95	May 18, 2021
96	May 18, 2021
97	May 18, 2021
98	May 18, 2021
99	May 18, 2021
100	May 18, 2021

554 Feathertop Way,
Big White, BC
Lot 61, Plan KAS 3134, DL 4222
Marlin Meninger
Shauna Mizinsky
Weninger Construction & Design Ltd.
#10-220 NEAVE RD
Kelowna, BC V1V 2L4
Tel: (250) 765-6648 Fax: (250) 765-6078

WEST CHALET
LOT 61 FEATHERTOP
SITE PLAN

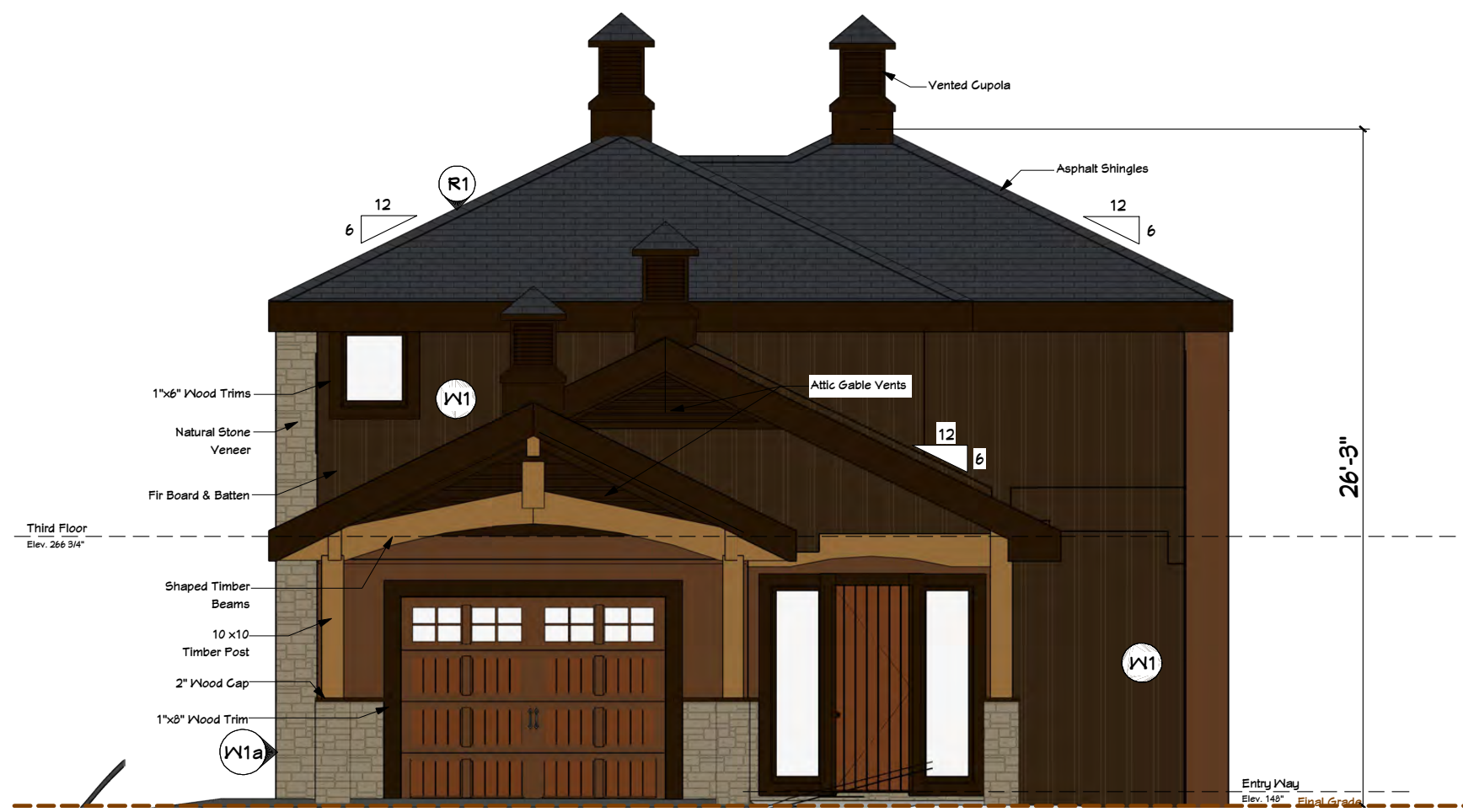
PROJECT
TITLE



DATE:
21/01/2021

SCALE:
1/4" = 1' 0"

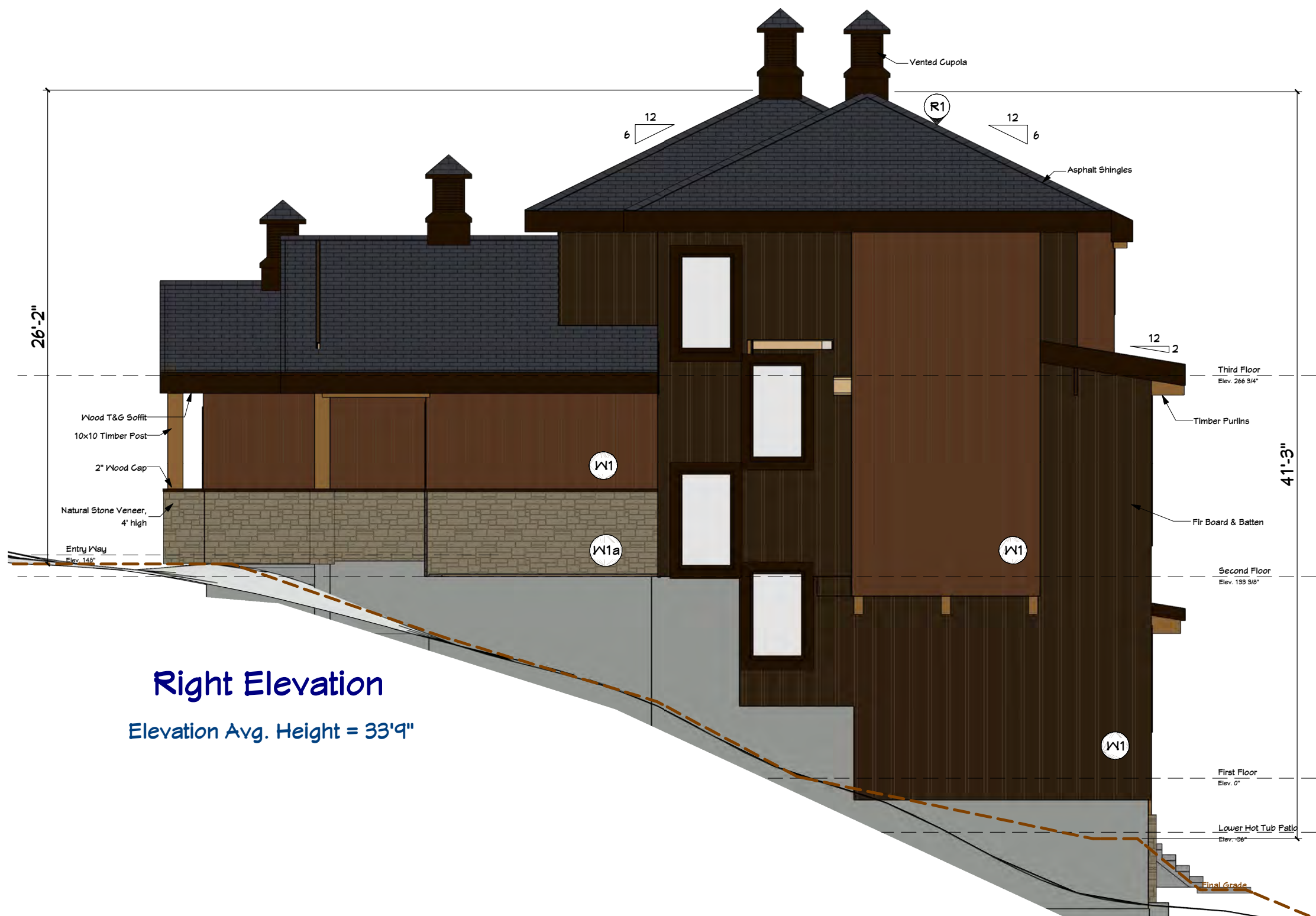
SHEET:
1



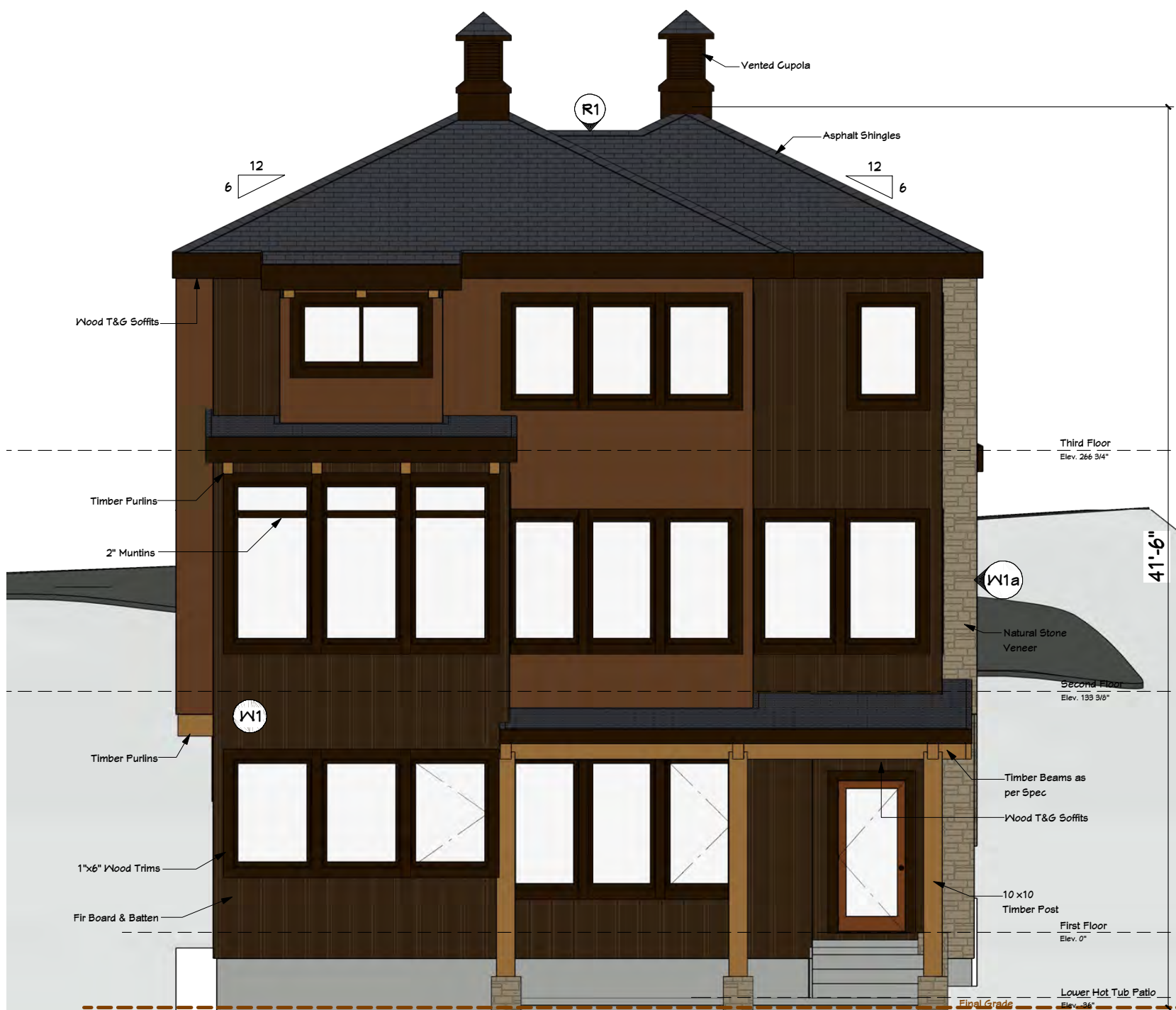
Front Elevation
Elevation Avg. Height = 26'3"



Left Elevation
Elevation Avg. Height = 33'9"



Right Elevation
Elevation Avg. Height = 33'9"



Rear Elevation
Elevation Avg. Height = 41'6"

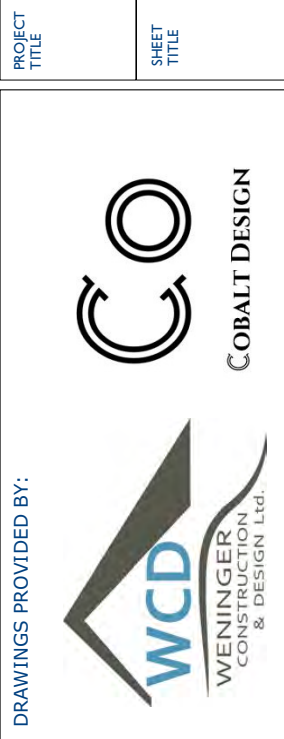
AVG. BUILDING HEIGHT:
33' 9 3/4" OR 10.3 m

DEVELOPMENT PERMIT SET - NOT FOR CONSTRUCTION

REVISION TABLE	
NUMBER	DATE
1	Jan 21, 2021

554 Feathertop Way,
Big White, BC
Lot 61, Plan KAS 9194, DL 4222
Marlin Meninger
Shauna Mitzinsky
Meninger Construction & Design Ltd.
#10-220 NEAVE RD
Kelowna, BC V1Y 2L4
Tel: (250) 765-6648 Fax: (250) 765-6678

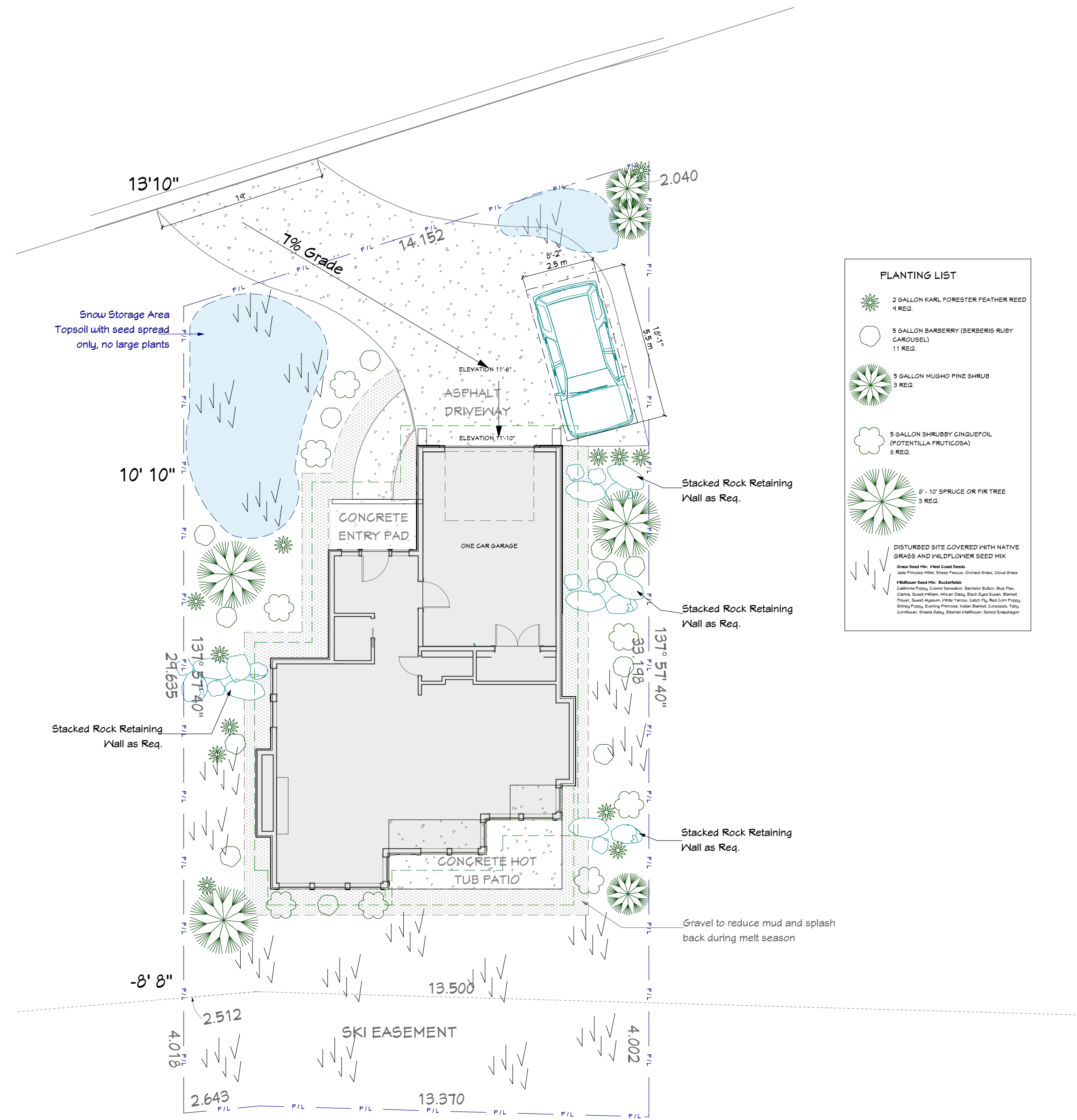
WEST CHALET
LOT 61 FEATHERTOP
ELEVATIONS



DATE:
21/01/2021

SCALE:
3/16" = 1' 0"

SHEET:
4




LANDSCAPE PLAN


REVISION TABLE	
NUMBER	DATE DESCRIPTION
1	Jan 21 2021 MW & SW DP Set
2	Jan 22 2021 MW & SW REV 1
3	Jan 26 2021 MW&SW PERMIT SET
4	Feb 12 2021 MW&SW SCHEDULE A

<p>554 Feathertop Way, Big White, BC Lot 61, Plan KAS 3134, DL 4222</p>	<p>PROJECT LOCATION</p>
<p>Marlin Weninger Shauna Wlitzinsky</p>	<p>OWNER</p>
<p>Weninger Construction & Design Ltd. #10-220 NEAVE RD. Kelowna, BC V1V 2L9 Tel: (250) 765-6898 Fax: (250) 765-6070</p>	<p>DESIGNER</p>

PROJECT TITLE	WEST CHALET LOT 61 FEATHERTOP
SHEET TITLE	LANDSCAPE PLAN

DRAWINGS PROVIDED BY:

 **WENINGER
CONSTRUCTION**

 **COALT DESIGN**

DATE:
22/02/2021

SCALE:

SHEET:
9



Electoral Area Services (EAS) Committee Staff Report

RE:	Ministry of Transportation and Infrastructure – Subdivision – Manson		
Date:	March 11, 2021	File #:	C-963-04310.000
To:	Chair Grieve and members of the EAS Committee		
From:	Danielle Patterson, Planner		

Issue Introduction

The Regional District of Kootenay Boundary has received a referral from the Ministry of Transportation and Infrastructure (MoTI) regarding a subdivision application in Electoral Area C/Christina Lake (see Attachment 1 – Site Location Map and Subject Property Map).

Property Information	
Owner:	Ronald Manson and Tara Manson
Agent:	Joshua Hango, Hango Land Surveying Inc.
Location:	3041 East Lake Drive
Electoral Area:	Electoral Area C/Christina Lake
Legal Description:	Lot 1, Plan KAP6813, District Lot 963, Similkameen Division of Yale Land District, Except Plan 29141
Area:	19.6 ha (48.3 ac)
Current Use:	Residential
Land Use Bylaws	
OCP Bylaw No.: 1250	Waterfront Residential (Proposed Remainder Lot only) and Rural Residential
Zoning Bylaw No.: 1300	Waterfront Residential 2 (R2) (Proposed Remainder Lot only) and Rural Residential 3 (R3)
Development Permit Area:	Environmentally Sensitive Waterfront
Other	
Waterfront / Floodplain:	Christina Lake/McRae Creek
Service Area:	NA

History / Background Information

The subject property is located north of English Point, along Christina Lake. The subject property hooks across East Lake Drive and McRae Road. McRae Creek runs through the western portion of the property. The property is located in the Environmentally Sensitive Waterfront Development Permit Area.

Proposal

The applicant is proposing a seven lot conventional subdivision (see Attachment 2 – Applicant Submission). *Table 1* shown below summarizes each proposed lot.

Lot	Area	Zone	Minimum Lot Area Requirements/ Other Considerations
Lot A	2.0 ha	R3	Minimum lot area = 1 ha
Lot B	1.1 ha	R3	Minimum lot area = 1 ha
Lot C	1.8 ha	R3	Minimum lot area = 1 ha
Lot D	1.0 ha + the area of the panhandle	R3	Minimum lot area = 1 ha
Lot E	1 ha + the area of the panhandle	R3	Minimum lot area = 1 ha
Lot F	1.2 ha+ the area of the panhandle	R3	Minimum lot area = 1 ha
Remainder Lot	10.3 ha	R3 and R2	Minimum lot area = 1 ha (R3) and 2 ha (R2). Includes two hooks.

Table 1: Proposed Lot Summary

The Remainder Lot is the portion of the subject property in the R2 Zone. It abuts Christina Lake to the west and is hooked across both East Lake Drive and McRae Road. This means the single Remainder Lot is physically divided into three parts.

The applicant is proposing wells for each lot and septic fields. The utility lines are overhead along East Lake Drive.

Advisory Planning Commission (APC)

At their February 2, 2021 meeting, the Electoral Area C/Christina Lake APC reviewed the application and recommended support with the condition that *“septic systems and wells be sited and proved prior to any development taking place.”*

Staff note that the siting of wells and septic systems is part of the MoTI's subdivision review requirements, which also involves Interior Health. Further, as all of the lands in the proposed subdivision are located in the Environmentally Sensitive Waterfront Development Permit Area, each proposed lot would required a Development Permit for the septic system prior to building dwellings.

Implications

The Zoning Bylaw requires all parcels not connected to a community water system to be at least 1 ha in area. The proposed lots all meet this Zoning Bylaw requirement.

Based on the site plan provided by the applicant, it appears an existing shed on the Remainder Lot may not comply with the accessory building interior parcel line setback for the R2 Zone which is 0.6 m for structures 10 m² or less in area and 1.5 m for structures

over 10 m² in area. The applicant will need to provide evidence the setback is met, relocate the shed, or obtain a Development Variance Permit.

Section 510 of the *Local Government Act* requires provision of park land or payment for park purposes when a) three or more are being created and b) the smallest of the lots has an area of 2 ha or less. Parks provision equal to no more than five percent of the value or area of land; whichever is preferred by the RDKB, is required for this subdivision.

Recommendation

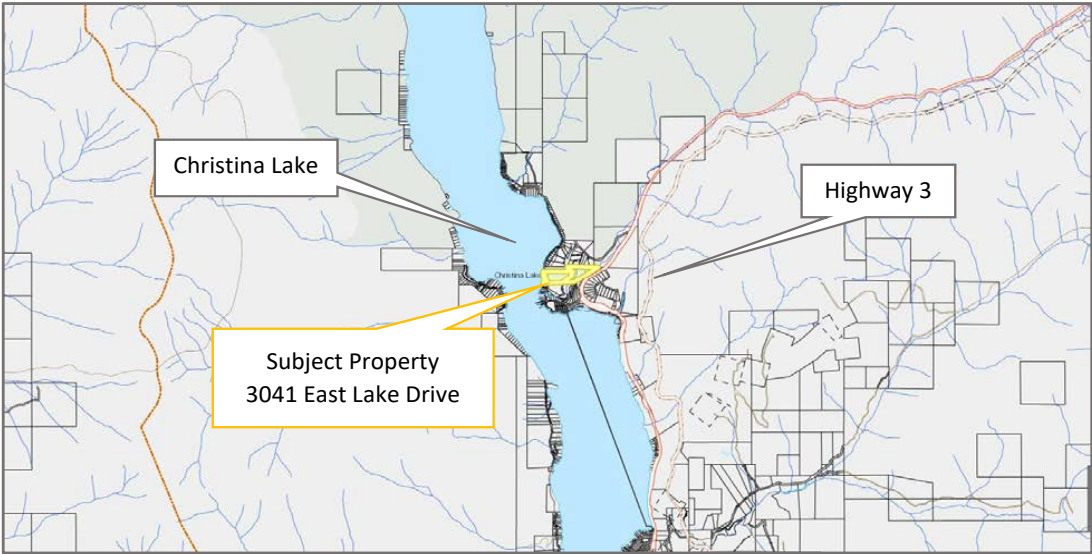
That the staff report regarding the Ministry of Transportation and Infrastructure referral for a proposed seven lot conventional subdivision, for the parcels legally described as Lot 1, Plan KAP6813, District Lot 963, Similkameen Division of Yale Land District, Except Plan 29141, located in Electoral Area 'C'/Christina Lake be received;

And that staff communicate with the property owner that park dedication in the form of land or cash must be secured, to be determined by the Regional District, for this proposed subdivision to move forward.

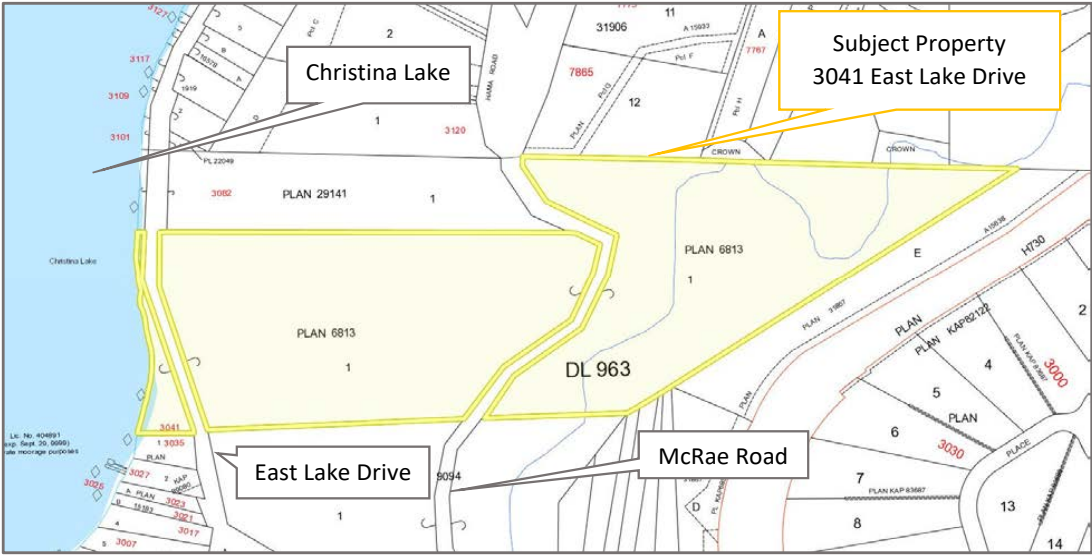
Attachments

1. Site Location Map and Subject Property Map
2. Applicant Submission

Site Location Map



Subject Property Map



BRITISH
COLUMBIAMinistry of Transportation
and Infrastructure**PRELIMINARY
SUBDIVISION APPLICATION**

Submit this application to the Ministry of Transportation and Infrastructure District Office in your area.

A. PROPOSAL

This is an application for preliminary layout approval for all properties involved

Applicant File Number 2629		Ministry File Number	
Subdivision Type	<input checked="" type="checkbox"/> Conventional (fee simple) Subdivision <input type="checkbox"/> Bare Land Strata		No. of Lots Including remainder 7
	<input type="checkbox"/> Other (Specify)		
Full Legal Description(s) per State of Title Certificate(s)	LOT 1 DISTRICT LOT 963 SIMILKAMEEN DIVISION YALE DISTRICT PLAN 6813 EXCEPT PLAN 29141.		
Full Civic Address	3041 EAST LAKE DRIVE, CHRISTINA LAKE, BC		
Property Location	0 Kilometres <input type="checkbox"/> North <input type="checkbox"/> South <input type="checkbox"/> East <input type="checkbox"/> West from <u>CHRISTINA LAKE</u> Local Gov't <u>RDKB</u>		
	Access Road EAST LAKE DRIVE		Property Zoning WATERFRONT RES. 2 AND RURAL RES. 3
	Existing Land Use RES.		Intended Land Use RES.
	Surrounding Land Use	North RES.	South RES.
Proposed Sewage Disposal	<input type="checkbox"/> Septic Tank <input type="checkbox"/> Community System		<input type="checkbox"/> Other (specify)
Proposed Water Supply	<input checked="" type="checkbox"/> Well <input type="checkbox"/> Community System (name of existing system)		
	<input type="checkbox"/> Water Licenses (License #)		<input type="checkbox"/> Other (specify)

B. APPLICATION INFORMATION Incomplete applications will not be accepted**Required items include:**

- ☒ Subdivision application form.
- ☒ The Preliminary Subdivision Application fee. Please make cheques payable to the Minister of Finance. (see page 2)
- ☒ An authorization letter from the owner(s) if someone else is applying on the owner's behalf. (Permission to Act as an Agent H1275)
- ☒ A copy of BC Assessment Authority Property Assessment Notice showing property tax classification.
- ☒ All new lots MAY require a sewage report—please contact your local Transportation office for clarification.
- ☒ One copy of the current State of Title Certificate so that property encumbrances can be checked.
- ☒ Copies of any covenants, easements, rights-of-way or other charges registered against the title. These are available through the Land Title Office.
- ☒ A copy of Contaminated Sites Profile form or Contaminated Sites declaration statement, duly completed and signed.
- ☒ Original copy and a .PDF file of a scaleable sketch plan of proposed layout with metric dimensions.

Properly engineered drawings will be required for final approval. The sketch must contain:

- ☒ the date it was drawn
- ☒ the scale
- ☒ north arrow
- ☒ legal description of the property being subdivided, and its adjacent properties
- ☒ outline of the subdivision in heavy black line
- ☒ all proposed lots, remainders, parks, rights-of-way, easements and roads showing metric dimensions and areas
- ☒ any existing property lines or roads proposed to be removed, closed or relocated
- ☒ all steep banks or slopes exceeding 2 m high and all slopes of 25% or greater, within or adjacent to the proposal area
- ☒ location of existing buildings and structures, wells and sewage disposal fields on the property, as well as adjacent properties within 30 m of property boundaries
- ☐ location of any onsite water sources to be developed (wells, surface)
- ☒ approximate location of all existing and proposed utility services
- ☒ existing access roads and other roads and trails on the property (state names of roads)
- ☒ location of all water courses (seasonal or otherwise) and water bodies

Include these items as well, where applicable

- ☐ A copy of the Provincial Agricultural Land Commission application (if located within ALR). While a developer can apply for subdivision approval before he or she receives permission to proceed from the Agricultural Land Commission or the local government if it has been delegated the authority, the Provincial Approving Officer can only give approval if the property has cleared the Land Commission process in the meantime.
- ☐ One copy of any test required by the Regional Health Authority.
- ☐ A Development Permit and plan where applicable.

C. SUBDIVISION APPLICATION FEES		Make cheques payable to the Minister of Finance	PAYABLE UPON (see below)
1. Preliminary Subdivision Application	\$350.00	Per lot or shared interest, including remainders, to a maximum of \$70,000	Application
2. Final Conventional Plan Exam	\$50.00	Per examination	Final Subdivision Plan Submission
	\$100.00	Per lot, including remainders, on the final plan	
3. Final Strata Plan Examination	\$100.00	Per examination	
	\$100.00	Per lot, including remainders, on the final plan	
4. Other Strata Fees	\$100.00	To examine Form P for any phased development	Application
	\$100.00	Approval (Form Q) for each phase of a phased building strata plan	Application for phase approval

Note: These fees may change without notice or amendment on this form. There may be other provincial and local government fees associated with your subdivision. To find out more, contact the local government in which the land is located, or contact the Islands Trust if located on the Gulf Islands.

D. FURTHER INFORMATION AND COMMENTS (Attach a separate sheet if more space is required)

Wells are proposed for each lot, there is plenty of room for separation of wells and septic.
Utility lines are over head along East Lake Drive.

E. OWNER(S)/APPLICANT INFORMATION

Property Owner(s) Full Name(s) RONALD NEIL MANSON AND TARA LYNN MANSON		Home Telephone [REDACTED]
Address [REDACTED]		Business Telephone [REDACTED]
E-Mail [REDACTED]		Fax [REDACTED]
Agent Full Name Hango Land Surveying Inc		Home Telephone [REDACTED]
Address 2924 9th Avenue		Business Telephone 250 365-5342
Castlegar, BC	E-Mail jhango@hangolandssurveys.com	Fax [REDACTED]

I certify that all the information about and on all plans and other attachments is true, correct and complete.

I understand that this submission constitutes a preliminary application only.

No approvals are implied prior to receipt of written preliminary approval from the Ministry of Transportation and Infrastructure.

Applicant/Agent Signature

Date (yyyy/mm/dd)

Joshua Hango, BCLS

DECEMBER 17, 2020

COLLECTION INFORMATION

The personal information on this form is collected under the authority of the Land Title Act. The information collected will be used to process your preliminary subdivision application, and it may be necessary for the ministry to provide this information to other agencies involved in the review and approval process. If you have any questions about the collection, use and disclosure of this information, contact District Development Technician at the nearest Ministry of Transportation and Infrastructure Office.

**The information in this application may be subject to disclosure
under the Freedom of Information and Privacy Act.**

Further information can be found at <http://www.gov.bc.ca/citz/iao/foi/submit/general/>

Scale 1:1500



30 0 30 60 90 120

All dimensions are in metres.



Attachment # 8.e)

Director Ali Grieve, Electoral Area 'A'		Grants-In-Aid 2021
Balance Remaining from 2020		11,741.64
2021 Requisition		46,159.00
Less Board Fee 2021		(1,524.00)
Total Funds Available		\$ 56,376.64

RESOLUTION	DATE	RECIPIENT	DESCRIPTION	AMOUNT
57-21	28-Jan	JL Crowe Secondary School	RDKB Area 'A' Fallen Firefighters Memorial Award	750.00
57-21	28-Jan	The Village of Fruitvale	Candy Cane Lane Expenses	1,500.00
57-21	28-Jan	The Village of Fruitvale	Harvest Central Community Garden Tool Shed	3,000.00
57-21	28-Jan	The Village of Fruitvale	Remembrance Day Luncheon	500.00
57-21	28-Jan	The Village of Fruitvale	BV Age Friendly Program	1,000.00
128-21	25-Feb	Beaver Valley Blooming Society	Flower Tubs & Ground Plantings Fruitvale	2,500.00
Total				\$ 9,250.00
Balance Remaining				\$ 47,126.64

Electoral Area 'B' /Lower Columbia-Old Glory		Grants-In-Aid 2021
Balance Remaining from 2020		6,887.02
2021 Requisition		34,464.00
Less Board Fee 2021		(1,138.00)
Total Funds Available		\$ 40,213.02

RESOLUTION	DATE	RECIPIENT	DESCRIPTION	AMOUNT
57-21	28-Jan	JL Crowe Secondary School	RDKB Area 'B' Fallen Firefighters Memorial Award	750.00
Total				\$ 750.00
Balance Remaining				\$ 39,463.02

Electoral Area 'C'/Christina Lake		Grants-In-Aid 2021	
Balance Remaining from 2020			35,278.15
2021 Requisition			75,180.00
Less Board Fee 2021			(2,482.00)
Total Funds Available			\$ 107,976.15

RESOLUTION	DATE	RECIPIENT	DESCRIPTION	AMOUNT
24-21	13-Jan	Christina Lake Arts & Aritisans Society	Replacement of Revenue Cost to COVID-19 Cancellations	4,000.00
57-21	28-Jan	Boundary Multi 4-H Club	Program Costs	500.00
128-21	25-Feb	Boundary Youth Soccer Association	Funds to Run Program & Equipment	1,000.00
Total				\$ 5,500.00
Balance Remaining				\$ 102,476.15

Electoral Area 'D'/Rural Grand Forks		Grants-In-Aid 2021		
Balance Remaining from 2020				24,694.28
2021 Requisition				55,803.00
Less Board Fee 2021				(1,843.00)
Total Funds Available				\$ 78,654.28

RESOLUTION	DATE	RECIPIENT	DESCRIPTION	AMOUNT
24-21	13-Jan	Boundary Metis Community Association	Wilgress Lake Fishing Derby Family Day Prizes	500.00
24-21	13-Jan	Phoenix Mountain Alpine Ski Society	Replacement of Hand Held Radio Devices	5,000.00
57-21	28-Jan	Boundary Multi 4-H Club	Program Costs	500.00
87-21	10-Feb	Boundary Youth Soccer Association	Program Costs	1,500.00
128-21	25-Feb	Grand Forks Flying Association	Pilot Courtesy Car Maintenance, Insurance, Repairs	3,500.00
Total				\$ 11,000.00
Balance Remaining				\$ 67,654.28

Electoral Area 'E'/West Boundary		Grants-In-Aid 2021
Balance Remaining from 2020		61,034.95
2021 Requisition		86,248.00
Less Board Fee 2021		(2,848.00)
Total Funds Available		\$ 144,434.95

RESOLUTION	DATE	RECIPIENT	DESCRIPTION	AMOUNT
24-21	13-Jan	Greenwood Community Association	Christmas Dinner Hampers & Take-Out Meals	300.00
24-21	13-Jan	Trails to the Boundary Society	Kettle River Echo Seed Money	5,000.00
24-21	13-Jan	West Boundary Community Services Co-Op	Mileage for Economic Development Consultant, Sandy Mark	750.00
87-21	10-Feb	Boundary Youth Soccer Association	Program Costs	1,500.00
				\$ 7,550.00
Balance Remaining				\$ 136,884.95