



Date: January , 2024

# Development Variance Permit Application

You are requested to comment on the attached DEVELOPMENT VARIANCE PERMIT for potential effect on your agency's interests. We would appreciate your response WITHIN 30 DAYS (PRIOR TO March 1, 2024). If no response is received within that time, it will be assumed that your agency's interests are unaffected.

## LEGAL DESCRIPTION & GENERAL LOCATION:

129 Boulder Beach Road, Kootenay Bay, Electoral Area 'A'  
LOT 5 DISTRICT LOT 4595 KOOTENAY DISTRICT PLAN 811, EXCEPT PARTS INCLUDED IN PLANS 3062, 16541, R127, NEP60734, NEP68076, NEP69201 AND NEP72451 (PID: 011-123-877)

## PRESENT USE AND PURPOSE OF PERMIT REQUESTED:

The subject property currently has two existing houses adjacent to Kootenay Lake and is 11.12 hectares (ha) in size. The portion of this hooked parcel adjacent to Highway 3A (south side) is currently vacant.

A rural subdivision application has been submitted to the Province (Ministry of Transportation and Infrastructure) to create three lots and remainder parcel. Proposed residential Lots A (1.41 ha) and B (1.5 ha) are for residential use, whereas Lot C (0.53 ha) is proposed to provide common access. The hooked remainder parcel is 7.7 ha in size and lies adjacent to Highway 3A (south side). The applicant seeks to subdivide to recognize the above two existing home sites and provide access to these proposed lots.

The *Regional District's Subdivision Bylaw No. 2159* Section 9.01 a. "requires where no community wastewater system exists, or is proposed, confirmation of assessment for capabilities on the basis of Type 1 (septic tank) treatment for each proposed lot". The applicant is proposing Type 2 treatment systems for proposed residential Lots A and B. A Type 1 system is proposed for the remainder lot. All other servicing requirements, including proof of water remain in effect for this subdivision proposal. No development is proposed for the common access Lot C.

An Environmentally Sensitive Development Permit will be required prior to any consideration of subdivision approval in accordance with the *Electoral Area 'A' Comprehensive Land Use Bylaw No. 2315*.

AREA OF PROPERTY AFFECTED	ALR STATUS	ZONING	OCP
Approx. 3.4 ha	No	N/A	Country Residential (RC)

APPLICANT: 1068616 BC LTD. c/o Ken Crowe

## OTHER INFORMATION: ADVISORY PLANNING COMMISSION PLEASE NOTE:

If your Advisory Planning Commission plans to hold a meeting to discuss this Development Permit 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**

- MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
- HABITAT BRANCH (Environment)
- FRONTCOUNTER BC (MFLNRORD)
- AGRICULTURAL LAND COMMISSION
- REGIONAL AGROLOGIST
- ENERGY & MINES
- MUNICIPAL AFFAIRS & HOUSING
- INTERIOR HEALTH, HBE TEAM
- 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
- APHC AREA A
  - RDCK FIRE SERVICES
  - 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: V2404A APPLICANT: KEN CROWE**

**Name:**

**Date:**

**Agency:**

**Title:**





RETURN TO: **STEPHANIE JOHNSON**, PLANNER  
DEVELOPMENT AND COMMUNITY SUSTAINABILITY SERVICES  
REGIONAL DISTRICT OF CENTRAL KOOTENAY  
BOX 590, 202 LAKESIDE DRIVE  
NELSON, BC V1L 5R4  
Ph. 250-352-8175  
Email: [plandept@rdck.bc.ca](mailto:plandept@rdck.bc.ca)

# RDCK Map



REGIONAL DISTRICT OF CENTRAL KOOTENAY  
Box 590, 202 Lakeside Drive,  
Nelson, BC V1L 5R4  
Phone: 1-800-268-7325 [www.rdck.bc.ca](http://www.rdck.bc.ca)  
[maps@rdck.bc.ca](mailto:maps@rdck.bc.ca)

### Legend

-  Electoral Areas
-  RDCK Streets
-  Cadastre
-  Address Points

### Map Scale:

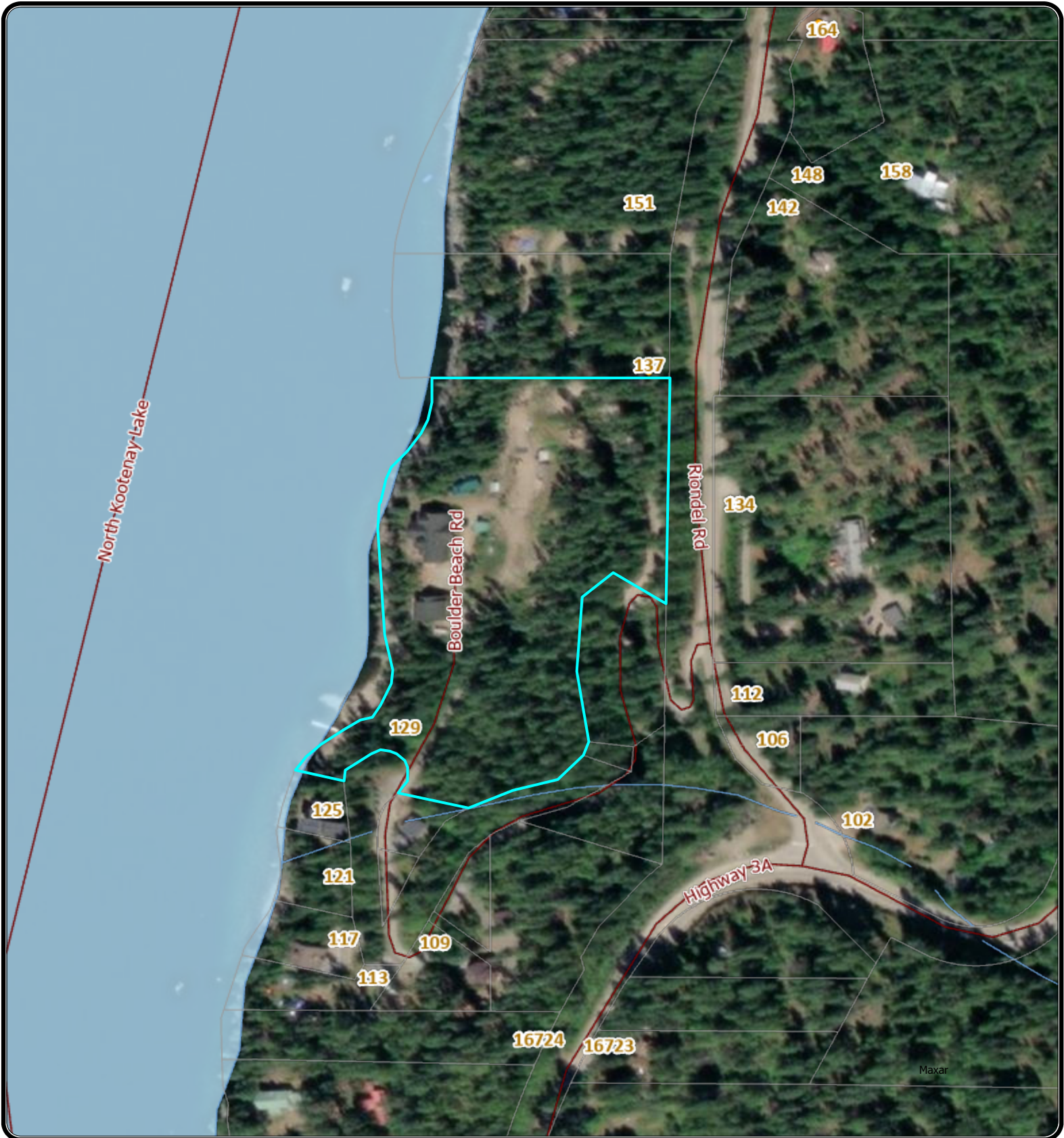
1:4,514

Date: January 22, 2024









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.

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 Box 590, 202 Lakeside Drive,  
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 Phone: 1-800-268-7325 www.rdck.bc.ca  
 maps@rdck.bc.ca

### Legend

-  Streams and Shorelines
-  Lakes and Rivers
-  Electoral Areas
-  RDCK Streets
-  Cadastre
-  Address Points

### Map Scale:

1:4,514

Date: January 22, 2024





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## Development Permit Areas

-  Environmentally Sensitive
-  Residential Cluster

## Legend

-  Electoral Areas
-  RDCK Streets
-  Cadastre
-  Address Points

## Map Scale:

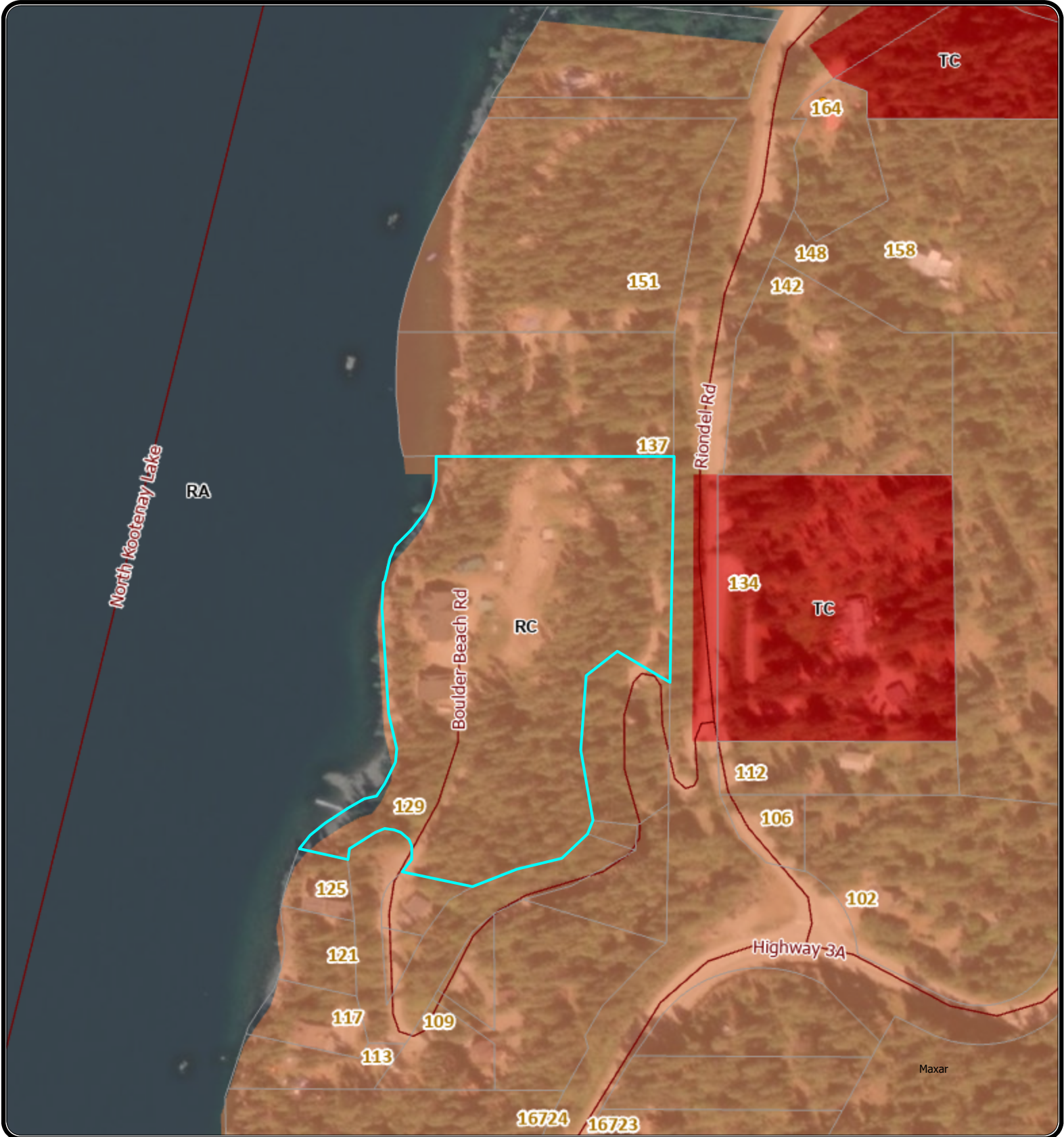
1:4,514

Date: January 22, 2024



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 maps@rdck.bc.ca

## Official Community Plan

- Commercial
- Country Residential

### Legend

- Resource Area
- Electoral Areas
- RDCK Streets
- Cadastre
- Address Points

### Map Scale:

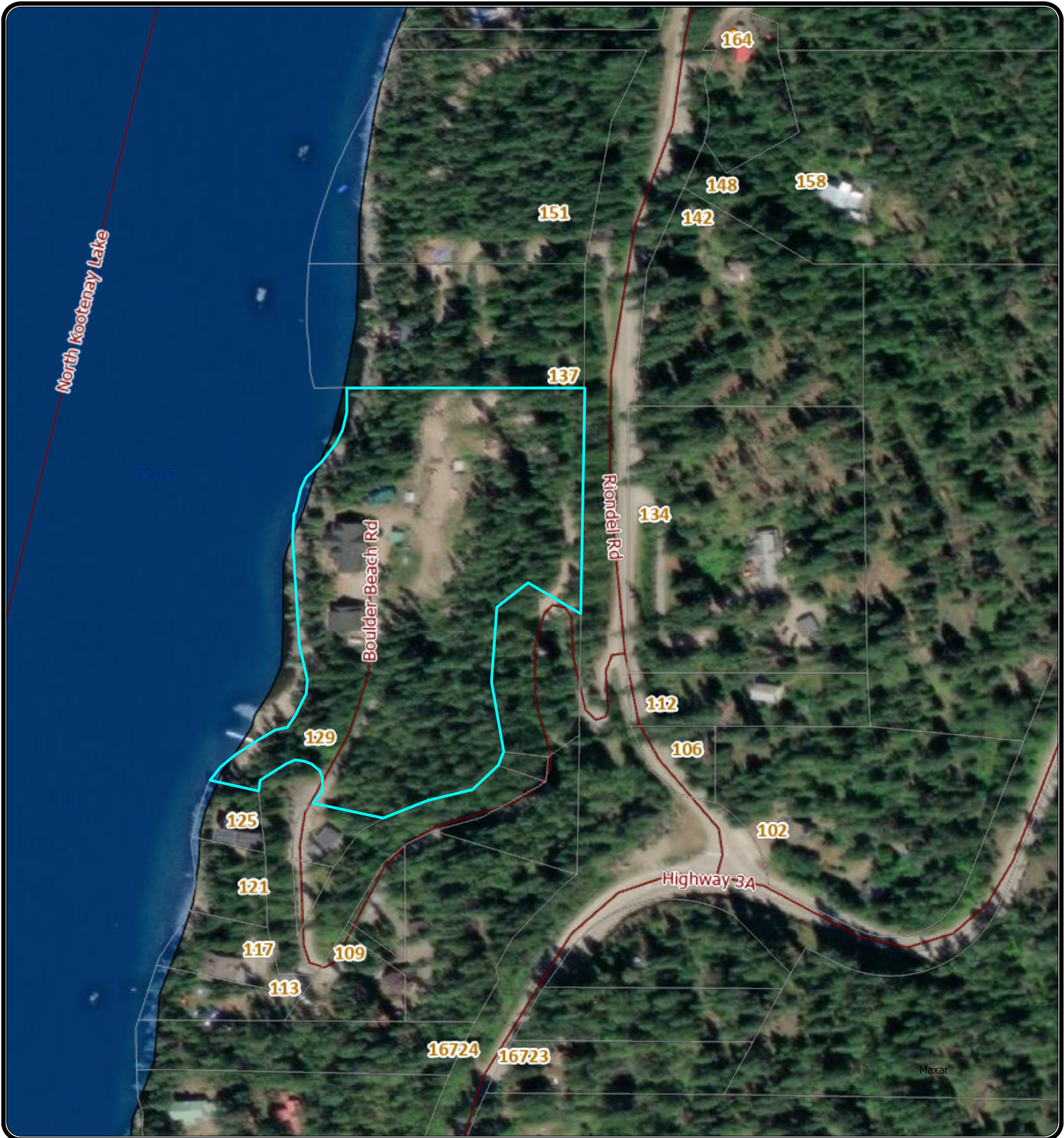
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Date: January 22, 2024








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# RDCK Map



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 maps@rdck.bc.ca

### Legend

-  Flood Construction Levels - 1990
-  Electoral Areas
-  RDCK Streets
-  Cadastre
-  Address Points

### Map Scale:

1:4,514

Date: January 22, 2024



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## SUMMARY OF VARIANCE

ByLaw: \_\_\_\_\_

The reason for the variance is to subdivide 2 existing houses on a 7-acre parcel of land.

Both houses have existing type 2 septic systems in place.

It is my understanding that the by law calls for a Type 1 to subdivide.

My engineer has designed a Type 2 system to replace the existing ones that in place.

The soil in this area does not allow for a Type 1 system.

My thoughts on this are:

1. The type 2 system my Engineer has designed is an approved Government system.
2. If my system fails tomorrow and I am unable to have a Type 1 system what are my options:
  - a. Put in a Type 2 Government approved system.
  - b. Pump sewage out on to ground.
  - c. Abandon the property.
3. It is hard for me to understand how I have a Type 2 system, but a Type 2 is no acceptable for a replacement.

A - The positive of all this is that the system is Government approved as environmentally safe.

B - Allow me to move forward to a subdivision and make 2 households.

I do not see any negative to doing the right thing.

His is the last step I need to satisfy moving forward.

Respectfully



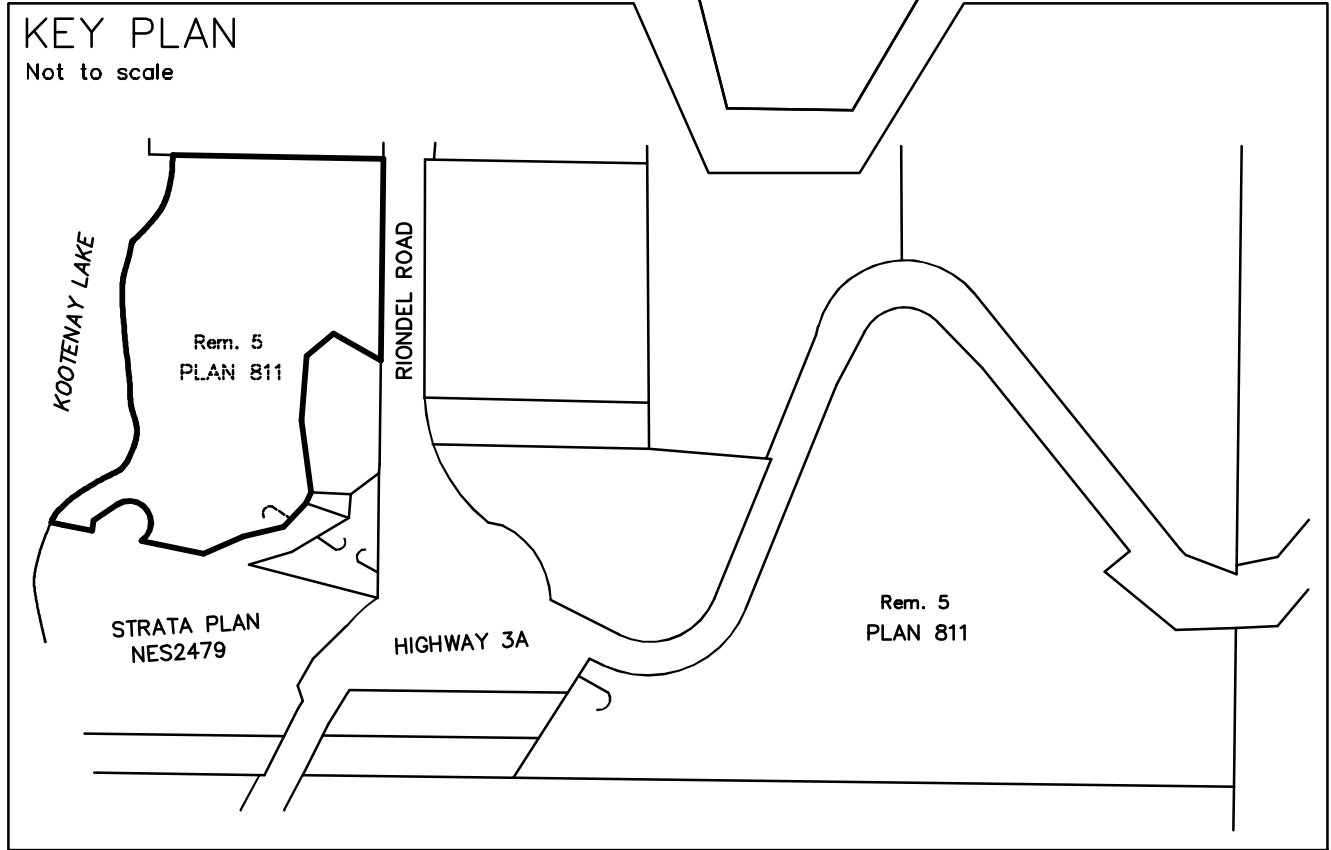
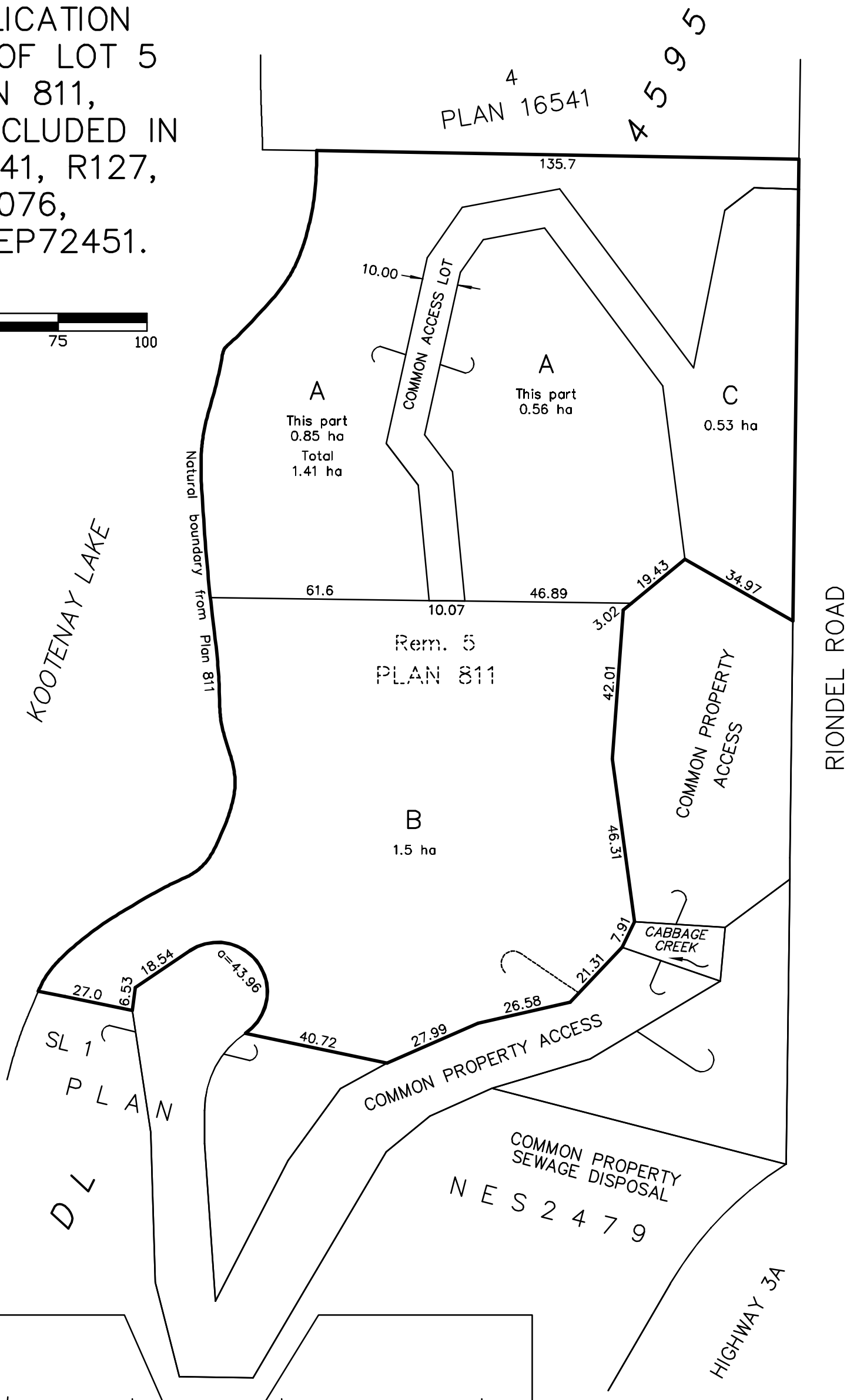
Ken Crowe

SUBDIVISION APPLICATION  
 PLAN FOR PART OF LOT 5  
 DL 4595 KD PLAN 811,  
 EXCEPT PARTS INCLUDED IN  
 PLANS 3062, 16541, R127,  
 NEP60734 NEP68076,  
 NEP69201 AND NEP72451.



LEGEND

Dimensions derived from Plan 811.  
 All dimensions are in metric.



# RDCK Map



**LEGEND**

- ESDP area and LWD and Leaf Litter ZOS (15 m)
- Shade ZOS (0-30 m)
- SPEA ( 15m - 30 m)



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 maps@rdck.bc.ca

**Legend**

- Electoral Areas
- RDCK Streets
- Cadastre - Legal Parcels
- Address Points

**Map Scale:**

1:2,000

Date: August 24, 2023

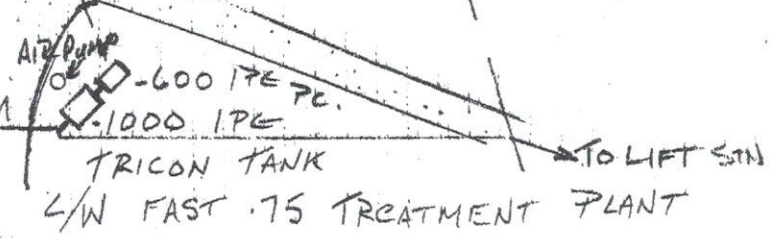
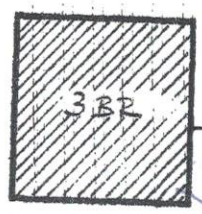
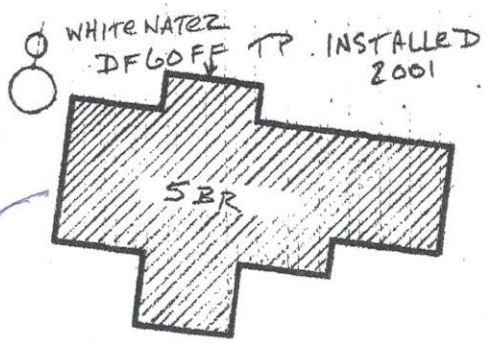
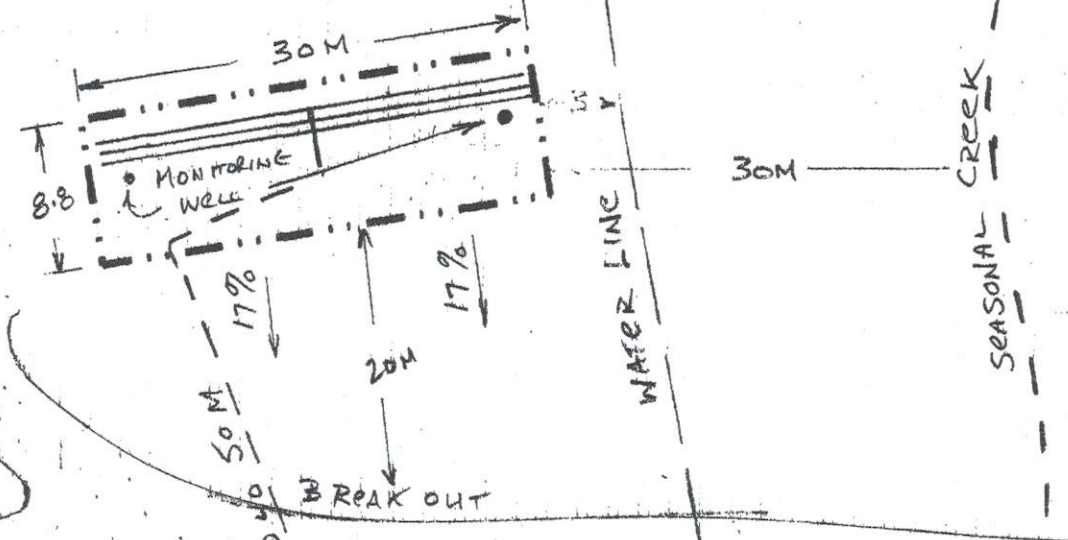
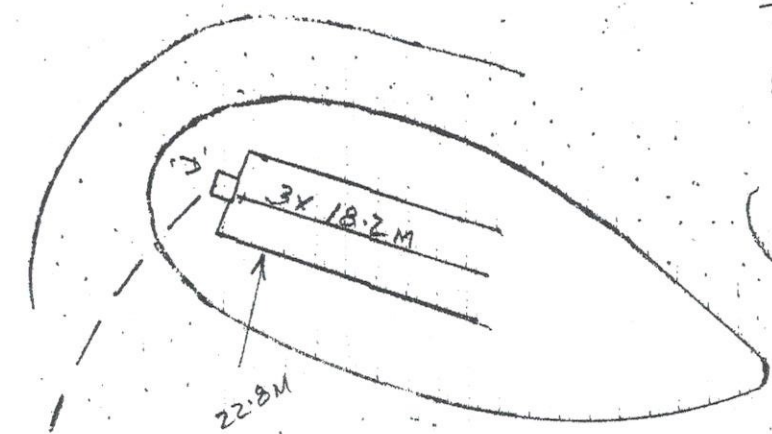
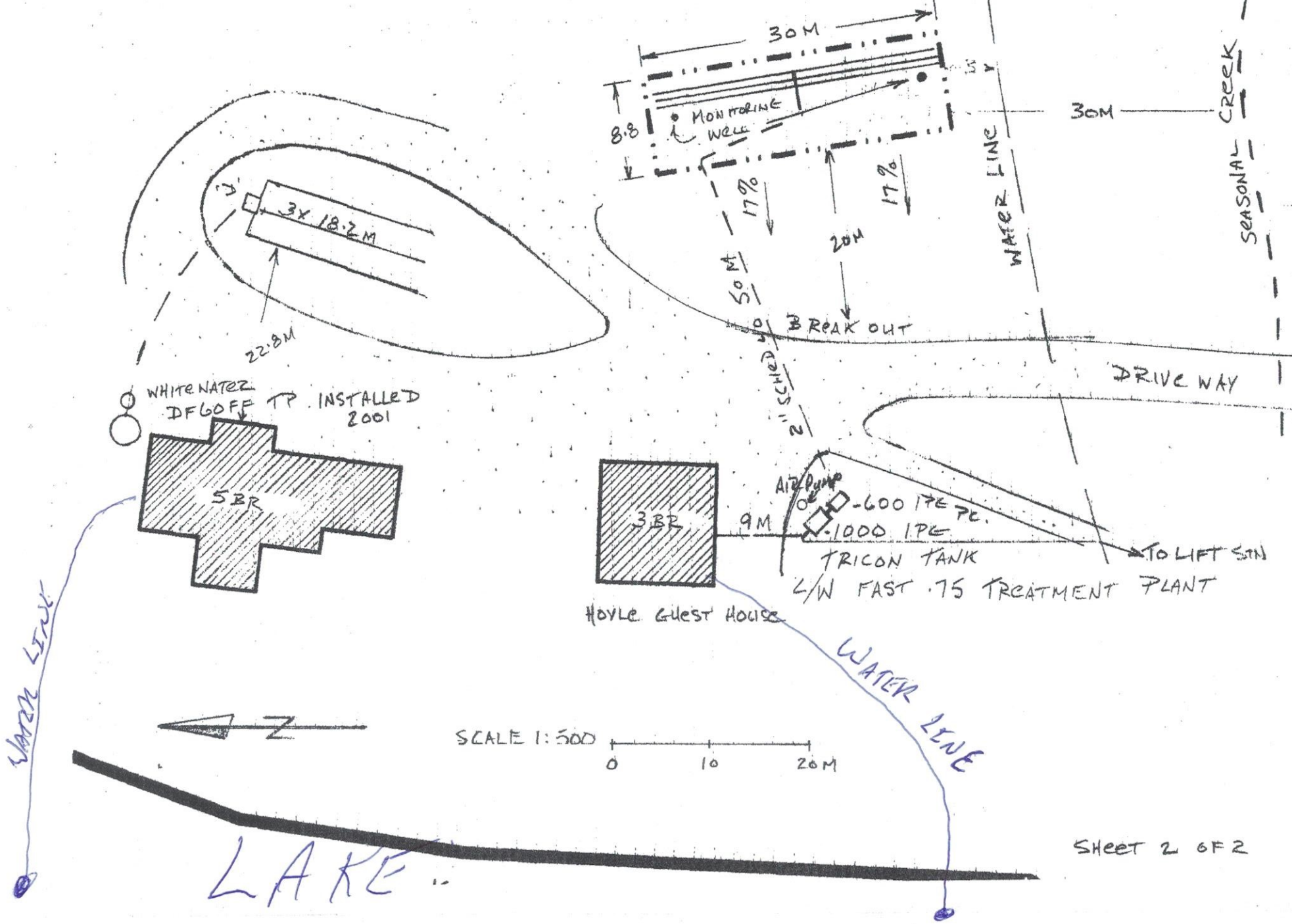


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RECORD OF SEWAGE SYSTEM: HOYLE GUEST HOUSE

& CABINS DESIGN FLOW: 3BR 1363 L/DAY

SEASONAL COTTAGES 5X290 L/DAY = 2813 L/DAY



LAKE

10/31/2022

# *129 Boulder Beach Rd, Subdivision #1, Site and Soils Report Type 2 System*

*Interior Health Authority Filing for Construction of Septic System: Site  
Investigation Report, Record of Design, and Specifications*

Alexander McNally P.Eng  
WEST KOOTENAY SEPTIC SOLUTIONS



## *Table of Contents*

<i>Introduction:</i> .....	2
<b>Summary of Proposed Works:</b> .....	2
RE: 129 Boulder Beach Rd #1 Type 2 Septic System .....	2
<i>Site Information:</i> .....	2
<i>Site and Soil Evaluation Report:</i> .....	3
Test pit #1 .....	3
Test pit #2 .....	3
Limiting Layer/ Design Limit .....	3
<i>Declaration:</i> .....	3
<i>Appendix 1: Site Plan, Detailed Design, Layout</i> .....	4
<i>Appendix 2: Site &amp; Soil Evaluation Photos</i> .....	5

## ***Introduction:***

Legal Owner's Name:	<u>Ken Crowe (204) 570-3213</u>
Date:	<u>October 18, 2022</u>
Civic Address:	<u>129 Boulder Beach Rd, Kootenay Bay V0B 2B0</u>
Legal Description:	<u>Lot 5 Plan NEP811 District Lot 4595 Land District 26 Except Plan 3062 16541 R127 NEP60734 NEP68076 NEP69201 NEP72451 FOR FORESHORE SEE 786-04737.101</u>
Tax Assessment Roll Number	<u>21-786-04737.100</u>
Property PID Number	<u>011-123-877</u>

## ***Summary of Proposed Works:***

See attached drawings Site Plan, Detailed Design, and Layout in Appendix 1

### ***RE: 129 Boulder Beach Rd #1 Type 2 Septic System***

This system will connect to an existing 5 person house at 129 Boulder Beach Rd. The system will use a Type 2 sand mound design. The house system is designed to accommodate 5 residents at 350L/D/R for a DDF of 1750L/D. A type 2 sand mound designs were chosen for these systems based on the percolation tests with a resulting Kfs of 1080mm/D. The sand mound system will use timed micro dosing to distribute the effluent throughout the day. The system will have to an outlet at the house [100 mm]. The house will use gravity to transport the effluent to a 2840 L (750 G) Dual Chamber Premium Plastic Tank (or equivalent) with a PL122 Effluent Filter [100 mm inlet/ outlet]. From the septic tank the effluent will flow with gravity into a 2840 L (750 G) Premier Pump Chamber (or equivalent). In the pump chamber the effluent will flow into a Hydromatic OSP50 Pump [ $\frac{1}{2}$  hp] set to run at 46 L/S for 76 sec every 38 min [30 times a day]. The effluent leaves the pump chamber in 50mm (2") Sch. 40 PVC (or equivalent) pipe and enters a manifold with three 32 mm (1  $\frac{1}{4}$ ") Sch. 40 laterals. The manifold has a head pressure of >2 m for both systems when the pump is on. The manifold has 5mm (3/16") orifices, spaced 0.6 m apart, facing up and down, orifice shields installed on the down facing orifices to prevent erosion. The distribution field is 3 m wide and 11m long with an area of 33 m<sup>2</sup>. The laterals are surround in drain rock with 50 mm (2") above the pipe and 200mm (8") below the pipe, wrapped in geotextile fabric. The distribution field is placed on a sand mound that rises 0.6m (2') above ground level and includes a sand toe which has a slope of 3:1. This all covered by natural organic material while also maintaining a slope of 3:1. The system has a HLR of 60 L/D/m<sup>2</sup> as chosen using result of percolation tests. This system is designed in accordance with the Ministry of BC's Sewer System Standard Practice Manual.

## ***Site Information:***

- Total parcel size: 27.48 Acres
- Potable Water Source: Community Water
- Closest Water Feature 45 m Kootenay Lake

## ***Site and Soil Evaluation Report:***

See Site and Soil Evaluation test photos in Appendix 2

### ***Test pit #1***

- 0 cm - 9 cm –Organics and sand dark brown soil
- 9cm – 70 cm – Mixed soil with large rocks, sand, clay, loam, greyish brown material

### ***Test pit #2***

- 0 cm - 11 cm –Organics and sand dark brown soil
- 11cm – 80 cm – Mixed soil with large rocks, sand, clay, loam, greyish brown material

$Kfs = 1080 \text{ mm/day} \Rightarrow \text{Type 2 Hydraulic Loading Rate HLR} = 60 \text{ L/D/m}^2$

### ***Limiting Layer/ Design Limit***

- Limiting Layer >150 cm

## ***Declaration:***

*These plans and specifications are consistent with standard practice with regard to the Sewerage System Regulations and the Sewerage System Standard Practices Manual of the B.C. Ministry of Health. I have conducted a site evaluation, exercised due diligence, and am a registered On-Site Practitioner authorized to plan and install the system designed herein.*





*Appendix 1: Site Plan, Detailed Design, Layout*

**General Notes**

1. System designed in accordance with BC Sewer System Practice Manual
2. Septic system shall be installed by authorized practitioner or under the supervision of a Professional Engineer registered with EGCBC
3. Micro Dosing  
H1 46 L/min for 76 sec  
Every 38 min 30 times a day  
4. Kts 1060 mV/D @20cm H20
5. House 5 Residents
6. H1 DDF 1750 L/D
7. L.R 60 L/D/m<sup>2</sup>
8. H1 Dispersal Area 33 m<sup>2</sup>  
Length 11 m Width 3 m
9. Type 2 Orifice  
All 90° bends 2 x 45°
10. Manifold head pressure >2 m H<sub>2</sub>O
11. Water: Community System
12. Closest Water Body >30m
13. System design is site specific anyone else using this information does so at their own risk

PID 011-123-877  
Tax Roll# 21-786-04737.100  
Lot Size 27.48 Acres  
Lat 49.886059  
Long -116.869309

McNally Technical Services  
Alexander McNally P. Eng  
301 Vernon St. Nelson, BC  
V1L 4E3

129 Boulder Beach Rd #1  
Kootenay Bay  
Land Subdivision  
Type 2 Septic System

Lot 5 Plan NEP811 District Lot 4595 Land District 26 Except Plan 3062 16541 R127  
NEP60734 NEP68076  
NEP69201 NEP72451 FOR FORESHORE SEE  
786-04737.101

October 31, 2022  
2022-10-MTKB-5RSMTY2  
Scale 1:1,128  
Sheet 1 of 3  
Site Plan  
Rev 0

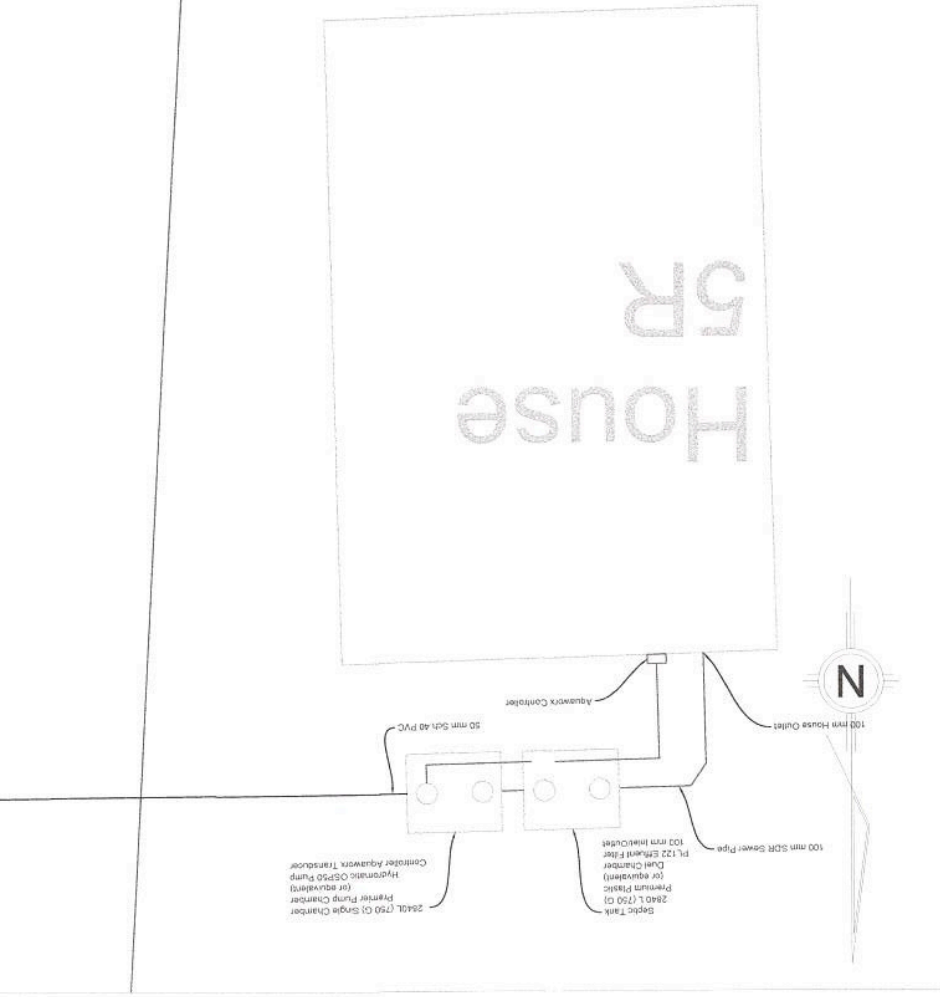
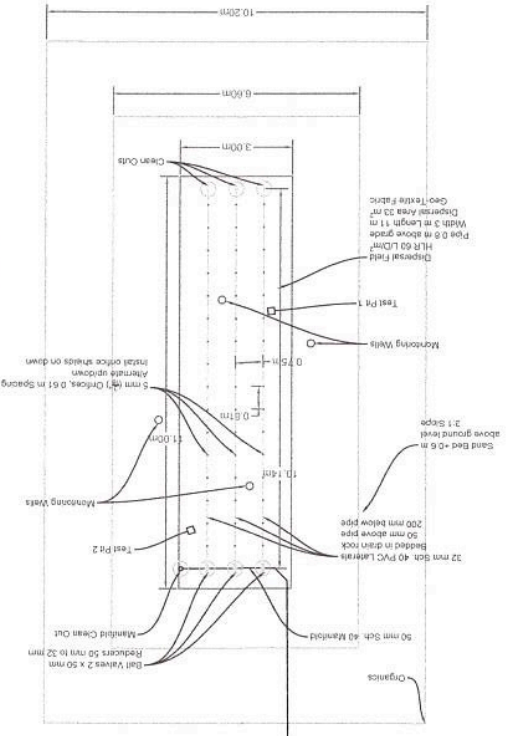


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- Micro Dosing  
H1 46 L/min for 76 sec  
Every 38 min. 30 times a day  
4. Kits 1080 mm/D @20cm H20  
5. House 5 Residents  
6. H1 DDF 1750 L/D  
7. HLR 60 L/D/m<sup>2</sup>  
8. H1 Dispersal Area 33 m<sup>2</sup>  
Length 11 m Width 3 m  
9. Type 2 Office  
All 90° bends 2 x 45°  
10. Manifold head pressure >2 m H<sub>2</sub>O  
11. Water: Community System  
12. Closest Water Body >30m  
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Type 2 Septic System  
Lot 5 Plan NEP811 District Lot  
4595 Land District 26 Except  
Plan 3062 16541 R127  
NEP60734 NEP68076  
NEP69201 NEP72451 FOR  
FORESHORE SEE  
786-04737.101

October 31, 2022  
2022-10-MTKB-SRSMTY2  
Scale 1:500  
Sheet 2 of 3  
Detailed Design  
Rev 0



General Notes

1. System designed in accordance with BC Sewer System Practice Manual
2. Septic system shall be installed by authorized practitioner or under the supervision of a Professional Engineer registered with EGBCC
3. Micro Dosing  
H1 46 L/min for 76 sec  
Every 38 min 30 times a day
4. Kts 1080 mm/D @20cm H20
5. House 5 Residents
6. H1 DDF 1750 L/D
7. HLR 60 L/D/m<sup>2</sup>
8. H1 Dispersal Area 33 m<sup>2</sup>  
Length 11 m Width 3 m
9. Type 2 Orifice  
All 90° bends 2 x 45°
10. Manifold head pressure > 2 m H<sub>2</sub>O
11. Water: Community System
12. Closest Water Body > 30m
13. System design is site specific anyone else using this information does so at their own risk

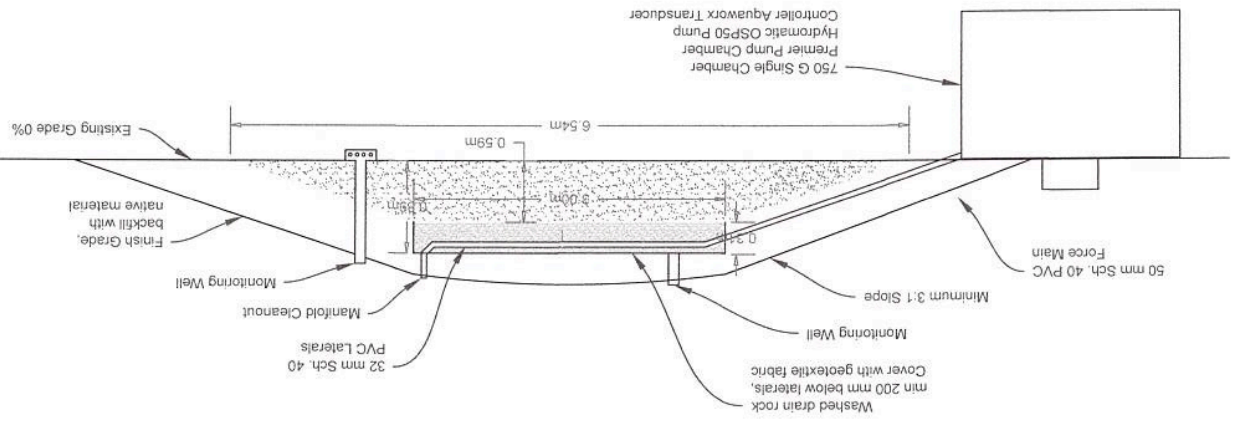
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Lot Size 27.48 Acres  
Lat 49.686059  
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Kootenay Bay  
Land Subdivision  
Type 2 Septic System

Lot 5 Plan NEP811 District Lot  
4595 Land District 26 Except  
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NEP60734 NEP68076  
NEP69201 NEP72451 FOR  
FORESHORE SEE  
786-04737-101

October 31, 2022  
2022-10-MTKB-5RSMTY2  
Scale 1:50  
Sheet 3 of 3  
Layout  
Rev 0



*Appendix 2: Site & Soil Evaluation Photos*



Figure 1: test pit # 1



Figure 2: Test Pit 2



Figure 5: Organics



Figure 6: Rocks, Clay and Sandy Gravel



- c. Confirmation of existing connection(s) to community water systems currently on boil water advisory shall be accepted as proof of water for the purposes of subdivision where the connection currently serves an existing residence as long as no new connections to the community water system are involved.

Where an applicant proposes to establish a new community water system, the applicant must submit to the Regional District:

- d. A copy of the construction permit issued pursuant to the *Drinking Water Protection Act*;
- e. Where a community water system is to be acquired by the Regional District, the design of such shall be submitted to the Regional District for approval prior to the commencement of construction as required by this Bylaw;
- f. That the water source to be used by the system is adequate to serve each parcel to be served by the system as determined by the authority having jurisdiction over the system.

## **PART 9 - SEWAGE**

### **9.01 On-Site Sewage Disposal**

Where no community wastewater system exists, or is proposed, soil and site conditions for on-site sewage disposal systems shall be subject to the following:

- a. Each lot be assessed on the basis of Type 1 (septic tank) treatment and trench disposal systems;
- b. Each lot must be self-contained, providing an initial and replacement sewage disposal area;
- c. Sewerage holding tanks will not be considered an acceptable method of waste water disposal.

### **9.02 Community Wastewater Systems**

Where an applicant proposes to connect to an existing community wastewater system the applicant must submit to the Regional District:

- a. A letter from the Owner/Operator of the community wastewater system confirming that all parcels proposed can be connected to the wastewater system and that fees have been paid for connection to the wastewater system. Confirmation must be submitted prior to final Approval of the subdivision;