



**REGIONAL DISTRICT OF CENTRAL KOOTENAY**  
**BOX 590, 202 Lakeside Drive, NELSON, BC V1L 5R4**  
 ph: 250-352-8165 fax: 250-352-9300  
 email: [plandept@rdck.bc.ca](mailto:plandept@rdck.bc.ca)

**REFERRAL FORM**  
**FLOODPLAIN EXEMPTION APPLICATION**  
**RDCK Planning File: F2103F**  
**Date: April 27, 2021**

**You are requested to comment on the attached FLOODPLAIN EXEMPTION for potential effect on your agency's interests. We would appreciate your response WITHIN 30 DAYS (PRIOR TO May 27, 2021). If no response is received within that time, it will be assumed that your agency's interests are unaffected.**

**LEGAL DESCRIPTION & GENERAL LOCATION:**

2168 Annable Road, North Shore, Electoral Area 'F'  
 LOT 3 DISTRICT LOT 4780 KOOTENAY DISTRICT PLAN 5416 (PID 014-442-698)

**PRESENT USE AND PURPOSE OF PERMIT REQUESTED:**

This application is for a Site Specific Floodplain Exemption. The applicant seeks to reduce the floodplain setback from Crystal Springs Creek, from 15 metres to 9 metres under the RDCK's Floodplain Management Bylaw No. 2080, 2009 to allow for a proposed addition to the existing residence. Crystal Springs Creek runs adjacent to the property line to the north, and is not located in an alluvial fan or geohazard area. An existing residence currently occupies the subject property.

AREA OF PROPERTY AFFECTED	ALR STATUS	ZONING	OCP
0.16 hectares (0.4 acres)	N/A	Country Residential (R2)	Country Residential (CR)

**APPLICANT:** Lindsey Myram

**OTHER INFORMATION: ADVISORY PLANNING COMMISSION PLEASE NOTE:** If your Advisory Planning Commission plans to hold a meeting to discuss this Floodplain Exemption application, please note that the applicants must be provided with an opportunity to attend such meeting, in accordance with Section 461, subsection (8) of the *Local Government Act*, which reads as follows: *"If the commission is considering an amendment to a plan or bylaw, or the issue of a permit, the applicant for the amendment or permit is entitled to attend meetings of the commission and be heard."*

**Please fill out the Response Summary on the back of this form. If your agency's interests are 'Unaffected' no further information is necessary. In all other cases, we would appreciate receiving additional information to substantiate your position and, if necessary, outline any conditions related to your position. Please note any legislation or official government policy which would affect our consideration of this permit.**

**Stephanie Johnson, PLANNER**  
**REGIONAL DISTRICT OF CENTRAL KOOTENAY**

- TRANSPORTATION  
 West Kootenay District Office, Nelson  
 HABITAT BRANCH  
 FRONT COUNTER BC (FLNRORD)  
 Nelson  
 Cranbrook  
 AGRICULTURAL LAND COMMISSION  
 REGIONAL AGROLOGIST  
 ENERGY & MINES  
 MUNICIPAL AFFAIRS & HOUSING  
 INTERIOR HEALTH  
 HBE Team, Nelson  
 KOOTENAY LAKES PARTNERSHIP (FORESHORE DEVELOPMENT PERMITS)  
 SCHOOL DISTRICT NO.  
 WATER SYSTEM OR IRRIGATION DISTRICT  
 UTILITIES (FORTIS, BC HYDRO, NELSON HYDRO, COLUMBIA POWER)

- REGIONAL DISTRICT OF CENTRAL KOOTENAY  
 DIRECTORS FOR:  
 A  B  C  D  E  F  G  H  I  J  K  
 ALTERNATIVE DIRECTORS FOR:  
 A  B  C  D  E  F  G  H  I  J  K  
 APC AREA  
 RDCK FIRE SERVICES  
 District Chief Nora Hannon – Kaslo, Balfour, Harrop, North Shore & Ymir  
 District Chief George Hamm – Pass Creek, Ootischenia, Robson, Tarry's & Beasley  
 District Chief Gord Ihlen – Crescent Valley, Passmore, Winlaw, Slokan & Blewett  
 RDCK EMERGENCY SERVICES  
 RDCK BUILDING SERVICES  
 RDCK UTILITY SERVICES  
 RDCK RESOURCE RECOVERY  
 RDCK REGIONAL PARKS  
 INSERT COMMENTS ON REVERSE . . .

The personal information on this form is being collected pursuant to *Regional District of Central Kootenay Planning Procedures and Fees Bylaw No. 2457, 2015* for the purpose of determining whether the application will affect the interests of other agencies or adjacent property owners. The collection, use and disclosure of personal information are subject to the provisions of FIPPA. Any submissions made are considered a public record for the purposes of this application. Only personal contact information will be removed. If you have any questions about the collection of your personal information, contact the Regional District Privacy Officer at 250.352.6665 (toll free 1.800.268.7325), [info@rdck.bc.ca](mailto:info@rdck.bc.ca), or RDCK Privacy Officer, Box 590, 202 Lakeside Drive, Nelson, BC V1L 5R4.

**RESPONSE SUMMARY**  
**FILE: F2103F APPLICANT: LINDSEY MYRAM**

Name:

Date:

Agency :

Title:

RETURN TO:   STEPHANIE JOHNSON, PLANNER  
                  DEVELOPMENT SERVICES  
                  REGIONAL DISTRICT OF CENTRAL KOOTENAY  
                  BOX 590, 202 LAKESIDE DRIVE  
                  NELSON, BC V1L 5R4  
                  Ph. 250-352-8190  
                  Email: [plandept@rdck.bc.ca](mailto:plandept@rdck.bc.ca)







Sources: Esri, Airbus DS,  
USGS, NGA, NASA, CGIAR,  
N Robinson, NCEAS, NLS,  
OS, NMA,  
Geodatastyrelsen,  
2166



REGIONAL DISTRICT OF CENTRAL KOOTENAY  
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Nelson, BC V1L 5R4  
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**Legend**

-  Electoral Areas
-  RDCK Roads
-  Cadastre
-  Civic Address

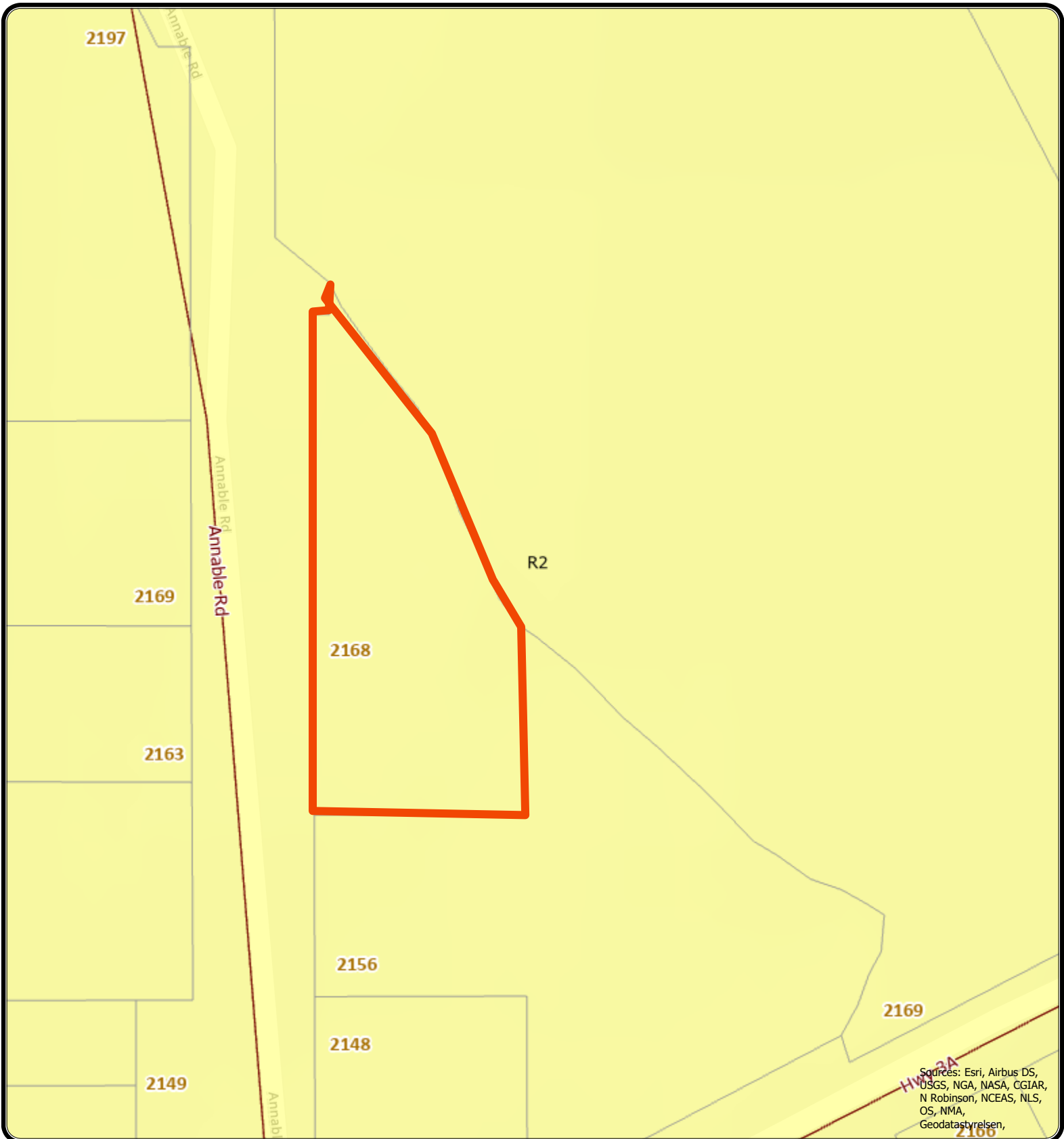
**Map Scale:**

1:1,128

Date: March 18, 2021



The mapping information shown are approximate representations and should only be used for reference purposes. The Regional District of Central Kootenay is not responsible for any errors or omissions on this map.



Sources: Esri, Airbus DS,  
USGS, NGA, NASA, CGIAR,  
N Robinson, NCEAS, NLS,  
OS, NMA,  
Geodatastyrelsen,



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maps@rdck.bc.ca

**Legend**

**Zoning Class**

- Residential 2
- Electoral Areas
- RDCK Roads
- Cadastre
- Civic Address

**Map Scale:**

1:1,128

Date: March 18, 2021



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**Proposal Summary**  
**Development Application – Site Specific Floodplain Exemption**  
**Kurt and Lindsey Myram**  
**2168 Annable Road, Nelson BC**

This is an application for a Site Specific Floodplain Exemption at the address of 2168 Annable Road, Nelson BC, V1L 6K5.

There is currently a 2-bedroom, 1-bathroom single-family dwelling at this location and the exemption would allow an expansion of the existing dwelling from 1,077 ft<sup>2</sup> to 1,345 ft<sup>2</sup>. The total house area includes decks and stairs.

Currently on the northeast side of the house, the existing structure is setback 10.2 meters from the waterway, and we are requesting to reduce the floodplain setback to 9 meters.

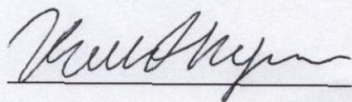
Due to the unique dimensions of the lot and the creek that borders the east side of the property, expanding the existing building within the current regulation of a floodplain setback of 15m would be difficult. The purposed expansion will include an additional bedroom and bathroom and a small extension of the dwelling towards the west side of the property. The addition of a bedroom and bathroom will require an updated septic system which can only be placed on the west side of the property between Annable road and the border of the proposed expansion of the existing dwelling due to the properties proximity to the watercourse.

We have considered adding an additional story, but upon inspection, the current foundation could not withstand a second story. The monetary investment that would be required to address the foundation is out of the scope of financing available to us.

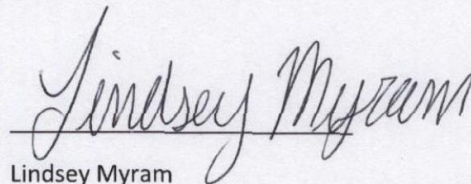
We are expecting our first child in June 2021 and the planned renovation would allow space in the house to have a dining room table and the extra space required for the child to have a dedicated living space. The additional bedroom would allow Lindsey to maintain a home office, which has become a requirement of her work since the start of the COVID-19 pandemic.

We thank you for your consideration on this matter and invite you to contact us if you have any questions or concerns regarding this proposal.

Kind Regards,

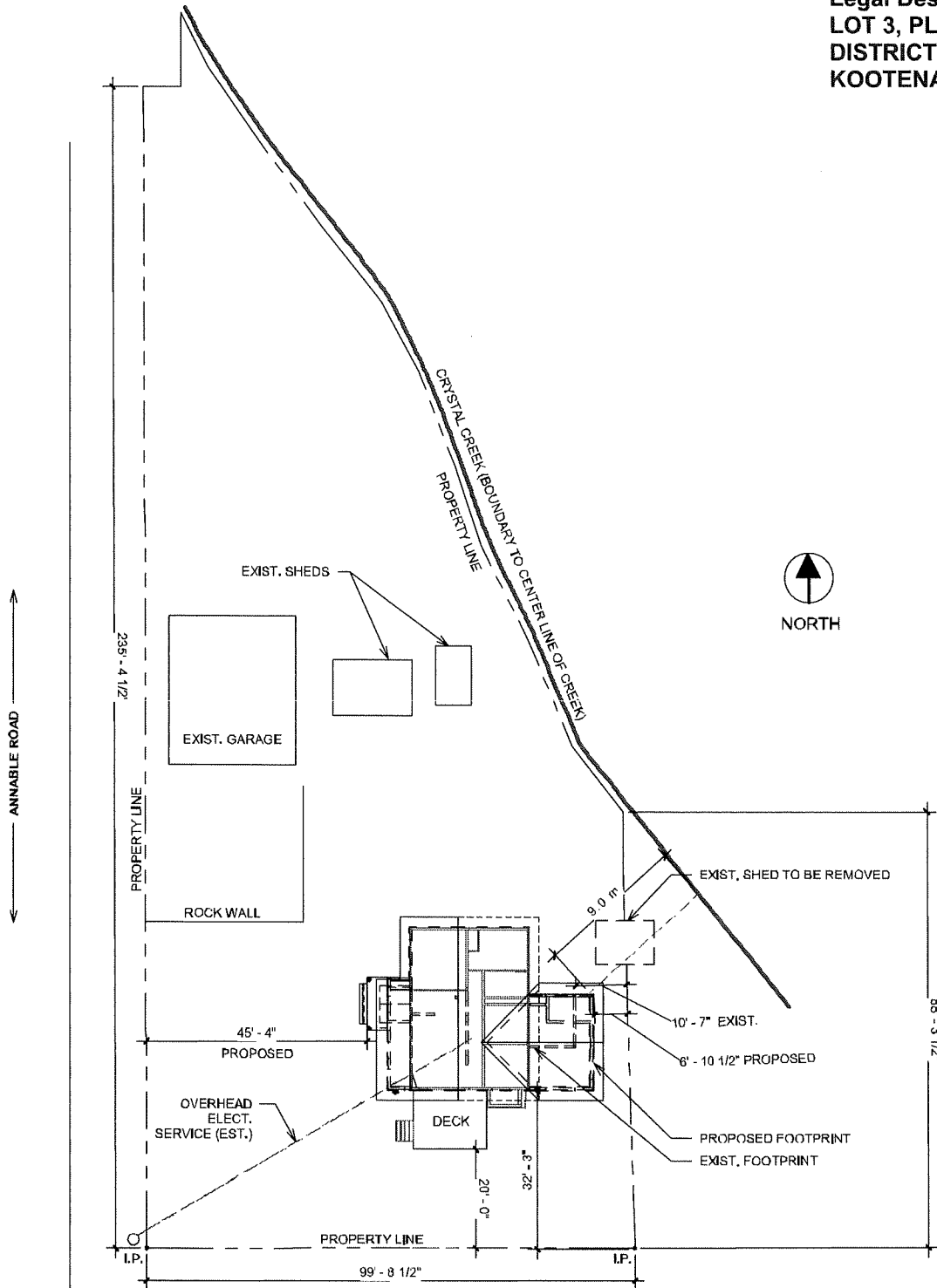


Kurt Myram



Lindsey Myram

Legal Description:  
 LOT 3, PLAN NEP5416  
 DISTRICT LOT 4780  
 KOOTENAY LAND DISTRICT



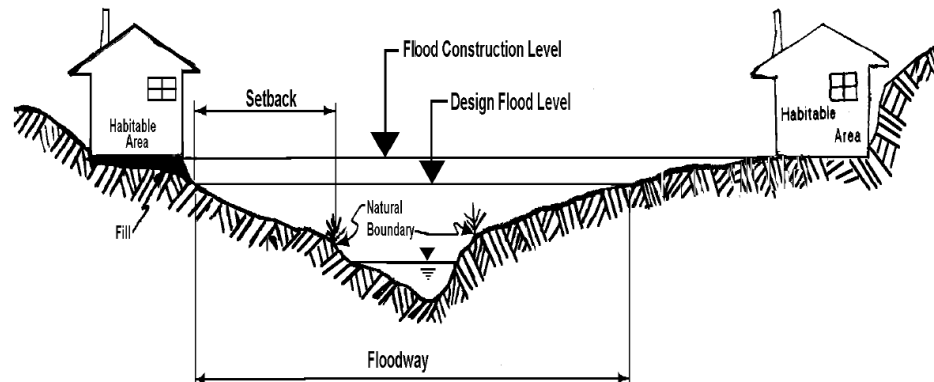
TOTAL LOT AREA: 0.4 AC / 17424.0 SF  
 TOTAL HOUSE AREA  
 (INCL DECKS & STAIRS ≥ 2'-0" ABOVE GRADE): 1334.7 SF  
 TOTAL GARAGE & OUTBUILDINGS: 1048.0 SF  
 LOT COVERAGE: 13.67 %

① Site  
 1" = 20'-0"

NOTE: BUILDING PLACEMENT ON LOT BASED ON REPORT  
 PREPARED BY LASCA GROUP TECHNICAL SERVICES

Diagram 1

## Cross-Section of a Typical Floodplain



Note: This diagram is provided for illustrative purposes only (source: British Columbia Ministry of Environment)

## 6.0 FLOODPLAIN DESIGNATION

6.1 The following are designated as Floodplain:

- a. Land shown as Floodplain in Schedule "B" – Floodplain Map
- b. Land within the Non-Standard Flooding and Erosion Area boundaries as delineated in Schedule "C" – Non-Standard Flooding and Erosion Areas Map
- c. Lands within the designated Floodplain Setback as specified in Section 7.2 of this Bylaw.

## 7.0 FLOODPLAIN SPECIFICATIONS

### 7.1 Flood Construction Levels

The following elevations are specified as Flood Construction Levels, except where more than one Flood Construction Level is applicable, the higher elevation shall be the specified Flood Construction Level:

- a. Where Floodplain Mapping is available, the Flood Construction Level (F.C.L.) for a specific property shall be determined by interpolation from the “200 year frequency Flood Level” as identified in Schedule “B” of this Bylaw
- b. Where Floodplain Mapping is not available, the following elevations are specified as Flood Construction Levels:
  - a. 652.3 G.S.C. Datum on Whatshan Lake;
  - b. 581.2 G.S.C. Datum on Duncan Lake;
  - c. 539.2 G.S.C. Datum on Slocan Lake;
  - d. 536.5 G.S.C. Datum on Kootenay Lake;
  - e. 443.5 G.S.C. Datum on the Arrow Reservoir;
  - f. 3.0 metres above natural boundary for the Duncan, Goat, Halfway (Arrow Reservoir), Kaslo, Kootenay (Brilliant Dam to Columbia River), Kootenay (Corra Lynn Dam to South Slocan Dam), Lardeau, Little Slocan, Moyie, Pend D’orelle, Salmo, Slocan, South Salmo, Westfall and Whatshan Rivers;
  - g. 3.0 metres above natural boundary for Barnes, Burton, Caribou, Carpenter, Cooper, Corn, Crawford, Cultus, Dog (Arrow Lake north of Castlegar), Duhamel, Eagle (Arrow Reservoir), East, Erie, Fosthall, Fry, Hall, Hamill, Hawkins, Howser, Keen, Koch, Kokanee, Kuskanax, Lemon, Midge, Mosquito, Pingston, Poplar, Stagleap, Summit and Wilson (Slocan Lake) Creeks;
  - h. 1.5 metres above natural boundary for Wilson Creek (Kootenay Lake drainage and South Salmo River Drainage); and
  - i. 1.5 metres above natural boundary for all other small lakes, ponds, marshes and small watercourses.

## 7.2 Floodplain Setbacks



Hawkins, Howser, Inonoaklin, Keen, Koch, Kokanee, Kuskanax, Lemon, Midge, Mosquito, Pingston, Poplar, Stagleap, Summit and Wilson Creek (Slocan Lake Drainage);

- i. 30.0 metres from the natural boundary of Duncan Lake;
- j. 15.0 metres from the natural boundary of Wilson Creek (Kootenay Lake and South Salmo River Drainages);
- k. 15.0 metres from the natural boundary for all other lakes and small watercourses; and
- l. 7.5 metres from the natural boundary for all small lakes, ponds and marshes.

A 7.5 metre setback is required for any standard dike or structure used for flood protection or any easement or right of way for a standard dike or structure used for flood protection.

## 8.0 FLOODPLAIN REGULATIONS

- 8.1 No building, manufactured home or unit, modular home or structure or any part thereof shall be constructed, reconstructed, moved, extended or located with the underside of a wooden floor system or top of concrete slab of any area used for habitation, business, or storage of goods damageable by floodwaters, or in the case of a manufactured home or unit the ground level or top of pad on which it is located, lower than the Flood Construction Level specified in Section 7.1 of this Bylaw.
- 8.2 No landfill or structural support required to support a floor system or pad, shall be constructed, reconstructed, moved, extended or located within any Floodplain Setback specified in Section 7.2 of this Bylaw.
- 8.3 Unless specifically provided for elsewhere in this Bylaw, no area below the Flood Construction Level shall be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.
- 8.4 Structural support or compacted fill or a combination of both may be used to elevate the underside of the floor system or the top of the pad above the Flood Construction Level. The structural support and/or fill



***Lasca Group Technical Services***

610 Front Street  
Nelson BC V1L4B7 [tednunnwater@shaw.ca](mailto:tednunnwater@shaw.ca)  
(604) 649-3543

**Flood Site Exemption Letter for Crystal Creek Diversion  
Ditch, 2168 Annable Road, North Nelson BC**

22 April 2021

The purpose of this letter is to inform the RDCK Planning Department that a variance is requested to move a Crystal Creek Diversion ditch setback from the Floodplain bylaw 15 metres to 9 metres for 2168 Annable Road east side of the existing house. The legal description and property information is:

Owner:	Lindsey Elizabeth Reed Kurt Russel Myram
Mailing Address:	2168 Annable Road, Nelson, BC V1L6K5
Description:	Lot 3 Plan NEP5416 DL 4780 KD PID 014-442-698
Folio Number:	21-707-07750.030
Zoning:	R2
Coordinates:	49°33'30.42" -117°14'50.49" Elev. 561 (pin as shown)
Lot Area:	0.16 ha

Attached to this letter are location maps detailing the proposed house addition project area and the surrounding properties. This letter has been prepared for the RDCK as a precondition of the issuance of a Site Specific Exemption from the provisions of Floodplain Management Bylaw 2080, 3009 under Section 910 of the Local Government Act, and any conditions in this report shall be included in a Restrictive Covenant under Section 219 of the Land Titles Act and filed against the title of the subject property.

This letter has been prepared for and at the expense of the owner of the subject property and that I have not acted for or as an agent of the Regional District of Central Kootenay in the preparation.

The property is not in the ALR. There is a community plan. The property has a diversion ditch bypassing the Crystal Creek alluvial fan (see Map 1). This diversion ditch diverts approximately 80% of the Crystal Creek flow with 20% still flowing in the original creek channel (see attached photograph showing Crystal Creek). RDCK mapping only shows Crystal Creek but not the ditch. The author has walked much of the ditch and has drawn it on the attached first map. The 126 square metre (1340 square feet) residence site is planned to be located within the area shown in the attached plan. To achieve an area to build the house addition on this lot, it only can happen if the floodplain



setback is decreased from 15 metres to 9 metres (note that the house is presently 10 metres from the ditch). The FCL is not a concern since the actual minimum depth is 2.0 metres (see attached ditch photographs) plus there is no historical evidence of flooding. A 50 foot length of this diversion ditch is within a culvert under Annable Road (see Map 1); the culvert is greatly oversized at 500 mm diameter (Hwy 3A culvert for this ditch is the same size plus it drains a larger volume because of property drainage between the study property and Highway 3A). The ditch is not seasonal. The south west corner of this planned building addition area is the location where the variance to 9 metres is required. While surveying the area, the ditch water flow was measured at 60 gallons (270 litres) per minute which is 4% of capacity. This volume was determined by measuring the height of water at the entrance of the Annable Road culvert and calculating the quantity by using "Mannings Formula" method.

There is no debris in the ditch since it is only sloped at a maximum of 6.8% (from exit of the Annable Road culvert to the Highway 3A culvert); 9% grade is the critical slope when debris flow becomes a study item. Also, there is no ponding or marshes within the neighborhood. The area of the creek is heavily treed. The property is approximately 300 metres to the southeast from the West Arm of Kootenay Lake. The property location is 6 kilometres north east of the City of Nelson.

Crystal Creek is actually geologically classified as a 'streamlet' which is a creek with a maximum flowing depth and width of 2 feet (0.6 metres). The creek has a length of 2.9 kilometres, average slope of 37% and a drainage basin of 1.6 square kilometres; and flows east to the West Arm of Kootenay Lake from the peak of Elephant Mountain.

The rock is within a plutonic complex of a massive mafic stock within the Early Jurassic period. The creek follows a tension crack from a complex tectonic and magmatic structure which occurred during continental drift.

The ice age within the Nelson area began 2 million years ago and receded to where it is today at approximately 10,000 years ago. The property lot (and adjacent lots) sits on a glacial silt bench with boulders on top that were plucked off the mountain side during the last glacial period. The height of the glacier during this period was 156 metres so these plucked irregular shaped boulders are very common along the West Arm (note Anderson Creek trestle and Redfish Creek as excellent examples of this event). There are no natural hazards in the Annable Road ditch area. This area has many residences plus an operating gravel pit. The gravel pit has a Mining Permit and part of the Ministry of Energy & Mines permit process is a detailed geotechnical hazard assessment report. The author could not find any records of hazard related reports but considers that 29 houses of newer vintage plus gravel pit permits issuance may not have been approved if hazards existed.

The ditch is manmade to divert water away from the crest of ancient and operating gravel pits (see attached Map 1). Large plutonic boulders from the gravel pits have been placed on both sides of the ditch to prevent erosion. The south west corner of this house is the location where the variance to 9 metres is required. There are no flooding risks at 2168



Annable Road therefore Lasca Group Technical Services verifies that the land may be used safely for the use intended as required under Section 56 of the Community Charter.

Since there is no flooding issue, it is recommended to approve a relaxed natural boundary to 9 metres from the bylaw value of 15 metres. This relaxation would allow the project to proceed to completion since it would have no area constraints. No mitigating structures are required so a BC Building Code Schedule B is not being issued.

There are no low hazard surfaces. Flood Risk Level is "Very Low". Consequence Indices is 1 and is therefore negligible; along with a descriptive of 0.004 – 0.0013. The Flood Risk Evaluation Likelihood is "acceptable – extremely unlikely" (ref 3). The above is based upon a 200 year event. A Flood Assurance Statement is attached submitted with this report.

Although the flood condition is extremely unlikely and would not be required when considering past events, climate change becomes the issue and is very difficult to forecast. The high continuous ditch FCL would support future climatic flooding.

References:

1. RDCK Floodplain Management Bylaw 2080
2. Floodplain, Alluvial Fans and Geotechnical Hazards RDCK Guide Brochure
3. Professional Practice Guidelines – Legislated /Flood Assessments in a Changing Climate in BC
4. Nelson Map – West Half Geology; Little HW, Memoir 308, 1960
5. Alluvial Fan Hazard Assessment, RDCK Electoral Areas E and F, Northwest Hydraulic Consultants, April 1996

If you have any questions, please telephone Edward J. Nunn, P.Eng. at (604) 649-3543 or email me at [tednunnwater@shaw.ca](mailto:tednunnwater@shaw.ca).

Sincerely



Edward J. Nunn, P. Eng.





Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



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 Nelson, BC V1L 5R4  
 Phone: 1-800-268-7325 www.rdck.bc.ca  
 maps@rdck.bc.ca

**Legend**

- Lakes and Rivers
- RDCK Roads
- Cadastre - Legal Parcels



Map 1

**Map Scale:**

1:18,056

Date: February 22, 2021



The mapping information shown are approximate representations and should only be used for reference purposes. The Regional District of Central Kootenay is not responsible for any errors or omissions on this map.



# Crystal Creek Area



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen,



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### Legend

- Electoral Areas
- RDCK Roads
- Cadastre - Legal Parcels
- Civic Address



Map 1A

### Map Scale:

1:9,028

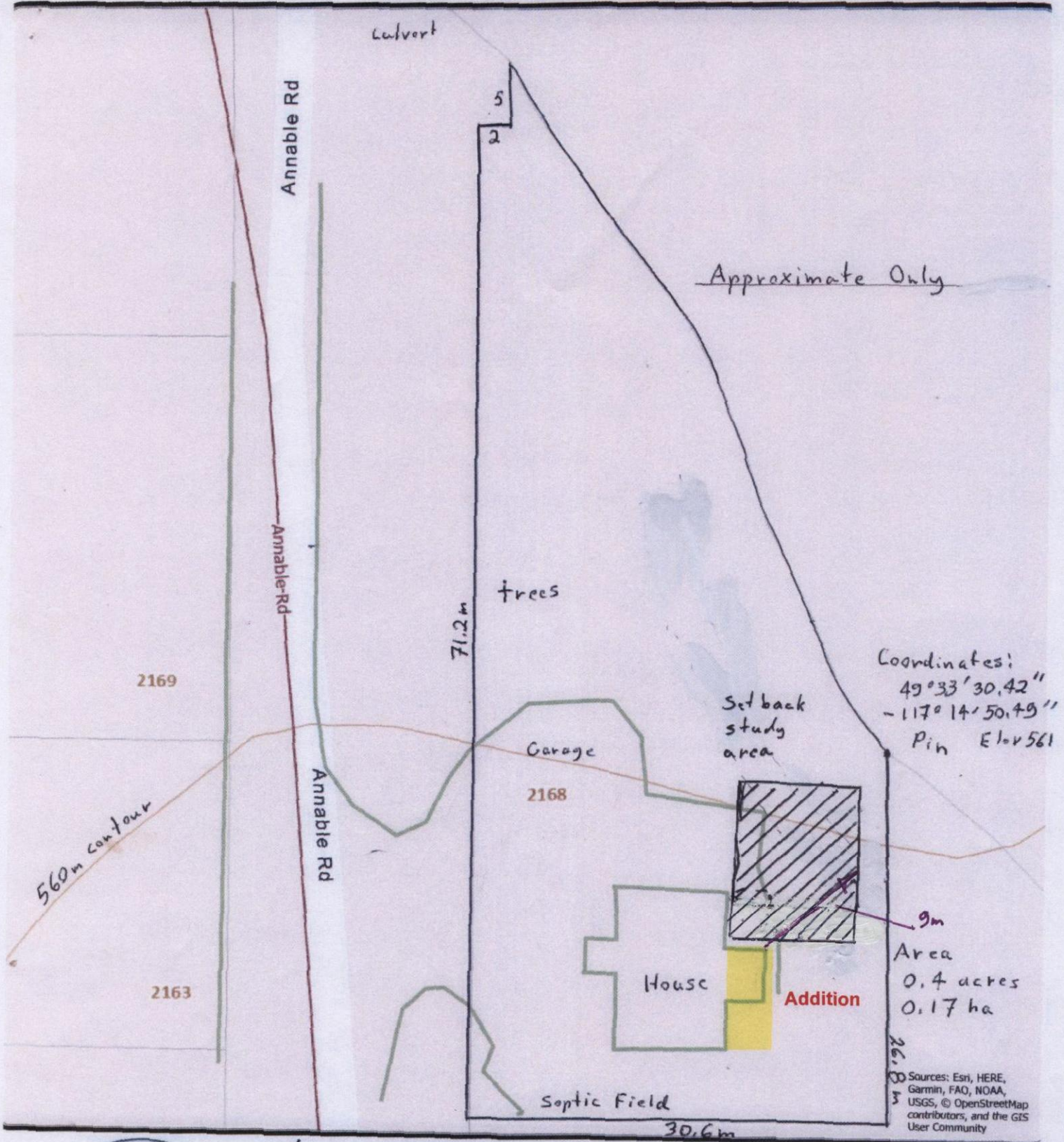
Date: April 11, 2021



The mapping information shown are approximate representations and should only be used for reference purposes. The Regional District of Central Kootenay is not responsible for any errors or omissions on this map.



2168 Annable Road, Four Mile



Coordinates:  
 49°33'30.42"  
 -117°14'50.49"  
 Pin E1-v561

9m  
 Area  
 0.4 acres  
 0.17 ha

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



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Legend

- RDCK Roads
- Cadastre - Legal Parcels
- Civic Address

All distances in metres.  
 Surveyed by E.J. Nunn

Map 2



Map Scale:

1:564

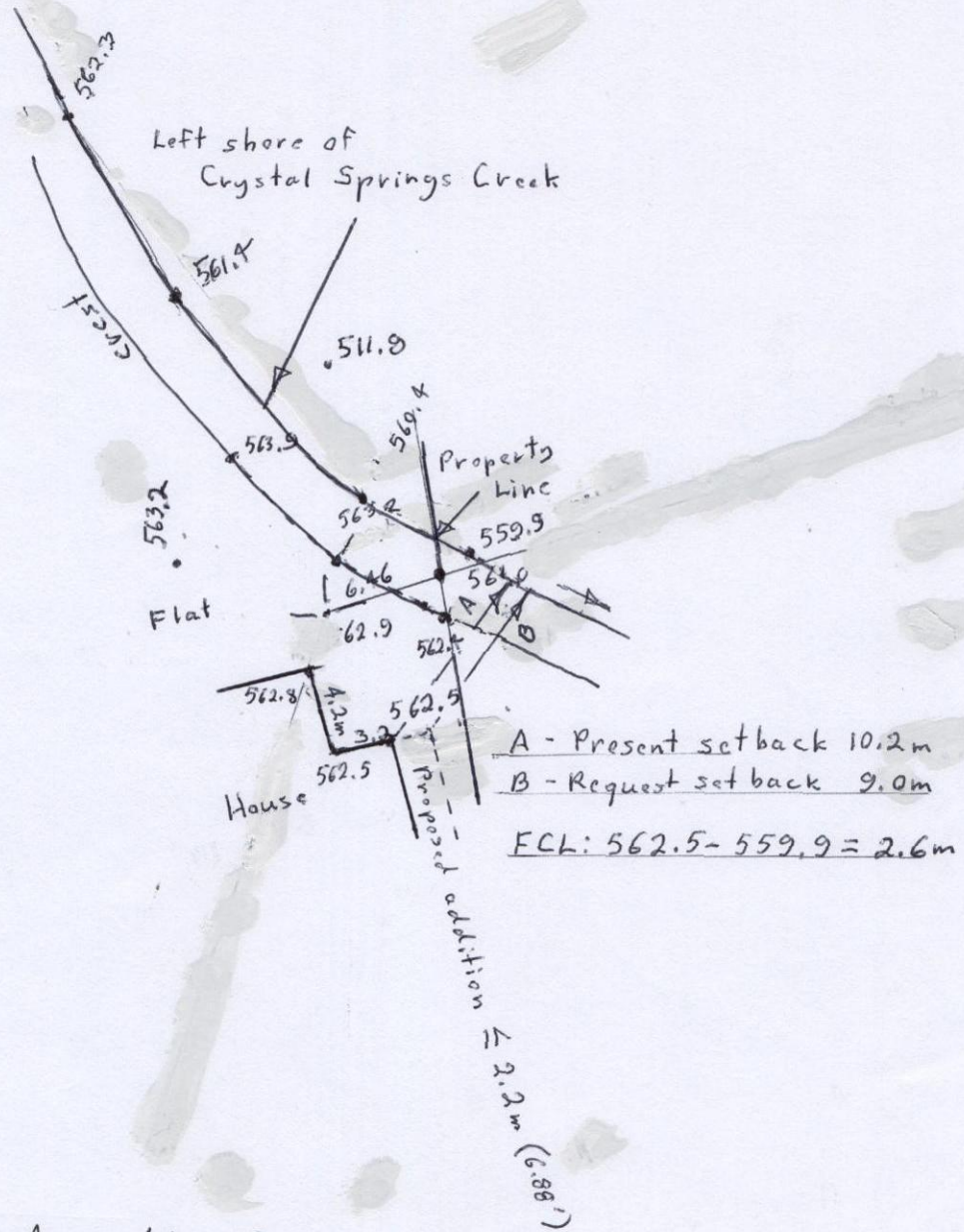


Date: February 22, 2021

The mapping information shown are approximate representations and should only be used for reference purposes. The Regional District of Central Kootenay is not responsible for any errors or omissions on this map.



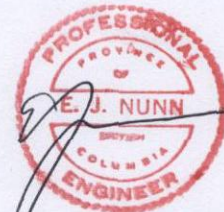
Culvert,  
500mm dia.



2168 Annable Road

Survey for Setback Purposes

Map 3




2021-02-15



# Annable Road

Gravel and Drainage

## Legend

 Willow Point Beach House B & B



Google Earth

200 m





pin

Creek

View of Crystal Spring Ck looking east.







Corner of future addition

Photograph taken at TP survey station







Photograph: Crystal Creek above Annable Rd  
Culvert at 12 gallons per minute  
flow.





Clear Springs culvert outlet.





Photograph: Ditch upstream from area seeking approval,





Photograph: Area of ditch requiring 5 metre setback approval



Photograph: Annable Rd lower culvert inlet.





# FLOOD ASSURANCE STATEMENT

Note: This statement is to be read and completed in conjunction with the current Engineers and Geoscientists BC *Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC* ("the guidelines") and is to be provided for flood assessments for the purposes of the *Land Title Act*, Community Charter, or the *Local Government Act*. Defined terms are capitalized; see the Defined Terms section of the guidelines for definitions.

To: The Approving Authority

Date: 2021-02-22

RDCK  
202 Lakeside Dr., Nelson  
Jurisdiction and address

With reference to (CHECK ONE):

- Land Title Act* (Section 86) – Subdivision Approval
- Local Government Act* (Part 14, Division 7) – Development Permit
- Community Charter (Section 56) – Building Permit
- Local Government Act* (Section 524) – Flood Plain Bylaw Variance
- Local Government Act* (Section 524) – Flood Plain Bylaw Exemption

For the following property ("the Property"):

Lot 3, Plan NEP5416 DL4780 KD, 2168 Annable Rd, Nelson  
Legal description and civic address of the Property

The undersigned hereby gives assurance that he/she is a Qualified Professional and is a Professional Engineer or Professional Geoscientist who fulfils the education, training, and experience requirements as outlined in the guidelines.

I have signed, sealed, and dated, and thereby certified, the attached Flood Assessment Report on the Property in accordance with the guidelines. That report and this statement must be read in conjunction with each other. In preparing that Flood Assessment Report I have:

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

- 1. Consulted with representatives of the following government organizations:  
Searched RDCK information
- 2. Collected and reviewed appropriate background information
- 3. Reviewed the Proposed Development on the Property
- 4. Investigated the presence of Covenants on the Property, and reported any relevant information
- 5. Conducted field work on and, if required, beyond the Property
- 6. Reported on the results of the field work on and, if required, beyond the Property
- 7. Considered any changed conditions on and, if required, beyond the Property
- 8. For a Flood Hazard analysis I have:
  - 8.1 Reviewed and characterized, if appropriate, Flood Hazard that may affect the Property
  - 8.2 Estimated the Flood Hazard on the Property
  - 8.3 Considered (if appropriate) the effects of climate change and land use change
  - 8.4 Relied on a previous Flood Hazard Assessment (FHA) by others
  - 8.5 Identified any potential hazards that are not addressed by the Flood Assessment Report
- 9. For a Flood Risk analysis I have:
  - 9.1 Estimated the Flood Risk on the Property
  - 9.2 Identified existing and anticipated future Elements at Risk on and, if required, beyond the Property
  - 9.3 Estimated the Consequences to those Elements at Risk





## FLOOD ASSURANCE STATEMENT

10. In order to mitigate the estimated Flood Hazard for the Property, the following approach is taken:

- 10.1 A standard-based approach
- 10.2 A Risk-based approach
- 10.3 The approach outlined in the guidelines, Appendix F: Flood Assessment Considerations for Development Approvals
- 10.4 No mitigation is required because the completed flood assessment determined that the site is not subject to a Flood Hazard

11. Where the Approving Authority has adopted a specific level of Flood Hazard or Flood Risk tolerance, I have:

- N/A*  11.1 Made a finding on the level of Flood Hazard or Flood Risk on the Property
- 11.2 Compared the level of Flood Hazard or Flood Risk tolerance adopted by the Approving Authority with my findings
- 11.3 Made recommendations to reduce the Flood Hazard or Flood Risk on the Property

12. Where the Approving Authority has not adopted a level of Flood Hazard or Flood Risk tolerance, I have:

- 12.1 Described the method of Flood Hazard analysis or Flood Risk analysis used
- 12.2 Referred to an appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk
- 12.3 Made a finding on the level of Flood Hazard or Flood Risk tolerance on the Property
- 12.4 Compared the guidelines with the findings of my flood assessment
- 12.5 Made recommendations to reduce the Flood Hazard or Flood Risk

*N/A* 13. Considered the potential for transfer of Flood Risk and the potential impacts to adjacent properties

*N/A* 14. Reported on the requirements for implementation of the mitigation recommendations, including the need for subsequent professional certifications and future inspections.

Based on my comparison between:

[CHECK ONE]

- The findings from the flood assessment and the adopted level of Flood Hazard or Flood Risk tolerance (item 11.2 above)
- The findings from the flood assessment and the appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk tolerance (item 12.4 above)

I hereby give my assurance that, based on the conditions contained in the attached Flood Assessment Report:

[CHECK ONE]

- For subdivision approval, as required by the *Land Title Act* (Section 86), "that the land may be used safely for the use intended":

[CHECK ONE]

- With one or more recommended registered Covenants.
- Without any registered Covenant.

- For a development permit, as required by the *Local Government Act* (Part 14, Division 7), my Flood Assessment Report will "assist the local government in determining what conditions or requirements it will impose under subsection (2) of this section [Section 491 (4)]".

- For a building permit, as required by the *Community Charter* (Section 56), "the land may be used safely for the use intended":

[CHECK ONE]

- With one or more recommended registered Covenants.
- Without any registered Covenant.

- For flood plain bylaw variance, as required by the *Flood Hazard Area Land Use Management Guidelines* and the *Amendment Section 3.5 and 3.6* associated with the *Local Government Act* (Section 524), "the development may occur safely".

- For flood plain bylaw exemption, as required by the *Local Government Act* (Section 524), "the land may be used safely for the use intended".



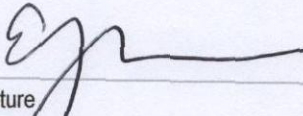
FLOOD ASSURANCE STATEMENT

I certify that I am a Qualified Professional as defined below.

2021-02-22  
Date

Prepared by

Edward J. Nunn, P. Eng.  
Name (print)

  
Signature

610 Front St.  
Address

Nelson BC V1L4B7

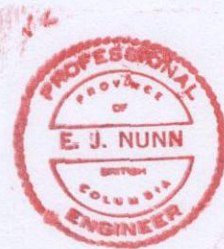
(604) 649-3543  
Telephone

tednunngeneral1@shaw.ca  
Email

N/A  
Reviewed by

Name (print)

Signature



(Affix PROFESSIONAL SEAL here)

If the Qualified Professional is a member of a firm, complete the following:

I am a member of the firm \_\_\_\_\_  
and I sign this letter on behalf of the firm. (Name of firm)