



Galiano Island Local Trust Committee Regular Meeting Agenda

Date: July 5, 2021
Time: 12:30 pm
Location: Electronic Meeting

		Pages
1.	CALL TO ORDER	12:30 PM - 12:50 PM
2.	APPROVAL OF AGENDA	
3.	TRUSTEE REPORT	
4.	CHAIR'S REPORT	
5.	TOWN HALL AND QUESTIONS	12:50 PM - 1:10 PM
6.	COMMUNITY INFORMATION MEETING	
	None	
7.	PUBLIC HEARING	
	None	
8.	MINUTES	1:10 PM - 1:20 PM
8.1.	Local Trust Committee Minutes Dated June 1, 2021 (for Adoption)	3 - 13
8.2.	Section 26 Resolutions Without Meeting Report - None	
8.3.	Advisory Planning Commission Minutes - None	
9.	BUSINESS ARISING FROM MINUTES	
9.1.	Follow-up Action List Dated June 2021	14 - 16
10.	DELEGATIONS	
11.	CORRESPONDENCE	
	<i>Correspondence received concerning current applications or projects is posted to the LTC webpage</i>	
12.	MEETING BREAK - COMMUNITY UPDATE	1:20 PM - 1:30 PM

13.	APPLICATIONS AND REFERRALS	1:30 PM - 2:30 PM	
13.1.	GL-RZ-2019.2 (Gauvreau) – Staff Report (attached)		17 - 39
13.2.	GL-DP-2021.2 and GL-DVP-2021.3 (Hoole) – combined Staff Report (attached)		40 - 111
13.3.	GL-DP-2021.1 (Orlitzky) - Staff Report (attached)		112 - 188
14.	LOCAL TRUST COMMITTEE PROJECTS	2:30 PM - 3:00 PM	
14.1.	Short Term Vacation Rentals Project - Consideration of Adoption of Bylaw No. 275 - Staff Report (attached)		189 - 193
14.2.	Land Use Bylaw Technical Review Project - Consideration of Adoption of Bylaw No. 278 - Staff Report (attached)		194 - 201
15.	REPORTS	3:00 PM - 3:10 PM	
15.1.	Work Program Reports (attached)		
15.1.1.	<u>Top Priorities Report Dated June 2021</u>		202 - 202
15.1.2.	<u>Projects List Report Dated June 2021</u>		203 - 205
15.2.	Applications Report Dated June 2021 (attached)		206 - 211
15.3.	Trustee and Local Expense Report - None		
15.4.	Adopted Policies and Standing Resolutions (attached)		212 - 216
15.5.	Local Trust Committee Webpage		
15.6.	Islands Trust Conservancy Report Dated May 25, 2021		217 - 218
16.	NEW BUSINESS	3:10 PM - 3:25 PM	
16.1.	Business Licenses – Memo (attached)		219 - 219
17.	UPCOMING MEETINGS		
17.1.	Next Regular Meeting Scheduled for September 7, 2021, Location: TBD		
18.	TOWN HALL	3:25 PM - 3:45 PM	
19.	CLOSED MEETING		
	None		
20.	ADJOURNMENT	3:45 PM - 3:45 PM	



Galiano Island Local Trust Committee

Minutes of Regular Meeting

Date: June 1, 2021
Location: Electronic Meeting (Zoom Webinar)

Members Present: Dan Rogers, Chair
 Tahirih Rockafella, Local Trustee
 Jane Wolverton, Local Trustee

Staff Present: Brad Smith, Islands Planner
 William Shulba, Senior Freshwater Specialist
 Maple Hung, Planning Team (Host)
 Carly Bilney, Recorder

Others Present: There were approximately 24 attendees in the Zoom Webinar.

1. CALL TO ORDER

Chair Rogers called the meeting to order at 12:30 p.m. He acknowledged the privilege that we have to be able to work on the territory of the Coast Salish First Nations. He commented on the sorrow and shame he feels as a Canadian and how settlers have historically failed in the relationship with Indigenous Peoples in ways that amount to genocide. There was a moment of silence after to honour families affected by the residential school system.

2. APPROVAL OF AGENDA

The following additions to the agenda were presented for consideration:

- 16.4 Standing Advisory Planning Commission (APC) Regarding Climate Crisis
- 16.5 James Island
- Projects List - Projects Combination

By general consent the agenda was approved as amended.

3. TRUSTEE REPORT

Trustee Rockafella reported on the following:

- At the latest meeting of the Southern Gulf Islands Forum (SGIF) discussion was held about how various levels of government can support the Tsawout First Nation on James Island; and
- Old growth forest protection was also discussed at the SGIF.

Trustee Wolverton reported on the following:

- Recent meetings have been held related to various issues including: Galiano roads, short-term vacation rentals (STVR), site visits to Galiano Green, model fee bylaws for the Islands Trust and drafting the Trust Policy Statement.

4. CHAIR'S REPORT

Chair Rogers reported on the following:

- Recent meetings have been held related to the revision of the Trust Policy Statement, which was last revised in 1994 and needs substantial updating; and
- There will be a special meeting of Trust Council for July 8 where the single topic will be a proposal to consider a draft bylaw of the Trust Policy Statement.

5. TOWN HALL AND QUESTIONS

Town hall was held and the following comments were made:

- Reliance on private sector professionals hired by applicants is fundamentally flawed as explained in a 2015 report titled *Professional Reliance and Environmental Regulation in BC*;
- The Islands Trust now has a freshwater specialist on staff to provide internal professional guidance; and
- Trustees should consider updating the build-out report completed for the Galiano Official Community Plan (OCP) to get a clearer idea of the island's zoning for density.

Trustee Rockafella was recused from the meeting at 1:02 p.m. and the following comments were made regarding application GL-RZ-2021.1 Galiano Affordable Living Initiative Society (GALI):

- Support was expressed for the application given the housing crisis on Galiano; and
- Support was expressed for the application given the proposed property's proximity to facilities, including grocery stores, fire station and the community hall.

Trustee Rockafella returned to the meeting at 1:04 p.m. Trustee Wolverton was recused from the meeting at 1:04 p.m. and attendees made the following comments about the GL-RZ-2019.1 (GIGARHS):

- Opposition to the proposal was expressed because of the high risk of wildfire in the Heritage Forest;
- A wildfire assessment is important to include as part of this application;
- All areas of Galiano were included in a wildfire assessment by the fire department in 2010;

- The agency referral from the Galiano Island Parks and Recreation Commission regarding the application should be amended to note that the proponent should consider providing some public parking at “any new terminus” should the application be successful;
- The maximum occupancy for the development is not clear;
- Publication of referral reports was clarified;
- A data logger should be required on the well of the proposed development site and elsewhere in neighbourhoods throughout the island;
- The water management plan for the proposal should include data from the Sticks Allison neighbourhood community well; and
- Theoretical science in hydrogeological reports lacks empirical evidence because it does not address issues related to well interference occurring in the Sticks Allison neighbourhood.

Trustee Wolverton returned to the meeting at 1:41 p.m.

6. COMMUNITY INFORMATION MEETING

6.1 Galiano Island Local Trust Committee Proposed Bylaw No. 278 (LUB Amendment) - Technical Review Project

Planner Smith reviewed proposed Bylaw No. 278.

7. PUBLIC HEARING

7.1 Galiano Island Local Trust Committee Proposed Bylaw No. 278 (LUB Amendment) - Technical Review Project

Public Hearing Binder under separate cover.

8. MINUTES

8.1 Local Trust Committee Minutes Dated April 12, 2021 (for Adoption)

The following amendments to the April 12, 2021 minutes were presented for consideration:

- On the first page of the minutes, Trustee Wolverton should be listed as “Local Trustee” not as “Chair.”

By general consent the minutes were adopted as amended.

8.2 Section 26 Resolutions Without Meeting Report Dated May 2021

None

8.3 Advisory Planning Commission Minutes Dated May 12, 2021

Received for information.

9. BUSINESS ARISING FROM MINUTES

9.1 Follow-up Action List Dated May 2021

Received for information.

10. DELEGATIONS

10.1 Capital Regional District - Southern Gulf Islands Transportation Integration Plan

Justine Starke introduced the Southern Gulf Islands Transportation Integration Plan led by the Capital Regional District (CRD) and made the following comments:

- The goal of the study is to cost out an inter-island integrated transportation service to a level of detail that would enable service establishment;
- The study will focus on both island residents and tourists, and include public transit, trail systems and a ferry service to supplement BC Ferries;
- The project will require voter consent and will thus result in a community referendum; and
- Next steps will include community engagement.

11. CORRESPONDENCE

Chair Rogers commented on recent correspondence related to the BC Ferries engagement survey and noted the item will be included in the next LTC meeting.

Correspondence received concerning current applications or projects is posted to the LTC webpage

11.1 Update from Applicant – Application GL-RZ-2005.1 (Romagnoli-Smith)

Planner Smith provided an update on Application GL-RZ-2005.1 (Romagnoli-Smith). Discussion was held and the following comments were made:

- The applicants are seeking advice as to how to proceed given they have not yet secured a covenant;
- Various options available to the current LTC to move forward were provided;
- The applicant expressed support for keeping the file open;
- Any covenant holder will likely require an endowment to pay for a management plan; and
- It is problematic to keep a file open for multiple years.

It was Moved and seconded that the Galiano Island Local Trust Committee would proceed no further with Application GL-RZ-2005.1 (Romagnoli-Smith).

Discussion on the motion was held about whether to give the applicant time to secure a covenant and the following comments were made:

- The application went to Public Hearing in 2011 and the applicant has had 10 years of direction from staff to come to agreement on a covenant;
- Leaving the matter unresolved is troubling; and
- The application does not look like it is going to move ahead in the near future.

1:55:43 / 1:57:05 – A friendly amendment on the motion was made.

GL-2021-032

It was Moved and Seconded,

that the Galiano Island Local Trust Committee would amend the proposed motion to specify that the Local Trust Committee would proceed no further with the application unless the applicants have identified and secured the terms of a covenant by September 30, 2021.

CARRIED

GL-2021-033

It was Moved and Seconded,

that the Galiano Island Local Trust Committee would proceed no further with Application GL-RZ-2005.1 (Romagnoli-Smith) unless the applicant has identified and secured the terms of a covenant by September 30, 2021.

CARRIED

12. MEETING BREAK - COMMUNITY UPDATE

A break was held from 2:30 p.m. to 2:40 p.m.

13. APPLICATIONS AND REFERRALS

13.1 GL-DVP-2020.2 (Hotte) - Staff Report

Planner Smith reviewed the Staff Report on GL-DVP-2020.2 (Hotte). Discussion was held and the following comments were made:

- Setting conditions for compliance cannot be included in a development variance permit; and,
- Staff recommends having a secondary voluntary compliance agreement, which would be subject to bylaw enforcement, to address the section of deck that is beyond the shoreline.

GL-2021-034

It was Moved and Seconded,

that the Galiano Island Local Trust Committee approve issuance of Development Variance Permit GL-DVP-2020.2 (Hotte).

CARRIED

GL-2021-035

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to seek a voluntary compliance agreement with applicants for GL-DVP-2020.2 (Hotte) for removal of the bottom portion of the deck to within 0.2 meters by the end of October 2021 and to submit paperwork that demonstrates proof of compliance by attaching an engineering report to the covenant.

CARRIED

13.2 GL-DVP-2021.4 (Allen & Norgang) - Staff Report

Planner Smith reviewed the Staff Report on GL-DVP-2021.4 (Allen & Norgang). Discussion was held and the following comments were made:

- Parking measures on the lot will be subject to bylaw enforcement;
- Parking across the street is under the jurisdiction of the Ministry of Transportation and Infrastructure; and
- Concern was expressed about allowing for two parking spaces though there are four vehicles on the property and for potential issues this might create.

GL-2021-036

It was Moved and Seconded,

that the Galiano Island Local Trust Committee approve issuance of Development Variance Permit application GL-DVP-2021.4 (Allen & Norgang).

CARRIED

Trustee Rockafella was recused from the meeting at 3:23 p.m.

13.3 GL-RZ-2021.1 Galiano Affordable Living Initiative Society (GALI) - Staff Report

Planner Smith reviewed the staff report on GL-RZ-2021.1 Galiano Affordable Living Initiative Society (GALI). Discussion was held and the following comments were made:

- Concern was expressed about neighbouring wells and the impact of water use in the high density area;
- Support was expressed to implement a continuous monitoring data logger on the subject well;
- There is a need to ensure the proposed density is appropriate for the property;
- The island needs stable, long-term funding to establish robust monitoring of wells and better understand the complex nature of hydrogeology;
- It is important to ensure this will be a viable project given the uncertainties related to hydrogeology;
- The applicants would consider resurrecting the idea of a community park within the property if requested by the current LTC; and
- This is a preliminary discussion and there remains much to be done before progressing to next steps.

GL-2021-037

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to proceed with application GL-RZ-2021.1 (GALI) and to prepare draft bylaws and a draft housing agreement.

CARRIED

GL-2021-038

It was Moved and Seconded,

that the Galiano Island Local Trust Committee authorize staff to enter into a cost recovery agreement, if necessary, with the applicant allowing Islands Trust legal counsel to prepare a draft housing agreement for application GL-RZ-2021.1 (GALI).

CARRIED

GL-2021-039

It was Moved and Seconded,

that the Galiano Island Local Trust Committee refer application GL-RZ-2021.1 (GALI) to the Galiano Island Advisory Planning Commission for comment.

CARRIED

Discussion was held about whether directing staff to schedule a Community Information Meeting is premature.

GL-2021-040

It was Moved and Seconded,

that the Galiano Island Local Trust Committee defer recommendation 4 regarding scheduling a Community Information Meeting electronically on application GL-RZ-2021.1 (GALI) to the July 5 Local Trust Committee meeting.

CARRIED

GL-2021-041

It was Moved and Seconded,

that the Galiano Island Local Trust Committee request that the applicants reinstall a continuous monitoring data logger on the subject well.

CARRIED

Trustee Rockafella returned to the meeting at 4:39 p.m. Trustee Wolverton was recused from the meeting at 4:39 p.m.

13.4 GL-RZ-2019.1 Gulf Islands Galisle Affordable Rental Housing Society (GIGARHS) - Staff Memo

Planner Smith reviewed the Staff Memo on GL-RZ-2019.1 Gulf Islands Galisle Affordable Rental Housing Society (GIGARHS). Discussion was held and the following comments were made:

- A data logger would be of great value in providing additional information regarding water supply and demand such as the recharge rate of the well;
- The estimated occupancy of the proposed development is likely to be around 35 people; and
- An affordable housing development could help mitigate fire risk in the area by providing rainwater storage for firefighting.

GL-2021-042

It was Moved and Seconded,

that the Galiano Island Local Trust Committee request that the GL-RZ-2019.1 applicants install a continuous monitoring data logger on the subject well as soon as possible and provide that information to the Islands Trust.

CARRIED

Discussion continued and the following comments were made:

- Applicants have not considered a grey water recovery system due to costs;
- Support was expressed for requesting that applicants undertake a grey water feasibility assessment; and
- Water management planning is an evolving expertise at the Islands Trust and water management requirements and water plans are shifting rapidly.

GL-2021-043

It was Moved and Seconded,

that the Galiano Island Local Trust Committee request that the GL-RZ-2019.1 applicants prepare a grey water recycling feasibility study.

CARRIED

14. LOCAL TRUST COMMITTEE PROJECTS

Trustee Wolverton returned to the meeting at 5:33 p.m.

14.1 Land Use Bylaw Technical Amendments – Staff Report

Planner Smith reviewed the report regarding Land Use Bylaw Technical Amendments.

GL-2021-044

It was Moved and Seconded,

that the Galiano Island Local Trust Committee proposed Bylaw No. 278, cited as “Galiano Island Land Use Bylaw 127, 1999, Amendment No. 1, 2021”, be read a second time.

CARRIED

GL-2021-045

It was Moved and Seconded,

that the Galiano Island Local Trust Committee proposed Bylaw No. 278, cited as “Galiano Island Land Use Bylaw 127, 1999, Amendment No. 1, 2021”, be read a third time.

CARRIED

GL-2021-046

It was Moved and Seconded,

that the Galiano Island Local Trust Committee proposed Bylaw No. 278 be forwarded to the Secretary of the Islands Trust for Executive Committee Approval.

CARRIED

GL-2021-047

It was Moved and Seconded,

that the Galiano Island Local Trust Committee rescind GL-2021-045.

CARRIED

GL-2021-048

It was Moved and Seconded,

that the Galiano Island Local Trust Committee rescind GL-2021-046.

CARRIED

GL-2021-049

It was Moved and Seconded,

that the Galiano Island Local Trust Committee amend proposed Bylaw No. 278 to add to Bylaw No. 278 a clause to amend Galiano Island Land Use Bylaw 127.1999 by removing the extra period in the numbering for 2.1.9.

CARRIED

GL-2021-050

It was Moved and Seconded,

that the Galiano Island Local Trust Committee proposed Bylaw No. 278, cited as "Galiano Island Land Use Bylaw 127, 1999, Amendment No. 1, 2021" as amended, be read a third time.

CARRIED

GL-2021-051

It was Moved and Seconded,

that the Galiano Island Local Trust Committee proposed Bylaw No. 278 as amended be forwarded to the Secretary of the Islands Trust for Executive Committee Approval.

CARRIED

15. REPORTS

15.1 Work Program Reports

15.1.1 Top Priorities Report Dated May 2021

Received for information.

15.1.2 Projects List Report Dated May 2021

GL-2021-052

It was Moved and Seconded,

That the Project List be amended by combining Project 7 (Review of maximum house sizes) and Project 10 (Review of LUB tiny home/trailer regulations) and that this item also include lot coverage.

CARRIED

15.2 Applications Report Dated May 2021

Received for information.

15.3 Trustee and Local Expense Report - None

15.4 Adopted Policies and Standing Resolutions

Received for information.

15.5 Local Trust Committee Webpage

The new Islands Trust website was discussed.

15.6 Islands Trust Conservancy Report - None

16. NEW BUSINESS

16.1 Business Licenses – Memo

By general consent, Item 16.1 was deferred until the July LTC meeting.

16.2 Draft Annual Report Wording - for approval

GL-2021-053

It was Moved and Seconded,

that the Galiano Island Local Trust Committee approves the format and outline of contents for the 2020/21 Annual Report.

CARRIED

16.3 Amending the Tree Cutting and Removal DPA 3

Discussion was held about possible amendments and how they relate to work focused on the Coastal Douglas Fir.

16.4 Standing APC Regarding Climate Crisis

Discussion was held about creating a standing Advisory Planning Commission (APC) with specific expertise related to climate change.

16.5 James Island

Discussion was held about how the Galiano LTC can advocate for the Tsawout Nation on James Island.

GL-2021-054

It was Moved and Seconded,

that the Galiano Island Local Trust Committee supports the North Pender Island correspondence related to the James Island subdivision proposal and a letter to that effect will be sent out under the Chair's signature to the appropriate provincial authority.

CARRIED

17. UPCOMING MEETINGS

17.1 Next Regular Meeting Scheduled for July 5, 2021 - Location: TBD

18. TOWN HALL

Trustee Wolverton was recused from the meeting at 6:13 p.m.

Town hall was held and the following comments were made:

- Support was expressed for LTC requests to applicants related to water issues;
- A special APC could have helped with GL-RZ-2019.1 (GIGARHS); and
- The value of scientific reports included in applications was questioned.

19. CLOSED MEETING

None

20. ADJOURNMENT

By general consent the meeting was adjourned at 6:22 p.m.

Dan Rogers, Chair

Certified Correct:

Carly Bilney, Recorder



Follow Up Action Report

Galiano Island

01-Feb-2021

Activity	Responsibility	Dates	Status
1 14.1 Review and amend LTC standings resolutions related to STVRS after bylaw 275 amendment finalized	Brad Smith Maple Hung	Target: 21-May-2021	In Progress

01-Mar-2021

Activity	Responsibility	Dates	Status
1 13.1 GL-RZ-2019.1 - Draft s. 219 covenant that considers recommendations of ecological assessment, a 30 m tree buffer, water management plan, hydrogeological assessment recommendations, site plan and elevation drawings.	Brad Smith	Target: 28-May-2021	In Progress

12-Apr-2021

Activity	Responsibility	Dates	Status
1 14.1 GL-RZ-2014.1 (Crystal Mountain) Include ecological assessment recommendations in s 219 covenant	Brad Smith	Target: 31-Aug-2021	In Progress

01-Jun-2021

Activity	Responsibility	Dates	Status
1 8.1 April 12, 2021 LTC meeting minutes adopted as amended	Maple Hung	Target: 18-Jun-2021	Completed



Follow Up Action Report

Galiano Island

01-Jun-2021

Activity	Responsibility	Dates	Status
2 13.2 GL-DVP-2021.4 (Allen/Norgang) - Permit approved as drafted, issue permit, update TAPIS, close-out file	Jas Chonk Maple Hung Phil Testemale	Target: 18-Jun-2021	Completed
3 13.1 GL-DVP-2020.2 (Hotte) - Permit approved as drafted, issue permit, update TAPIS, close-out file	Brad Smith Jas Chonk Maple Hung	Target: 18-Jun-2021	Completed
4 13.1 GL-DVP-2020.2 (Hotte) Issue voluntary compliance agreement with applicant for 1) removal of bottom portion of stair structure and 2) proof of covenant amendment by October 31, 2021	Brad Smith Warren Dingman	Target: 18-Jun-2021	In Progress
5 13.3 GL-RZ-2021.1 (GALI) - Proceed with application, establish amending draft bylaw, refer application to APC	Brad Smith Jas Chonk Maple Hung	Target: 18-Jun-2021	Completed
6 13.3 GL-RZ-2021.1 (GALI) Direct applicant to reinstall datalogger in subject property source well	Brad Smith	Target: 11-Jun-2021	Completed
7 13.4 GL-RZ-2019.1 (GIGARHS) Direct applicant to install continuous datalogger in source well and conduct feasibility study of greywater recycling system	Brad Smith	Target: 18-Jun-2021	Completed
8 14.1 LUB Tech Review Project - given 2nd and 3rd reading as amended - amend s. 2.1.9 to remove extra period (Brad)- send amended bylaw to EC for approval (Jas)	Brad Smith Jas Chonk	Target: 18-Jun-2021	Completed

Follow Up Action Report

Galiano Island

01-Jun-2021

Activity	Responsibility	Dates	Status
9 15.1 Combine max house size and tiny house regs projects (7 and 10) and expand to include lot coverage	Brad Smith	Target: 18-Jun-2021	Completed
10 16.1 LTC deferred Business Licence memo to next meeting - add to July 5 agenda package	Jas Chonk	Target: 30-Jun-2021	Completed
11 16.2 Annual report wording approved as presented	Jas Chonk Mike Richards	Target: 11-Jun-2021	Completed

DATE OF MEETING: July 5, 2021

TO: Galiano Island Local Trust Committee

FROM: Brad Smith, Island Planner
Southern Team

COPY: Robert Kojima, Regional Planning Manager

SUBJECT: Rezoning Application – Application Update and Groundwater Testing Results

Applicant: Lisa Gauvreau

Location: 60 Madrona Road, Galiano Island

RECOMMENDATION

1. That the Galiano Island Local Trust Committee rescind resolution GL-2020-026 to waive the holding of a Public Hearing for Bylaw No. 271, cited as “Galiano Island Land Use Bylaw No. 127, 1999, Amendment No. 1, 2019”.
2. That the Galiano Island Local Trust Committee direct staff to schedule a Public Hearing for Bylaw No. 271.
3. That the Galiano Island Local Trust Committee direct staff to schedule a Community Information Meeting in conjunction with the Public Hearing for Bylaw No 271.

REPORT SUMMARY

The purpose of this report is to update the Galiano Island Local Trust Committee (LTC) on rezoning application GL-RZ-2019.2 (Gauvreau), to present results of groundwater testing and to seek direction on scheduling of a Public Hearing and Community Information Meeting (CIM).

The above recommendations are supported as:

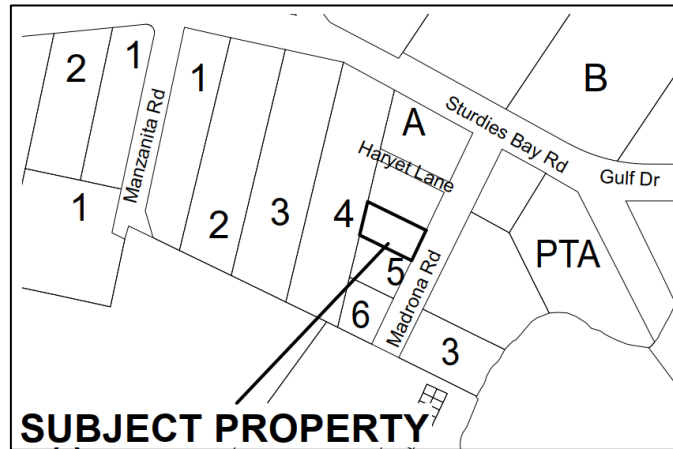
- The land use designation for the subject property in the Galiano Island Official Community Plan No. 108, 1995 (OCP) is **Community Facility/Commercial** and is supported by a number of commercial policies;
- Well drilling and pump testing reports demonstrate proof of water for the proposed land use;
- The Capital Regional District (CRD) Building Inspection has confirmed the proposed driveway access is not a barrier to building permit approval and the Ministry of Transportation and Infrastructure (MOTI) has issued a highway access permit consistent with the proposal;
- The applicant has received significant community support for the proposed rezoning and no dissenting views have been heard to date; and
- Referral agencies have indicated no issues or concerns with the proposed rezoning.

BACKGROUND

A rezoning application for the subject property was received by the Islands Trust on October 1, 2019 (Figure 1). If approved, the application would amend the Galiano Island Land Use Bylaw No. 127, 1999 (LUB) by rezoning the subject property from **Village Residential 1 (VR1)** to **Retail Commercial 1 (C1)**.

The 0.06 hectare (0.15 ac.) subject property is currently used as a single family residence by the applicant. The operation of a restaurant is not a permitted use in the VR1 zone, but is a permitted use in the C1 zone.

Figure 1 – Subject Property – 60 Madrona Rd.



The LTC gave first and second reading of proposed Bylaw No. 271 at the February 3, 2020 regular LTC meeting. The LTC also passed the following resolutions at this meeting:

GL-2020-05

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to schedule a Public Hearing for Bylaw No. 271.

Carried

GL-2020-06

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to schedule a Community Information Meeting in conjunction with the Public Hearing for Bylaw No 271.

Carried

Subsequent to these resolutions, Covid 19 limited the ability of the Islands Trust to undertake CIMs and Public hearings. In response, at the June 1, 2020 meeting the LTC rescinded resolutions 2020-05 and 2020-06 and passed the following resolution to waive a Public Hearing for the application.

GL-2020-026

It was Moved and Seconded,

waive the holding of a Public Hearing for Bylaw No. 271, cited as "Galiano Island Land Use Bylaw No. 127, 1999, Amendment No. 1, 2019".

While LTC did resolve to waive a Public Hearing, LTC has not proceeded with statutory notifications to waive the Public Hearing or consideration of third reading of proposed Bylaw No. 271 as two aspects of the application were still outstanding:

- 1) **Proof of water** – the applicant’s original proposal was for an easement to access a neighbouring well that had already demonstrated proof of water. This agreement has ceased and the applicant has subsequently re-drilled the existing well on their own subject property. Pump test and water well drilling reports are now finalized for LTC consideration.
- 2) **Driveway Access** – questions remained on whether the proposed driveway access width was adequate to obtain building and highway access permits. The applicant has now resolved these questions.

Staff are now seeking direction on whether this further information provided by the applicant satisfies the needs of LTC to move forward with next steps in consideration of rezoning approval.

Proposed Bylaw No. 271 is included as Attachment 1. Additional site context is included in Attachment 2, and Attachment 3 includes reference maps, plans and drawings.

Background to this application, including previous staff reports, are available on the Islands Trust website: <http://www.islandstrust.bc.ca/islands/local-trust-areas/galiano/current-applications/current-application-documents/>

ANALYSIS

Policy/Regulatory

Islands Trust Policy Statement (ITPS)

The proposed rezoning is compliant with the Islands Trust Policy Statement (ITPS) and LTC endorsed the Policy Statement Checklist by resolution at the February 3, 2020 LTC meeting.

Official Community Plan

The property is designated **Community Facility/Commercial** (CF/C) in the Galiano Island Official Community Plan No. 108, 1995 (OCP). As such, the proposed rezoning is consistent with the OCP’s future intent for the area as a centre for commercial and community services and no bylaw amendments to the OCP are required.

Land Use Bylaw

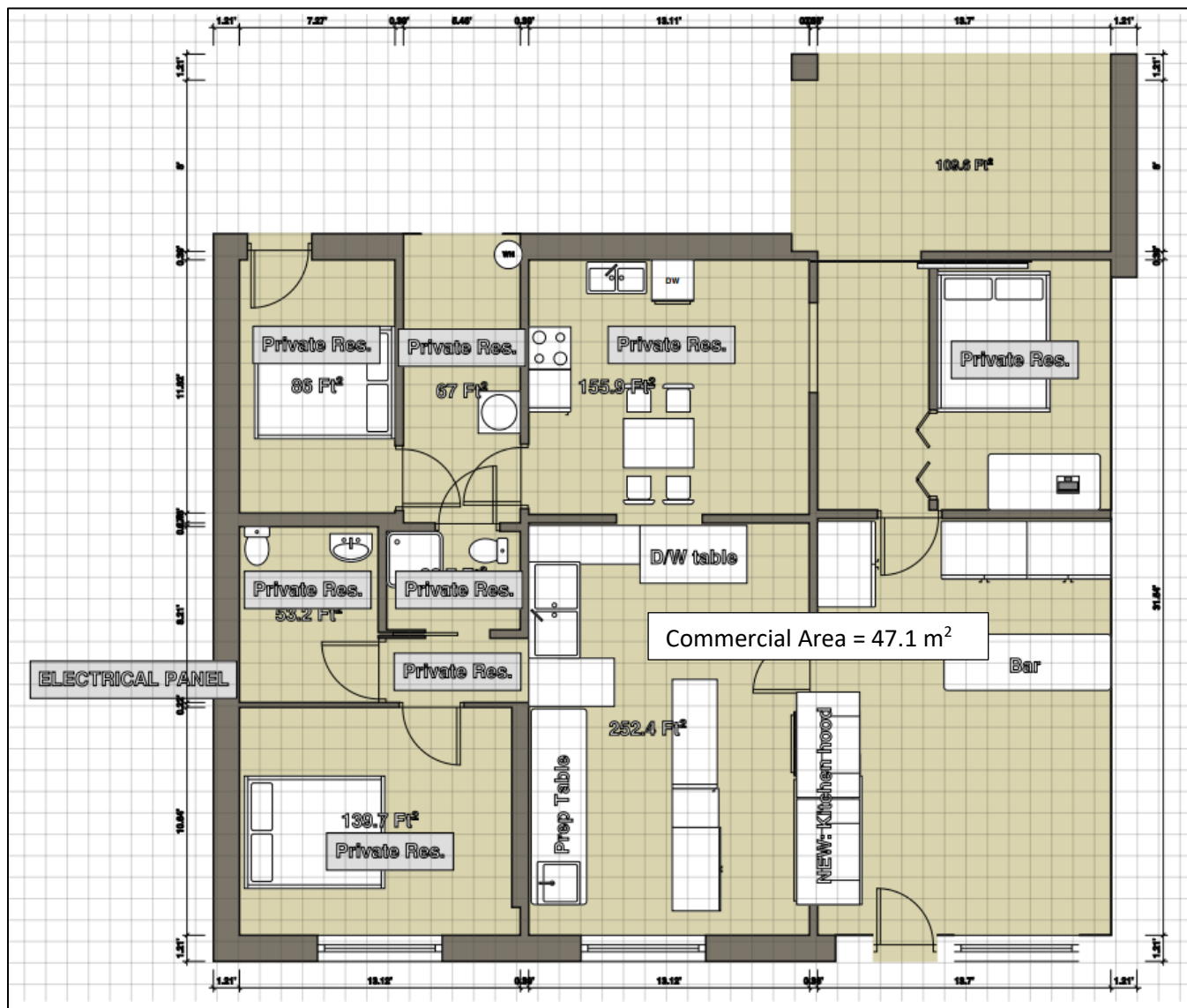
Bylaw No. 271 would rezone the subject property from **Village Residential 1** (VR1) to **Commercial 1** (C1). The LTC gave first and second reading to Bylaw No. 271 at the February 3, 2020 LTC meeting.

Development Permit Area 6

If rezoned, the property would become subject to the requirements of Development Permit Area 6 – Commercial and Industrial Form and Character (DPA 6). Any applicable DPA 6 requirements would be need to be addressed when the applicant seeks building permit approval from the CRD following rezoning, with Islands Trust included as a referral agency.

Project Design

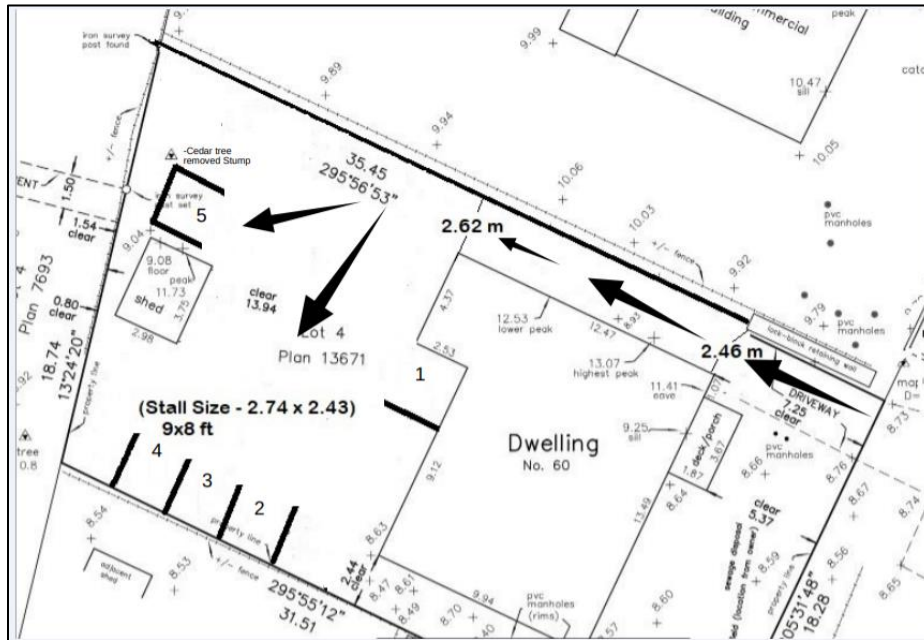
Figure 2. Preliminary Floor Plan



The South Galiano Fire Department (SGFD) has identified no concerns with this minimum driveway width particularly given the proximity of the road allows for access to the front of the structure in case of fire.

MOTI has issued a Highway Access Permit to the applicant consistent with the proposed layout (Attachment 4). The previous proposal required 8 parking spaces (20 seat restaurant @ 1 parking spot/per 3 seats = 6 + 2 for residential). The updated take-out proposal will require 5 parking spaces (under s. 14.1.1 of LUB at 1 seat per 12 m² of floor area plus 2 residential).

Figure 3. Driveway and Parking Layout Plan – 5 Spaces – 3 Commercial 2 Residential



Groundwater Analysis

Section 13.23 of the LUB requires that potable water be provided for both the commercial (3640 L/d) and residential (2275 L/d) standards, for a total of 5915 L/day for subdivision.

The original well was reportedly drilled in 1965 by Gulf Drilling to a depth of 150 feet (45.72 m). Drillwell Enterprises Ltd., deepened the well to 200 feet (60.96 m) on November 2, 2020 and noted a significant water-yielding fracture at a depth of 175 feet (53.34 m).

A Stage 1: Hazard Screening and Assessment for well WID 61164 was completed. The need for this assessment was primarily based on the location of well WID 61164 being within 30 m of a potential source of pollution.

The assessment initially identified two potentially GARP risks centered on: (a) the location of the well, and (b) the aquifer type and setting.

Subsequent alterations to the well construction with the installation of a PVC liner cemented in place to a depth of 50 feet (15.24 m) has effectively reduced the potential risks of contamination from the septic tank and disposal field.

A January 24, 2021 letter of assurance from Hy-Geo Consulting provided the following recommendations for consideration as part of a review of the November 2020 alteration work undertaken on the well:

1. In order to minimize water quality degradation due to salt water intrusion, the well pump should be raised with the intake set higher in the well e.g. at 150 feet (45.72 m) below ground. A dole valve should also be installed on the pump discharge line to reduce the pumping volume and a timer incorporated

into the pumping system to enable the well to be pumped for longer periods of time at lower pumping rates.

2. Consideration should be given to equipping the discharge line from the well with a totalizing water flow meter to monitor and record the well use with time and having a water level sounding tube installed for taking periodic water level measurements in the well.
3. As a precautionary measure against any future potential sources of coliform bacteria, water from the well should be treated with an appropriately designed and maintained ultraviolet irradiation (UV) treatment system.
4. The surface drainage around the pump house should be improved so that surface water flows freely and does not pond around the pumphouse.
5. Drainage from the neighbouring property north of the well should not drain onto the property at 60 Madrona Drive.
6. Water quality should be checked annually for any variations in the overall mineralization and as directed by Island Health.

The applicant has implemented recommendations 1-4.

Well WID 61164 was pump tested by Brad Lockett (BC Certified Well Pump Installer) under the direction of Alan Kohut, PEng., on June 14, 2021 for a period of 12 hours (Attachment 5).

The sustainable long-term yield of the well was determined to be 4.5 L/min (6480 L/day) with a safety factor of 52%, exceeding the subdivision water supply requirements of 5915 L/day for the property by 10%.

Bacteriological testing results indicate the raw well water is potable showing non-detectable levels of total coliforms and E.coli.

Well drilling and pumping information has been reviewed by planning staff and the Senior Freshwater Specialist. Methods are consistent with provincial standards and requirements.

Given the well is demonstrated to produce enough volume with a reasonable safety factor, the rezoning proposal is for a change in land use and not a new dwelling, that the dwelling is modest in size and occupancy potential, that the combined business and residential water use is likely to be far less than the combined 5,915 litre/day minimum standard that is being applied, and that rainwater catchment will be utilized to supplement groundwater uses, staff concerns with respect to proof of water have been satisfied.

Rainwater Catchment

While there are no specific LUB requirements for the installation of rainwater catchment and storage when considering a change in land use, the applicant is voluntarily proposing to implement a rainwater storage system with a capacity of 4160 gallons that would be made potable in accordance with applicable building code and health department requirements.

LTC could require that installation of rainwater storage infrastructure be a condition of rezoning. This could be included in a *Land Title Act* section 219 covenant agreement.

Consultation

Waiving of Public hearing due to Covid-19

Generally, a public hearing is required for all zoning bylaw amendments. However, the *Local Government Act* provides the ability for local governments to waive a public hearing if (a) an OCP is in effect for the area that is subject to the zoning bylaw, and (b) the bylaw is consistent with the OCP.

In March 2020 Covid-19 restrictions limited the ability of the LTC to host meetings including Public Hearings and CIMs. In this case, given the proposed rezoning is consistent with the OCP, and that there had been significant community support with no dissenting views, staff deemed that the risks associated with conducting an electronic Public Hearing outweighed the benefits and recommended a public hearing be waived. LTC agreed and passed resolution 2020-026 which waived the Public Hearing for the application.

Public Hearing

If LTC is ready to move forward with the application, staff recommend that LTC now rescind resolution 2020-026 and conduct a Public Hearing prior to consideration of third reading of proposed Bylaw No. 271. A Public Hearing will allow for more community input, and could be held either electronically over the summer of 2021, or potentially in-person as/when covid restrictions ease in the fall of 2021.

Notice would be posted as per statutory and bylaw requirements in advance of the Public Hearing.

Community Information Meeting

Unless waived, in accordance with regular statutory requirements, a public hearing is required and it is normal practice to hold a Community Information Meeting (CIM) prior to that. In this circumstance, staff recommend scheduling a CIM in conjunction with the Public Hearing.

Agency Referrals

Proposed Bylaw No. 271 was referred to the following agencies in December 2019:

- Ministry of Transportation and Infrastructure
- Island Health
- CRD, Building Inspection Services
- Galiano Island Fire Rescue – South Department
- Mayne Island Local Trust Committee
- Thetis Island Local Trust Committee
- Salt Spring Island Local Trust Committee
- South Pender Island Local Trust Committee

No issues or concerns were raised. Island Health and the CRD continue to work with the applicant to ensure compliance with regulatory building, health and safety requirements for the legal operation of a commercial restaurant facility on the subject property.

First Nations Referrals

Staff referred proposed Bylaw No. 271 on June 24, 2021 to the following First Nations:

- Stz'uminus First Nation
- Lake Cowichan First Nation
- Halalt First Nation
- Lyackson First Nation

- Penelakut Tribe
- Semiahmoo First Nation
- Pauquachin First Nation
- Tsartlip First Nation
- Tseycum First Nation
- Cowichan Tribes
- Tsawwassen First Nation
- Tsawout First Nation
- Musqueam Indian Band
- WSANEC Leadership Council

First Nations referrals will be completed prior to the scheduling of a Public Hearing and CIM and any referral responses will be provided by staff to LTC for consideration.

RATIONALE FOR RECOMMENDATION

Based on the foregoing, the recommendations on page 1 are supported as:

- The land use designation for the subject property in the Galiano Island Official Community Plan No. 108, 1995 (OCP) is **Community Facility/Commercial** and is supported by a number of commercial policies;
- Well drilling and pump testing reports demonstrate proof of water for the proposed land use;
- The Capital Regional District (CRD) Building Inspection has confirmed the proposed driveway access is not a barrier to building permit approval and the Ministry of Transportation and Infrastructure (MOTI) has issued a highway access permit consistent with the proposal;
- The applicant has received significant community support for the proposed rezoning and no dissenting views have been heard to date; and
- Referral agencies have indicated no issues or concerns with the proposed rezoning.

ALTERNATIVES

The LTC may consider the following alternatives to the staff recommendations:

1. Request further information

The LTC may request further information prior to making a decision. If selecting this alternative, the LTC should describe the specific information needed and the rationale for this request.

Resolution:

That the Galiano Island Local Trust Committee request that the applicant submit to the Islands Trust
_____.

2. Continue to waive a Public Hearing

The LTC may opt to continue with the waiving of a public hearing for the application. In this case nothing would be required as this is consistent with the current direction provided by LTC.

3. Proceed No Further

The LTC may opt to proceed no further with the application.

Resolution:

That the Galiano Island Local Trust Committee proceed no further with application GL-RZ-2019.2 (Gauvreau).

NEXT STEPS

With direction from the LTC, Staff will:

- Undertake statutory notifications and schedule a Public Hearing and CIM following the completion of First Nation referrals

Submitted By:	Brad Smith, Island Planner	June 24, 2021
Concurrence:	Robert Kojima, Regional Planning Manager	June 24, 2021

ATTACHMENTS

Attachment 1. Bylaw No. 271

Attachment 2. Site Context

Attachment 3. Maps, Plans and Drawings

Attachment 4. MOTI Highway Access Permit

Attachment 5. June 2021 Pump Test Results - Well WID 61164

PROPOSED

GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 271

A BYLAW TO AMEND GALIANO ISLAND LAND USE BYLAW NO. 127, 1999

The Galiano Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the Galiano Island Local Trust Area under the *Islands Trust Act*, enacts as follows:

1. Citation

This bylaw may be cited for all purposes as “Galiano Island Land Use Bylaw No. 127, 1999, Amendment No. 1, 2019”.

2. Galiano Island Local Trust Committee Bylaw No. 127, cited as “Galiano Island Land Use Bylaw No. 127, 1999,” is amended as follows:

Schedule “B” – Zoning Map, is amended by changing the zoning classification of Lot 4, Section 5, Galiano Island, Cowichan District, Plan 13671 from Village Residential 1 (VR1) to Retail Commercial 1 (C1), as shown on Plan No. 1 attached to and forming part of this bylaw.

3. SEVERABILITY

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

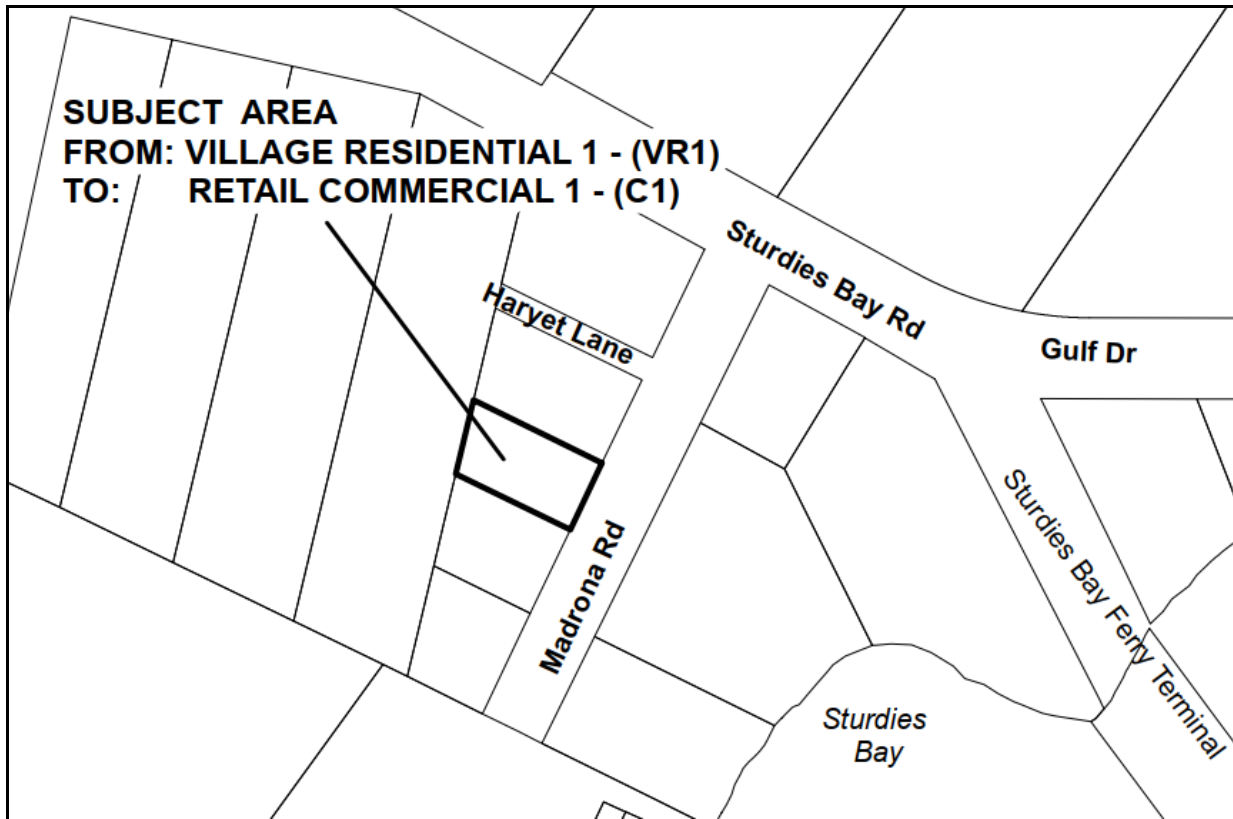
READ A FIRST TIME THIS	3 RD	DAY OF	FEBRUARY	2020.
READ A SECOND TIME THIS	3 RD	DAY OF	FEBRUARY	2020.
PUBLIC HEARING HELD THIS	_____	DAY OF	_____	20____
READ A THIRD TIME THIS	_____	DAY OF	_____	20____
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	_____	DAY OF	_____	20____
ADOPTED THIS	_____	DAY OF	_____	20____

CHAIR

SECRETARY

GALIANO ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 271

Plan No. 1



ATTACHMENT 2 – SITE CONTEXT

LOCATION

Legal Description	Lot 4, Section 5, Galiano Island, Cowichan District, Plan 13671
PID	000-027-626
Civic Address	60 Madrona Road, Galiano Island
Lot Size	0.06 hectares (0.15 acres)

LAND USE

Current Land Use	Village Residential 1 – currently used by applicant as primary dwelling
Surrounding Land Use	Retail Commercial 1, Village Residential 1, Light Industrial 1

HISTORICAL ACTIVITY

File No.	Purpose
None	None

POLICY/REGULATORY

Official Community Plan Designations	Galiano Island OCP No. 108, 1995 Designations: Community Facility/Commercial
Land Use Bylaw	Galiano Island LUB No. 127, 1999: Village Residential 1
Other Regulations	None
Covenants	None
Bylaw Enforcement	None

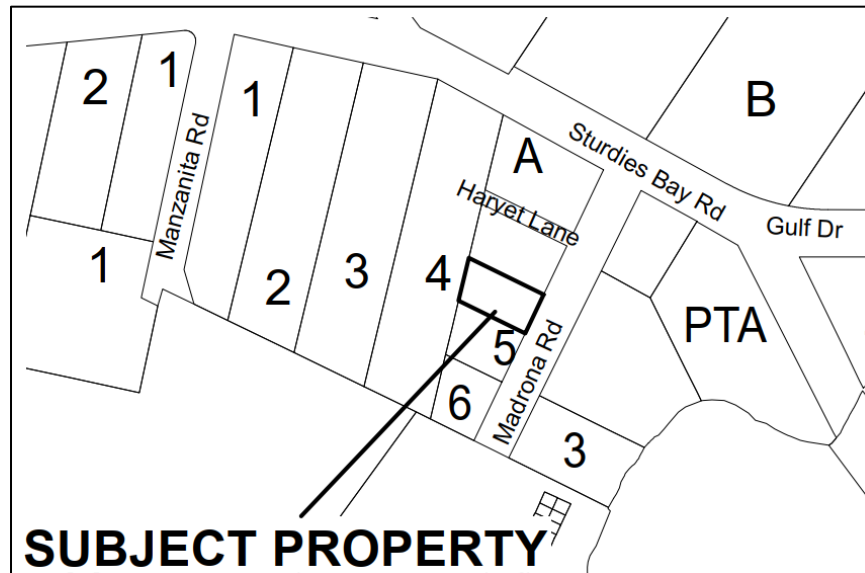
SITE INFLUENCES

Islands Trust Fund	There are no Trust Fund Board or Conservancy covenants or properties in the direct area; therefore no referral has been made to the Board.
Regional Conservation Strategy	The proposal does not impact the objectives and priorities of the Islands Trust Fund regional conservation plan.
Species at Risk	N/A
Sensitive Ecosystems	N/A
Hazard Areas	N/A
Archaeological Sites	There are no archaeological sites identified on the provincial RAAD site. There are however sites with archaeological potential identified in RAAD on adjacent properties. Notwithstanding the lack of sites identified in RAAD on the subject property, and by copy of this report, the owners and applicant should be aware that there is still a chance that the lot may contain previously unrecorded archaeological material that is protected under the <i>Heritage Conservation Act</i> . This would most likely be indicated by the presence of areas of dark-stained soils containing conspicuous amounts of fire-stained or fire-broken rock, artifacts such as arrowheads or other stone

	tools, or even buried human remains. If such material is encountered during development, all work should cease and Archaeology Branch should be contacted immediately as a <i>Heritage Conservation Act</i> permit may be needed before further development is undertaken. This may involve the need to hire a qualified archaeologist to monitor the work.
Climate Change Adaptation and Mitigation	N/A
Shoreline Classification	N/A
Shoreline Data in TAPIS	N/A

ATTACHMENT 3 – MAPS, PLANS, DRAWINGS

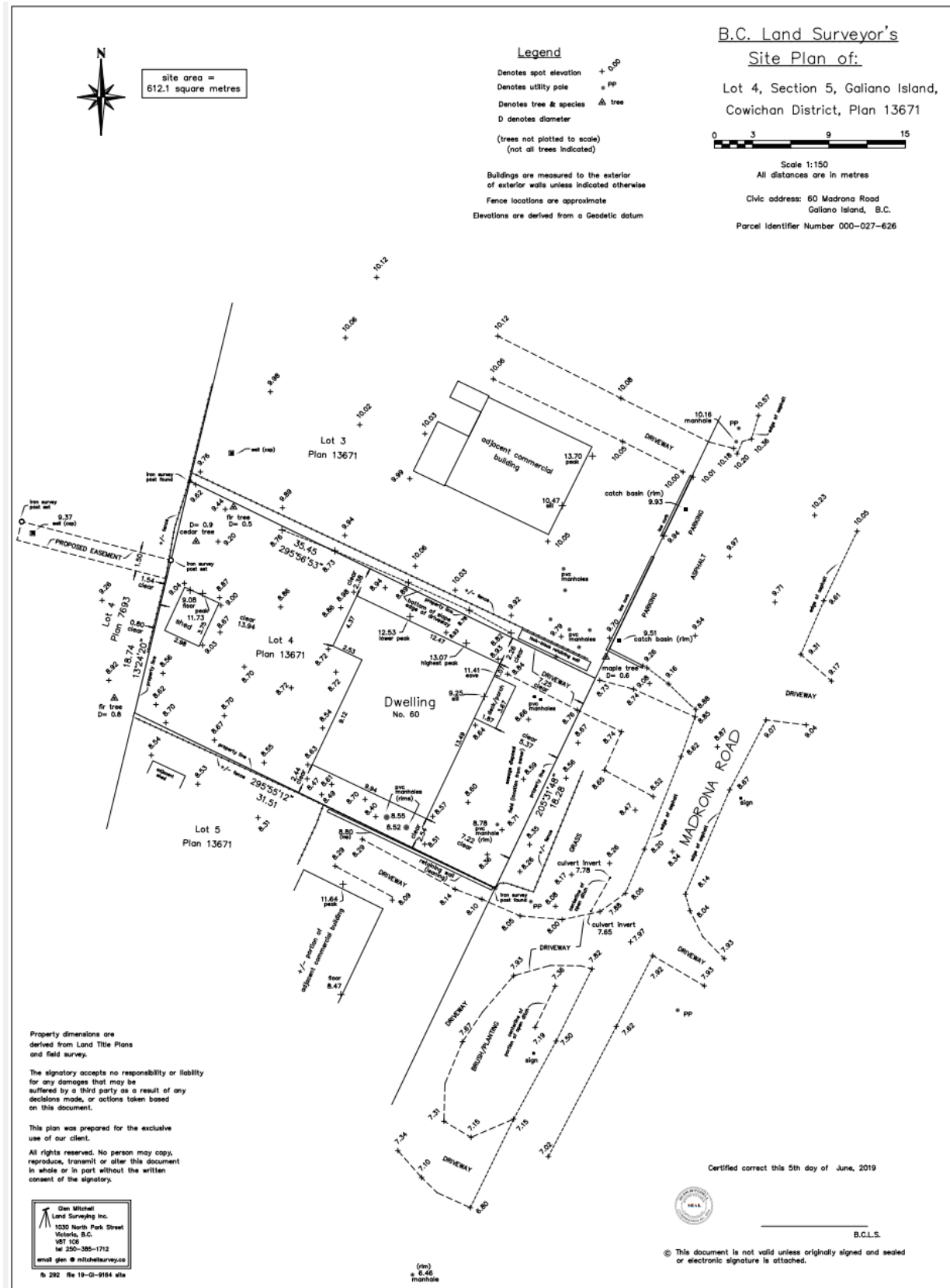
2.1 SUBJECT PROPERTY MAP



2.2 SUBJECT PROPERTY ORTHO PHOTO

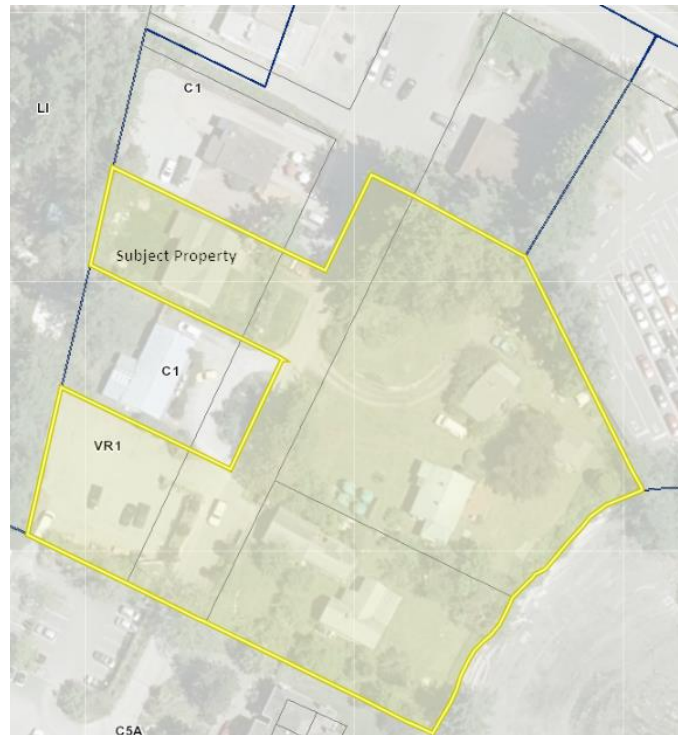


2.3 SITE PLAN

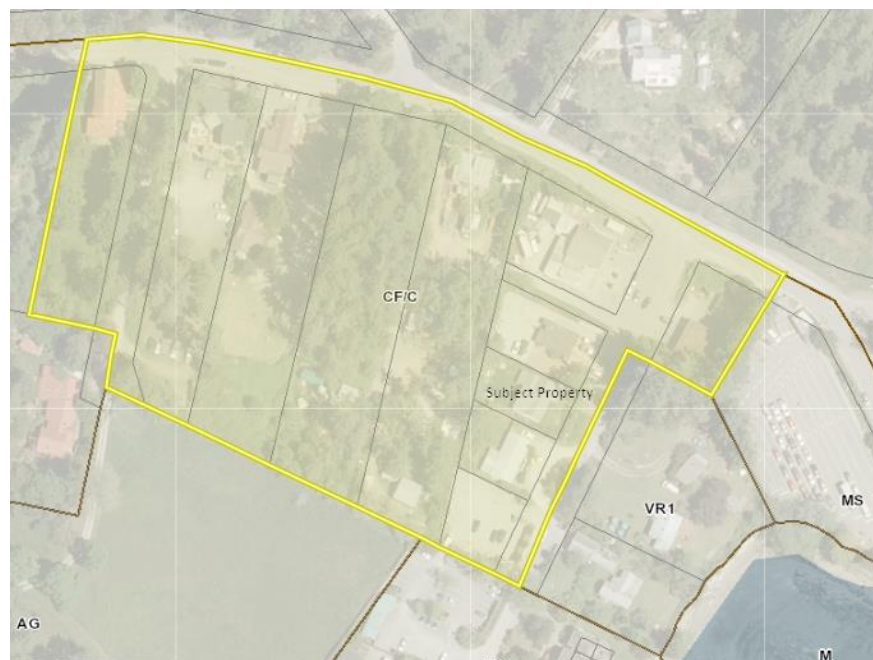


2.5 ZONING AND LAND USE DESIGNATIONS

CURRENT ZONING



OCP LAND USE DESIGNATION





PERMIT TO CONSTRUCT, USE, AND MAINTAIN ACCESS TO A PROVINCIAL PUBLIC HIGHWAY

PURSUANT TO TRANSPORTATION ACT AND/OR THE INDUSTRIAL ROADS ACT AND/OR THE MOTOR VEHICLE ACT AND/OR AS DEFINED IN THE NISGA'A FINAL AGREEMENT AND THE NISGA'A FINAL AGREEMENT ACT.

BETWEEN:

The Minister of Transportation and Infrastructure

Saanich Area Office
240-4460 Chatterton Way
Victoria, British Columbia V8X 5J2
Canada

("The Minister")

AND:

Lisa Gauvreau
60 Madrona Road
Galiano Island, BC V0N 1P0

("The Permittee")

WHEREAS:

- A. The Minister has the authority to grant permits for the auxiliary use of highway right of way, which authority is pursuant to both the Transportation Act and the Industrial Roads Act, the Motor Vehicle Act, as defined in the Nisga'a Final Agreement and the Nisga'a Final Agreement Act;
- B. The Permittee has requested the Minister to issue a permit pursuant to this authority for the following purpose:

The installation, operation, and maintenance of a commercial and residential access to 60 Madrona Road, Galiano Island, as shown on the attached drawing and per application dated February 4, 2021.
- C. The Minister is prepared to issue a permit on certain terms and conditions;

ACCORDINGLY, the Minister hereby grants to the Permittee a permit for the Use (as hereinafter defined) of highway right of way on the following terms and conditions:

- 1. The Minister shall designate an official ("the Designated Ministry Official") who shall act as the Minister's agent in the administration of this permit in the manner hereinafter set out.
- 2. The Use shall be carried out according to the reasonable satisfaction of the Designated Ministry Official.
- 3. The Permittee shall indemnify and save harmless the Ministry, its agents and employees, from and against all claims, liabilities, demands, losses, damages, costs and expenses, fines, penalties, assessments and levies made against or incurred, suffered or sustained by the Ministry, its agents and employees, or any of them at any time or times, whether before or after the expiration or termination of this permit, where the same or any of them are based upon or arise out of or from anything done or omitted to be done by the Permittee, its employees, agents or Subcontractors, in connection with the permit.
- 4. The Permittee shall make diligent attempts to determine if there are other users of the right of way in the vicinity of the Permittee's location whose use may be affected. It shall be the responsibility of the Permittee to contact any such users before exercising any of the rights granted hereunder and to attempt to reach an accommodation.
- 5. The Minister shall take reasonable care to do as little damage or interference, as possible, to any Use authorized by this permit in the carrying out of the construction, extension, alteration improvement, repair, maintenance or operation of any work adjacent thereto, but the Minister shall not be responsible for any damage regardless.



6. The Minister at the absolute discretion of the Minister may, at any time, cancel this permit for any reason upon giving reasonable notice; provided, however, that in the case of default by the Permittee or in the case of an emergency no notice shall be necessary. The Minister shall not be liable for any loss incurred as a result of permit cancellation.
7. Placing of speed arresters on the access (or accesses) or in the Permittee's property without the prior consent in writing of the Designated Ministry Official shall render the permit void.
8. The Permittee shall be responsible for replacing any survey monuments that may be disturbed or destroyed by the Use. Replacement must be by a British Columbia land surveyor at the Permittee's expense.
9. The Permittee shall remove any mud, soil, debris, or other foreign material tracked onto the highway from the access authorized herein. Such removal shall be at the Permittee's expense and shall be done at any time the material unduly inconveniences traffic and, in any event, daily.
10. The Permittee acknowledges that the issuance of this permit by the Minister is not a representation by the Minister that this permit is the only authority needed to carry out the Use. The Permittee shall give deference to any prior permission given for use of the right of way in the vicinity of the permit area, shall obtain any other permission required by law, and shall comply with all applicable laws regardless of their legislative origin.
11. At the end of the term of this permit, or when the permit is cancelled or abandoned, the Permittee shall, if so requested by the Minister, remove all installations and shall leave the site as near as reasonably possible in the condition it was in before this permit was issued or such other condition as shall reasonably be required by the Designated Ministry Official. If the Permittee refuses to comply with these obligations, the Minister may perform them as required and the Permittee shall be liable to the Minister for the costs of doing so.
12. The rights granted to the Permittee in this permit are not assignable without the consent of the Minister.
13. As a condition of this permit, the permittee unconditionally agrees with the Ministry of Transportation and Infrastructure that the permittee is the prime contractor or will appoint a qualified prime contractor, as described in Section 118 of the Workers Compensation Act, for the purposes of the work described by this permit, at the work location described in this permit, and that the permittee or designated prime contractor will observe and perform all of the duties and obligations which fall to be discharged by the prime contractor pursuant to the Workers Compensation Act and the Occupational Health and Safety Regulation.
14. The permittee is advised and acknowledges that the following hazards may be present at the work location and need to be considered in co-ordinating site safety: overhead hazards, particularly electrical or telecommunications lines; buried utilities, particularly electrical, telecommunication, and gas lines; traffic, danger trees, falling rocks, and sharp or infectious litter.
15. Any works within the Ministry right-of-way that fall within the scope of "engineering" under the Engineers and Geoscientists Act will be performed by a Professional Engineer, and shall comply with this Ministry's "Engineer of Record and Field Review Guidelines". The Guidelines can be viewed on the Ministry's website at <http://www2.gov.bc.ca/assets/gov/driving-and-transportation/transportation-infrastructure/engineering-standards-and-guidelines/technical-circulars/2009/t06-09.pdf>
16. The permittee is responsible for preventing the introduction and spread of noxious weeds on the highway right-of-way as defined by the British Columbia Weed Control Act and Weed Control Regulation.
17. The layout shown on the attached drawing is a condition of this permit, and any change in layout without the prior consent in writing of the Designated Ministry Official shall render the permit void.
18. The rights granted under this permit and certificate are for an indefinite period.
19. The Permittee shall take all reasonable precautions to attempt to ensure the safety of the public in connection with the Use. In particular, but not so as to limit this obligation, the Permittee shall, if so required by the Designated Ministry Official on reasonable grounds, prepare and implement a traffic control plan. The contents of the plan and the manner in which it is implemented must meet the reasonable satisfaction of the Designated Ministry Official.
20. The access (or accesses) shall be graveled to an extent satisfactory to the Designated Ministry Official to prevent the tracking of mud and soil onto the highway surface.
21. The Permittee shall provide off-street parking.
22. The Permittee will ensure that the works do not, impair, impede or otherwise interfere with;
 - I. public passage on the Highways;
 - II. the provision of highway maintenance services by the Province, or by its servants, contractors, agents or authorized representatives of the Province in connection with the Highways; or
 - III. the operation of the Highways;

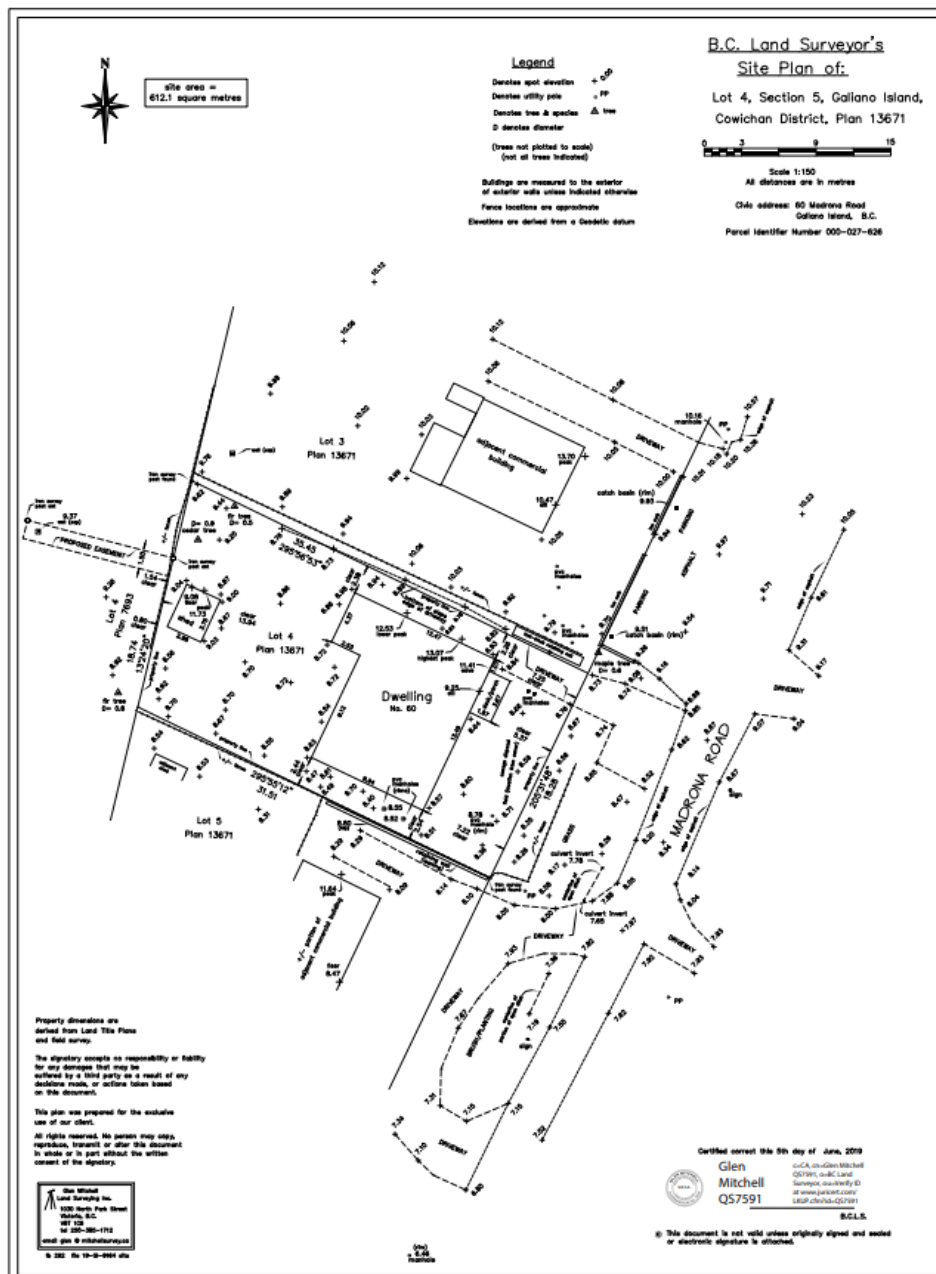


The rights granted to the Permittee in this permit are to be exercised only for the purpose as defined in Recital B on page 1.

Dated at Victoria, British Columbia, this 9 day of February, 2021

Halley Leech
On Behalf of the Minister

Appendix A



File: 2106221

June 21, 2021

Lisa Gauvreau
60 Madrona Drive
Galiano Island BC V0N 1P0

Attention: Lisa Gauvreau

**Re: Preliminary Testing Results for Well WID 61164, WTN 19130,
60 Madrona Drive, Galiano Island**

This letter provides a brief summary of the well testing that was recently completed on the above bedrock well in order to address the *Standards for Potable Water Supply* requirements of *Land Use Bylaw 127, 1999*, Galiano Island Local Trust Committee (2021).

My understanding from your correspondence with the Islands Trust is that you require a report confirming the pump test results exceed the litres/day requirement cumulatively for both the commercial (3640 L/d) and residential (2275 L/d) standards for potable water supply under s. 13.23 of the Land Use Bylaw.

A brief summary of the testing results is provided below. A more comprehensive report is currently under preparation and will be completed in the next few weeks following receipt of the chemical laboratory results on the well water quality. Previously, a letter of assurance was prepared for this well when it was altered in 2020 (Kohut, 2021).

Recent Well Testing

Well WID 61164 was pump tested by Brad Lockett (BC Certified Well Pump Installer) under the direction of Alan Kohut, PEng., on June 14, 2021 for a period of 12 hours at a constant rate of 4.5 L/min utilizing the existing pump in the well. Pumped water was discharged away from the wellhead to a perimeter drain on the property. Manual water level readings were taken in the well during the test at prescribed intervals (Ministry of Environment, 2010) and a Diver™ water level datalogger was set in a neighbouring well on the adjoining property to the west. Pumping of the well was followed by manually measuring the recovery water level at prescribed intervals for 240 minutes after pump shutdown.

Water samples were taken from the wellhead of WID 61164 by Brad Lockett near the end of the test and delivered by courier within 20 hours of sampling with ice packs to the MB Laboratory in Saanich for analysis of chemical and bacteriological parameters. Total

dissolved solids (TDS) was monitored periodically during the pumping test utilizing a field meter and values ranged between 720 and 750 mg/L.

Quantity Testing Results

Drawdown in well WID 61164 at the end of the test was 6.61 m below the pre-pumping (static) level 17.80 m below the top of casing. Approximately 27% of the available drawdown of (27.92 m) to the pump intake set at a depth of 45.72 m was utilized at the end of the test. The pump intake had been set several months previously above the major water-producing fracture in the well at 53.34 m (175 feet) to minimize the possibility of sea water intrusion in the well. Extrapolating the drawdown to 100 days without recharge indicates that the drawdown would reach 13.4 m, utilizing 48 % of the available drawdown in the well and providing a safety factor of 52 %. It is evident that the well would be capable of sustaining a long-term yield greater than 4.5 L/min or 6480 L/day.

Quality Testing Results

Preliminary bacteriological results received June 15, 2021 from MB Laboratories showed non detectable levels of total coliforms and E.coli.

Conclusions

Based on the recent testing completed on well WID 61164, the following conclusions can be made:

1. The sustainable long-term yield of the well is determined to be 4.5 L/min (6480 L/day) with a safety factor of 52%, exceeding the water supply requirements of 5915 L/day for the property by 10%.
2. Preliminary bacteriological results indicate the raw well water is potable showing non detectable levels of total coliforms and E.coli.

Respectfully submitted,



Alan P. Kohut PEng
Principal and Senior Hydrogeologist

HY-GEO CONSULTING

References

- Galiano Island Local Trust Committee. 2021. *Land Use Bylaw 127, 1999*. (with amendments to 2020). Internet website https://islandstrust.bc.ca/wp-content/uploads/2020/12/gi-ltc-lub-bl-127_consolidated_july2020.pdf
- Kohut, A.P. 2021. *Letter of Assurance for Well WID 61164, WTN 19130, 60 Madrona Drive, Galiano Island*. Letter report prepared for Lisa Gauvreau by Hy-Geo Consulting, Victoria, British Columbia, File 2106221, January 24.
- Ministry of Environment. 2010. *Guide to Conducting Well Pumping Tests*. Water Stewardship Information Series. ISBN 978-0-7726-7033-5.



File No.: GL-DVP-2021.3 (Hoole)

GL-DP-2021.2 (Hoole)

DATE OF MEETING: July 5, 2021

TO: Galiano Island Local Trust Committee

FROM: Phil Testemale
Southern Team

COPY: Brad Smith, Island Planner

SUBJECT: Combined Development Permit & Development Variance Permit Application
Applicant: Warren Hoole
Location: 21455 Porlier Pass Road

RECOMMENDATION

1. That the Galiano Island Local Trust Committee approve issuance of Development Permit GL-DP-2021.2 (Hoole); and,
2. That the Galiano Island Local Trust Committee approve issuance of Development Variance Permit GL-DVP-2021.3.

REPORT SUMMARY

This report is to consider a combined Development Permit (DP) and Development Variance Permit (DVP) application.

The purpose of the DP application is for measures for the protection of the sensitive marine ecosystem and construction management for a proposed construction of a replacement septic sewer system within **Development Permit Area 2 – Shoreline and Marine (DPA)**.

The DVP application is to consider siting variances for the septic sewer system, and for two (2) existing sheds that are non-conforming on the subject property. The variances would bring the property into conformity with the Galiano Island Land Use Bylaw.

BACKGROUND

The combined DP-DVP application was submitted to the Islands Trust in advance of the installation of a new septic system on the property to replace the dwelling's fifty year old septic system that is failing. There is no other development proposed with the application.

The location, size and configuration of the property are such that any new development would be within DPA 2 and require a DP (or an exemption), and, when the Land Use Bylaw (LUB) property line and natural boundary setback regulations are applied, a variance (s) would also be required (Figure 2).

The siting of the new field and tanks is in the same specific site on the property as the old one. The proposed system is a Type 2 treatment system (partial treatment prior to dispersal) designed and permitted by a professional engineer. It includes a pump tank, septic storage/treatment and dispersal field.

The property is long and narrow configuration and is confined between Porlier Pass Road and the public foreshore. The property is fully developed including a dwelling with a deck, a short driveway, a lawn and two (2) small sheds. All building and structures were in place when the current owner acquired the property in the 2020.

The closest neighbouring dwelling is approximately 115 metres south (Attachment 2).

Development Permit

Overall, the primary objective of the DPA is to

To plan and regulate new development in a manner that preserves and protects the long-term physical integrity and ecological values of shorelines and associated foreshore and upland areas.

More specifically, the shorelines area is recognized as having:

... a high ecological function and values and may be subject to shoreline erosion in some locations. Due to their physical and biological characteristics and situation they need to be carefully managed to avoid potential negative impacts of development. Development and associated shoreline improvements or protection measures can threaten the ecological and physical integrity of the foreshore and upland.

Almost the entire property is designated within the DPA (Figure 2 and Attachment 2.2).

As required, the owners retained Caurinus Environmental to undertake an environmental assessment and make recommendations for mitigation in accordance with DPA Guidelines. The report “Environmental Assessment of 21455 Porlier Pass Road, Galiano Island, BC” (Dan Baxter, R.P. Bio. and Erin O’Brien, Ph.D., March 14, 2021 – ‘EA Report’) is Attachment 3, and, is discussed further in ‘Issues and Opportunities’ (below).

An engineer’s report was submitted for the design and construction of the septic system by BWD Engineering “21455 Porlier Pass Road, Galiano Island, BC, Onsite Wastewater System Construction Package” (BW Dennis, P.Eng., January 13, 2021 – ‘Engineers Report’) is Attachment 4. Under professional reliance, Island Health accepted the filing of that plan on January 14, 2021.

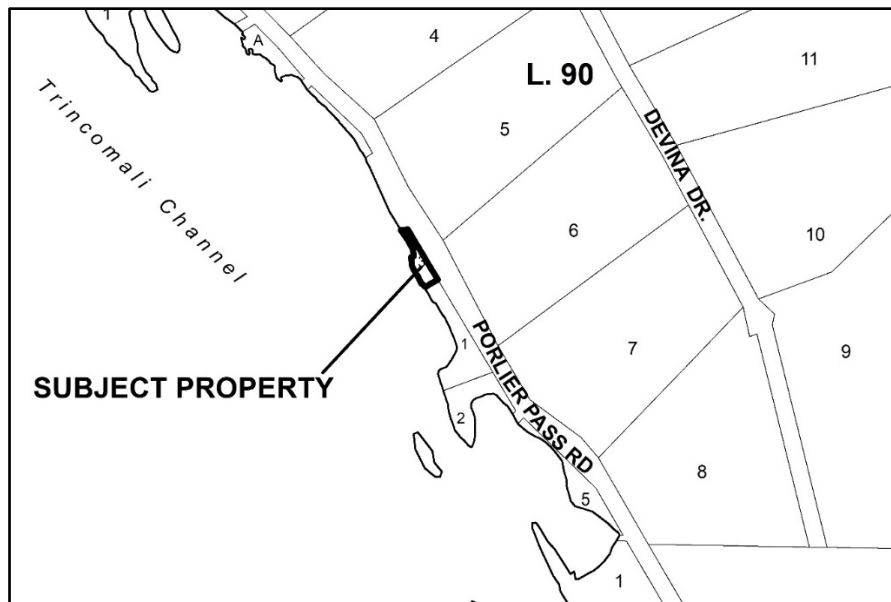
Development Variance Permit

The proposed siting of the septic system requires numerous variances. There are no other locations on the subject property that meet soil conditions and health setback requirements from drinking water well(s). The siting of the system off the property is not practical, nor financially feasible.

The submitted legal survey (Attachment 2.6) indicated that the dwelling and deck and the two (2) sheds do not meet current LUB siting requirements for setbacks from the front, interior side and natural boundary of the sea. The dwelling and deck were constructed with a building permit in 1971, and staff have confirmed they have legal, non-conforming status for siting. As the sheds are not sited in conformity and their legal status is unknown, they have been included in the variance permit in order to bring the property into full compliance with the LUB. The woodshed encroaches by a 0.3 m on the neighbouring property to the south, and the applicant is aware that if the variances are granted, they are still obliged to locate that building entirely on the subject property

Staff visited the property in March of 2021. (Attachment 2.7).

Figure 1 – Subject Property



ANALYSIS

Policy/Regulatory

Official Community Plan:

The property is designated as **SLR- Small Lot Residential** in the Galiano Island Official Community Plan Bylaw 108.

Development Permit Areas:

Development Permit Area 2 – Marine and Shoreline is designated on the property (Attachment 2.2). A DPA checklist for relevant guidelines has been completed and is Attachment 7. In summary, the proposal meets the applicable guidelines contained in the DPA.

Land Use Bylaw:

The property is zoned as **Small Lot Residential (SLR)** in the Galiano Island Land Use Bylaw 127. The residential use of the property conforms to the zoning. The variances, if granted, would bring the siting of all buildings and structures into conformity with the LUB.

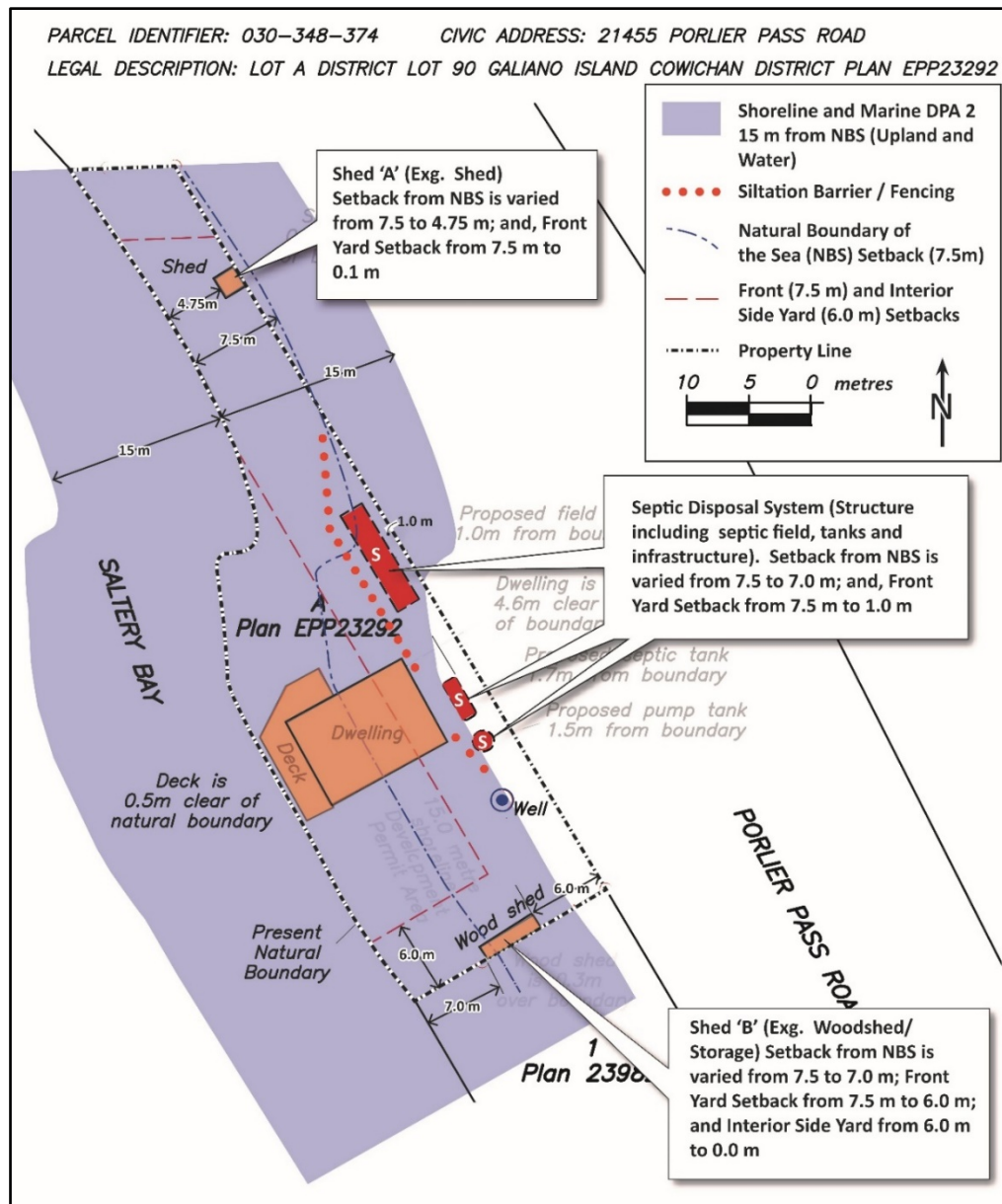
Issues and Opportunities

Development Permit

EA Report

The EA Report inventories the physical conditions of the site, flora, and fauna, assesses potential impacts of the proposal, and makes recommendations for mitigation and monitoring. No species at risk were identified on the site. It also confirms that the entire property has been previously disturbed for development with the current residence, tree removal and a narrow, sparsely treed yard running parallel to Porlier Pass Road (pp.10 and 11)

Figure 2 – Site Plan



The EA Report identified the CDFmm SV:RO/00: *Sparsely Vegetated (Rock)* and CDFmm DA/02: *Douglas-fir - Shore Pine - Arbutus* ecosystems on the property (pp.9 & 10) . The Douglas-fir – Shore pine – Arbutus plant

community is an ecosystem at risk and is provincially Red listed. It is considered imperilled to critically imperilled globally with the primary threat to these ecosystems within the Southern Gulf Islands is from residential development.

The shoreline area consists of exposed sandstone rock with a shallow overlay of soil with evidence of foreshore erosion and the long term exposure to wave energy. There was not a detailed marine ecosystem included as there is no development proposed for the foreshore or water area.

The impact assessment focuses on concerns with the required subsurface excavation (to a depth of 1.25 m) that could potentially damage large lateral anchoring roots of adjacent canopy trees, as well as the potential for accelerated erosion of the adjacent bank, which is already undergoing erosion into the backshore below (p. 17 and 18).

The report makes recommendations for mitigation measures under the categories of slope stability /erosion, excavation and root damage, introduction of non-native flora, downslope contamination and ecosystem enhancement and monitoring (pages 19 to 21). The report indicates that a restoration plan for the specific works is not needed, however, guidance and resources on appropriate revegetation of the DPA and property are provided on page 21. The specific and relevant DPA guidelines are cited and all measures have been incorporated as conditions into the draft DP, in addition to other conditions consistent with the DPA guidelines.

The conclusion of the EA report is as follows:

“Providing our mitigation recommendations are followed, these potential impacts can be avoided. Invasive plant removal and restoration with native plants throughout the property is essential to enhance the ecological value of the DPA, and to further protect the property from ongoing erosional losses. It is our opinion that the guidelines and recommendations we have outlined above will ensure that detrimental impacts to the sensitive and threatened ecosystem on the subject property can be avoided.” (p.22)

Development Variance Permit

Rationale for the Variances

The rationale provided by the owners is the necessary replacement of the septic system and that the size, shape and configuration of the property, and health regulations do not provide any alternatives on the subject property.

The rationale for the variances for two (2) sheds is to bring the property into compliance with the LUB.

Staff is of the opinion that the rationales are supportable.

Impact on Neighbouring Properties and Ecosystems

The location and scale of the new septic system should not impact any adjacent properties as they are sub-surface structures. Further, the replacement of the septic system will be of benefit, as the failing system has the potential to negatively impact the terrestrial and marine ecosystems.

The impacts of granting the variances for the sheds on neighbouring properties would be minimal given they are existing and distant to any other residential development (115 m to the south at its closest– Attachment 2.1).

Intent of the Regulations being Varied

The overall purpose of the setback from the Natural Boundary of the Sea (NBS) and the front and interior side lot regulations are to minimize impacts on adjacent properties and the public realm related to:

- Protection of the natural environment and sensitive ecosystems (in the case of the NBS)
- Limiting the visual impact of development on adjacent properties.
- Protection of views, scenic areas and distinctive features contributing to the overall visual quality and scenic value of the Trust Area.
- Maintaining privacy.
- Establishing a consistent development pattern within a local area.
- Public Access
- Maintaining a rural character.
- Establishing certainty with respect to residential development by maintaining consistent siting regulations. The proposed variances do not challenge the intent of the bylaw regulations.

Potential Impacts of Granting the Variances

Granting a variance can potentially create an expectation in the community with regard to future applications. As variances consider the unique circumstances pertaining to a particular situation that may warrant the relaxation of a specific zoning regulation each application should be evaluated on its own merits.

Consultation

There is no public or agency consultation regularly associated with a DP application. In addition, there is no statutory notification required.

DVP Notices were circulated to surrounding property owners and residents (Attachment 9). The notification period ended at 4:30 p.m. on June 24, 2021. At the time of writing, staff have not received any submissions in response to notification. Any submissions received prior to the LTC Meeting will be forwarded to the LTC and reported at the meeting.

First Nations

With respect to the potential for archaeological material to be found on the property during the proposed additions, Islands Trust reviews all applications/permits using Remote Access to Archaeological Data (RAAD) mapping to ensure the preservation and protection of cultural heritage, archaeological sites, and ancestral places. Staff have provided the Islands Trust Chance Find Protocol and the Provincial Archaeological Branch guidelines on *Heritage Act* and other guidance itemized in Attachment 1.

Rationale for Recommendation

The recommendations on page 1 with respect to the Development Permit are supported as:

- the objectives and specific guidelines of the DPA have been met;
- all relevant recommendations of a professional environmental assessment report have been incorporated into the conditions of the proposed DP; and,
- conditions in the draft DP will ensure the protection of the terrestrial shoreline and marine ecosystems.

The recommendations on page with respect to the proposed Development Variance Permit are supported as:

- although not all variances are minor, the property is very confined by its location, shape and size;
- the siting of the septic system is further limited by required setbacks to wells and soil conditions;
- the replacement of the failing septic system will be of benefit to terrestrial and marine ecosystems;
- the two buildings are existing and reasonably small and unobtrusive;
- the potential impacts from granting the variances are minor;
- notification to surrounding neighbours has generated no response; and,
- the variances do not challenge the intent of the bylaw provision.

ALTERNATIVES

The LTC may consider the following alternatives to the staff recommendations:

Development Permit

1. Request further information

The LTC may request further information prior to making a decision. If selecting this alternative, the LTC should describe the specific information needed and the rationale for this request. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee request that the applicant submit to the Islands Trust _____.

2. Deny the application

The LTC may deny the application. Note, if this alternative is selected, the resolution SHOULD specify which guideline(s) the application does not comply with. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee deny application GL-DP-2021.2 (Hoole) as it does not comply with guideline_____.

Development Variance Permit

1. Approve the permit as drafted and circulated

The LTC may approve the permit as circulated. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee approve issuance of GL-DVP-2021.3.

2. Further amend the permit and approve the permit as amended

The LTC may opt to make amendments to the permit as circulated. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee amend GL-DVP-2021.3 by____; and, .

That the Galiano Island Local Trust Committee approve issuance of GL-DVP-2020 as amended.

3. Request further information

The LTC may request further information prior to making a decision. If selecting this alternative, the LTC should describe the specific information needed and the rationale for this request. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee request that the applicant submit to the Islands Trust

4. Deny the application

The LTC may deny the application. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee deny application GL-DVP-2021.3.

Submitted By:	Phil Testemale, Planner 2	June 25, 2021
Concurrence:	Robert Kojima, Regional Planning Manager	June 25, 2021

ATTACHMENTS

1. Site Context
2. Maps, Plans, Photographs
3. EA Report
4. Engineer's Report
5. DPA Guideline Checklist
6. Draft Development Permit GL-DP-2021.2
7. DVP Notice
8. Draft Development Variance Permit GL-DVP-2021.3

ATTACHMENT 1 – SITE CONTEXT

LOCATION

Legal Description	Lot A, District Lot 90, Galiano Island, Cowichan District Plan EPP23292
PID	030-348-374
Civic Address	21455 Porlier Pass Road, Galiano Island
Lot Size	0.17 hectares (0.41 acres)

LAND USE

Current Land Use	Small Lot Residential (SLR)
Surrounding Land Use	Small Lot Residential (SLR), Residential 2 (R2) , Marine (M)

HISTORICAL ACTIVITY

File No.	Purpose
GL-DVP-2008.1	To vary the setbacks from the water boundaries (for additions) – application was withdrawn.

POLICY/REGULATORY

Official Community Plan Designations	Galiano Island OCP No. 108, 1995 Designations: SLR – Small Lot Residential Development Permit Areas (DPAs): • DPA 2 – Shoreline and Marine
Land Use Bylaw	Galiano Island LUB No. 127, 1999: Village Residential 2 (VR2)
Other Regulations	None
Covenants	None
Bylaw Enforcement	None

SITE INFLUENCES

Islands Trust Conservancy	There are no Conservancy covenants or properties in the direct area; therefore no referral has been made to the Board.
Regional Conservation Strategy	The proposal does not impact the objectives and priorities of the Islands Trust Conservancy regional conservation plan.
Species at Risk	None
Sensitive Ecosystems	Reference EA Report (Attachment 3) and Attachment 2.3
Hazard Areas	Attachment 2.5 - low slope hazard

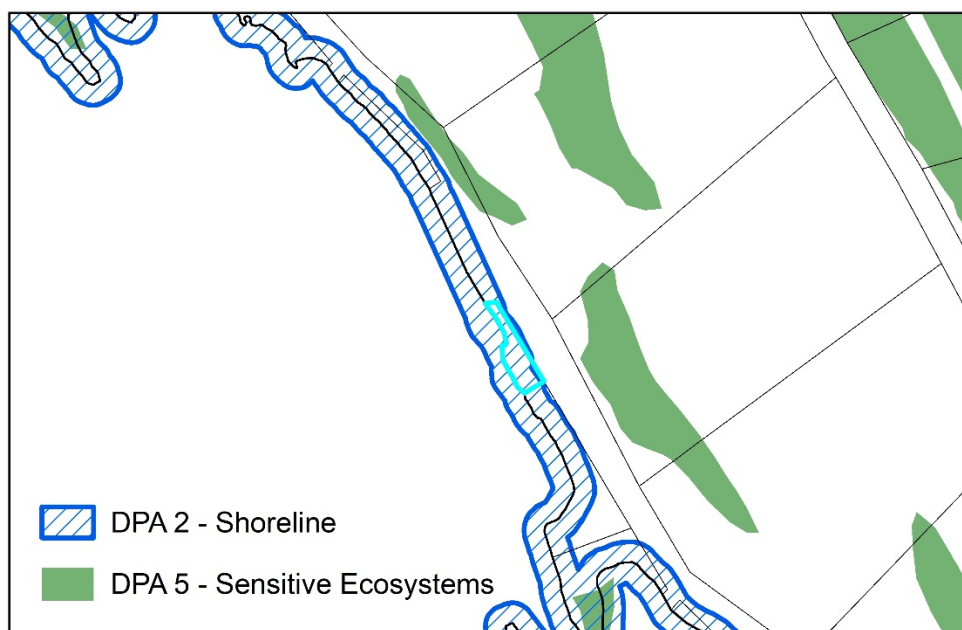
Archaeological Sites	Staff have provided the Islands Trust Chance Find Protocol and the Provincial Archaeological Branch guidelines on <i>Heritage Act</i> and directed the applicant to the following guidelines: • All archaeological and cultural heritage is protected under the <i>Heritage Conservation Act</i> and areas of archaeological potential may contain undocumented archaeological sites which would be automatically protected under the <i>Heritage Conservation Act</i> (including all intact or disturbed sites) and require a permit from the BC Archaeology Branch. Further information regarding permits: https://www2.gov.bc.ca/gov/content/industry/natural-resource-use/archaeology/permits. • In the event that archaeological features or materials are found, either intact or disturbed on the subject property, stop work immediately and contact the BC Archaeology Branch at 250-953-3334 or archaeology@gov.bc.ca. • Any impacts, would include the following: landscaping, tree removal, digging, using heavy equipment, development, fencing, footings, or any form of groundwork. • For more information regarding registered archaeological sites and archaeological potential on the subject property, submit an Archaeological Information Request Form: www.archdatarequest.nrs.gov.bc.ca, or contact Islands Trust to access mapping of the subject property.
Climate Change Adaptation and Mitigation	N/A
Shoreline Classification	Rock Shoreline - Low Rock/Boulder
Shoreline Data in TAPIS	Forage fish mapped south approximately 150 m. (Attachment 2.4)

ATTACHMENT 2 – MAPS, PLANS, DRAWINGS, PHOTOGRAPHS

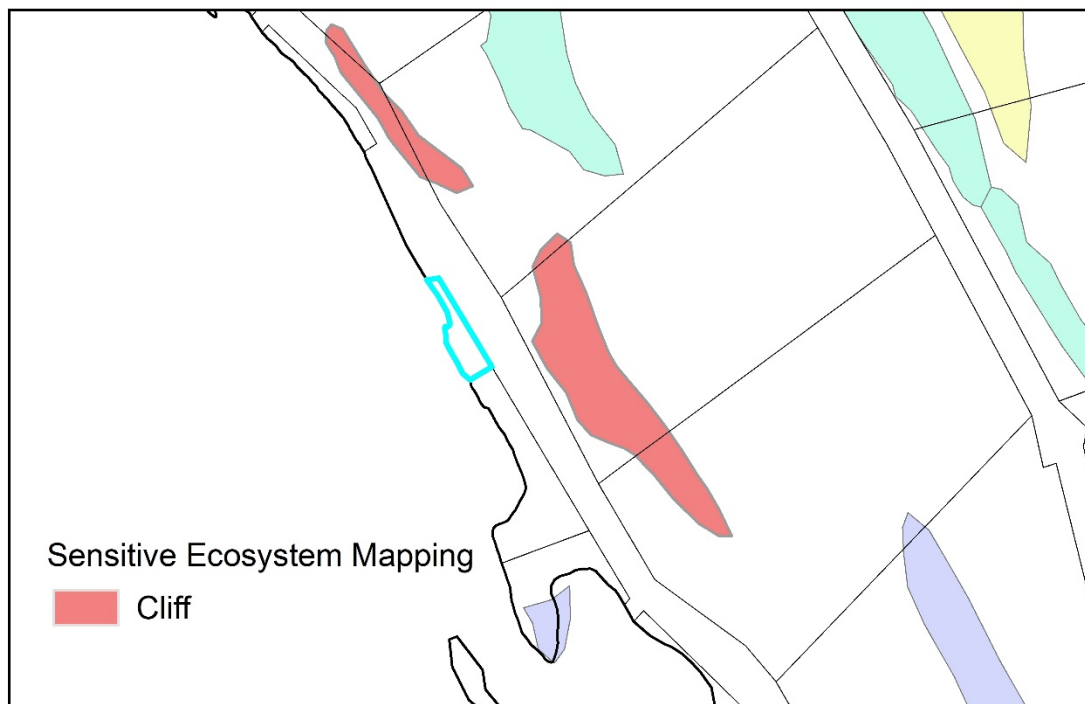
2.1 ORTHOZONING



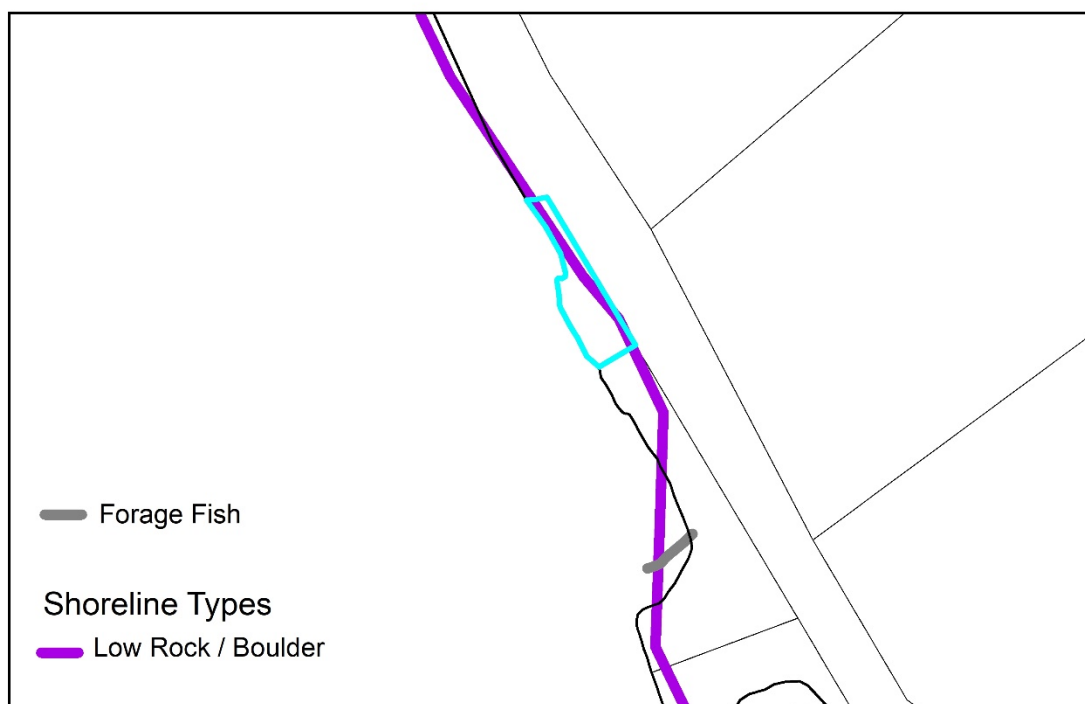
2.2 DPAs



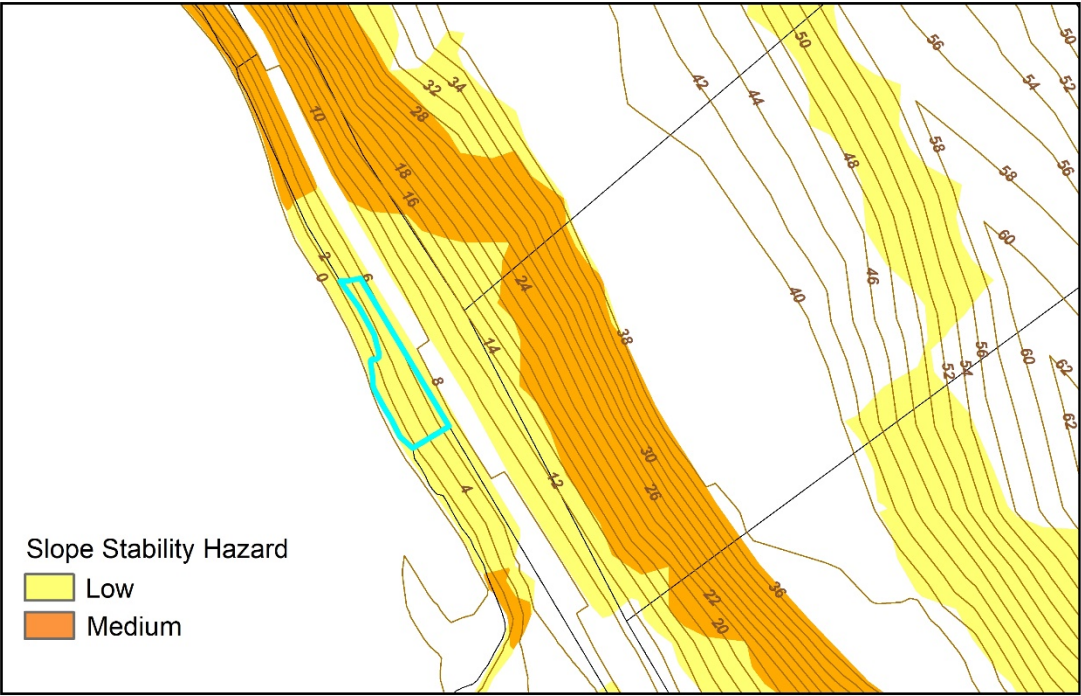
2.2 SEM (TERRESTRIAL)



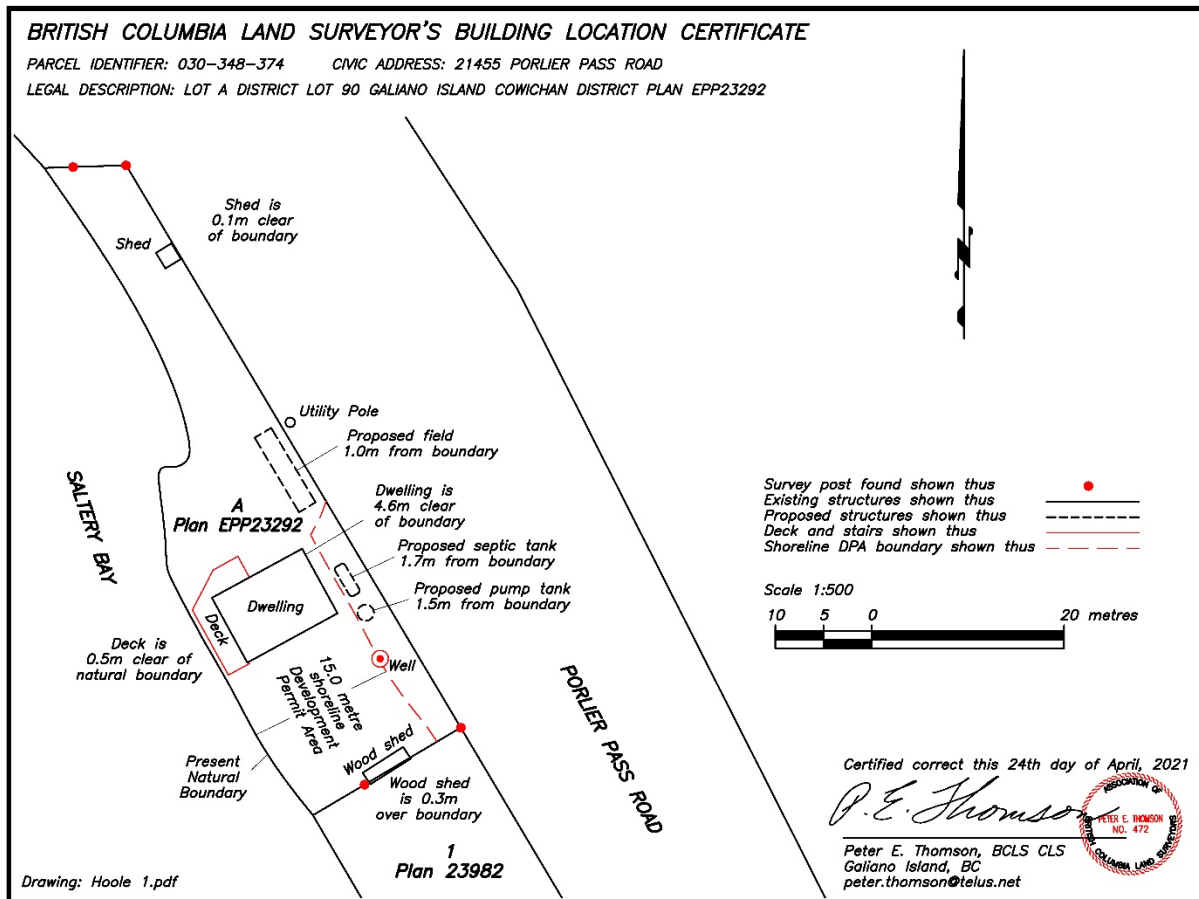
2.4 SEM (MARINE) & SHORELINE TYPE



2.5 STEEP SLOPE & CONTOURS



2.6 SURVEY PLAN



2.7 PHOTOGRAPHS

One: View north of septic field area (dwelling to right)



Two: Spetic field and tank(s) area



Three: View south from rear of dwelling - woodshed behind car

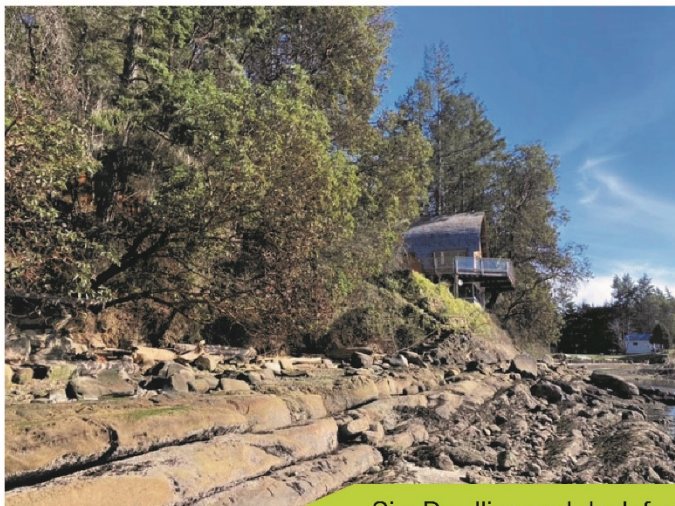
2.7 PHOTOGRAPHS (CONT'D)



Four: Woodshed



Five: South property line from deck



Six: Dwelling and deck from shoreline

Environmental Assessment of 21455 Porlier Pass Road Galiano Island, BC

Submitted To:

Warren Hoole

On

March 14, 2021

Prepared By:

Dan Baxter and Erin O'Brien



Caurinus Project No.: CE2021002

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1.0 Introduction

In January 2021, Caurinus Environmental was retained by Warren Hoole to complete an environmental inventory and impact assessment for the replacement of the septic system within the designated Shoreline and Marine DPA located on Galiano Island at 21455 Porlier Pass Road (Figure 1). The purpose of this report is to provide a complete environmental inventory, impact assessment and strategies with other disciplines to guide the proposed development in an environmentally responsible manner.

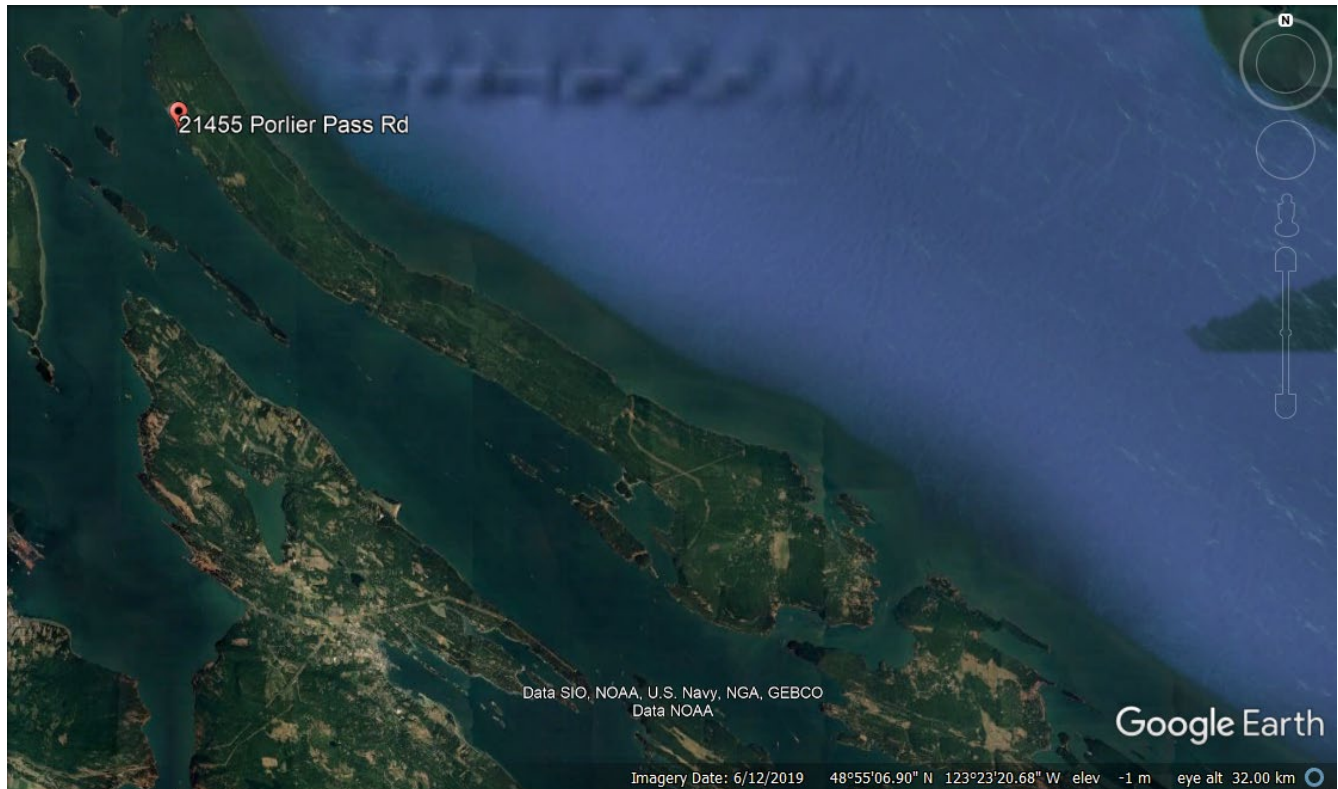


Figure 1. Galiano Island; Gulf Islands (Google Earth 2020).

The subject property is located in the Galiano Island Local Trust Area, Capital Regional District (CRD), the subject area is approximately 0.17 ha (0.413 Acres) in size. The property is located on Porlier Pass Road at the Southeast section of Galiano Island (Figure 2). Legal property description for the parcel is:

- Lot A Plan EPP23292 District Lot 90 Land District 16 (PID: 030-348-374)



Figure 2. 21455 Porlier Pass Road, Galiano Island (e-valueBC, BC Assessment 2021).

The subject property is currently zoned SLR (Small Lot Residential) and is bordered by R2 (Rural 2) to the north and east, and SLR to the northwest and southeast. The subject property falls under the jurisdiction of the Galiano Island Local Trust Committee and consequently must conform to the Galiano Island Official Community Plan Bylaw No.108, 1995 (Islands Trust 2018). Both phases of the environmental assessment are included in this report: Ecological Assessment Phase as well as Impact Assessment and Mitigation Phase. Other regulatory frameworks which also guide the assessments and strategies within this report include, but are not limited to:

- 1. Species at Risk Act (SARA) - Federal**
- 2. Migratory Birds Convention Act – Federal**
- 3. Wildlife Act – Provincial**

2.0 Supporting Inventories

A review of current information pertaining to the subject property and surrounding areas was conducted using the following resources:

- **Biogeoclimatic maps and online satellite imagery of the subject property**
- **BC Conservation Data Centre (CDC)**
- **Ecocat, Ecosystems Report Catalogue**
- **Terrestrial Ecosystem Mapping**

2.1 Physical Resources

Humid Temperate Ecodomain

In British Columbia, the ecosystems of the Gulf Islands originate from the most southerly extent of the Humid Temperate Ecodomain extending from the continental slope and shelf, all the coastal islands, adjacent mountains, the central interior plateau, and the southern interior mountains. The climate is characterized by strong seasonal cycles of temperature and precipitation with a distinct winter (CPAWS 2005; Demarchi 2011).

Humid Maritime & Highlands Ecodivision

This Ecodivision occurs along the coast from the western edge of the Continental Slope eastward to the effective height of land on the Coast Mountains, including the Nass Basin and Nass Ranges. This Ecodivision's climate is temperate, with abundant rainfall throughout the year, but with reduced precipitation in summer. Coniferous tree species that occur include Douglas-fir (*Pseudotsuga menziesii*), Western redcedar (*Thuja plicata*), Western hemlock (*Tsuga heterophylla*), Sitka spruce (*Picea sitchensis*), amabilis fir (*Abies amabilis*), and yellow-cedar (*Chamaecyparis nootkatensis*). In the extreme south of the province, where it is much drier, it contains arbutus (*Arbutus menzeisii*) and Garry oak communities (CPAWS 2005; Demarchi 2011).

Georgian Depression Ecoprovince (GED)

This ecoprovince lies between the Vancouver Island Mountains and Olympic Mountains to the west and the southern Coast Mountains and northern Cascade Ranges to the east. In British Columbia, the Georgia Depression Ecoprovince is a large basin that encompasses the southeastern Vancouver Island Mountains, the Nanaimo Lowlands, and the Gulf Islands in the west, the Strait of Georgia in the middle, and the Georgia Lowlands and Fraser Lowlands in the east (CPAWS 2005; Demarchi 2011).

SGI - Southern Gulf Islands Ecoregion

These islands occur from Newcastle and Gabriola islands south to Chatman, Discovery and Chain islands, including the inter-island channels and sounds that extend across the Strait of Georgia, and the San Juan Islands in Washington. The islands consist of folded and faulted shale and sandstone/conglomerate, with some volcanic stocks intermixed. This has resulted in the many linear valleys and island separations. The northwesterly aligned folded structure and the eroding power of southeasterly moving glacial ice have resulted in the prominent northwesterly-southeasterly alignment of the Gulf Islands. As the glaciers retreated, it resulted in very deep deposits of sediments on this lowland. Streams that originate here are short and often ephemeral, drying in the summer (CPAWS 2005; Demarchi 2011).

2.2 Topography

The dominant landforms in the area are long ridges overlooking interior lowlands that are generally submerged. Island ridges and peaks are capped by hard conglomerate and sandstones. Smaller valleys have been eroded out of softer, shaly sediments (Green *et al.* 1989). Galiano Island is entirely underlain by the sedimentary formations of Upper Cretaceous age (Muller and Jeletzky 1970). These formations comprise alternating beds of conglomerates, sandstones, and shales with an estimated total thickness of 3050 m (Williams and Pillsbury 1958). Galiano Island is long and narrow and strongly reflects the linear character of the underlying sedimentary bedrock. Ridges and hills are very pronounced, and the bedrock strata can be seen to dip steeply towards the Strait of Georgia. The highest peaks consist of Sutil Mountain (290 m) in the southeastern part of the island and Mount Galiano (311 m) located on the most southerly point (Muller and Jeletzky 1970).

2.3 Hydrology

Soils, climate, vegetation cover, and surface topography work together in a complementary manner. Soils directly influence the infiltration rate of rainfall, the rate of surface runoff, and ultimately the groundwater

recharge/discharge as well as soil moisture content (Kenney *et al.* 1988). The subject property is composed of very shallow channery sandy loam and glacial drift materials, brown with many fine to medium roots overlaying sandstone bedrock. The property is slightly sloped toward the ocean with a steep rocky embankment.

2.4 Biological

2.4.1 Biogeoclimatic Ecosystem

In British Columbia, resource managers have advocated Terrestrial Ecosystem Mapping (TEM) as a means to establish natural resource baselines for planning and management purposes. Furthermore, these databases are to be used by stakeholders and resource planners to provide guidance for the private sector and all levels of government regarding conservation and management at a meaningful scale, such as community development plans, and to do so in a common language.

Climate, topography and surface geology influence the site hydrology, which in turn influences the biological resources on site. This ecological principle is fundamental to most Ecological Landscape Classifications. The vegetation assessment utilizes the Biogeoclimatic Ecosystem Classification (BEC) which is used extensively throughout British Columbia to report and describe terrestrial ecosystems. In the BEC system, climate is the most significant determinant of ecosystems, influencing soil characteristics which in turn influence the climax (old growth) vegetation, its composition and structure.

The subject property is located in the CDFmm - Moist Maritime Coastal Douglas-fir subzone occurring in the Southern Gulf Islands (Pojar and Mackinnin 1994). The Southern Gulf Islands ecosystems are heavily influenced by the rain shadow of the mountains on Vancouver Island and Washington's Olympic Peninsula. This results in warm, dry summers and mild, wet winters. The Southern Gulf Islands fall predominantly into the Coastal Douglas-Fir biogeoclimatic zone. The most common tree species found are Douglas-fir, Western redcedar and Garry oak (*Quercus garryana*). Other common species include salal (*Gaultheria shallon*) and Oregon grape (*Mahonia aquifolium*) in upland areas, wild rose (*Rosa acicularis*), snowberry (*Symphoricarpos albus*) and oceanspray (*Holodiscus discolor*) in rocky outcrops, and bigleaf maple (*Acer macrophyllum*), sword fern (*Polystichum munitum*), and salmonberry (*Rubus Spectabilis*) in moister regions (Meidinger and Pojar 1991; Demarchi 2011).

The following ecosystems were noted within the subject property (Green and Klinka 1994; Figure 3):

- **CDFmm SV:RO/00: Sparsely Vegetated (Rock)**
- **CDFmm DA/02: Douglas-fir - Shore Pine – Arbutus**



Figure 3. Property Ecosystems: (5054: 50% Sparsely Vegetated (Rock), 50% Woodland (Douglas-fir - Shore Pine – Arbutus, Mature Forest (Islands Trust (MapIT) 2021).

Shoreline and Marine DPA

British Columbia's Local Government Act enables communities to designate parts of their planning area as Development Permit Areas (DPAs). As part of the Galiano Island Official Community Plan (OCP), a set of objectives and guidelines for development were designated. Seven DPAs were identified to protect sensitive ecosystems or to guide development in areas with special circumstances. A Development Permit may be needed by any building construction, demolition, land alteration, or subdivision of land that occurs in the DPA. The Shoreline and Marine DPA was adopted by the Galiano Island Local Trust Committee (LTC) in order to protect sensitive coastal areas and processes (Islands Trust 2018). The entire subject property has been designated as a Shoreline and Marine Development Permit Area by the Islands Trust. This designation includes the protection of the natural environment, its ecosystems and biological diversity. Shorelines within the Galiano Island Local Trust Area have high ecological diversity and value and may be subject to shoreline erosion in some locations. Due to their physical and biological characteristics they need to be carefully managed to avoid potential negative impacts of development. Development and associated shoreline improvements or protection measures can threaten the ecological and physical integrity of the foreshore and upland. The Shoreline and Marine DPA includes all land 15 m upland of the natural boundary of the sea, and seaward to the boundary of the area of bylaw application (Islands Trust 2018).

3.0 Site Inventory

Dan Baxter (B.Sc., R.P.Bio) and Erin O'Brien (Ph.D.) of Caurinus Environmental conducted a site visit and review of current information pertaining to the subject property and surrounding areas in February 2021. The review included online satellite imagery, reports, independent studies and recent Terrestrial Ecosystem Mapping (TEM). The subject property is accessed from Porlier Pass Road on Galiano Island (Figure 2). The inhabited section of the property begins at the southwest corner and consists of mainly sparse trees and shrubs continuing toward the house and shoreline. The proposed septic site has been previously disturbed by historic land use and is composed of an open area with grasses and sparse young and mature trees.

3.1 Shoreline Regulation and Setback

The Shoreline and Marine DPA includes all land 15 m upland of the natural boundary of the sea, and seaward to the boundary of the area of bylaw application.

Shoreline Description (21455 Porlier Pass Road; Figure 4)

Type: Low Rock/Boulder Shoreline;

Substrate: Low rock/boulder shore types are a mix of hard bedrock ramps and boulder beaches that have a slope of less than 20%. These shores are a mixture of sediment and rock, and are moderately resistant to erosion (McPhee *et al.* 2000.)

Description: They tend to have a limited sediment supply and be stable over a human time scale. Sediment transport processes depend on the wave energy at the site, with more exposed shores having some onshore/offshore and longshore transport. Low rock/boulder shores often have driftwood accumulations in high intertidal and backshore areas (McPhee *et al.* 2000.) On the subject property there is a thin layer of sediment with an underlay of sandstone which is causing a slow erosion of the cliff shoreline (Plate 1).

Plate 1. Thin layer of sediment with an underlay of sandstone on property



Tide Type: Mixed Semidiurnal: two HW (High Water a.k.a. high tide) and two LW (Low Water a.k.a. low tide) occur each lunar day, each of markedly different height.



Figure 4. 21455 Porlier Pass Road, Galiano Island BC, showing Shoreline and Marine DPA (extending 15 m from the natural boundary of the sea, shaded in blue; MapIT, Island Trust 2021).

3.2 Conservation Data Centre

British Columbia Conservation Data Centre (CDC) is an extension of the Ministry of Environment and Climate Change Strategy and is the provincial coordinator of tracking rare and endangered species (native plants, animals, and natural plant communities) in British Columbia on provincial, national and international levels. Documented locations of sensitive (at-risk or endangered) and non-sensitive species were reviewed for the area using a 1 km search radius; no known sensitive species occurrences have been reported in the area (BC Conservation Data Centre 2021; Data review: February 28, 2021).

3.3 Flora

The ecosystems on the property categorized by the Islands Trust (Figure 3) were as follows:

- **5054: 50% Sparsely Vegetated (Rock), 50% Woodland (Douglas-fir - Shore Pine – Arbutus, Mature Forest)**

The following section summarizes the provincial Terrestrial Ecosystem Mapping TEM - ecosystems found on the subject property site. The following ecosystems were identified in a literature review and confirmed during the survey of the property: Primary – 50% Sparsely Vegetated (Rock), Secondary - 50% Woodland (Douglas-fir - Shore Pine – Arbutus, Mature Forest) (Figure 5; Meidinger and Pojar 1991).

Sparsely Vegetated - CDFmm: Coastal Douglas-fir Zone, Moist Maritime

- **CDFmm SV/RO: Sparsely Vegetated: rock outcrop**

Sparsely vegetated ecosystems are areas of low vascular vegetation cover, generally 5 – 10%, usually discontinuous, interspersed with bare sand, gravel, or exposed bedrock. These unique landforms are often in a dynamic state of change due to factors such as water level changes, sediment deposition, sediment erosion and

mass wasting. Although species diversity is low in these ecosystems in comparison to other sensitive ecosystems, they provide a variety of specialized wildlife habitats. They support slowly developing pioneer plant communities that are formed by species adapted to hostile environmental conditions. Rock outcrop are generally comprised of exposed bedrock, usually at the top of knolls or on portions of steeper slopes. Environmental factors influencing plant and animal establishment include steepness and activity of slopes; aspect and position on a slope; exposure to severe weather conditions; lack of moisture or continuous seepages; and whether the site is wind-blown or fully sheltered. Rapid drainage and the accumulation of soil organic matter that is limited to bedrock fissures and ledges results in shallow-rooted stunted trees such as Garry oak, arbutus and Douglas-fir. Patches of kinnikinnick (*Arctostaphylos uva-ursi*) may be present, and scattered baldhip rose (*Rosa gymnocarpa*) can also occur. Herbs can include Stonecrop (*Sedum sp.*), small-flowered alumroot (*Heuchera micrantha*), and nodding onion (*Allium cernuum*). Introduced grasses are typical, with mosses and lichens developing in the shallow soils (McPhee *et al.* 2000.)

Woodland - CDFmm: Coastal Douglas-fir Zone, Moist Maritime

- **CDFmm DA/02: Douglas-fir – Shore pine – Arbutus**

This forested ecosystem is dominated by Douglas-fir and arbutus with shore pine (*Pinus contorta contorta*) occurring on the driest and poorest sites. In areas with rock outcrops and/or small islands, Garry oak can also occur. Forest canopies are discontinuous with large gaps, due to rock outcrops and pockets of shallow soil. Typically found on drier, poorer sites including crests, upper slopes, and warm aspects. Soils are shallow, mostly medium-textured ranging from fine sand to silty loam and have a very dry moisture regime with a very poor to medium soil nutrient regime. Some have a thin soil deposited by glacial melt water or till origin overlying bedrock. Drainage ranges from very rapid to well. The shrub layer is diverse drought-tolerant shrubs such as hairy honeysuckle (*Lonicera hispidula*), nootka rose (*Rosa nutkana*), Oregon grape, oceanspray, salal with saskatoon (*Amelanchier alnifolia*) being present in minor amounts. The herb layer usually includes Columbia brome (*Bromus vulgaris*), purple peavine (*Lathyrus nevadensis*), orange honeysuckle (*Lonicera ciliosa*), broad-leaved starflower (*Trientalis latifolia*), white fawn lily (*Erythronium oregonum*), Pacific sanicle (*Sanicula crassicaulis*), and trailing blackberry (*Rubus ursinus*).

The Douglas-fir – Shore pine – Arbutus plant community is provincially **Red** Listed (BC List Status 2021) and is ranked S1 (critically imperiled; Provincial Conservation Status 2021) in British Columbia. This critically imperiled habitat is situated in coastal areas with favourable scenic aspects and is in high demand for new and re-development in the region. In the entire Coastal Douglas-fir Zone, due to continued development pressures, only ~0.5% has been identified as mature or old forest (BC's Coast Region: Species & Ecosystems of Conservation Concern 2010). Historically, this ecological community has experienced significant declines as a result extensive past timber harvesting, grazing, and extensive rural and urban development. Threats include development, agriculture, fire suppression, invasive species, recreational use, grazing and browsing by domestic livestock and the overabundance of black-tailed deer (*Odocoileus hemionus columbianus*; BC's Coast Region: Species & Ecosystems of Conservation Concern 2010).

Habitat description

The subject property was assessed during the site visit for the possible occurrence of all provincially Red- and Blue-listed species as well as federal Species at Risk Act-scheduled species.

Site Inventory Description:

The whole of the property lies within the Shoreline and Marine DPA with all sections of the property having been previously disturbed for development (Plate 2). The shoreline area on the property is steeply sloped to the

natural boundary of the sea, and currently shows signs of erosion (Plate 3). The dwelling is located within ~1 m of the natural boundary of the sea (Plate 4).

Plate 2. Main lawn area previously cleared for development at 21455 Porlier Pass Rd., Galiano Island, BC.



Plate 3. Section of property with signs of erosion at 21455 Porlier Pass Rd., Galiano Island, BC



◀ View of eroding section from above



View of eroding section from below ▶

Plate 4. Natural boundary of the sea at base of current dwelling at 21455 Porlier Pass Rd., Galiano Island, BC.



The vegetation survey was comprised solely of the *Shoreline and Marine Ecosystem DPA*, where development has already occurred. The *Shoreline and Marine Ecosystem DPA* has historical disturbance in the form of the current residence, tree removal and a narrow sparsely treed yard running parallel to Porlier Pass Road. The plants detected during the site survey are presented in Table 1; invasive species detected include: Scotch broom (*Cytisus scoparius*), Himalayan blackberry (*Rubus armeniacus*) and large periwinkle (*Vinca major*). No species at risk were detected during the vegetation survey. However, the timing of our inventory (winter) would not preclude the potential occurrence of rare species at some other point during the growing season (this would apply to all plant species). Given the prior disturbance to the area, however, it is unlikely such species would be found on site.

Table 1. List of plant species detected at 21455 Porlier Pass Rd., Galiano Island, BC.

Common Name	Scientific Name	Origin Status ¹	BC Status ²	BC List ³	COSEWIC ⁴
Western trumpet	<i>Lonicera ciliosa</i>	Native	S5	Yellow	Not Listed
Himalayan blackberry	<i>Rubus armeniacus</i>	Exotic	SNA	Exotic	Not Listed
Scotch broom	<i>Cytisus scoparius</i>	Exotic	SNA	Exotic	Not Listed
Large periwinkle	<i>Vinca major</i>	Exotic	SNA	Exotic	Not Listed
Grass sp.	-----	---	---	---	---
Garry oak	<i>Quercus garryana</i>	Native	S5	Yellow	Not Listed
Arbutus	<i>Arbutus menziesii</i>	Native	S5	Yellow	Not Listed
Douglas-fir	<i>Pseudotsuga menziesii</i>	Native	S5	Yellow	Not Listed

¹Origin Status: <https://ibis.geog.ubc.ca/biodiversity/eflora/>

²BC Status: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/status-ranks>
<https://explorer.natureserve.org/AboutTheData/Statuses>

³BC List: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/red-blue-yellow-lists>

⁴COSEWIC: <http://www.cosewic.ca/index.php/en-ca/assessment-process/wildlife-species-assessment-process-categories-guidelines/status-categories>

3.4 Fauna

During the site visit, all provincially Red- and Blue-listed species as well as Species at Risk Act-scheduled species were assessed for possible occurrence on the subject property. This wildlife assessment only considers vertebrate animals. The study area was carefully assessed for evidence of recent or past use by wildlife species. The following species were detected during the survey of the property:

Birds

The following 14 (7 terrestrial, 7 marine) bird species were observed on or adjacent to the property during the site visit, with two species at risk detected (Provincially: double-crested cormorant (*Phalacrocorax auratus*); Federally: Horned grebe (*Podiceps auratus*); Table 2). The double-crested cormorant breeds primarily in the Strait of Georgia. During the fall and winter double-crested cormorants can be found in sheltered waters throughout the coast but are most abundant in the Strait of Georgia and Juan de Fuca Strait (Campbell *et al.* 1990). The horned grebe nests throughout interior valleys, Peace Lowlands, and across northern portion of British Columbia. Important wintering areas for the grebe on coast include: Clayoquot Sound, western and southern Strait of Georgia, Fraser River estuary, and Haro Strait (Campbell *et al.* 1990). The birds detected on site are typical for the area in mid-winter. No heron or raptor nests were detected during the site visit.

Table 2. List of bird species detected at 21455 Porlier Pass Rd., Galiano Island, BC.

Common Name	Scientific Name	Origin Status ¹	BC Status ²	BC List ³	COSEWIC ⁴
Red Crossbill	<i>Loxia curvirostra</i>	Native	S5	Yellow	Not Listed
Chestnut-backed Chickadee	<i>Poecile rufescens</i>	Native	S5	Yellow	Not Listed
Pine Siskin	<i>Spinus pinus</i>	Native	S5B	Yellow	Not Listed
Anna's Hummingbird	<i>Calypte anna</i>	Native	S4S5	Yellow	Not Listed
Song Sparrow	<i>Melospiza melodia</i>	Native	S5	Yellow	Not Listed
Common Raven	<i>Corvus corax</i>	Native	S5	Yellow	Not Listed
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Native	S5B, S5N	Yellow	Not Listed
Harlequin Duck	<i>Histrionicus histrionicus</i>	Native	S4B, S3N	Yellow	Not Listed
Bufflehead	<i>Bucephala albeola</i>	Native	S5B, SNRN	Yellow	Not Listed
Common Goldeneye	<i>Bucephala clangula</i>	Native	S5	Yellow	Not Listed
Horned Grebe	<i>Podiceps auritus</i>	Native	S4B, SNRN	Yellow	SC
American Wigeon	<i>Anas americana</i>	Native	S5B, S5N	Yellow	Not Listed
Double-crested cormorant	<i>Phalacrocorax auritus</i>	Native	S3S4	Blue	NAR
Gull sp.	-----	----	----	----	----

¹Origin Status: <https://ibis.geog.ubc.ca/biodiversity/efauna/>

²BC Status: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/status-ranks>

<https://explorer.natureserve.org/AboutTheData/Statuses>

³BC List: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/red-blue-yellow-lists>

⁴COSEWIC: <http://www.cosewic.ca/index.php/en-ca/assessment-process/wildlife-species-assessment-process-categories-guidelines/status-categories>

Mammals

Three species of mammal were detected in the marine environment during our site visit, with one species at risk detected (Steller's sea lion (*Eumetopius jubatus*); Table 3). The Steller's sea lion breeds along the coast in British

Columbia at specific locations, including the Northern section of Vancouver Island, Haida Gwaii and in Northern BC. There are about 30 known haulout sites distributed mainly along the exposed outer coast that are used throughout the year, as well as additional winter sites used on a seasonal or irregular basis (COSEWIC 2013). Other mammals that may be on site, but which were not directly surveyed include small rodents and bats. Suitable habitat for bat roosting and nursery sites include clefts in steep rock outcrops and standing dead trees with hollow interiors or flaking bark (Nagorsen and Brigham 1993); these features are present on the subject property and may support roosting or hibernating bats.

Table 3. List of mammal species detected at 21455 Porlier Pass Rd., Galiano Island, BC.

Common Name	Scientific Name	Origin Status ¹	BC Status ²	BC List ³	COSEWIC ⁴
River Otter	<i>Lontra canadensis</i>	Native	S5	Yellow	Not Listed
Steller's Sea Lion	<i>Eumetopius jubatus</i>	Native	S3B, S4N	Blue	SC
Harbour Seal	<i>Phoca vitulina</i>	Native	S5	Yellow	NAR

¹Origin Status: <https://ibis.geog.ubc.ca/biodiversity/efauna/>

²BC Status: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/status-ranks>
<https://explorer.natureserve.org/AboutTheData/Statuses>

³BC List: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/red-blue-yellow-lists>

⁴COSEWIC: <http://www.cosewic.ca/index.php/en-ca/assessment-process/wildlife-species-assessment-process-categories-guidelines/status-categories>

Amphibians and Reptiles

No reptiles or amphibians were detected during our site visit but may occur in the warmer months. For example, previous discussions with a landowner 2 km South on Porlier Pass Road revealed that a northwestern alligator lizard (*Elgaria coerulea*) has been observed among boulders on their property, and the subject property similarly contains suitable rocky substrates for this species. No hibernacula were found on the property.

3.5 On Site and Adjacent Land Use

The whole of the subject property lies within the Shoreline and Marine DPA. Currently there is an existing dwelling on the property with a short driveway, a lawn and a small shed (Plate 5a, 5b). The proposed septic site has been previously disturbed by historic land use and is composed of an open grassed area (Plate 6). The shoreline area consists of exposed sandstone rock with a shallow overlay of soil (Plate 1). No developed properties exist adjacent to the subject property.

Plate 5a. View of property looking south with existing dwelling, lawn and a short driveway in the background at 21455 Porlier Pass Rd., Galiano Island, BC.



Plate 5b. View of shed on north side of the property at 21455 Porlier Pass Rd., Galiano Island, BC.



Plate 6. Site of proposed replacement septic system at 21455 Porlier Pass Rd., Galiano Island, BC.



4.0 Impact Assessment

The property lies within the Shoreline and Marine DPA with all sections of the property having been previously disturbed for development (Plate 2). The shoreline area on the property is steeply sloped to the natural boundary of the sea, and currently shows signs of erosion (Plate 3). The location of the field must comply with sewerage system regulations regarding well setbacks, as well as minimum native soil depth for final treatment; the proposed location is in the only area that meets these requirements (Brent Dennis, P.Eng., personal communication). Hence, moving the entire septic field outside of the DPA is not possible or practical as the only other suitable location would reside outside of the owner's property. Excavation of native soils to construct the septic field will extend to a depth of 1.25 m (Appendix 1, Drawing 21105-001, sheet 5 of 6). Potential impacts of this proposed development on the DPA centre around this excavation activity, subsequent reclamation, and ongoing use of the septic field in the future.

Slope Stability / Erosion

The shoreline along the property is well vegetated with large patches of invasive species such as large periwinkle and Scotch broom, especially along the rockwall (Plate 7). The shoreline is exposed to high wave energy and is characterized by extensive erosion of sandstone bedrock (see Plate 8).

Plate 7. Rockwall along shoreline at 21455 Porlier Pass Rd., Galiano Island, BC.



Plate 8. Evidence of seasonal shoreline erosion at 21455 Porlier Pass Rd., Galiano Island, BC.



Given the steep slope along the marine boundary of the property, there is the potential for any construction activities involving subsurface disturbance to result in erosion of soils and reduced slope stability. The septic field is in close proximity to the eroding bank (Plate 3) along the marine environment and will be contained within its current boundaries in a relatively level area of the DPA. The sloped portion of the DPA on the subject property near and under the house shows signs of erosion (Plate 1, 9). An old retaining wall using portions of the local sandstone is present along the shore behind and under the house. The wall appears stable due to the amount of well rooted vegetation present, although part of the wall under the house shows evidence of erosion (Plate 9) and requires stabilization to prevent further sediment transport and overland flow.

Plate 9. Evidence of erosion along the rock wall near residence at 21455 Porlier Pass Rd., Galiano Island, BC.



Excavation and Root Damage

Given the excavation depth required for construction of the septic field, there is potential for damage to lateral anchoring roots of trees growing within the DPA. Root damage can compromise tree health and stability, and this has the potential to impact the integrity of the DPA. Of particular concern are any impacts to the trees bordering the eroding bank adjacent to the septic field (Plate 3); if root damage occurs on the upland side, this will lead to the loss of these stabilizing trees over the bank and further erosional losses.

Introduction of Non-native Flora

Any construction activities involving the use of heavy equipment, as well as revegetation of disturbed areas using commercial reseeding preparations, have the potential to introduce non-native vegetation to immediate and surrounding areas.

5.0 Mitigation and Recommendations

Mitigation and restoration measures described below will help retain and/or enhance the ecological value of the entire subject property and DPA therein.

Little remains of the **Red**-listed Douglas-fir – Shore pine – Arbutus habitat that lies within the Shoreline and Marine Ecosystem DPA on the subject property (see Figure 4). This habitat requires restoration (invasive plant removal and revegetation; see recommendations below) to ensure that this rare habitat is given the ability to re-establish itself on the property, and to prevent seeding of non-native species into the Shoreline and Marine Ecosystem DPA itself.

Any activity during construction must minimize disturbance to the soil and existing vegetation, and particularly to large anchoring tree roots. Further, ongoing invasive plant removal is recommended for species such as Scotch broom, as well as revegetation with native plant species in areas of disturbance to help avoid further introduction of non-native species. Scotch Broom modifies soil chemistry and prevents native species from establishing, shades out native species, and competes with native plants for access to water, nutrients and pollinators and hence it is critical that it be eliminated from this landscape to restore it to a healthy and diverse native plant community. Removal should be achieved by cutting the plants at or just below the ground (just below the root collar) to avoid soil disturbance and erosional loss, as well as to reduce the chance of germination of seeds contained in the soil seed bank. (Germination is enhanced in newly disturbed soil.) Cutting plants when they are in full bloom in the spring will minimize resprouting, as all nutrients have been moved from roots into above ground parts. It will take many years before Scotch broom will be fully removed from this landscape as there will be a considerable seed bank that can persist for many decades.

The double-crested cormorant (Blue listed Provincially), horned grebe (Special Concern Federally) and Steller's sea lion (Blue listed Provincially & Special Concern Federally) have distant breeding locations along the coast of British Columbia and the current project on the property will have no effect on these breeding areas. To prevent disturbance to these species in their non-breeding habitat, activity near the foreshore should be minimized during the winter season (See Point 10 in the summary below). Mitigation and restoration measures that prevent erosion of soils into the marine environment will further minimize disturbance to these species during the winter months, as increased water turbidity due to overland sediment transport in coastal areas can negatively impact habitats and foraging conditions for diving birds and mammals.

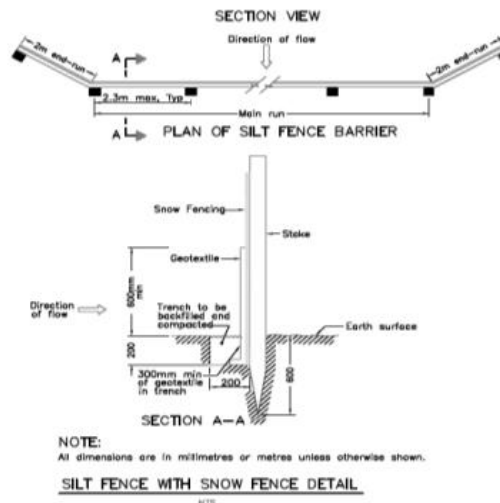
Site Specific Recommendations

Slope Stability / Erosion

1. Prior to construction, install silt fence as illustrated below to prevent surface transport of soil or fill and other material toward the steeply sloped portion of the DPA beyond the immediate construction area.

EROSION AND SEDIMENTATION

- 1) PRE-STAKED SILT FENCE TO BE INSTALLED AS SHOWN PRIOR TO CONSTRUCTION AS DIRECTED BY THE ENGINEER.
- 2) TOPSOIL STRIPPED FOR REUSE TO BE STOCKPILED AWAY FROM WATER COURSES, DRAINAGE PATHS AND PROPERTY AND SHALL BE COVERED AND / OR SEEDED TO REDUCE EROSION.
- 3) ALL DISTURBED AREAS TO BE RESTORED AND LANDSCAPED AS SOON AS POSSIBLE FOLLOWING CONSTRUCTION.



2. Install silt barrier fencing as close as possible to the construction area and ensure no equipment crosses the barrier in the vicinity of the eroding bank (Plate 3). Storage of building materials must be limited to areas on or near the driveway and the south side of the house as is practical.
3. Immediately stabilize shorelines or banks disturbed by any activity associated with the project using silt barrier fencing to prevent erosion and/or sedimentation, and subsequently through revegetation with native species suitable for the site. This is of extreme importance for the subject property, as the upland-backshore boundary on the subject property is at high risk of erosion. This would in turn cause sedimentation of nearshore waters, and increased turbidity will restrict the growth of photosynthetic macroalgae along the shore.
4. To further stabilize the bank from future erosion, we recommend ongoing invasive plant removal, as well as revegetation with native plant species in areas of disturbance to help avoid further introduction of non-native species. All restoration planting along the unstable bank should occur in the spring (Feb-Mar) to allow for plant root establishment and soil stabilization before being exposed to winter precipitation.
5. Ensure no work is carried out during precipitation events.
6. Any soils exposed for prolonged periods, i.e., greater than 2 weeks, shall be covered. Covering may include tarping, or hydromulch (without seed mixture) and must be maintained.

Excavation and Root Damage

7. Use lightest possible equipment for lowest impact and avoid cutting or damaging large lateral anchoring tree roots.

Introduction of Non-native Flora

8. Contractors should inspect their equipment and vehicles to ensure they do not transport invasive plant species seeds onto or off the property. All equipment should be washed prior to arrival. Manual removal of weeds from equipment should be performed regularly.
9. Landscaping and restoration of disturbed areas should be conducted using only native plant species.
10. The removal of invasive species (Himalayan blackberry, large periwinkle, Scotch broom) is recommended throughout the entire property. Where invasive plants occur along the steep-sloped portion of the DPA, ensure all stems are cut and not pulled to maintain stabilization of the bank. Keeping the Scotch broom and Himalayan blackberry trimmed before flowering will also help reduce the spread of seed in the area.

Downslope Contamination

11. The construction plan for the proposed septic system installation has been approved by Vancouver Island Health Authority (VIHA) and is to a high standard. Providing the plan is implemented as proposed, there should be no potential for contamination of the surrounding DPA or adjacent marine environment.

The following measures would help retain or enhance ecological value of the property as a whole:

1. To maintain ecological integrity of the Shoreline and Marine Ecosystem DPA, all existing canopy trees must be maintained. This includes standing dead trees (snags), as these features provide critical habitat for many species of birds, bats, and invertebrates. Existing seedlings or young trees should be managed to provide the best opportunity for survival (e.g. removal of competing vegetation and non-native species as needed, protection from herbivore browsing). Retention of all mature trees in the Shoreline and Marine Ecosystem DPA on the property will help stimulate the natural tree regeneration process, since mature Douglas-fir and arbutus provide a source of seed for future regeneration.
2. All future landscaping works in the areas adjacent to the DPA will not occur during rain deposition events.
3. Minimize disturbance and maintain undeveloped habitat in as natural a state as possible.
4. Landscaping and restoration of natural areas in the Shoreline and Marine Ecosystem DPA should be conducted using only native plant species.
5. Any hired contractors should inspect their equipment and vehicles to ensure they do not transport invasive plant species seeds onto or off the property. All equipment should be washed prior to arrival. Manual removal of weeds should be performed regularly.
6. For project planning in the Gulf Islands region, the songbird nesting window is March 12 to August 17 across all habitat types, with peak nesting occurring between May 1 and July 22 (Department of Environment and Climate Change 2020). All construction activities should be avoided during this peak nesting period.

6.0 Monitoring and Restoration

A follow-up site visit by a Qualified Environmental Professional (QEP) is recommended in the future, to assess the effectiveness of the proposed mitigation procedures. A restoration plan is not needed at this time; however, an expert with knowledge of saline tolerant, drought resistant plants can provide the property owners with the shrubs/plants needed to revegetate the developed area in the DPA and surrounding area. To assist with the identification of appropriate native plants, below are links to local providers in the area:

<http://galianoconservancy.ca/grow-native-plants/>

http://www.goert.ca/gardeners_restoration/buying_native_plants.php

Our recommended mitigation measures are primarily intended to enhance the disturbed ecosystem, in order to ensure protection of the DPA itself (minimize ongoing introduction of invasive species), and to directly restore the patches of **Red**-listed Douglas-fir – Shore pine – Arbutus habitats ecosystem within the Shoreline and Marine DPA.

The Shoreline and Marine DPA restoration guidelines relevant to the property are as follows (Islands Trust 2018):

1. If the area has been previously cleared of native vegetation, or is cleared during the process of development, replanting requirements may be specified in the development permit. Areas of undisturbed bedrock exposed to the surface or natural sparsely vegetated areas should not require planting.

2. Vegetation species used in replanting, restoration or enhancement should be selected to suit the soil, light and groundwater conditions of the site, should preferably be native to the area, and should be selected for erosion control and/or fish and wildlife habitat values as needed.
3. All replanting should be maintained by the property owner for a minimum of 2 years from the date of completion of the planting to ensure survival. This may require irrigation, fencing to prevent deer browsing, and removal of invasive, non-native weeds (e.g., Himalayan blackberry, Scotch broom). Unhealthy, dying or dead stock should be replaced at the owner's expense in the next regular planting season. Permits may include, as a condition, the provision of security to guarantee the performance of terms of the permit.

7.0 Conclusion

The proposed septic system replacement at 21455 Porlier Pass Rd., Galiano Island BC will occur within the designated Shoreline and Marine DPA, which extends over the entire subject property. The area of construction will be limited to the location of the existing septic system (Appendix 1) which is already highly disturbed; the most significant concerns regarding impacts of the proposed development are with regard to subsurface excavation that may damage large lateral anchoring roots of adjacent canopy trees, and the potential for accelerated erosion of the adjacent bank, which is already undergoing erosion into the backshore below. Providing our mitigation recommendations are followed, these potential impacts can be avoided. Invasive plant removal and restoration with native plants throughout the property is essential to enhance the ecological value of the DPA, and to further protect the property from ongoing erosional losses. It is our opinion that the guidelines and recommendations we have outlined above will ensure that detrimental impacts to the sensitive and threatened ecosystem on the subject property can be avoided.

If you have any questions or comments, please contact the undersigned at your convenience.



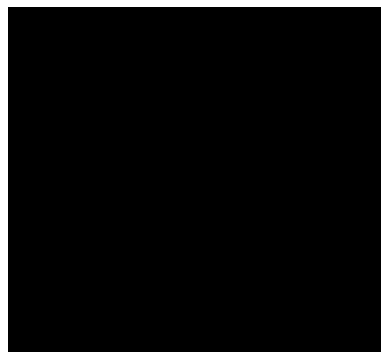
Dan Baxter, B.Sc., R.P.Bio. #1999
Project Manager



Erin O'Brien, Ph.D.
Director of Science



Caurinus Environmental



8.0 References

- BC Assessment (e-valueBC). 2021. <https://www.bcassessment.ca/> [Accessed Feb 27, 2021].
- BC Conservation Data Centre. 2021. BC Species and Ecosystems Explorer. B.C. Ministry of Environment Victoria, B.C. Available: <http://a100.gov.bc.ca/pub/eswp/> [Accessed Feb 21, 2021].
- BC List Status 2021. B.C. Conservation Data Centre. BC Species and Ecosystems Explorer. B.C. Ministry of Environment Victoria, B.C. Available: <http://www.env.gov.bc.ca/atrisk/help/list.htm> [Accessed Mar 5, 2021].
- BC's Coast Region: Species & Ecosystems of Conservation Concern: Plant Community: Douglas-fir / Arbutus (*Pseudotsuga menziesii* / *Arbutus menziesii*). 2010. The South Coast Conservation Program. Available: https://ibis.geog.ubc.ca/biodiversity/factsheets/pdf/plant%20communities/douglasfir_arbutus_cdfmm02.pdf [Accessed Mar 5, 2021].
- Campbell RW, NK Dawe, I McTaggart-Cowan, JM Cooper, G Kaiser and MCE McNall. 1990. The Birds of British Columbia, Vol. 1. Nonpasserines: Introduction, Loons through Waterfowl. Royal B.C. Mus. in association with Environ. Can., Can. Wildl. Serv. 514pp.
- Canadian Parks and Wilderness Society (CPAWS). Gulf Islands Ecosystem Community Atlas. Parks Canada. 2005.
- COSEWIC. 2013. COSEWIC assessment and status report on the Steller Sea Lion *Eumetopias jubatus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 54 pp.
- Demarchi DA. 2011. The British Columbia Ecoregion Classification, Third Edition March. Ecosystem Information Section. Ministry of Environment. Victoria, British Columbia.
- Department of Environment and Climate Change. 2020. General nesting periods of migratory birds. <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html#ZoneA> [Accessed Feb 11, 2021].
- Google Earth V 7.3.3.7786 (64-bit) (July 21, 2020). 21455 Porlier Pass Road, Galiano Island, Canada., Canada. 48°59'18.16"N; 123°34'35.64"W, Eye alt 32.00 km. DigitalGlobe 2020. <http://www.earth.google.com> [Accessed Mar 1, 2021].
- Green RN and Klinka K. 1994. A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region. Ministry of Forests. 185 pp. <http://www.for.gov.bc.ca/hfd/pubs/docs/lmh/lmh28.htm> [Accessed Feb 26, 2021].
- Green AJ, van Vliet LJP and Kenney EA. 1989. Soils of the Gulf Islands of British Columbia. Soils of Galiano, Valdes, Thetis, Kuper, and lesser islands. Vol 3, No. 43. British Columbia Soil Survey Research Branch, Agriculture Canada.
- Island Trust. 2015. Caring for my Shoreline - Low Rock/Boulder Shoreline. <http://www.islandstrust.bc.ca/islands/island-ecosystems/caring-for-my-shoreline/low-rock-boulder/> [Accessed Mar 3, 2021].
- Islands Trust. 2018. Galiano Island Local Trust Committee Official Community Plan, 1995. http://www.islandstrust.bc.ca/media/349883/gl-ltc-ocp-bl-108_consolidated_july2020.pdf [Accessed Feb 20, 2021].

- Islands Trust (MapIT). 2021. <http://www.islandstrust.bc.ca/maps/mapit/> [Accessed Mar 8, 2021].
- Kenney EA, van Vliet LJP, and Green AJ. 1988. Soils of the Gulf Islands of British Columbia. Vol. 2, No. 43. British Columbia Soil Survey Research Branch, Agriculture Canada.
- McPhee M, Ward P, Kirkby J, Wolfe L, Page N, Dunster K, Dawe NK and Nykwist I. Pacific and Yukon Region 2000. Sensitive Ecosystems Inventory: East Vancouver Island and Gulf Islands 1993 - 1997 Volume 2: Conservation Manual Canadian Wildlife Service Environmental Conservation Branch.
- Meidinger D and Pojar J. 1991. Ecosystems of British Columbia. Special Report Series 6, Research Branch, BC Ministry of Forests, Victoria, BC.
- Muller JE and Jeletzky JA 1970. Geology of the Upper Cretaceous Nanaimo Group, Vancouver Island and Gulf Islands, Canada. Geol. Surv. Can. Pap. 69-25. 77 pp.
- Nagorsen DW and RM Brigham. 1993. Bats of British Columbia. Volume 1, The Mammals of British Columbia. Royal British Columbia Museum Handbook. University of British Columbia Press, Vancouver. 164 pp
- Pojar J and MacKinnon A. 1994. Plants of Coastal British Columbia, including Washington, Oregon, and Alaska. Lone Pine Publishing, Vancouver.
- Provincial Conservation Status. 2021. B.C. Conservation Data Centre. Species and Ecosystems Explorer. B.C. Ministry of Environment Victoria, B.C.
Available: <http://www.env.gov.bc.ca/atrisk/help/srank.htm> [Accessed Mar 5, 2021].
- Williams MY and Pillsbury RW. 1958. The Gulf Islands of British Columbia. Can. Geogr. J. LVI 6:184-201.

**Appendix 1. Proposed plan for septic system replacement at 21455
Porlier Pass Rd, Galiano Island.**

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4 (Next)*



21455 Porlier Pass Road Galiano Island, BC

Onsite Wastewater System Construction Package

Month 2021

Project No. 21105

**Prepared by:
BWD Engineering Inc.**

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PROJECT

Client	Hoole (Warren)
Owner	Hoole (Warren)
Project No.	21105
Project Name:	21455 Porlier Pass Road, Galiano Island, BC

STRUCTURE(S) SERVICED

The wastewater system will service a 2-bedroom family residence. There are no future expansion plans.

PRINCIPLE DESIGN

SYSTEM PARAMETERS

DDF	1000 L/day
HLR	65 L/m ² /day
Field Type	Bed
Treatment System	Type 2 – Combined Treatment and Dispersal system
Distribution	Pressure – Micro Time Dose

SOILS LOG

The soils are primarily Loam to 60 cm with some sand. There are many small, medium, and large roots through this horizon, but no redoximorphic features. Below the Loam is a permeable clay with some sand, no roots but significant redoximorphic features.

The only area to use contains the old system which will be removed. At this time complete understanding of soils will be clear and elevations can be confirmed to accommodate the required vertical separation. All contaminated soils will be removed and replaced with Mound Sand.

SYSTEM DESCRIPTION AND FUNCTION

The residence is existing. All existing septic systems are removed or abandoned. No existing equipment is reused. A new septic system will service the existing residence.

All sewerage from the house exits through a single line from the east side of the building below grade by gravity directly to the septic tank. The septic tank is two-chamber with an outlet filter and high-level alarm. The effluent then flows by gravity to the pump tank. A single pump delivers effluent, controlled by a micro time dose controller, from the pump tank to the combined treatment and dispersal field. The septic and pump tank are vented to an acceptable location.

The secondary treatment is an Eljen In-Ground, Type 2 Combined Treatment and Dispersal System. This system incorporates two rows of Eljen GSF A42 modules. The Eljen GSF further moderates the dosing and ensures that the effluent is properly treated prior to being released into the environment. The Eljen GSF also moderates the rate of infiltration further protecting the native soils.

The distal lines in the field are equipped with a shut off valve at the proximal ends. There is a clean out at the distal ends of the lines as well. Also, the field has two combination observation / sampling ports per the site plan.

The electrical system design is by others. The control panel and pump are only specified to meet the process requirements of the sewerage system regulation and the performance requirements of the piping design. The electrical contractor is responsible for all aspects of the electrical installation and power distribution.

PROJECT SPECIFIC NOTES

1. This system is NOT designed for backwash from a water softener.
2. This system is NOT designed for use of a garburator.
3. This system is NOT designed for floor drains, roof down spouts or any other water source not specifically noted.
4. This system IS designed for residential wastewater only.

EQUIPMENT SPECIFICATIONS

Septic Tank	Canwest RKS1000LP/2 c/w PL122 Filter and HLA Switch Usable Volume: 4,540 L
Alarm Panel	Rhombus Tank Alert XT
Pump Tank	Canwest RKP500 Usable Volume: 2,270L
Pump	Ashland EP40
Control Panel	Rhombus IFS Simplex c/w C-Level
Treatment System	Eljen GSF – (24) A42 Modules c/w 3 Sampling Devices (12 modules per row, 2 rows)

EQUIPMENT NOTES:

- All supplier drawings must be reviewed for acceptance by the Engineer prior to final commitment.
- Equivalent substitutions must be approved by the Engineer in writing.
- All equipment manuals to be retained and forwarded to the Engineer.

CONSTRUCTION NOTES

1. Construction Management by Owner
2. Site Meetings / Inspections:
 - a) Project review (kick off) meeting on site is required prior to construction.
 - b) Final Inspection and commissioning is required prior to the system being put into service.
 - c) Further inspections, if required, will be determined at the kick off meeting.

Note: Owner is responsible for scheduling site meetings and inspections.
3. All work to be completed by an ROWP Certified Installer unless approved by the Engineer in writing.
4. Any changes to the design must be approved by the Engineer in writing prior to installation.
5. **Electrical Notes:**
 - *All electrical design is by others and must comply with BC Provincial Electrical Code.*
 - *Electrical Design to be reviewed by the Engineer prior to installation.*
 - *Junction Boxes are not to be located inside the septic tank or below grade with the exception of Orenco SBEX Splice Box.*
 - *Rhombus Panel to have a minimum of 2 discrete supply circuits (Pump, Control/Alarm).*
 - *All Conduit to be sealed at both ends.*
 - *Transducer (C-Level) cable to be run in separate conduit.*
 - *Reed Switch from Septic Tank Filter to be wired to Tank Alert panel.*
 - *Control Panel and all JB's to have cover from direct weather.*
 - *Transducer to be mounted on separate post, not on pump or discharge piping. Post to be mounted in a SIM/Tech pipe support.*
 - *Elevation of Transducer to be per BWD Engineering Design, not manufacturer's catalog suggestions.*
 - *Both Pump and Transducer to have enough cable to be removed from the tank without disconnection of the cable.*
6. All building plumbing by others.
7. All septic plumbing to meet BC Plumbing Code and BC SPM-V3.
8. The pump is located directly on the floor of the pump tank. There is no riser block used.
9. Dispersal Field Notes:
 - a) Field construction to take place during dry weather only.
 - b) Organic Layer and any heavy overburden to be removed from basil area prior to fill placement. Uncontaminated soils to be removed may be reused as topsoil.
 - c) All components of the existing field and contaminated soils to be removed and disposed. They are not to be reused.
 - d) Basil Area to be gently scarified to remove smearing prior to system placement as recommended.

-
- e) All fill and specified sand to meet Eljen 2020 Design and Installation Manual for BC and BC SPM-V3 specification for washed mound sand.
 - f) This system does not require venting.
 - g) Observation ports extend to Basil Area (native soil) per BC SPM-V3. Two required, located per the site plan.
 - h) Lysimeter Pans. Two required, located as noted on the site plan and installed per BWD Engineering drawings.
 - i) Finished Landscaping to encourage surface water to drain away from field and must avoid pooling.
 - j) Distribution piping is end fed.
- 10. All tanks to have sufficient cover and depth to water table to avoid floatation or concrete is to be substituted with anti-floatation flanges. Final installation to be approved by the manufacturer.
 - 11. All piping is PVC. All pressure mains are 2-inch schedule 40, all gravity lines are 4-inch sewerage class. Field piping per design drawings.
 - 12. This design complies with and must be installed in accordance with the February 2020 Eljen GSF Design and Installation Manual for BC and the BC SPM V3.
 - 13. Installer must follow project guidance on BWD Installer Information and Project Check List document provided under separate cover.
 - 14. Installer must complete and return BWD Installer's Letter of Certification, provided under separate cover.

ATTACHMENTS

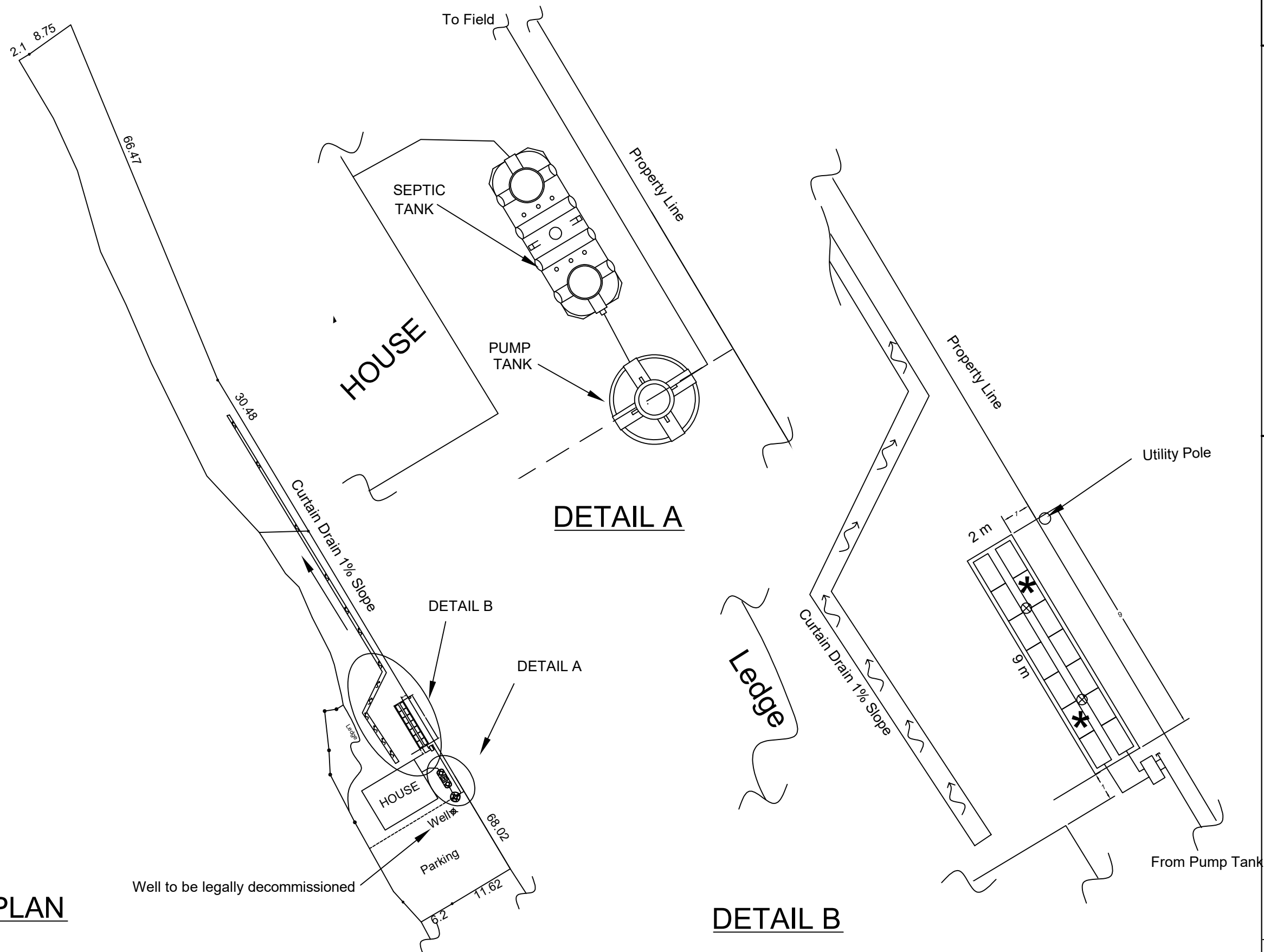
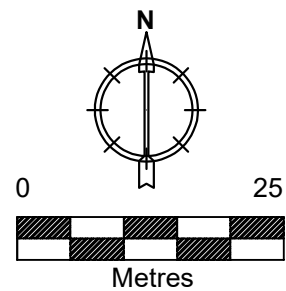
DRAWINGS

21105-001 Sheet 1 of 6 rev 0	Site Plan
21105-001 Sheet 2 of 6 rev 0	Field Section
21105-001 Sheet 3 of 6 rev 0	Distribution Piping Detail
21105-001 Sheet 4 of 6 rev 0	Time Dose Control Schematic – Pressure transducer
21105-001 Sheet 5 of 6 rev 0	Pipe Trench Detail
21105-001 Sheet 6 of 6 rev 0	Pan Lysimeter & Observation Port

SUPPLIERS

Canwest	RKS 1000LP/2
Polylok	PL122 Outlet Filter and HLA Switch
Canwest	RKP 500
Canwest	Poly Tank Installation Instructions
SJE Rhombus	Tank Alert XT
SJE Rhombus	IFS Simplex c/w C-level
Ashland	EP40
Eljen	GSF (for Eljen 2020 Design and Installation Manual for BC, go to www.eljen.com)

Note: Supplier Documentation is supplied for reference only. Third party designers and Installers must use manuals as supplied with equipment purchased and comply with the design criteria as set out herein this Construction Package. Should any discrepancy be found between documentation, the engineer must be consulted prior to issue of any design or commencement of construction.



SITE PLAN

DETAIL A

DETAIL B

Filing #:

LEGEND

- Test Hole
- Observation Port
- Well
- Pan Lysimeter
- Mound Sand
- Washed Drainrock
- System Sand
- Soil
- Grass
- Eljen Section

Notes:

0		Issued for RSS Filing
REV	DATE	DESCRIPTION



Brent Dennis, P. Eng.
brent.dennis@BWDengineering.com
Office: 604-957-3611 Mobile: 604-789-2204
15822-106A Ave. Surrey BC V4N 1K7
www.BWDengineering.com

Client:	Hoole (Warren)
Owner:	Hoole (Warren)
Project #:	21105

Description:
Onsite Wastewater System

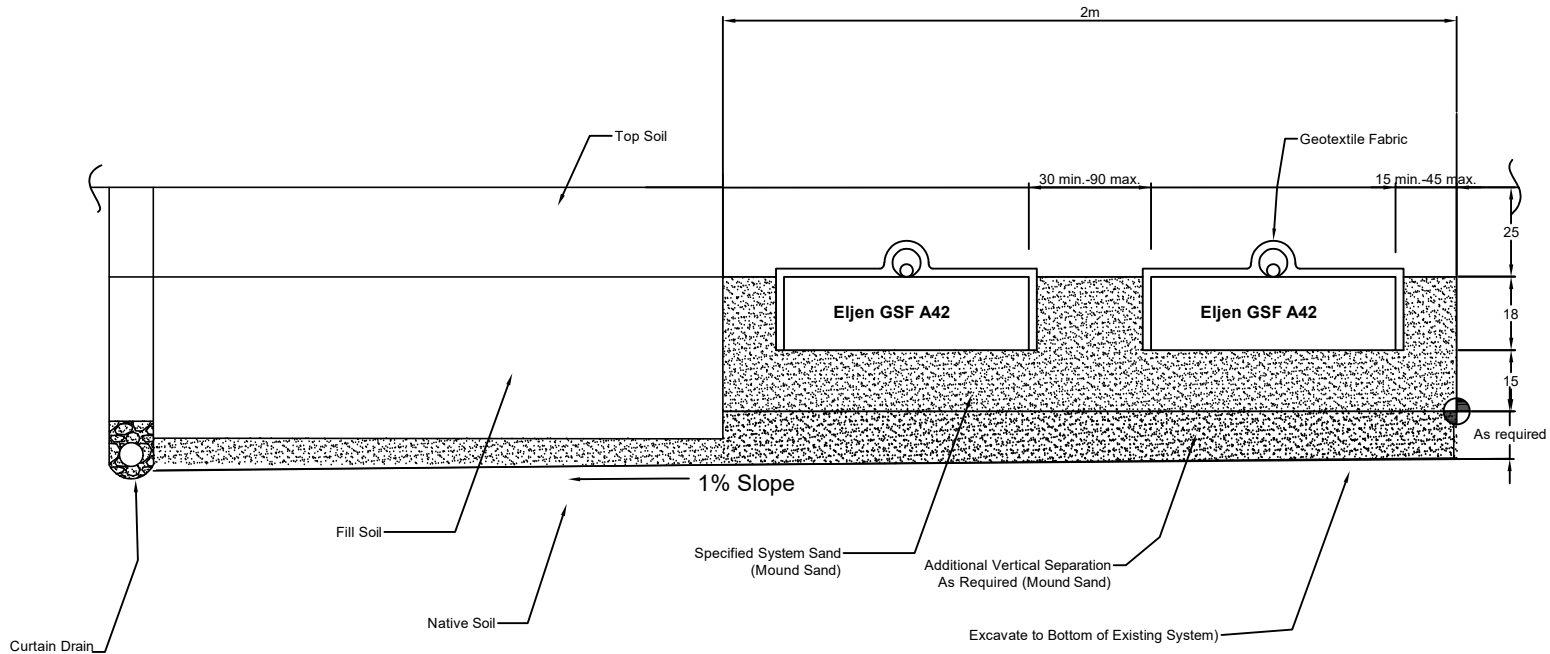
Project Name: 21455 Porlier Pass Road			
Title: Site Plan			
Drawing #:	Sheet #:	Rev:	
21105 - 001	1 of 6	0	89

Filing #:

LEGEND

- ☒ Test Hole
- ⊗ Observation Port
- ⊕ Well
- ✱ Pan Lysimeter
- Point of Application

Notes:



- Notes:
- If depth of bury is greater than 45cm, system must be vented.
 - Top Soil To Be Crowned For Settling And Water Run Off

NOT TO SCALE; ALL DIMENSIONS IN CM

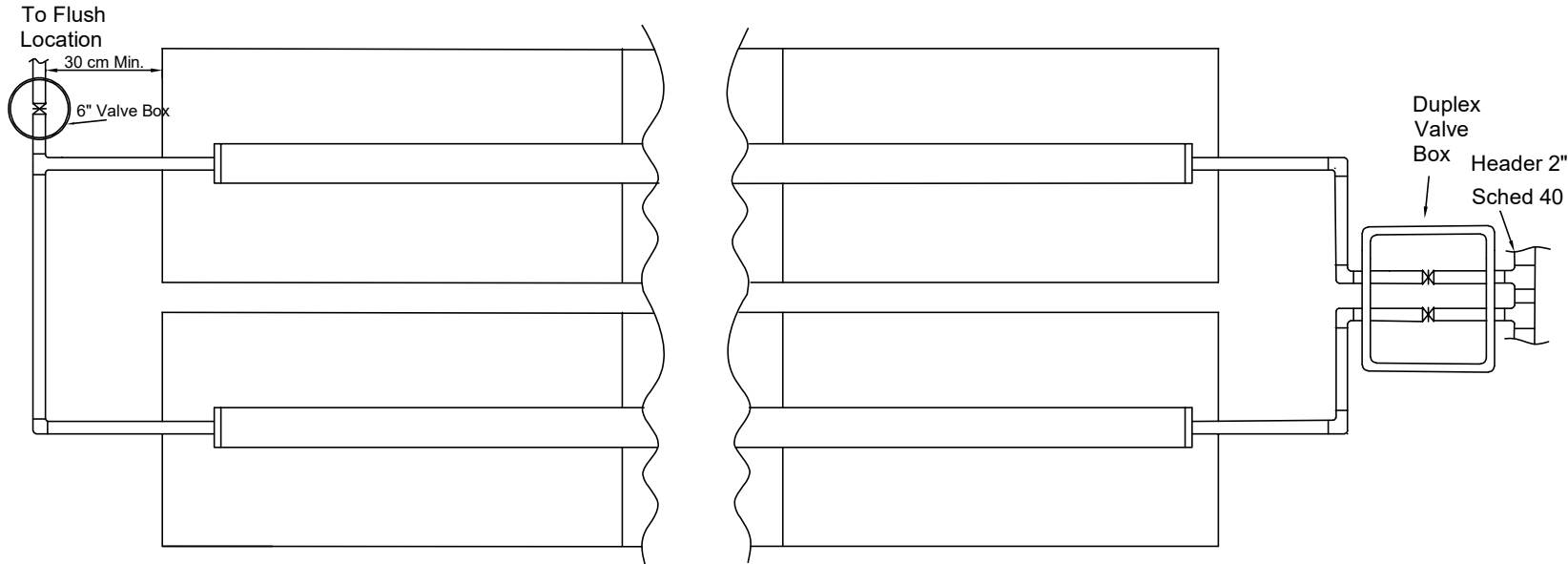
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Rev	Date Description



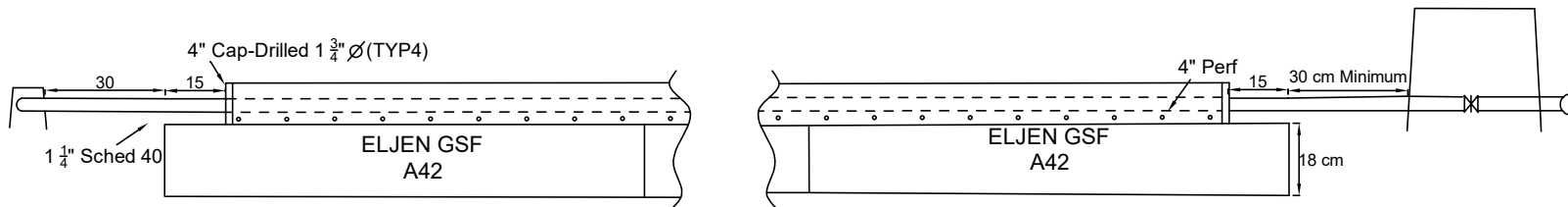
90

NOTES:

1. One (1) Orifice every 1.2m drilled at 12 O'Clock - $\frac{3}{16}$ " Diameter
2. Every forth orifice drilled at 5 O'Clock
3. Orifice sizing to be determined by Engineer after pump purchase.



PLAN



DISTAL END

PROXIMAL END

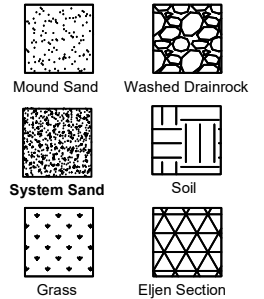
SECTION

ALL DIMENSIONS IN CM

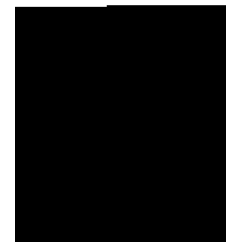
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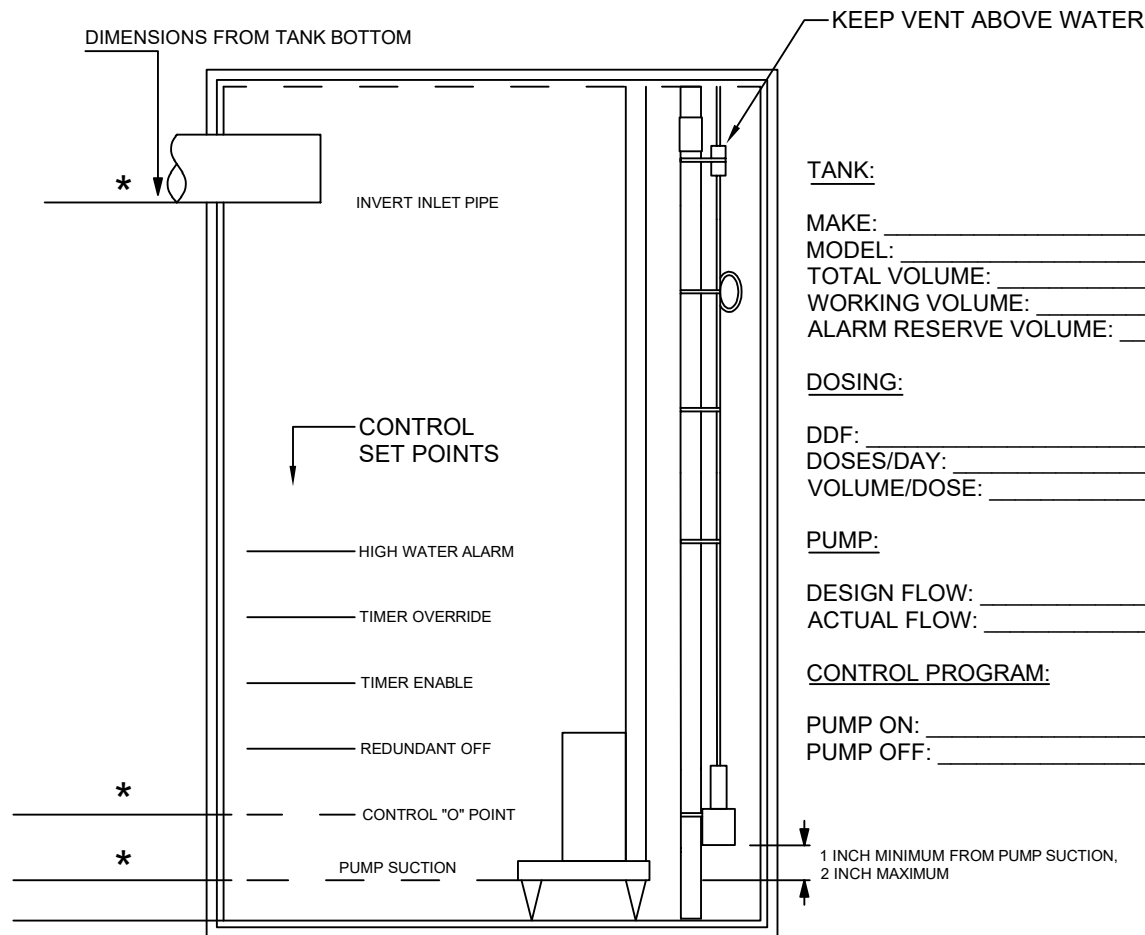
- ⊗ Test Hole
- ⊗ Observation Port
- ⊕ Well
- ✱ Pan Lysimeter
- Point of Application



Notes:



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Rev	Date Description



TANK:

MAKE: _____
 MODEL: _____
 TOTAL VOLUME: _____
 WORKING VOLUME: _____
 ALARM RESERVE VOLUME: _____

DOSING:

DDF: _____
 DOSES/DAY: _____
 VOLUME/DOSE: _____

PUMP:

DESIGN FLOW: _____
 ACTUAL FLOW: _____

CONTROL PROGRAM:

PUMP ON: _____
 PUMP OFF: _____

Filing #:

LEGEND

- ☒ Test Hole
- ⊗ Observation Port
- ⊕ Well
- * Pan Lysimeter
- Point of Application

Notes:

NOTES:

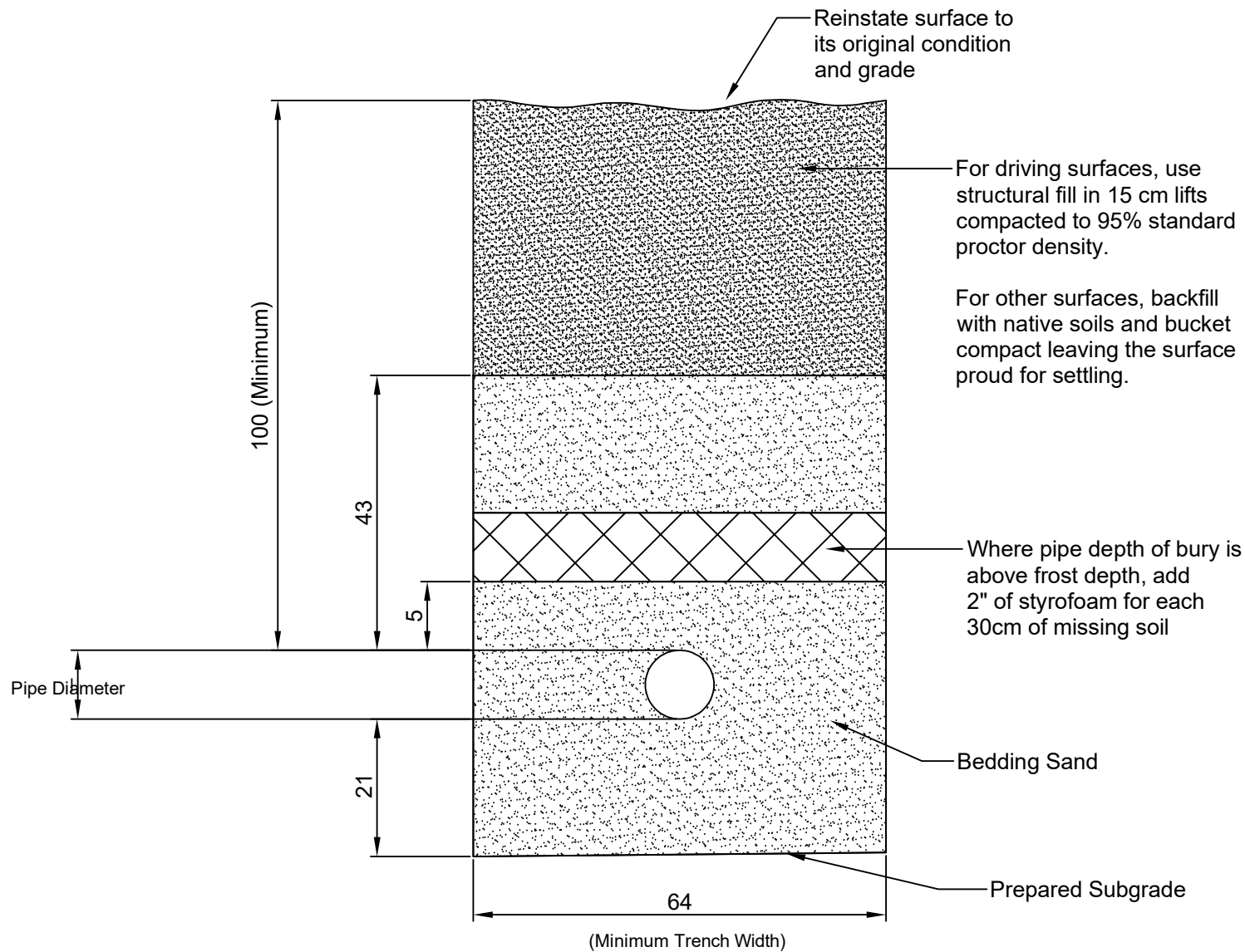
- ALL ELECTRICAL TO MEET BC ELECTRICAL CODE
- NO JUNCTION BOXES ALLOWED INSIDE TANKS
- ALL ELECTRICAL AND CONTROL CABLES IN TANK TO HAVE EXCESS LENGTH TO ALLOW FOR UNHINDERED EXTRACTION OF PUMP(S) AND LEVEL TRANSDUCER WITHOUT DISCONNECTION.
- * DIMENSIONS TO BE SUPPLIED BY CONTRACTOR AS-BUILT. REMAINDER TO BE COMPLETED BY THE ENGINEER AFTER COMMISSIONING.

NOT TO SCALE, DIMENSIONS IN CM



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Rev	Date	Description

92



NOT TO SCALE, DIMENSIONS IN CM

Filing #:

LEGEND

- ☒ Test Hole
- ⊗ Observation Port
- ⊕ Well
- * Pan Lysimeter
- Point of Application



Mound Sand



Washed Drainrock



System Sand



Soil



Grass



Eljen Section

Notes:



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Brent Dennis, P. Eng.
brent.dennis@BWDengineering.com
Office: 604-957-3611 Mobile: 604-789-2204
15822-106A Ave. Surrey BC V4N 1K7
www.BWDengineering.com

Client: Hoole (Warren)
Owner: Hoole (Warren)
Project #: 21105

Description:
Onsite Wastewater System

Project: 21455 Porlier Pass Road

Title: **Pipe Trench Detail**

Drawing #: 21105-001

Sheet #: 5 of 6

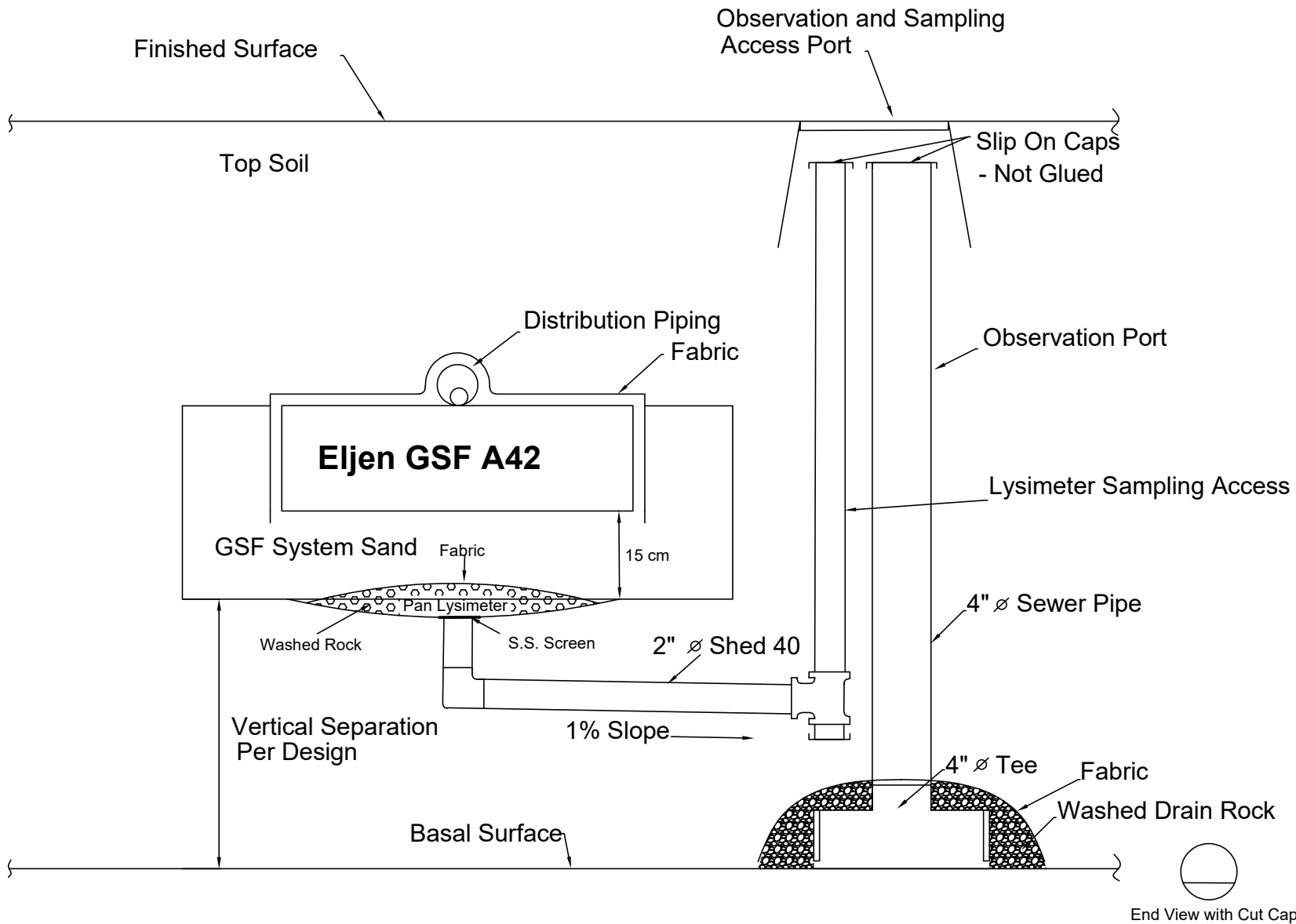
Rev: 0 **93**

Filing #:

LEGEND

- ☒ Test Hole
- ⊗ Observation Port
- ⊕ Well
- ✱ Pan Lysimeter
- ◐ Point of Application

Notes:



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Rev	Date Description

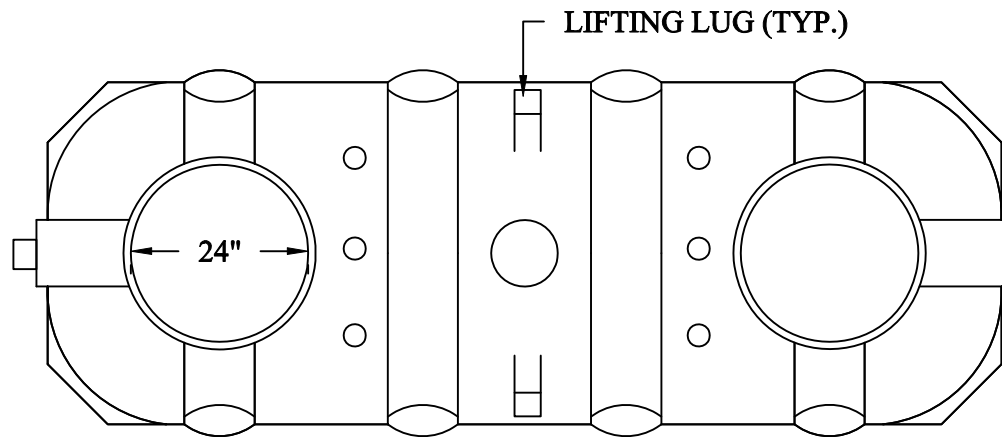
Project: 21455 Porlier Pass Road

Title: Pan Lysimeter with Observation Port

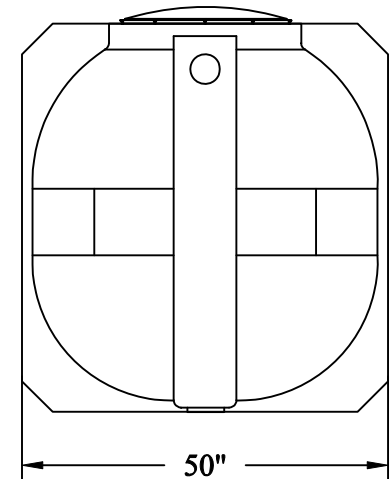
Drawing #: 21105-001

Sheet #: 6 of 6

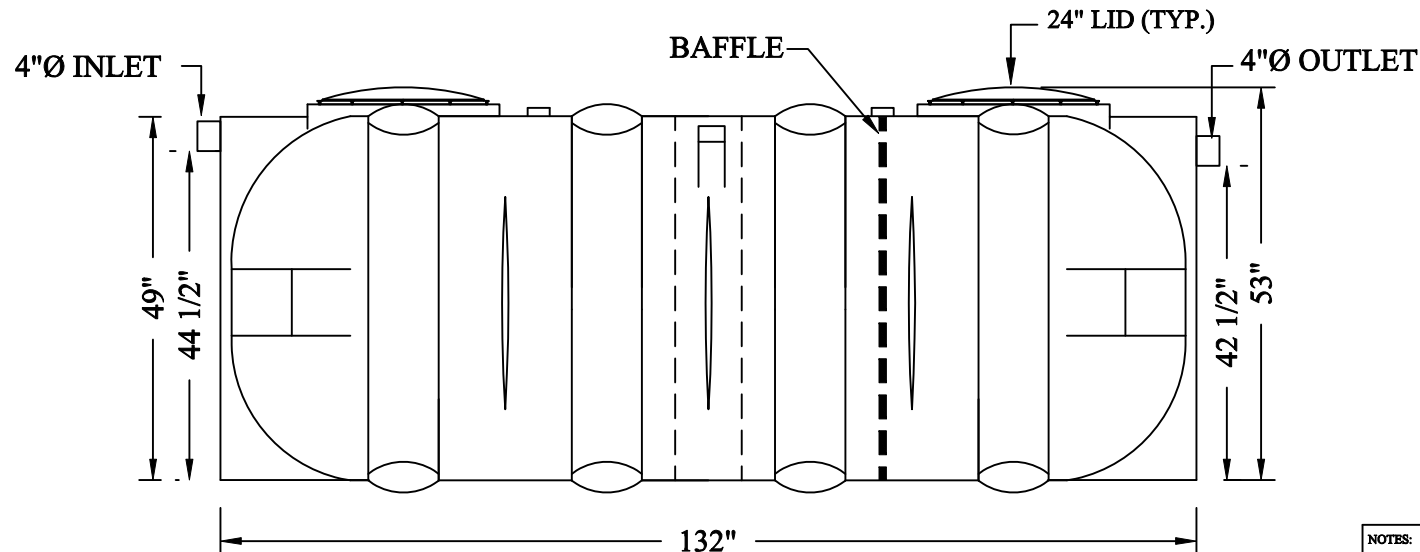
Rev: 0 94



TOP VIEW



END VIEW



ELEVATION VIEW

MODEL No. RKS1000LP/2
TWO CHAMBER SEPTIC TANK

VOL. CAP. - 1,000 IGALS
1,200 USGALS
4,546 LITERS

NOTES:	<u>PROJECT</u>			
	MODEL No. RKS1000LP/2 TWO CHAMBER SEPTIC TANK			
	 CANWEST TANKS & ECOLOGICAL SYSTEMS LTD. www.canwest-tanks.com			
TOTAL VOLUME	REV No.	SCALE:	SHEET	DWG REF.
LITERS:			OF	
IGALS:				
LENGTH				
METRIC (mm):				
IMPERIAL:				
DATE:				
DRAWN BY:				
L J				95

PL-122 Filter

The PL-122 was the original Polylok filter. It was the first filter on the market with an automatic shut-off ball installed with every filter. When the filter is removed for regular servicing, the ball will float up and prevent any solids from leaving the tank. Our patented design cannot be duplicated.

Features:

- Offers 122 linear feet of 1/16" filter slots, which significantly extends time between cleaning.
- Has a flow control ball that shuts off the flow of effluent when the filter is removed for cleaning.
- Has its own gas deflector ball which deflects solids away.
- Installs easily in new tanks, or retrofits in existing systems.
- Comes complete with its own housing. No gluing of tees or pipe, no extra parts to buy.
- Has a modular design, allowing for increased filtration.

PL-122 Installation:

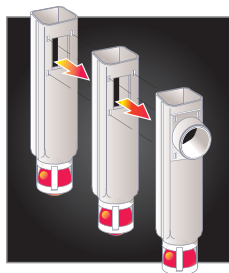
Ideal for residential waste flows up to 3,000 gallons per day (GPD). Easily installs in any new or existing 4" outlet tee.

1. Locate the outlet of the septic tank.
2. Remove the tank cover and pump tank if necessary.
3. Glue the filter housing to the outlet pipe, or use a Polylok Extend & Lok if not enough pipe exists.
4. Insert the PL-122 filter into tee.
5. Replace and secure the septic tank cover.

PL-122 Maintenance:

The PL-122 Effluent Filter will operate efficiently for several years under normal conditions before requiring cleaning. It is recommended that the filter be cleaned every time the tank is pumped, or at least every three years.

1. Do not use plumbing when filter is removed.
2. Pull PL-122 cartridge out of the tee.
3. Hose off filter over the septic tank. Make sure all solids fall back into septic tank.
4. Insert filter back into tee/housing.



Polylok offers the only filter on the market where you can get more GPD by simply snapping our filters together!

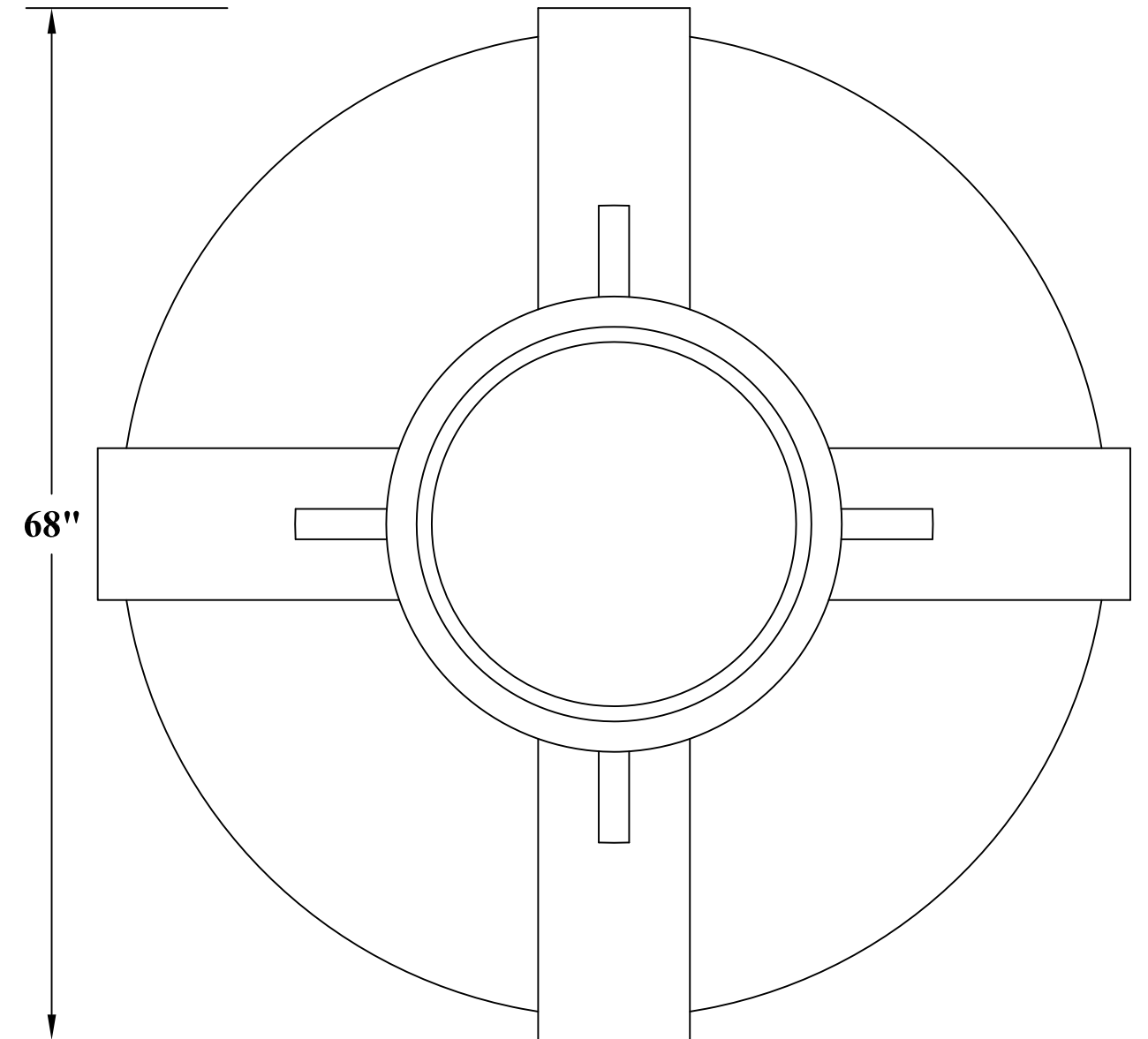
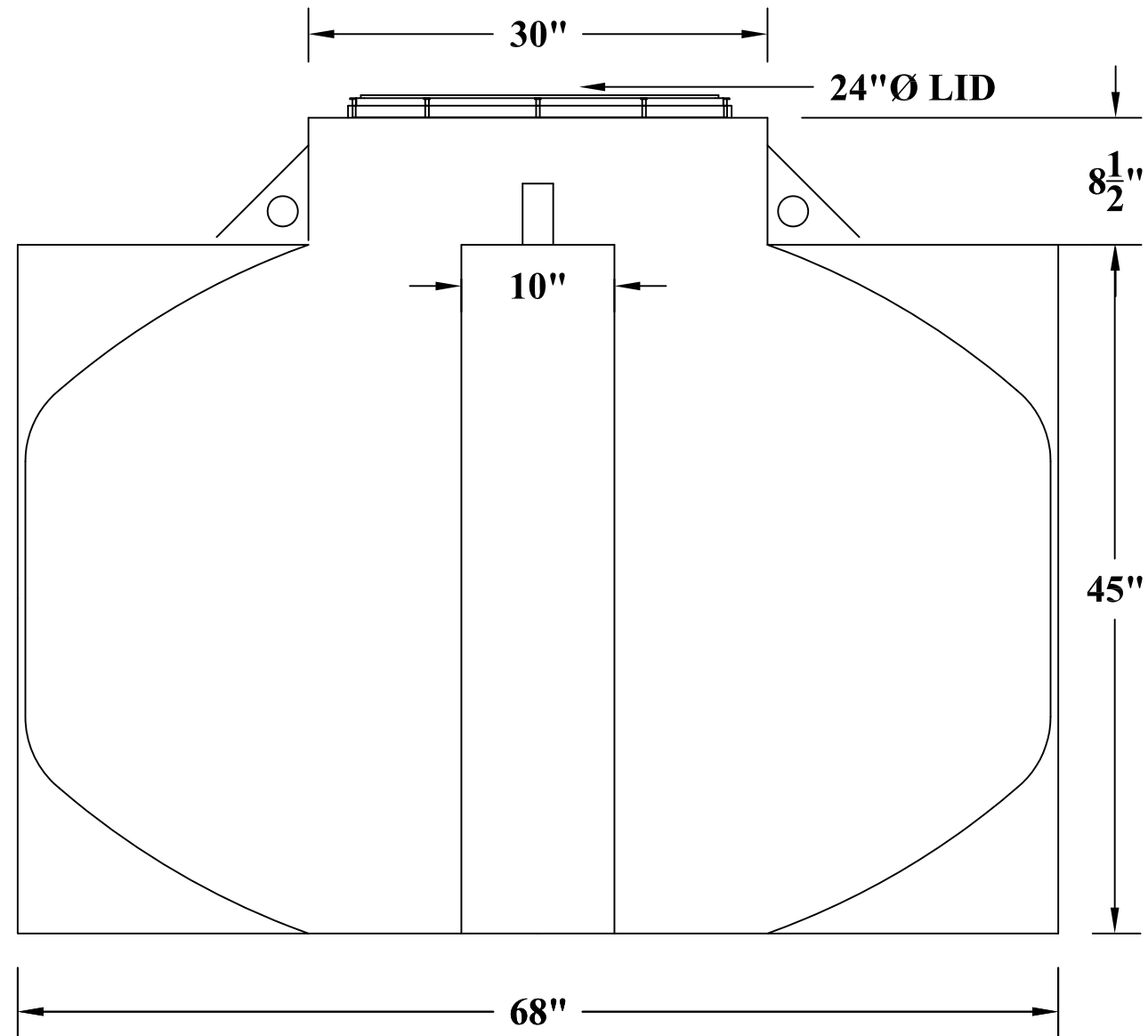
Patent Numbers
6,015,488 & 5,871,640



Filter Ready Adapter
Connects to Septic Tank Wall



Outdoor SmartFilter® Alarm
Polylok, Zabel & Best filters accept the SmartFilter® switch and alarm.



CAPACITY

IMP.GAL. = 500

U.S.GAL. = 600

LTR. = 2,273

PROJECT:

Model No. RKP500

500 I gals Pump chamber

QUOTE #:

DATE:



**CANWEST TANKS &
ECOLOGICAL SYSTEMS LTD.**
www.canwest-tanks.com Tel: 604.580.3030

DRAWN BY: L J

REV No.

SCALE:
N.T.S.

DWG REF.:

97
SHEET OF

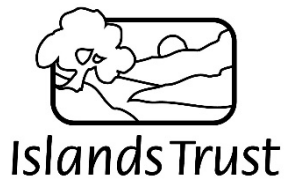
Attachment 5
Galiano Island OCP Bylaw No. 108, 1995
Shoreline and Marine Development Permit Area (DPA 2)
Guideline Checklist

Guideline	Complies			Comments
	Yes	No	N/A	
1. In general, development of the shoreline area should be limited, should minimize negative impacts on the ecological health of the immediate area, and should not impede public access.	☒	☐	☐	
2. Shoreline protection measures should be limited to those necessary to prevent damage to existing structures or established uses on the adjacent upland. Softer shore protection measures should be considered first, and only if all options to locate and design without the need for shore protection works are exhausted should such works be considered.	☐	☐	☒	
3. Sea level rise, storm surges, and other anticipated effects of climate change should be addressed in all applications.	☒	☐	☐	
4. The Local Trust Committee may consider variances to subdivision or building and structure siting or size regulations to meet the objectives of the development permit area.	☐	☐	☒	
5. New upland structures or additions to existing structures should be located and designed to avoid the need for shore protection works.	☒	☐	☐	
6. When required, shore protection measures should:				
a. Apply the 'softest' possible shore protection measure that will still provide satisfactory protection; and	☐	☐	☒	
b. Limit the size of shore protection works to the minimum necessary.	☐	☐	☒	
7. 'Hard' structural shore protection measures (e.g. concrete walls, lock block, stacked rock) may be considered in support of existing development only when a geotechnical and biophysical analysis demonstrates that:				
a. an existing structure is at immediate risk from shoreline erosion caused by tidal action, currents, or waves. Evidence of normal sloughing, erosion or steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not sufficient demonstration of need;	☐	☐	☒	
b. the erosion is not being caused by upland conditions, such as the loss of vegetation and uncontrolled drainage. The geotechnical analysis should evaluate on-site drainage problems and investigate drainage solutions away from the shoreline edge before considering structural shoreline stabilization;	☐	☐	☒	
c. non-structural measures, such as locating new buildings and structures further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or sufficient to address the stabilization issues; and	☐	☐	☒	

Guideline	Complies			Comments
	Yes	No	N/A	
d. unavoidable damage to shoreline ecological function is mitigated as much as feasible and restoration is undertaken when feasible.	☐	☐	☒	
8. All structural shore protection measures should be installed within the property line or upland of the natural boundary of the sea, whichever is further inland. 'Soft' shoreline protection measures that provide restoration of previously damaged ecological functions may be permitted seaward of the natural boundary subject to obtaining necessary approvals from the provincial and federal governments.	☐	☐	☒	
9. New development on steep slopes or bluffs shall be set back sufficiently from the top of the bluff to ensure that shore protection measures will not become necessary during the life of the structure, as demonstrated by a geotechnical assessment of the site.	☐	☐	☒	
10. Shore protection measures that are likely to cause erosion or other physical damage to adjacent or down-current properties shall not be supported.	☐	☐	☒	
11. Shore protection measures should not be considered for solely the purpose of providing a sufficient setback to meet other land use bylaw requirements.	☐	☐	☒	
12. New driveways and sewage disposal systems should not be located in the development permit area. If such a location cannot be avoided, the encroachment into the development permit area must be minimized, and the development permit may require that the assessment, design and construction of the road or sewage disposal system be supervised by a qualified professional to ensure that the objectives and guidelines of the development permit area are met.	☐	☐	☒	
13. Where this development permit area includes native plant species or plant communities dependent on a marine shoreline habitat that are identified locally, provincially, or federally as sensitive, rare, threatened or endangered, or have been identified by a qualified professional as worthy of particular protection, their habitat areas should be left undisturbed. If disturbance cannot be entirely avoided, development and mitigation / compensation measures shall be undertaken only under the supervisions of a qualified professional with advice from provincial and federal environmental agencies.	☒	☐	☐	Area of development has been previously disturbed. General replanting recommendations in draft DP.
14. Shore protection measures should not be allowed for the purpose of extending lawns or gardens, or to provide space for additions to existing structures or new outbuildings.	☐	☐	☒	
15. Existing shore protection works may be replaced if the existing works can no longer adequately serve their purpose provided that:				
a. The replacement shore protection works are of the same size and footprint as the existing works, unless required to prevent shoreline erosion as determined by a qualified professional;	☐	☐	☒	
b. The replacement shore protection works are designed, located, sized, and constructed to mitigate the loss of ecological functions, and include habitat restoration measures when feasible;	☐	☐	☒	

Guideline	Complies			Comments
	Yes	No	N/A	
c. Replacement walls or bulkheads do not encroach seaward of the natural boundary or the seaward limit of the existing shore protection works unless there are significant safety or environmental concerns that could only be addressed via such an encroachment. In such cases, the replacement of shore protection works should utilize the 'softest' approach possible and should abut the existing shore protection works; and	☐	☐	☒	
d. Where impacts to critical marine habitats would occur by leaving the existing works in place, they can be removed as part of the replacement measure.	☐	☐	☒	
Guidelines for Specific Shoreline Types:				
16. Because of their extreme sensitivity to disturbance and slow rate of recovery, dredging or filling of estuaries should not be permitted, sea walls and rip rap embankments should not be permitted in estuaries, and when shore protection measures are necessary "beach nourishment" designs are preferred, which add appropriately sized material to the upper beach, creating a natural beach slope and beach armour.	☐	☐	☒	
17. New structures on steep slopes or bluffs shall be set back sufficiently from the top of the bluff to ensure that shore protection measures will not become necessary during the life of the structure, as demonstrated by a geotechnical analysis for the structure.	☒	☐	☐	Septic system location constrained by property configuration, size and location.
18. Removal of trees or other vegetation from steep slopes or bluffs should only be allowed where necessary and where replacement vegetation / erosion control measures are established. If possible, stumps should be left in place to provide some soil stabilizing influence until replacement vegetation is established. Plans delineating extent of vegetation / tree removal (location, species and diameter of trees) and location of proposed construction, excavation and / or blasting, may be required.	☐	☐	☒	
Guidelines for Construction Practices:				
Erosion Control:				
19. All development within this development permit area should be undertaken and completed in such a manner as to prevent the release of sediment to the shore or to any watercourse or storm sewer that flows to the marine shore. An erosion and sediment control plan, including actions to be taken prior to land clearing and site preparation and the proposed timing of development activities to reduce the risk of erosion, may be required as part of the development permit application.	☒	☐	☐	Conditions in draft DP
Monitoring:				
20. A development permit may require monitoring by a qualified professional of the implementation of environmental mitigation, restoration or enhancement planting or other measures required by a development permit, until all such measures have been completed and the professional has provided a report confirming completion to the standard specified in the permit.	☒	☐	☐	Conditions in draft DP
Guidelines for Vegetation Management, Restoration and Enhancement:				

Guideline	Complies			Comments
	Yes	No	N/A	
21. Existing, native vegetation should be retained wherever possible to minimize disruption to habitat and to protect against erosion and slope failure.	☒	☐	☐	Conditions in draft DP
22. Existing trees and shrubs to be retained should be clearly marked prior to development, and temporary fencing installed at the drip line to protect them during clearing, grading and other development activities.	☒	☐	☐	Conditions in draft DP
23. If the area has been previously cleared of native vegetation, or is cleared during the process of development, replanting requirements may be specified in the development permit. Areas of undisturbed bedrock exposed to the surface or natural sparsely vegetated areas should not require planting.	☒	☐	☐	Planting over septic field and tanks is limited. General conditions inserted for native replanting.
24. Vegetation species used in replanting, restoration or enhancement should be selected to suit the soil, light and groundwater conditions of the site, should preferably be native to the area, and should be selected for erosion control and/or fish and wildlife habitat values as needed. Suitably adapted, non-invasive, non-native vegetation may also be considered acceptable.	☒	☐	☐	Conditions in draft DP
25. All replanting should be maintained by the property owner for a minimum of 2 years from the date of completion of the planting to ensure survival. This may require removal of invasive, non-native weeds (e.g., Himalayan blackberry, Scotch broom, English ivy) and irrigation. Unhealthy, dying or dead stock should be replaced at the owner's expense in the next regular planting season. Permits may include, as a condition, the provision of security to guarantee the performance of terms of the permit.	☒	☐	☐	Conditions in draft DP



**GALIANO ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GL-DVP-2021.2**

To: Warren Hoole and Catherine Burgess

1. This Development Permit (the "Permit") applies to the land described below and all structures and other developments therein:

Lot A, District Lot 90, Galiano Island, Cowichan District, Plan EPP23292
(PID: 030-348-374)

2. This Development Permit GL-DVP-2021.2 authorizes the construction of a septic disposal field within Development Permit Area (DPA) 2 – Shoreline and Marine DPA ("DPA"), subject to the following requirements and conditions:

General

- a. All construction shall be consistent with Schedules 'A', 'B' and 'C' attached to and forming part of this permit.
- b. All construction shall minimize disturbance and maintain any undeveloped habitat in as natural a state as possible.

Construction of Septic Disposal Field

- c. The construction of the septic disposal field shall be built as to a maximum excavation depth of 1.25 m and in the location shown on Schedule 'A' and 'B'.
- d. There is to be no disturbance or clearing of native plants within the DPA, with the exception of the septic field area shown on Schedule 'A'.
- e. Native plant materials removed from the area specified in 2. d. (above) are to be stored with the roots systems covered, maintained by watering daily and replanted in the specified area, and once replanted, watered regularly until re-established.

Protection of Root Systems - Mature Douglas- fir Trees

- f. All necessary measures shall be taken to protect the roots of mature trees within the DPA.
- g. Excavation should utilize the lightest possible machinery and equipment practical to avoid cutting or damaging large lateral anchoring tree roots.
- h. All existing canopy trees, and standing dead trees within the DPA shall be retained to maintain the integrity of the sensitive ecosystem and for habitat.

Sediment and Erosion Control

- i. All necessary measures to protect the sensitive shoreline and marine ecosystem must be used by the property owners and contractors through the construction process, specifically:
 - i. Construction and landscaping should be undertaken during dry weather and not during periods of prolonged rainfall deposition.
 - ii. Prior to commencing construction for the minimum length of the location shown as "Siltation Barrier/Fencing" in Schedule 'A', temporary fencing and silt

- fencing shall be installed in accordance with the specification in Schedule 'C' , attached to and forming part of this permit.
- iii. The Silt Barrier/Fencing shall be installed as close as possible to the construction area and ensure no equipment crosses the barrier in the vicinity of the eroding bank identified by the QEP in the report "*Environmental Assessment of 21455 Porlier Pass Road, Galiano Island, BC*" (Dan Baxter, R.P. Bio. and Erin O'Brien, Ph.D., March 14, 2021) on file with the Islands Trust.
 - iv. Any shoreline or bank area disturbed by the construction should immediately be stabilized with the installation of additional Silt Barrier to prevent erosion and siltation, and subsequently replanted with native vegetation suitable to the site.
 - v. Any soils, construction equipment and machinery shall be placed on the existing driveway area.
 - vi. Any soils exposed or deposited for a period of greater than two (2) weeks shall be covered and maintained by means of tarps in good repair and/or hydromulch (without seeds).
 - vii. To further stabilize the unstable bank from future erosion, ongoing invasive plant removal and revegetation with native plant species in areas of disturbance is encouraged. Planting should occur in the spring (February to March) to allow for plant root establishment and soil stabilization before being exposed to winter precipitation

Construction Management and Timing

- j. All contractors and construction personnel are to be notified of the location of the DPA and the conditions of this Development Permit.
- k. Contractors should inspect their equipment and vehicles to ensure they do not transport invasive plant species seeds onto or off the property. All equipment should be washed prior to arrival. Manual removal of weeds should be performed on a regular basis.
- l. All machinery and equipment is to be inspected for leaks prior to operation.
- m. Machinery and equipment is only to be refuelled at a designated location that is a minimum 15 metres distant and isolated from the DPA and any aquatic ecosystem.
- n. A spill response kit is to be on site during all periods when machinery is being operated and all operators are to be trained in the use of the spill kit.
- o. All construction activities should be avoided during the peak songbird nesting period May 1 and July 22

Protection from Introduction of Non-Native Flora

- p. The removal of non-native and invasive species such as Scotch broom, Himalayan blackberry, English ivy and non-native rose is encouraged with the exception of any individual plants growing in the steep sloped portion of the DPA, as they are important for stabilizing the bank. Keeping the Scotch broom and Himalayan blackberry trimmed before flowering will help reduce the spread of seed in the area.
- q. The retention of dead or declining trees, downed logs, snags and leaf litter within the DPA is encouraged.

Replanting and Monitoring

- r. Post construction planting of the septic field area and unstable bank areas susceptible to erosion shall be limited to native grass, tree and shrub species only.
- s. Vegetation species used in replanting, restoration or enhancement should be selected to suit the soil, light and groundwater conditions of the site, should preferably be native to the

- area, and should be selected for erosion control and/or fish and wildlife habitat values as needed.
- t. All replanting should be maintained by the property owner for a minimum of 2 years from the date of completion of the planting to ensure survival. This includes irrigation, exclusion fencing to prevent deer browsing, and removal of invasive, non-native weeds. Unhealthy, dying or dead stock should be replaced at the owner's expense in the next regular planting season
 - u. The installing contractor shall provide the monitoring registered professional biologist (R.P. Bio.) with initial and periodic photographic evidence of the implementation of construction and construction management conditions herein to the satisfaction of the R.P. Bio.
 - v. Upon completion of construction, the monitoring R.P. Bio. shall provide written confirmation of compliance with all conditions with this permit as issued within one (1) month of the development work being completed.
3. The area described herein shall be developed in accordance with the terms, conditions and provisions of this Permit, and any plans and specifications attached to this Permit, which shall form a part thereof.
4. Any further development within designated Development Permit Area will require a new Development Permit, or a Development Permit Amendment.
5. This permit is not a building permit and does not remove any obligation on the part of the permittee to comply with all other requirements of Galiano Island Land Use Bylaw No. 127, 1999 and/or Galiano Island Official Community No. 108, 1995 and to obtain other approvals necessary for the lawful completion of the proposed development.

AUTHORIZING RESOLUTION PASSED BY THE GALIANO ISLAND LOCAL TRUST COMMITTEE, THIS ##TH DAY OF MONTH, 2021.

Deputy Secretary, Islands Trust

Date Issued

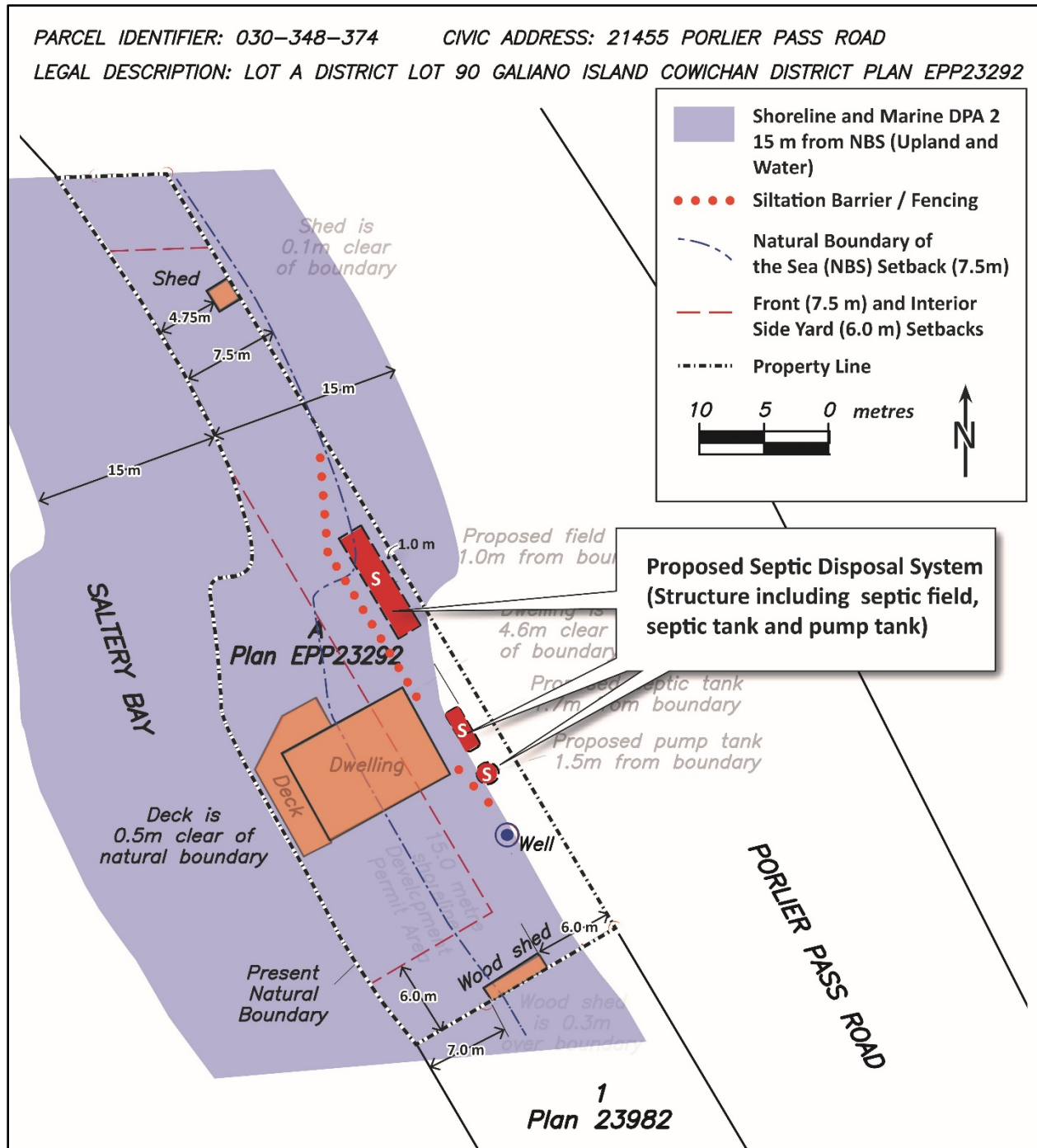
IF THE DEVELOPMENT HEREIN IS NOT COMMENCED BY THE TH DAY OF MONTH, 202_, THIS PERMIT AUTOMATICALLY LAPSES.

GALIANO ISLAND LOCAL TRUST COMMITTEE

DEVELOPMENT PERMIT GL-DVP-2021.2

Schedule "A"

Site Plan

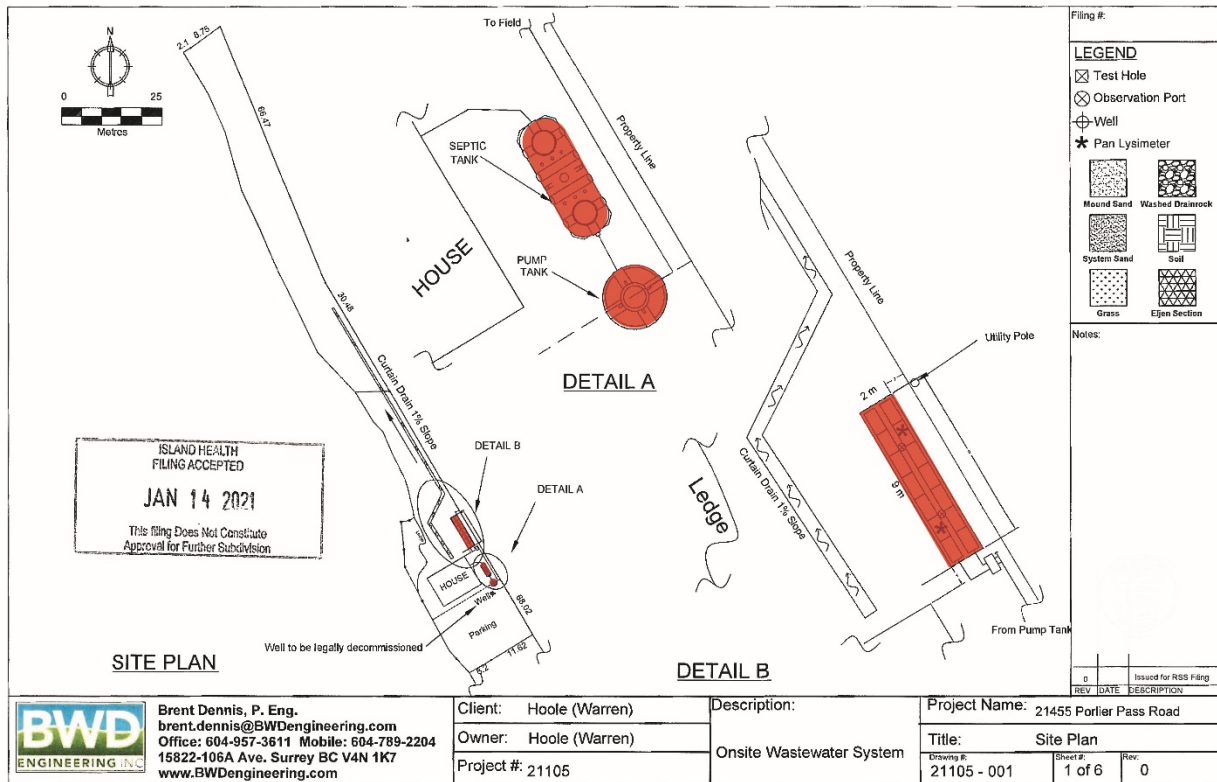


GALIANO ISLAND LOCAL TRUST COMMITTEE

DEVELOPMENT PERMIT GL-DP- 2019.4

Schedule "B"

Engineer's Plan



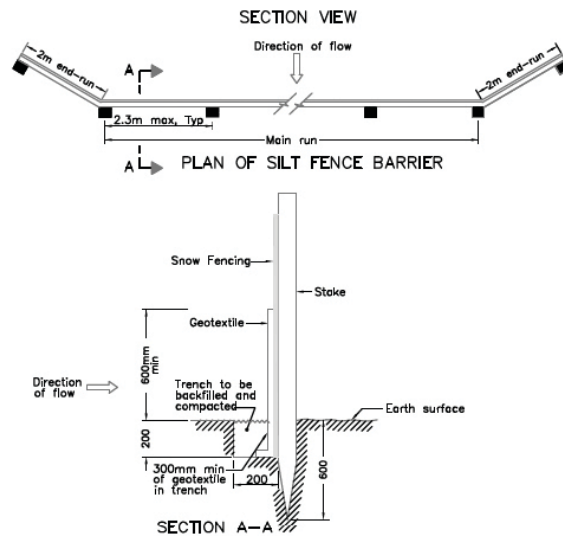
GALIANO ISLAND LOCAL TRUST COMMITTEE

DEVELOPMENT PERMIT GL-DP- 2019.4 Schedule "C"

Erosion and Sedimentation Control Measures

EROSION AND SEDIMENTATION

- 1) PRE-STAKED SILT FENCE TO BE INSTALLED AS SHOWN PRIOR TO CONSTRUCTION AS DIRECTED BY THE ENGINEER.
- 2) TOPSOIL STRIPPED FOR REUSE TO BE STOCKPILED AWAY FROM WATER COURSES, DRAINAGE PATHS AND PROPERTY AND SHALL BE COVERED AND / OR SEEDED TO REDUCE EROSION.
- 3) ALL DISTURBED AREAS TO BE RESTORED AND LANDSCAPED AS SOON AS POSSIBLE FOLLOWING CONSTRUCTION.
- 4) ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED ON A REGULAR BASIS THROUGHOUT THE COURSE OF CONSTRUCTION BY THE CONTRACTOR. THE QUALIFIED ENVIRONMENTAL MONITOR (QEM) JOHN GRODS SHALL HALT PROGRESS OF ANY AND ALL WORK AND SHALL DIRECT CONTRACTOR TO REPAIR / ALTER CONSTRUCTION MITIGATION MEASURES IF THEY ARE NOT PERFORMING ADEQUATELY.



NOTE:

All dimensions are in millimetres or metres unless otherwise shown.

SILT FENCE WITH SNOW FENCE DETAIL

NTS

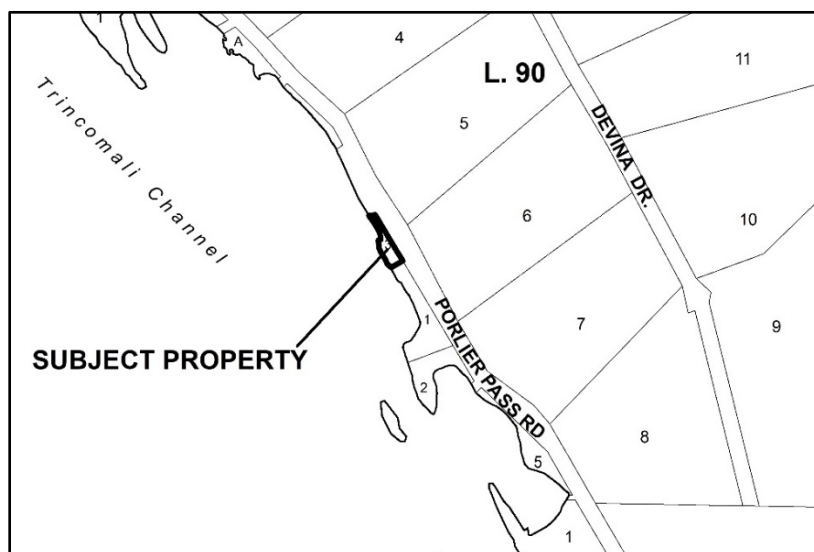


NOTICE
GL-DVP-2021.3
GALIANO ISLAND LOCAL TRUST COMMITTEE

NOTICE is hereby given pursuant to Section 499 of the *Local Government Act* that the Galiano Island Local Trust Committee will be considering a resolution allowing for the issuance of a Development Variance Permit. The proposed permit is attached and would vary the Galiano Island Land Use Bylaw No. 127, 1999 as follows:

- Variances to the setback from the Natural Boundary of the Sea, front and interior side yard setbacks for construction of a proposed, new **septic disposal system** (including an irrigation field and infrastructure), and, for the siting of two (2) existing sheds.

The property is located at **21455 Porlier Pass Road** and is legally described as Lot A, District Lot 90, Galiano Island, Cowichan District, Plan EPP23292 (030-348-374). The general location of the subject property is shown on the following sketch.



A copy of the proposed permit may be inspected at the Islands Trust Office, 200 - 1627 Fort Street, Victoria, B.C. V8R 1H8 between the hours of 8:30 a.m. to 4:30 p.m. Monday to Friday inclusive, excluding statutory holidays, commencing **June 11, 2021** and continuing up to and including **June 24, 2021**.

For the convenience of the public only, and not to satisfy Section 499 (2) (c) of the *Local Government Act*, additional copies of the Proposed Permit may be inspected at various Notice Boards on Galiano Island, BC, commencing **June 11, 2021**.

Enquiries or comments should be directed to Phil Testemale, Planner 2 at (250) 405-5170, for Toll Free Access, request a transfer via Enquiry BC: In Vancouver 660-2421 and elsewhere in BC 1-800-663-7867; or by fax (250) 405-5155; or by email to: information@islandstrust.bc.ca before 4:30 pm, **June 24, 2021**.

The Galiano Island Local Trust Committee may consider a resolution allowing for the issuance of the permit during the regular business meeting starting at **12:30 p.m., July 5, 2021**, to be conducted electronically.

All applications are available for review by the public. Written comments made in response to this notice will also be available for public review.

Jas Chonk, Deputy Secretary



Islands Trust

**GALIANO ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT VARIANCE PERMIT
GL-DVP-2021.3**

To: Warren Hoole and Catherine Burgess

1. This Development Variance Permit applies to the land described below:

Lot A, District Lot 90, Galiano Island, Cowichan District, Plan EPP23292
(PID: 030-348-374)

2. Galiano Island Land Use Bylaw 127, 1999 is varied to allow for the siting of the following:

- a) Section 2.14 which states that buildings and structures must be sited at least 7.5 metres from the natural boundary of the sea, is varied to permit:
 - i) the siting of a new structure (Septic Disposal System - field and associated infrastructure) within **7.0 metres** of the natural boundary of the sea;
 - ii) the siting of an existing building (Shed 'A') within **4.75 metres** of the natural boundary of the sea; and,
 - iii) the siting of an existing building (Shed 'B' – Woodshed / Storage) within **7.0 metres** of the natural boundary of the sea.
- b) Article 5.3.8.1 which states that buildings and structures must be sited at least 7.5 metres from front and rear lot lines:
 - i) the siting of a new structure (Septic Disposal System - field and associated infrastructure) within **1.0 metres** of the front lot line;
 - ii) the siting of an existing building (Shed 'A') within **0.1 metres** siting of the front lot line; and,
 - iii) siting of an existing building (Shed 'B' – Woodshed and Storage) within **6.0 metres** of the front lot line.
- c) Article 5.3.8.2 which states that buildings and structures must be sited at least 6.0 metres from each interior lot line is varied to permit the siting of an existing building (Shed 'B' – Woodshed /Storage) within **0.0 metres** from an interior lot line

The development shall be consistent with Schedule 'A', which is attached to and forms part of this permit.

3. This permit is not a building permit and does not remove any obligation on the part of the permittee to comply with all other requirements of "Galiano Island Land Use Bylaw No. 127, 1999" and to obtain other approvals necessary for completion of the proposed development, including approval of the Capital Regional District and Ministry of Transportation and Infrastructure.

AUTHORIZING RESOLUTION PASSED BY THE GALIANO ISLAND LOCAL TRUST COMMITTEE THIS ##TH DAY OF MONTH, 2021.

Deputy Secretary, Islands Trust

Date of Issuance

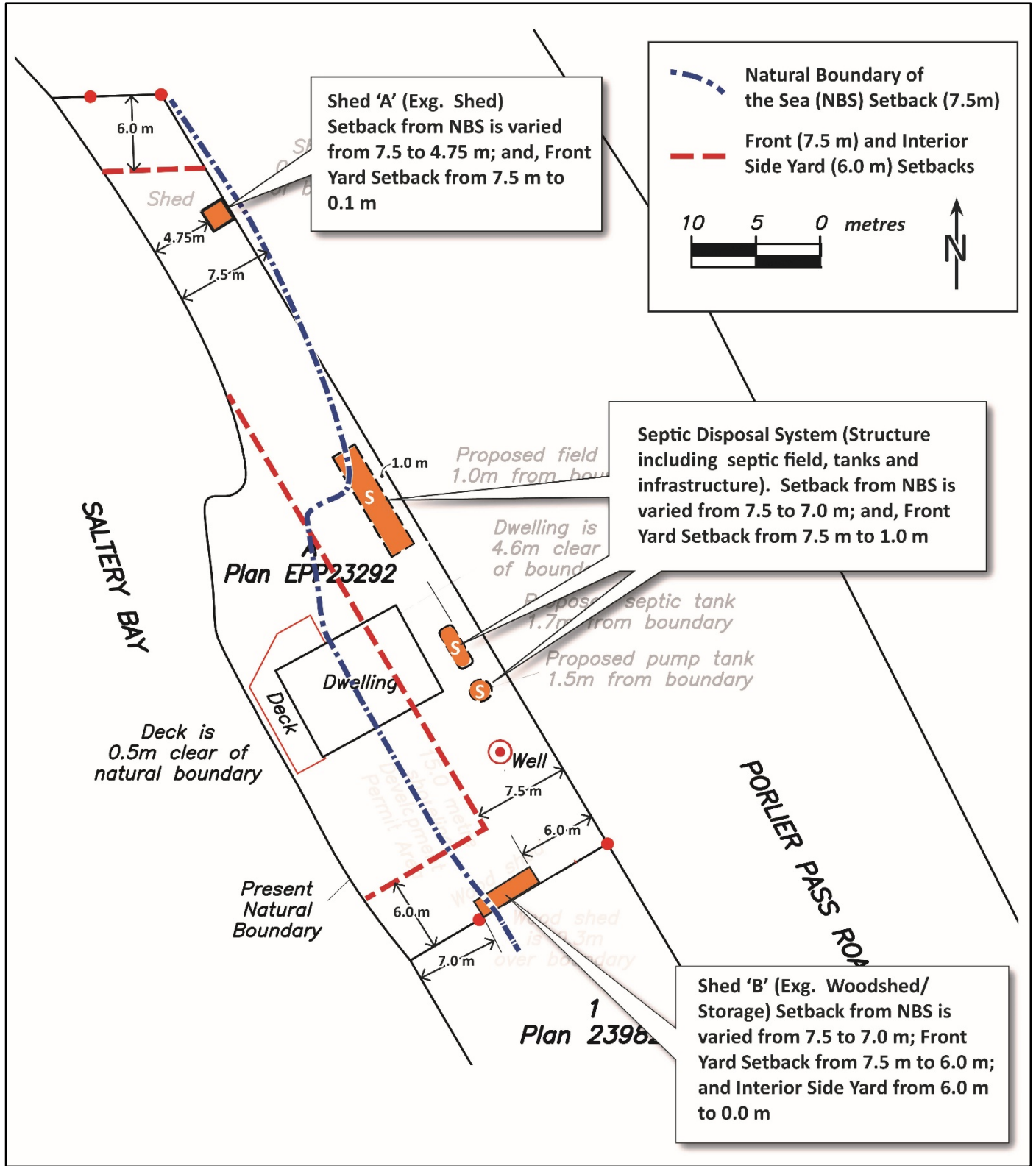
IF THE DEVELOPMENT DESCRIBED HEREIN IS NOT COMMENCED BY THE ##ST DAY OF Month, 202#, THIS PERMIT AUTOMATICALLY LAPSES.

GALIANO ISLAND LOCAL TRUST COMMITTEE

GL-DVP-2021.3

SCHEDULE 'A'

Site Plan





File No.: GL-DP-2021.1
(GL-BE-2019.4)

DATE OF MEETING: July 5, 2021
TO: Galiano Island Local Trust Committee
FROM: Phil Testemale
Southern Team
COPY: Brad Smith, Island Planner
SUBJECT: Development Permit Application
Applicant: Roxanne Orlitzky
Location: 743 Georgeson Bay Road ('Woodstone Manor')

RECOMMENDATION

1. That the Galiano Island Local Trust Committee approve issuance of Development Permit GL-DP-2021.1 (Orlitzky).

REPORT SUMMARY

This report is to consider a Development Permit (DP) application.

The application is for measures to retroactively authorize land alteration, tree removal, the construction of a building (shed) and a pond all within **Development Permit Area ("DPA") 1 - Riparian Areas, DPA 3 - Tree Cutting and Removal, and DPA 5 - Sensitive Ecosystem**. Further, it also authorizes remediation for the unpermitted activities with restoration works within the same DPAs.

Overall, the objectives of the respective DPAs are:

The DPA 1 designation is intended, in part, to protect riparian areas from development so that the areas can provide natural features, functions and conditions that support fish life processes.

The objectives of the DPA 3 -Tree Cutting and Removal are to: ensure a sustainable rate of cutting and removal in order to meet the LTCs greenhouse gas emission reductions goals; protect biodiversity; provide wildlife habitat; protect species such as Garry Oak; and protect the productivity of groundwater recharge areas. (DPA3)

The objective of DPA 5 – Sensitive Ecosystems is to preserve and protect remaining sensitive ecosystems (here wetland ecosystems) on Galiano Island.(DPA 5)

BACKGROUND

The application is the result of Bylaw Enforcement file GL-BE-2019.4 resulting from a complaint in October 2019 for works in the DPAs undertaken without a permit.

Referencing Figure 2, the proposal is to retroactively permit the following land alteration activities in the DPAs that proceeded without obtaining a required DP:

- Within the boundary of DPA 1 and DPA 5 (noting that these overlap in many places as shown in Figure 2 and Attachment 2.2), in 2019 the property owner cleared a landing area, constructed a berm, roadway, small ditch, pond, and a shed. Specifically:
 - The cleared landing area is approximately 750 m². All vegetation was removed, and new grasses and herbaceous plants re-established in 2020 (Attachment 2.5 – 03 -2021). However, this spring the owner removed the berm and spread the soils over the landing area (as per recommendations of the Qualified Environmental Professional's (QEP) report – below). Photos from a site visit by Bylaw staff on June 8 shown that all vegetation removed from the landing (Attachment 2.5 – 06-2021).
 - The berm was constructed at the south end of the cleared landing and is 33 m long X 4.5 m wide X 2 m high. The berm was fully vegetated with shrubs and grasses, but has since been removed as recommended by the QEP.
 - The constructed roadway is overlaid with road base and is approximately 110 m long within DPA 1.
 - The small ditch was constructed to convey water from the landing area southeast towards the wetland and is approximately 29 m long X 30 cm wide and 10 cm deep.
 - A pond with a riprap bank, approximately 25 m², was constructed next to the road, west of the landing area. It is stormwater fed and is naturally stagnant. A small aerator pump was installed to prevent algae growth.
 - A wooden shed, approximately 2.3m X 1.2 m, was built adjacent to the pond.
- Within the entire property, (DPA 3), the property owner felled trees, and cleared windfall:
 - Approximately 150 trees were felled on the property, the large majority of which were windfall.

The DP will also permit restoration works as remediation for the unpermitted works detailed above. This includes planting of replacement trees, shrubs and grasses and land alteration to remove some features as recommended by the QEP.

The subject property is 3.61 ha (8.93 acres) in size and is known as the 'Woodstone Manor' which is owned and operated by the applicant. The property has is a twelve (12) bedroom hotel with a restaurant along with associated buildings, access road and parking, which are all on the west side of the property which is zoned **Commercial 3** (Attachment 2.1). The east side of the property, where all non-permitted development activities occurred, is zoned **Rural Residential (RR)** and was largely forested with Douglas-fir (*Pseudotsuga menziesii*) and western red cedar (*Thuja plicata*). A meadow and wetland exist toward the east end of the property. Immediately south and east of the property is a pasture, and a large wetland complex. The area surrounding the subject property is largely rural properties and forest.

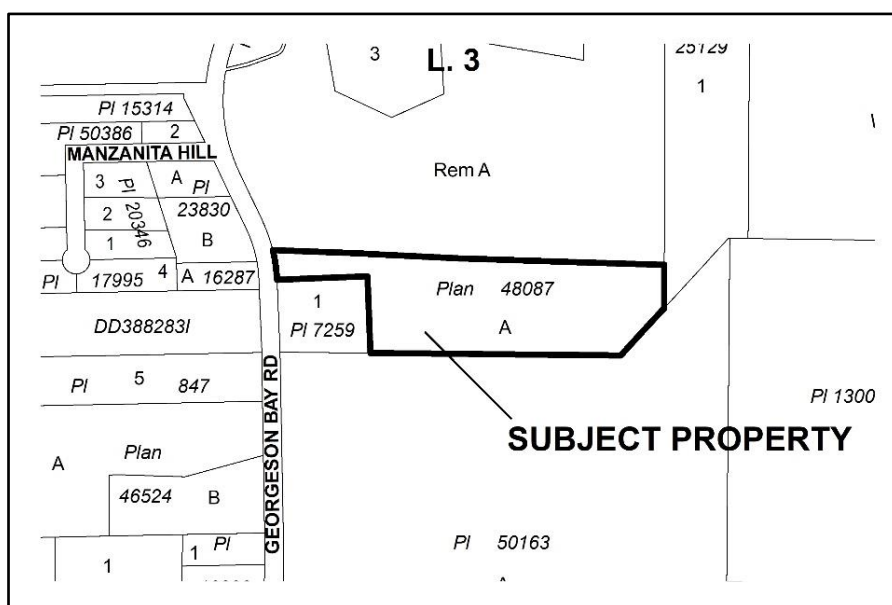
As required, a report entitled “Environmental Impact Assessment and Restoration Plan, Woodstone Manor, Galiano Island” (Oliver Busby, MBA, R.P. Bio., P. Ag., EBB Environmental Consulting Inc., July 2020 – ‘Biologist’s Report’) was submitted as part of the application. An addendum to the Biologist’s Report that established a Streamside Protection and Enhancement Area (SPEA) was submitted on May 27, 2021 by the QEP. The combined Biologist’s Report is Attachment 3 and is discussed further in ‘Issues and Opportunities’ (below).

The QEP also provided a cost estimate for the restoration works on June 9, 2021 (Attachment 4).

A copy of proposed Development Permit GL-DP-2021.1 (Orlitzky) is Attachment 5.

Staff visited the property in September of 2019, and March and June of 2021 (See Attachment 2.5)

Figure 1 – Subject Property



ANALYSIS

Policy/Regulatory

Official Community Plan:

The property is designated as **VA – Visitor Accommodation** and **RR- Rural Residential** in the Galiano Island Official Community Plan Bylaw 108

Development Permit Areas:

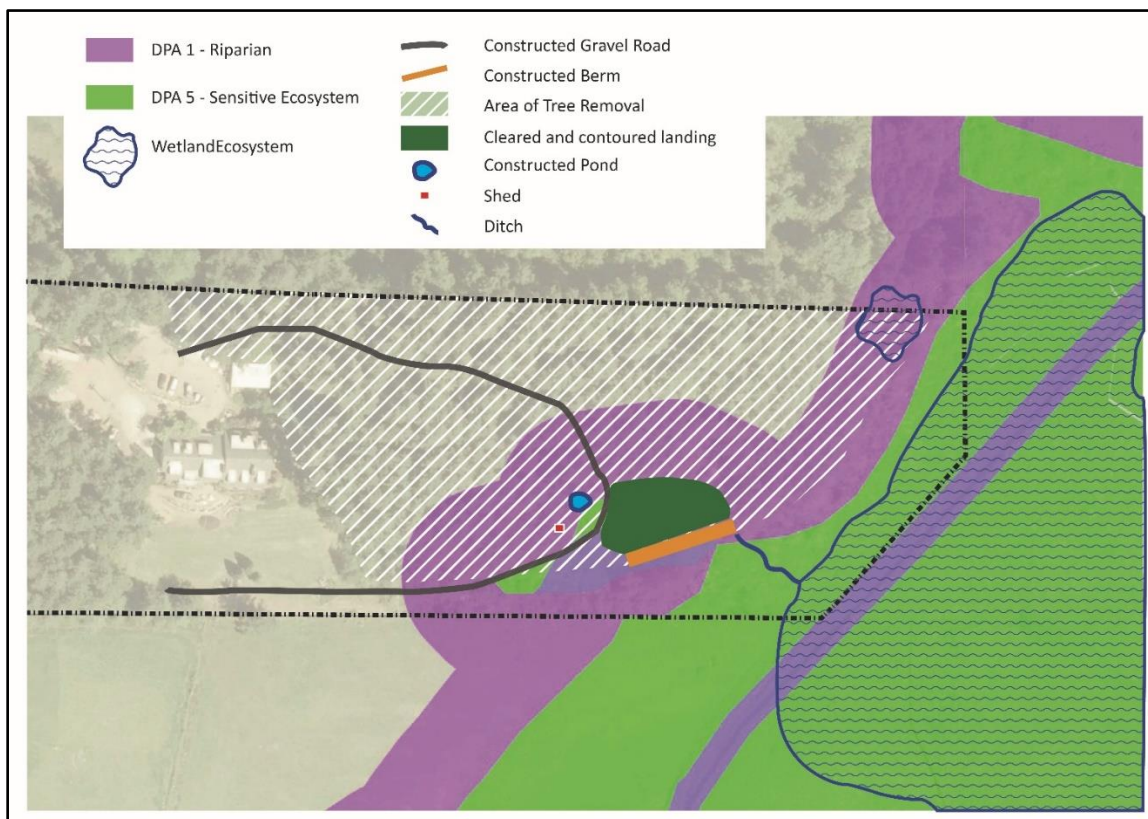
Development Permit Area (DPA) 1 – Riparian Areas, DPA 3 – Tree Cutting and Removal and **DPA 5 - Sensitive Ecosystems** are all designated on the property (subject of application – Attachment 2.2).

A DPA checklist for relevant guidelines has been completed and is Attachment 6. In summary, many of the activities undertaken without a permit do not meet the objectives and guidelines contained in the DPAs, however, the restoration plan does meet guidelines for these circumstances.

Land Use Bylaw:

As above, the property is split zoned in the Galiano Island Land Use Bylaw 127 (Attachment 2.1). The property was the subject of a rezoning application in 2016 (GL-RZ-2016.1) to permit the hotel and restaurant uses on the western portion of the property.

Figure 2 – Works Undertaken Without a Permit



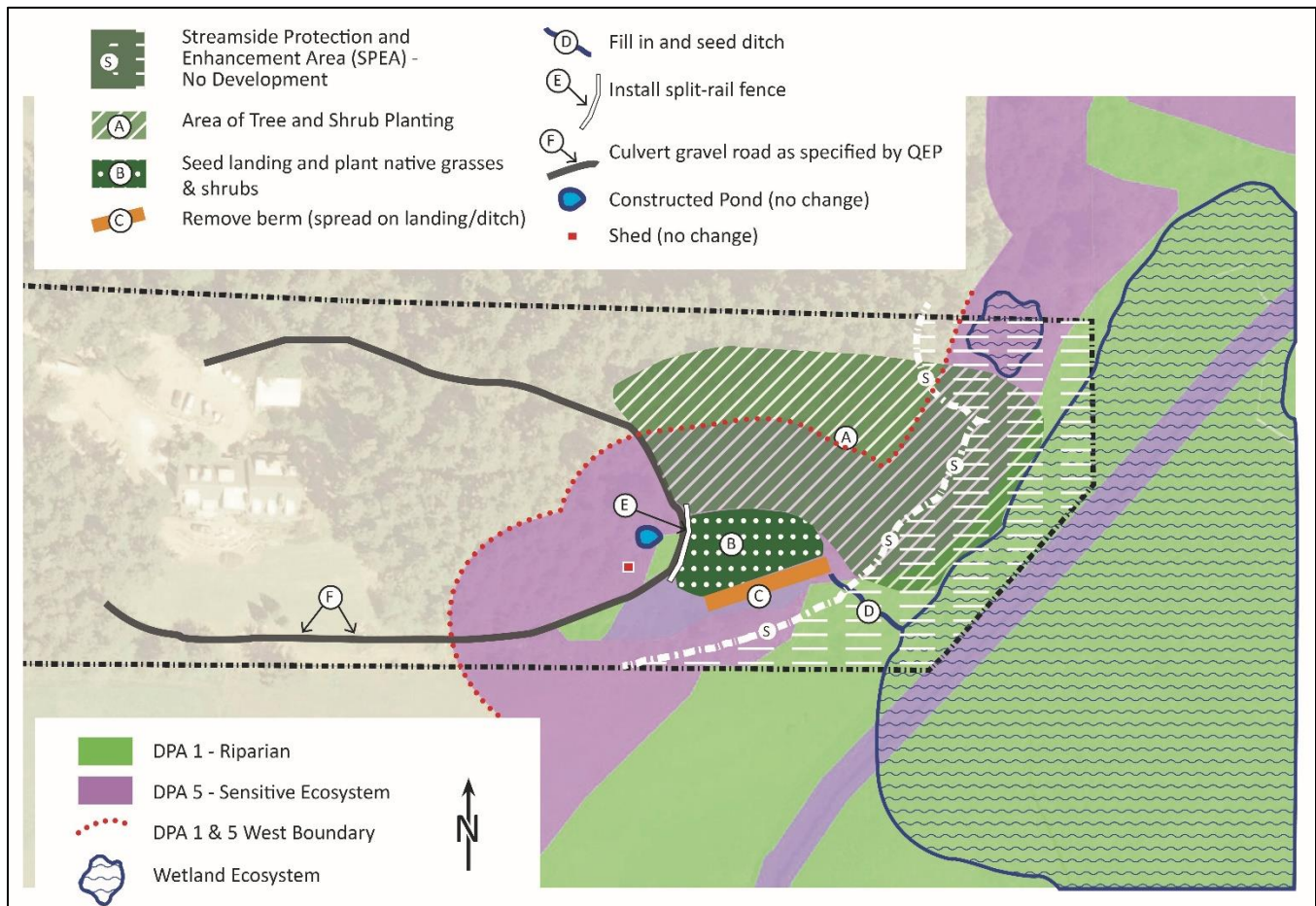
Issues and Opportunities

Biologist's Report

The Biologist's Report submitted in support of the application is organized to assess the site inventory and impact assessment for each of the three (3) DPAs.

The inventory for **DPA 1 – Riparian Area** (pp. 8 – 19) includes a database review, a field assessment, watercourses and vegetation surveys, soil surveys, and a determination of the wetland boundary. The QEP did not submit a *Riparian Areas Protection Act* (RAPR) assessment report to the Province because retroactive development cannot be approved under the provincial legislation. Therefore, a Streamside Protection and Enhancement Area (SPEA - a 'no development' area setback from the stream or water feature) which is a RAPR assessment requirement, was not part of the Biologist's Report. To meet the DPA objectives and guidelines, staff requested that the QEP work with provincial staff and provide an addendum to the report that followed the legislated methodology and set the SPEA at 15 metres from the boundary of the wetland (Figure 3 and Attachment 3 – *end of document*). The SPEA and the delineation by a native hedge or fence to limit encroachment are both conditions of the draft DP.

Figure 3 – Site Plan – Including Restoration Plan



The assessment on page 19 concludes that impacts to the riparian wetland were limited to possible sedimentation entering the area, although no sedimentation accumulations were observed by the QEP. Additionally, the ditch may have altered localized drainage, although that was undetermined as well.

The **inventory for DPA 5– Sensitive Ecosystems** (p 20 -28) includes a database review, and a field inventory. The latter assessed existing plant communities, aquatic and terrestrial habitats, breeding birds and nesting trees, species at risk and environmentally sensitive areas, slope stability and erosional processes, and hydrology and topography.

The impact assessment on page 28 summarizes that foraging, migratory corridor and breeding opportunities have potentially been lost for several at-risk animal species within the DPA. It also indicated limited impacts given the degraded nature of the wetland. It concluded that the unpermitted works are unlikely to have had any direct negative impacts on rare or at-risk species. It also notes the impact of loss of potential habitat from felled trees as well as lost migration options with the cleared landing (amphibians). The impacts to the hydrology of the area were minimal.

The inventory for **DPA 3– Tree Cutting and Removal** (p 29 -31) includes a site inventory indicating that approximately 150 trees were felled and cleared from the property, noting that approximately 90% of those were windfall from a storm event in December of 2018 (p. 29). The estimated volume of timber is estimated

between 11 and 25 m². It notes that most were young Douglas fir trees as well as Hawthorn in the landing area. No Garry Oak trees were felled or cleared (p.31).

The impact assessment on page 31 indicates that slope stability is not a concern on the property and that erosional processes do not appear to have been affected by the tree removal. However, the cleared landing area has increased potential for overland flow, and the lower areas closer to the wetland areas have decreased structural diversity from loss of shrub cover and woody debris.

Section 6 (p. 31 – 32) of the Biologist's report details recommends **restoration works** to maintain the health, form and function of the wetland area. These are diagramed in Figure 3 (above) and Schedules 'A' and 'B' in the draft DP. In summary, the works include the planting of a minimum of 100 trees and shrubs overall. It recommends culverting of the road to promote natural drainage, the removal of the berm and filling-in of the ditch and seeding and planting in those areas as well as the landing area. Restoration in the areas outside of the landing include planting of trees and shrubs and placing woody debris. The Biologist's Report recommends that the road, pond and small shed can remain as they will have minimal impacts on the sensitive ecosystems.

Finally, the report makes recommendations for **monitoring** on pages 33 and 34.

DP Conditions

All recommendations from the Biologist's Report have been incorporated as conditions in the draft DP, in addition to other conditions consistent with the DPA guidelines. Section 3 of the draft DP are conditions for a required security of 125% of the estimated value for the restoration work provided by the QEP (Attachment 4).

Consultation

There is no public or agency consultation regularly associated with a DP application. In addition, there is no statutory notification required.

First Nations

With respect to the potential for archaeological material to be found on the property during the proposed additions, Islands Trust reviews all applications/permits using Remote Access to Archaeological Data (RAAD) mapping to ensure the preservation and protection of cultural heritage, archaeological sites, and ancestral places. Staff have provided the Islands Trust Chance Find Protocol and the Provincial Archaeological Branch guidelines on *Heritage Act* and other guidance itemized in Attachment 1.

Rationale for Recommendation

The recommendation on page 1 is supported as:

- The restoration works meet objectives and specific guidelines of the DPA.
- All relevant recommendations of a professional biological assessment report and additional conditions consistent with the DPA objectives and guidelines have been incorporated into the conditions of the proposed DP.
- The conditions in the draft DP will facilitate repair of damage to the riparian wetland ecosystem by implementing the restoration plan and thereby also ensuring the future protection and health of the ecosystem.

ALTERNATIVES

1. Request further information

The LTC may request further information prior to making a decision. Staff advise that the implications of this alternative are a potential delay in construction and costs to the applicant. If selecting this alternative, the LTC should describe the specific information needed and the rationale for this request. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee request that the applicant submit to the Islands Trust _____.

2. Add Further Conditions

The LTC may add further conditions to the draft DP. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee amend the draft Development Permit for application GL-DP-2021.1 (Orlitzky) as shown as Attachment 5 to this staff report as follows:_____; and,

That the Galiano Island Local Trust Committee approve issuance of application GL-DP-2021.1 (Orlitzky) as amended.

3. Deny the application

The LTC may deny the application. Note, if this alternative is selected, the decision MUST be accompanied by specifying which guideline(s) the application does not comply with. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee deny application GL-DP-2021.1 (Orlitzky) as it does not comply with guideline_____.

NEXT STEPS

Submitted By:	Phil Testemale, Planner 2	June 30, 2021
Concurrence:	Brad Smith, Island Planner	June 30, 2021

ATTACHMENTS

1. Site Context
2. Maps, Plans, Photographs
3. Combined Environmental Assessment Report and Restoration Plan
4. Cost Estimate for Restoration Work
5. Draft Development Permit GL-DP-2021.1
6. DPA Guideline Checklist

ATTACHMENT 1 – SITE CONTEXT

LOCATION

Legal Description	Lot A, District Lot 3, Galiano Island, Cowichan District, Plan 48087
PID	013-184-261
Civic Address	743 Georgeson Bay Road, Galiano Island
Lot Size	3.61 ha (8.93 acres)

LAND USE

Current Land Use	Commercial 3 (west half) and Rural Residential (east half)
Surrounding Land Use	Agricultural (South, East, Northeast and Northwest), Rural Residential (North)

HISTORICAL ACTIVITY

File No.	Purpose
GL-RZ-2009.1	Allow for use as treatment facility.
GL-TUP-2015.1	cancelled
GL-RZ-2016.1	Allow use as an Inn with restaurant.

POLICY/REGULATORY

Official Community Plan Designations	The subject property is designated as VA – Visitor Accommodation and RR - Rural Residential in the Galiano Island OCP No. 108, 1995 Development Permit Areas (DPAs): • DPA 1 – Riparian Areas • DPA 3- Tree Cutting and Removal • DPA 5 – Sensitive Ecosystems
Land Use Bylaw	The subject property is ‘split zoned’ in Galiano Island LUB No. 127, 1999: Commercial 3 and Rural Residential (RR)
Other Regulations	None
Covenants	EC14291 – Crown (1989) – no building before septic installation EC14292 – Crown (1989) - no further subdivision CA5782630 – GILTTTC (2016) – Part of rezoning 2016.1 - requirement for no occupancy of Inn or dwelling or cottage without installation of rainwater collection systems.
Bylaw Enforcement	GL-BE-2019.4 – works in DPA without permit – subject of application.

SITE INFLUENCES

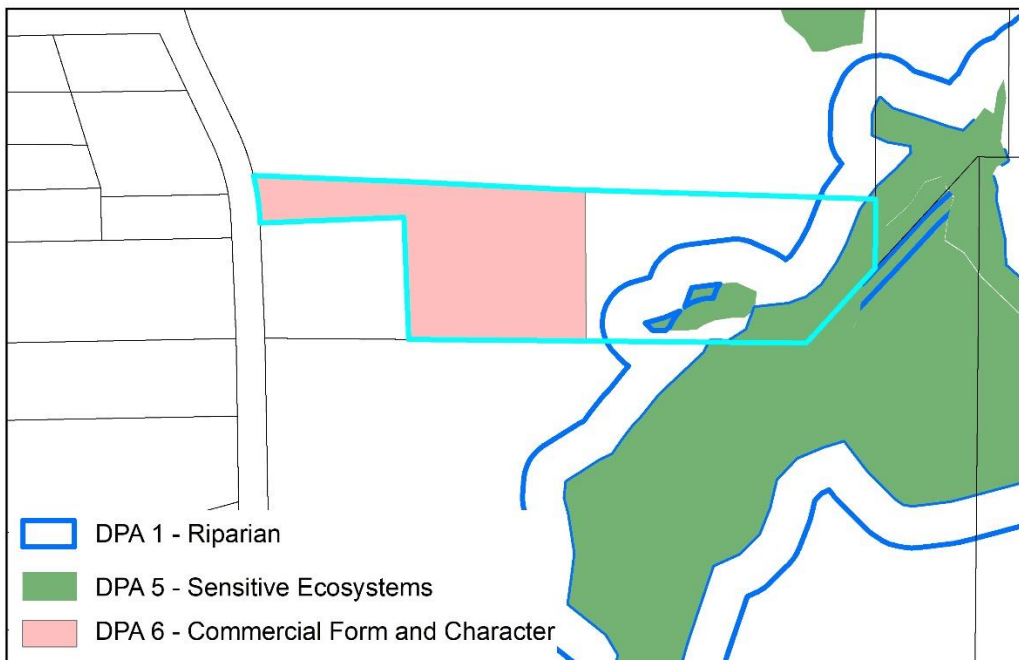
Islands Trust Conservancy	There are no Conservancy covenants or properties in the direct area; therefore no referral has been made to the Board.
Regional Conservation Strategy	The proposal does not impact the objectives and priorities of the Islands Trust Conservancy regional conservation plan.
Species at Risk	None Biologist's Report (Attachment 3)
Sensitive Ecosystems	Reference Biologist's Report (Attachment 3) and Attachment 2.3
Hazard Areas	Attachment 2.4 - a very small area of low hazard.
Archaeological Sites	Staff have provided the Islands Trust Chance Find Protocol and the Provincial Archaeological Branch guidelines on <i>Heritage Act</i> and directed the applicant to the following guidelines: • All archaeological and cultural heritage is protected under the <i>Heritage Conservation Act</i> and areas of archaeological potential may contain undocumented archaeological sites which would be automatically protected under the <i>Heritage Conservation Act</i> (including all intact or disturbed sites) and require a permit from the BC Archaeology Branch. Further information regarding permits: https://www2.gov.bc.ca/gov/content/industry/natural-resource-use/archaeology/permits. • In the event that archaeological features or materials are found, either intact or disturbed on the subject property, stop work immediately and contact the BC Archaeology Branch at 250-953-3334 or archaeology@gov.bc.ca. • Any impacts, would include the following: landscaping, tree removal, digging, using heavy equipment, development, fencing, footings, or any form of groundwork. • For more information regarding registered archaeological sites and archaeological potential on the subject property, submit an Archaeological Information Request Form: www.archdatarequest.nrs.gov.bc.ca, or contact Islands Trust to access mapping of the subject property.
Climate Change Adaptation and Mitigation	Impacts from loss of tree coverage, noting loss is approximately 90% windblow from a storm event. Restoration should mitigate some effects.

ATTACHMENT 2 – MAPS, PLANS, DRAWINGS, PHOTOGRAPHS

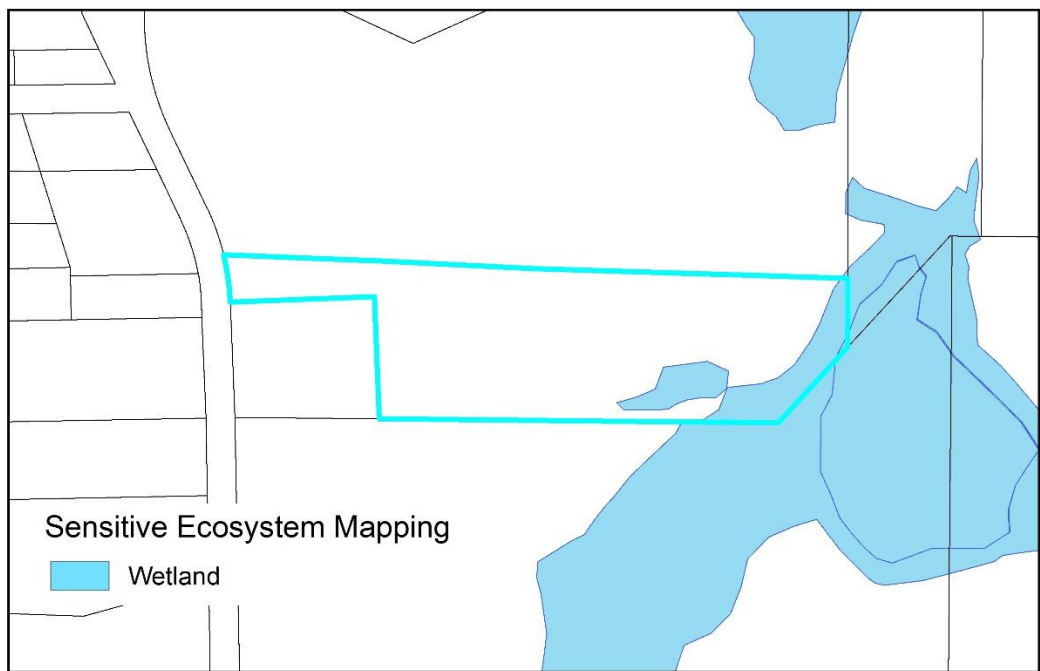
2.1 ORTHOZONING



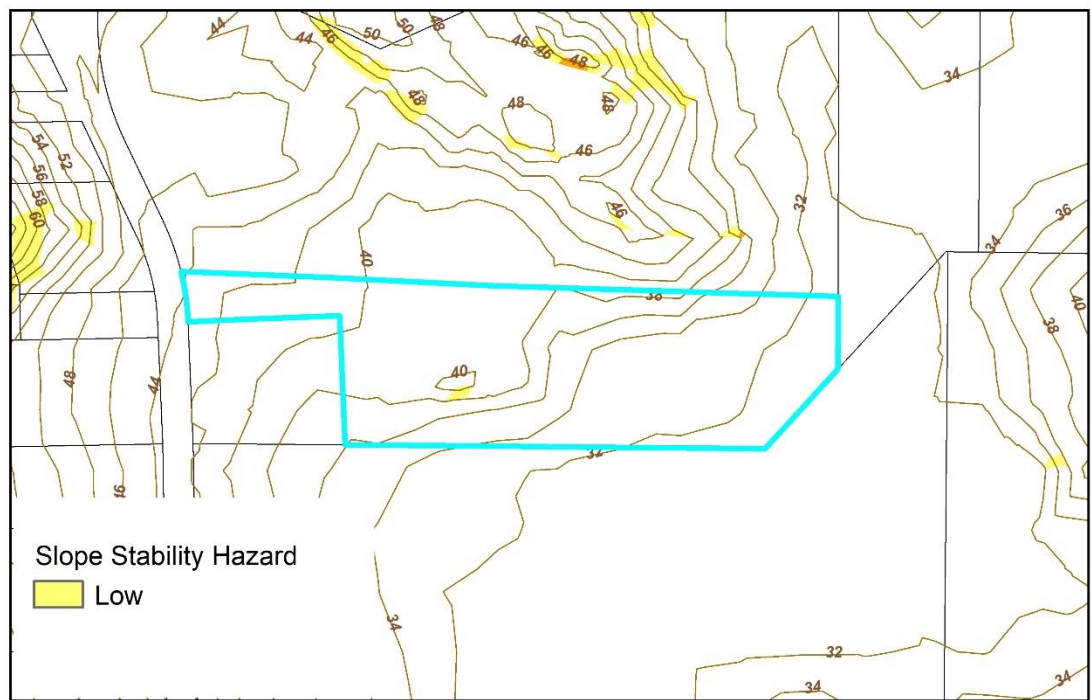
2.2 DPAs



2.3 SENSITIVE ECOSYSTEM MAPPING (SEM)



2.3 CONTOURS AND STEEP SLOPE MAPPING



2.5 PHOTOGRAPHS (2019)

One: (2019) View east from south of property - constructed gravel road



Two: (2019) Constructed berm and landing



Three: (2019) Constructed pond with landing and berm beyond

2.5 PHOTOGRAPHS (MARCH 2021)

Four: (03-2021) View south of shed and pond



Five: (03-2021) Landing and berm to right



Six: (03-2021) View south east of pond, shed and berm

2.5 PHOTOGRAPHS (JUNE 2021)

Seven: (06-2021) Landing with berm removed.



Eight: Landing

Environmental Impact Assessment and Restoration Plan

Woodstone Manor, Galiano Island

Prepared for:

**Stephan Orilitzy
743 Georgeson Bay Rd,
Galiano Island, B.C., V0N 1P0**



Prepared by:

EBB Environmental
Consulting Inc.

Environmental Impact Assessment and Restoration Plan

Woodstone Manor, Galiano Island

PREPARED FOR

Stephan Orilitzy
743 Georgeson Bay Rd
Galiano Island, B.C., V2Z 1S6

SUBMITTED

July 2020

PREPARED BY

EBB Environmental Consulting Inc.
PO Box 18180 1215C 56th Street
Delta, British Columbia, V4L 2M4

Phone: 604-943-3209
Fax: 604-948-3273
Toll-Free: 1-877-943-3209
www.ebbconsulting.ca

PRINCIPAL CONTACT

Oliver Busby, MBA, RPBio, PAg
Mobile: 604-219-2412
Email: busby@ebbconsulting.ca

Document Limitations

This document was prepared exclusively for Woodstone Manor, Galiano Is., B.C. The findings, conclusions, and recommendations in this document are based on the expertise and experience of EBB personnel based on 1) the information available at the time of preparation; 2) data supplied by outside sources; and, 3) the assumptions, conditions, and qualifications set forth in this document. While professional judgement and standard practices were used in interpreting third-party external data, EBB did not verify the accuracy and quality of externally provided data.

Respectfully submitted;

Prepared by

Reviewed by

ORIGINAL SIGNED AND SEALED

ORIGINAL SIGNED AND SEALED

Lorraine Campbell, MSc, BIT
Junior Biologist

Oliver Busby, MBA, RPBio, PAg
Principal

I certify that the work described herein fulfills standards acceptable of a Professional Biologist.

I certify that the work described herein fulfills standards acceptable of a Professional Biologist.

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1 Introduction

EBB Environmental Consulting Inc. (EBB) was retained by Stephan Orilitzy, owner of Woodstone Manor Ltd., to prepare an Environmental Impact Assessment for works conducted at 743 Georgeson Bay Road, Galiano Island, BC (Subject Property). Works were conducted on the property beginning on December 25th, 2018 following a large storm. The subsequent clearing of windfall and other works on the property were within several Development Permit Areas (DPA's) as defined in the Galiano Island Official Community Plan Bylaw No. 108, 1995. The property owner was unaware at the time of the DPA boundaries and his responsibilities. As of July 2019, works have been stopped and the property owner is cooperating and would like to provide compensation and restoration of the land where necessary.

This report includes the information required by the Galiano Island Local Trust Committee Development Approval for works competed in DPA 1 (Riparian Areas), DPA 3 (Tree Cutting and Removal), and DPA 5 (Sensitive Ecosystems). This report provides the information requirements as outlined by the Galiano Island Trust Committee in the *Development Approval Information Checklist* for DPA's. Site Inventories and Impact Assessments are discussed for each DPA, and Measures, Restoration and Monitoring are discussed for all DPA's together in Section 6.

2 Site Plan

2.1 Location

The Subject Property (Table 1) is located on the southeast end of Galiano Island, directly north of Georgian Bay (Figure 1). Woodstone Manor is owned and operated by the Property Owner and is a 12 bedroom hotel with restaurant. The hotel, associated buildings, access road and parking are all on the west side of the property. The east side of the property, where all works were conducted, is largely forested with Douglas-fir (*Pseudotsuga menziesii*) and western red cedar (*Thuja plicata*). Additionally, a meadow and wetland exist toward the east end of the property. Immediately south of the property is a pasture occupied by horses, and a large wetland complex. The area surrounding the wetland and Subject Property is largely rural properties and forest.

Table 1. Property profile summary.

Property Profile	
Civic Address	743 Georgeson Bay Rd, Galiano Island, B.C., V2Z 1S6
Parcel Identification Number	013-184-261
Total Property Size	3.6 ha
Current Zoning	Visitor Accommodation (west half); Rural Residential (east half)
Development Permit Area	Development Permit Area 1 (Riparian Areas), Area 3 (Tree Cutting and Removal), and Area 5 (Sensitive Ecosystems)

Property Profile

Agricultural Land Reserve

No



Figure 1 Location of project site in relation to surrounding community

2.1.1 Ecosystems and Climate

Based on the Canadian Ecological Land Classification hierarchy, the proposed project footprint is situated within:

- The Fraser Lowland Ecosection,
 - The Lower Mainland ecoregion,
 - The Georgia Depression ecoprovince,
 - the cool Hypermaritime and highlands ecodivision,
 - the humid temperate ecodomain.

Based on the BEC classification system, the Subject Property is located within the Coastal Douglas-fir, moist maritime zone (CDFmm). The CDFmm zone is within the rainshadow of Vancouver Island. This results in warm, dry summers and wet, mild winters with little snowfall. Annually, the zone receives 647 to 1263 mm of precipitation, with only 5% or so falling as snow (Nuszdorfer *et al.* 1994).

2.2 Description of the Development

Works were completed without a permit in DPA 1, 3 and 5. DPA 3 covers the entire property and requires a permit for tree felling over 12 cubic metres within a three-year period. DPA 1 and 5 share similar boundaries; however, DPA 1 is larger due to the riparian buffer area provided for the wetland. The DPA 1 boundary is used below to describe works conducted within it.

Within the boundary of DPA 1, the property owner cleared a landing area, constructed a berm, roadway, small ditch, pond, and a shed (Figure 2). Within the entire property, (DPA 3), the property owner felled trees, and cleared windfall (Figure 2). Details of the works conducted with the associated DPA's are as such:

- The roadway is overlaid with road base and is approximately 110 m long within DPA 1 (Photo 1);
- The cleared landing area is approximately 750 m². Initially, all vegetation was removed. At the time of the field visit, new grasses and herbaceous plants were growing within the clearing (Photo 2);
- The berm is at the south end of the cleared landing and is 33 m long X 4.5 m wide X 2 m high. At the time of the field visit, the berm was fully vegetated with shrubs and grasses growing (Photo 3);
- The small ditch appears to convey water from the landing area towards the wetland and is approximately 29 m long X 30 cm wide and 10 cm deep (Photo 4);
- A pond with riprap bank, approximately 25 m², was constructed next to the road, west of the landing area (Photo 5). It is stormwater fed and is naturally stagnant. A small aerator pump was installed to prevent algae growth. The pond was dry during the August field visit;
- A wooden shed, approximately 2.3 X 1.2 m, was built adjacent to the pond (Photo 5);
- Approximately 150 trees were felled on the property (Photo 6). No Gary Oak trees exist within the area of tree clearing and no Gary Oak trees were removed. Additionally, windfall on the property had also been bucked and were being cleared from the forest (Photo 7).

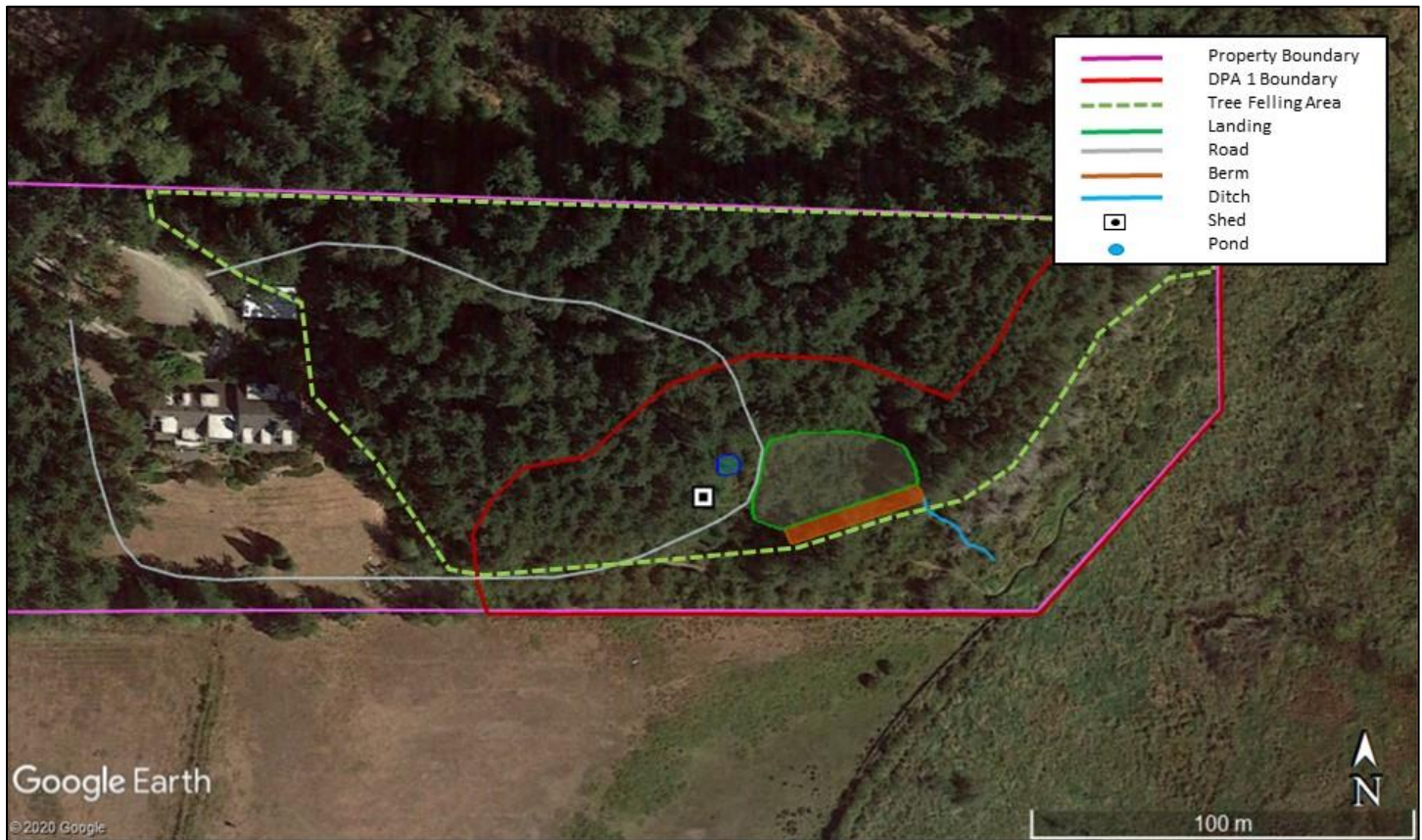


Figure 2 Location of works conducted on Subject Property and DPA 1 boundary



Photo 1: Constructed road with road base



Photo 2: Landing area



Photo 3: Large berm at the south boundary of landing area. Fully overgrown with weeds and other vegetation



Photo:4: Ditch which appears to convey water from landing area towards wetland



Photo 5: Shed and pond



Photo 6: Trees felled throughout forested area adjacent to meadow



Photo 7: An example of uprooted trees from a large storm. Windfall had largely been bucked and was difficult to differentiate from felled trees

3 Riparian Areas Development Permit Area (DPA 1)

The Galiano Island Official Community Plan has classified approximately 1.19 Ha of the Subject Property as RAPR applicable wetland, including a 30 m buffer (Figure 3). Government digital databases (e.g. Habitat Wizard, Freshwater Atlas, EcoCat) were assessed to determine documented watercourses and fish presence.

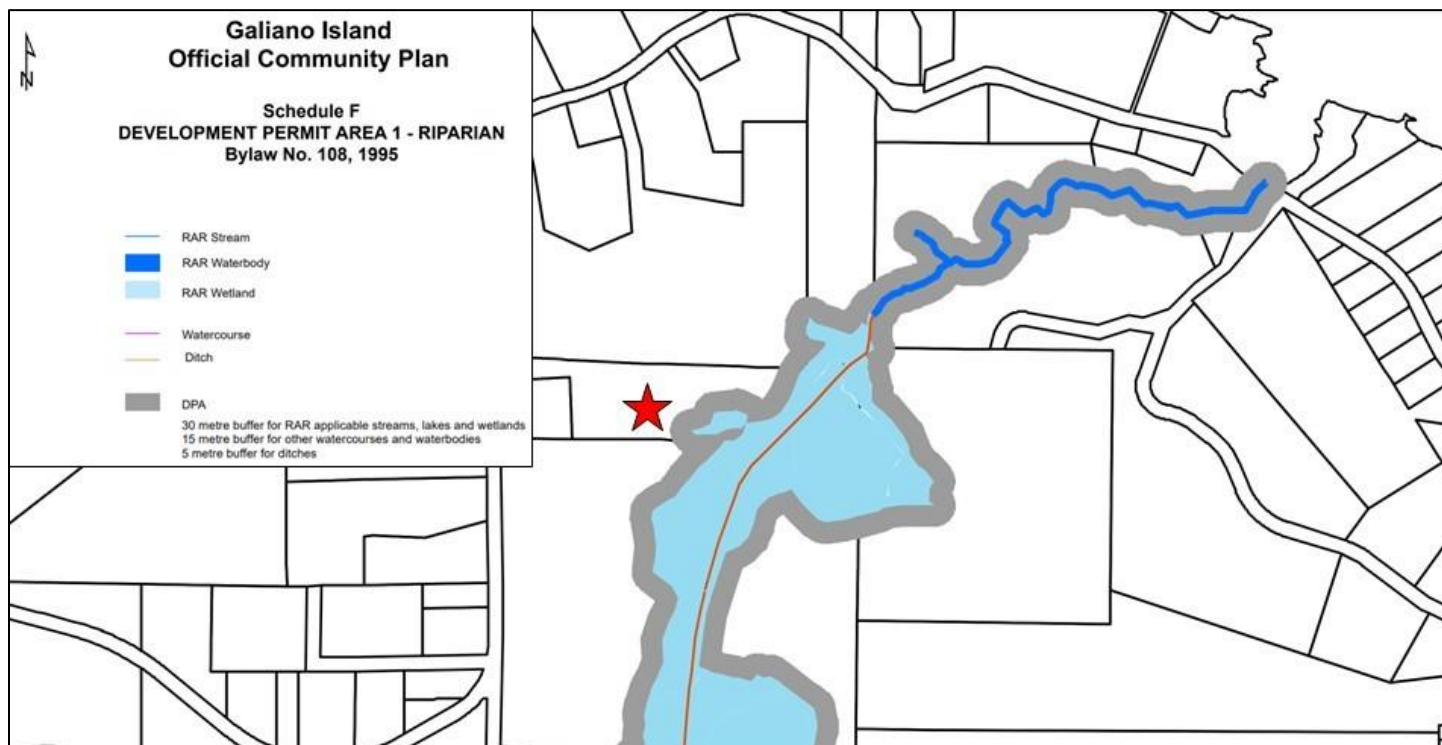


Figure 3 DPA 1 map as provided in Schedule F of the Galiano Island Official Community Plan

3.1 Site Inventory

3.1.1 Database review

Using provincial spatial data, one (1) watercourse was identified at the east end of the Subject Property (Table 2; Figure 4). The watercourse is a wetland and is hydraulically connected to a stream at its north and south ends. There are no documented occurrences of fish or amphibian species nearby. According to the Habitat Wizard stream report, a four (4) metre high waterfall makes the stream impassable to fish.

Table 2 Potential watercourses and associated information within the project footprint

Creek Name	Waterbody Classification	Coordinates	Documented Fish Occurrences
Unnamed	Wetland	10 U 474728.54 E, 5414727.45 N	None

Using Google Earth imagery, the majority of the wetland is east of the primary channel through the wetland. This areal appears to be more consistently wetted than area west of the primary channel; it also exhibits wetland

characteristics (Figure 5). The area west of the main wetted channel, within the Subject Property, rarely has open water visible and may only become wetted during periods of flooding.



Figure 4 Wetland boundary as mapped in the BC Freshwater Atlas (FWA) (Habitat Wizard 2020)



Figure 5 Satellite imagery from June 26, 2012 showing DPA 1 boundary (red line), property boundary (pink line) and the open water areas to the east of the primary channel (blue line)

3.1.2 Field Assessment

Determining a wetland outer edge can be difficult but is generally done by identifying changes in vegetation structure, the loss of obligate hydrophytes and an absence of wetland soil characteristics (e.g. hydric soils).

The BC Riparian Regulation Protection Regulation (RAPR), describes wetland subhydric or hydric soils as having one or more of the following:

1. Peaty organic horizons greater than 40 cm thick.
2. Non-sandy soils with blue-grey gleying within 30 cm of the surface.
3. Sandy soils with prominent mottles within 30 cm of the surface or blue-grey matrix.
4. Hydrogen sulphide (rotten egg smell) in upper 30 cm

Field assessments were conducted on June 23rd, 2020 by Oliver Busby (MBA, RPBio, PAg), Lorraine Campbell (BIT, MSc) and on August 13th, 2020 for soil sampling by an EBB Consulting field technician. Terry McIntosh (PhD), a wetland expert, was also consulted via email which included photographs of the area.

All documented watercourses were assessed for presence, and to ground-truth the accuracy of digital/spatial databases. Any additional watercourses crossing or adjacent to the project footprint were also noted. The applicability of the federal *Fisheries Act* to any watercourses found in terms of providing fish or fish habitat was determined.

To identify the wetland boundary, a reconnaissance level assessment of vegetative composition was first conducted. Vegetation within the project footprint was assessed on June 23rd to verify composition and dominant vegetation. On August 13th, a second visit was made to the site and six (6) soil pits were dug to look for the presence of subhydric or hydric soil indicators as described above.

3.1.3 Watercourses and Vegetation Surveys

During field assessments, the unnamed stream flowing in and out of the wetland was identified. The stream channel was well defined through the wetland section due to a low water table. It had shallow banks and was mostly covered by overhanging hardhack (*Spiraea douglasii*) and reed canarygrass (*Phalaris arundinacea*). Water was approximately 1 m deep and the main channel was an average of 3.5 m wide. Spatial data and imagery indicate that this watercourse begins just north of the Subject Property; due to accessibility, this was not confirmed in the field. Based on the topography and mapped watercourse, it is inferred that the stream originates at the high point north of the property and flows south, exiting at Georgian Bay. There is minimal gradient to the watercourse however, and flow was undetectable during the field reconnaissance. No observations of fish were made during field reconnaissance. Stream substrate was fines and organics. There were some undercut banks, minimal LWD, moderate SWD, high inputs from litter fall and insect drop and shade from overhanging shrubs (Photo 8).

A small, 350 m² wetland was identified at the northeast end of the DPA (Figure 9). It was dry at the time of observation, but there was a notable change in plant species composition between it and the surrounding grass and forested areas. Several *Carex* species, and *Juncus effuses*, indicative of wetlands, were also observed within it (Photo 9).

During field assessments, the most abundant hydrophytic species observed was bulrush (*Scirpus* spp.), which was only noted along the primary channel. No hydrophytic species were observed throughout the meadow area immediately west of the channel. This area was overgrown with reed canarygrass and several other exotic plant species, such as oxeye daisy (*Leucanthemum vulgare*) (Photo 10). Reed canarygrass is often confused as a wetland indicator species, however it is not (T. McIntosh, pers. comm. 2020), although it is capable of, and often overtakes wetlands. As well, oxeye daisy is commonly found on mesic to dry sites along roadsides and pastures; it can tolerate wet soils but not hydric conditions.



Photo 8: One of the few open areas along the wetlands primary channel



Photo 9 Small wetland in the forested area north of the northeast end of the Subject Property

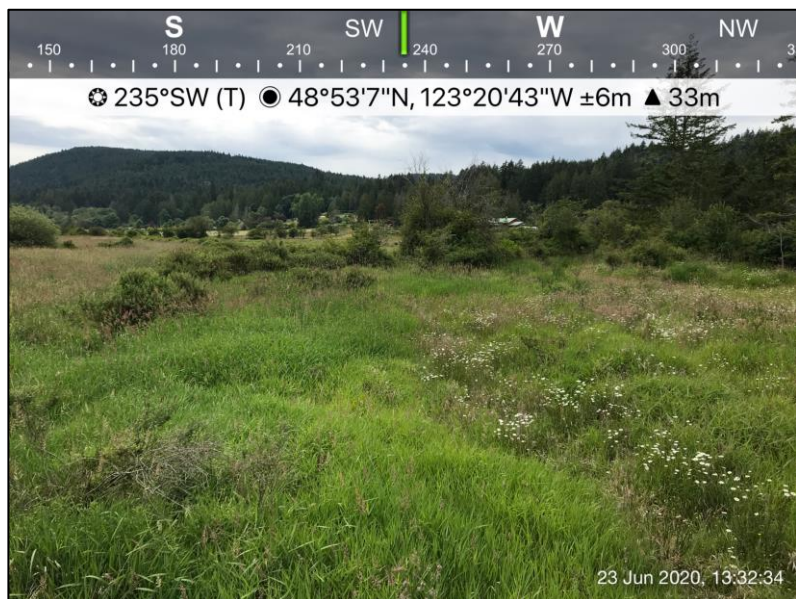


Photo 10 Meadow area west of the primary channel through the wetland area

3.1.4 Soil Surveys

Six (6) soil pits were dug to a depth of 50 cm within the DPA 1 boundary (Figure 6). In pits 1 – 4, clay dominated soil was reached between 20 – 40 cm. Pits 5 and 6 were dominated with sandy soils. The soils closer to the waters edge had more moisture than soils near the forest, however, none of the soils observed were indicative of subhydric or hydric soils. The organic layer was never more than 10 cm deep and was not peaty; no mottles or gleying were observed (Figure 7). The area east of the main channel is not within the Subject Property and was not visited.

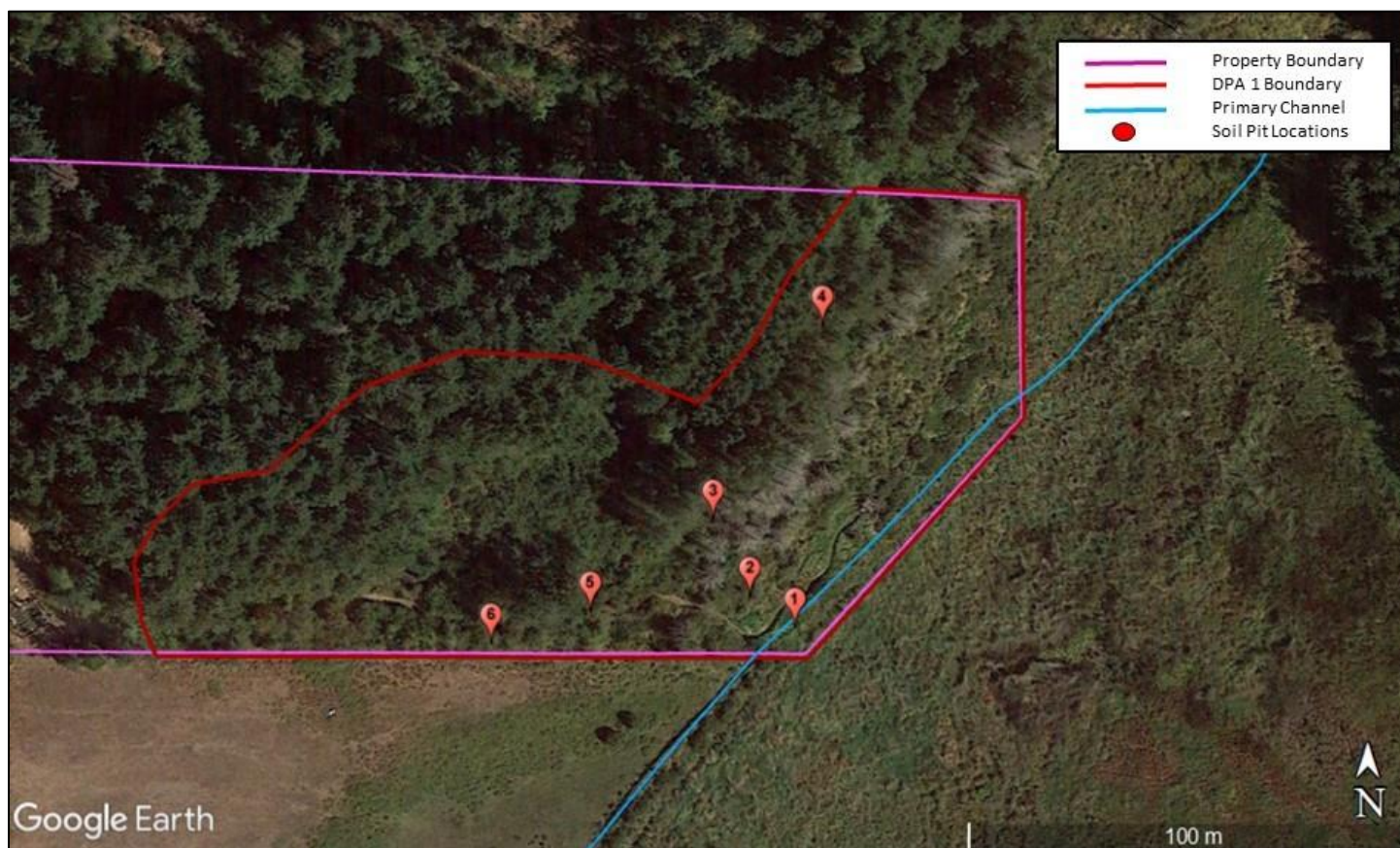


Figure 6 Locations of soil pits conducted August 13th 2020



Figure 7 Soil pits 1 (top left), pit 2 (top right), pit 5 (bottom left) and pit 6 (bottom right)

3.1.5 Determination of the Wetland Boundary

In Google Earth, the 30 m buffer for the DPA 1 was removed to better visualize the wetland boundary as defined in the DPA (Figure 8). Field assessments did not reveal any wetland characteristics in the southwest section of the DPA boundary (Figure 8). This area was covered in shrubs and trees and had no evidence of regular flooding; it had no hydrophytic vegetation or hydric soils. Based on field assessments of vegetation composition and soils, as well as historical imagery, the wetland west boundary is generally several metres out from the main channel top of bank (Figure 9).

The wetland is approximately 2.7 Ha in size and appears to have some open water areas east of the primary channel. In general, the wetland is heavily degraded and inundated with exotic plant species, primarily reed canarygrass. The wetland also appears to be drying over time; open water areas seen in earlier imagery appear smaller in later years and open areas appear to become more inundated with vegetation (Figure 10).



Figure 8 DPA determined wetland boundary (without the 30 m buffer applied) compared to field assessed wetland boundary. The southwest section of the DPA boundary had no wetland vegetation or soil characteristics, and should not be included as part of the wetland boundary (2015 imagery)

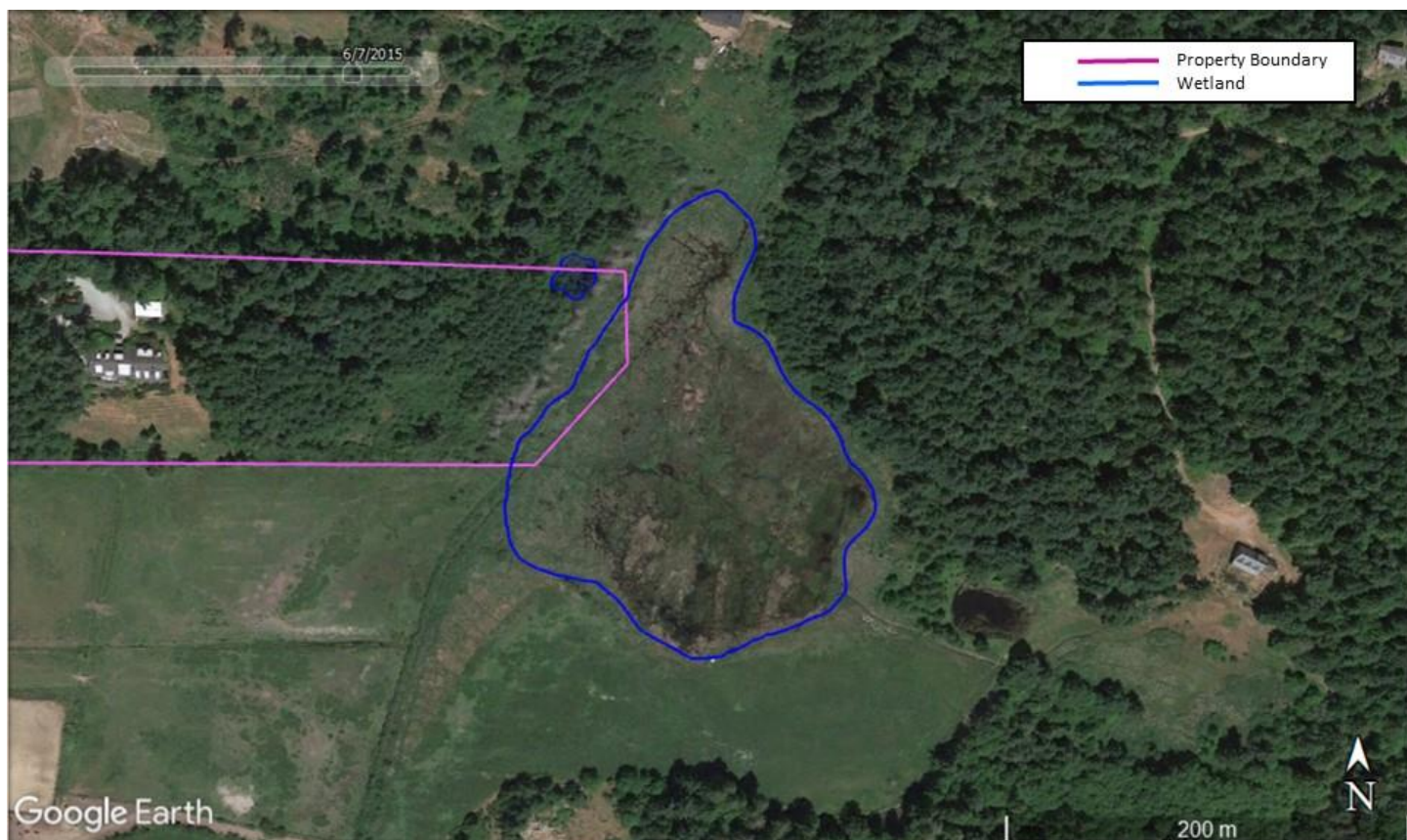


Figure 9 Wetland boundaries (main wetland and small wetland northwest of main) as determined from field assessments and historical Google Earth imagery



Figure 10 Changes to wetland between 2004 and 2016 as seen in Google Earth imagery

3.2 Impact Assessment

The Provincial RAPR standards are for a 15 m buffer around wetland areas; the Official Community Plan for Galiano Island stipulates a 30 m buffer. The area where works took place on the Subject Property are within the DPA 1, although much of this area has been determined to not be a wetland. Applying a 30 m buffer to the field assessed wetland, it was determined that most works occurred outside of the buffer. Only the ditch and the berm are within the field assessed wetland riparian area buffer (Figure 11).

When the landing area was first cleared, and the berm was created, there would have been exposed soil; it is possible that sediment entered the wetland riparian area, although no sediment accumulations were observed during field reconnaissance. Currently, the berm is completely vegetated and not posing a threat to the wetland from sediment release. Additionally, it is possible that the ditch may be altering localized drainage, although it appears to be conveying stormwater from upslope into the wetland.

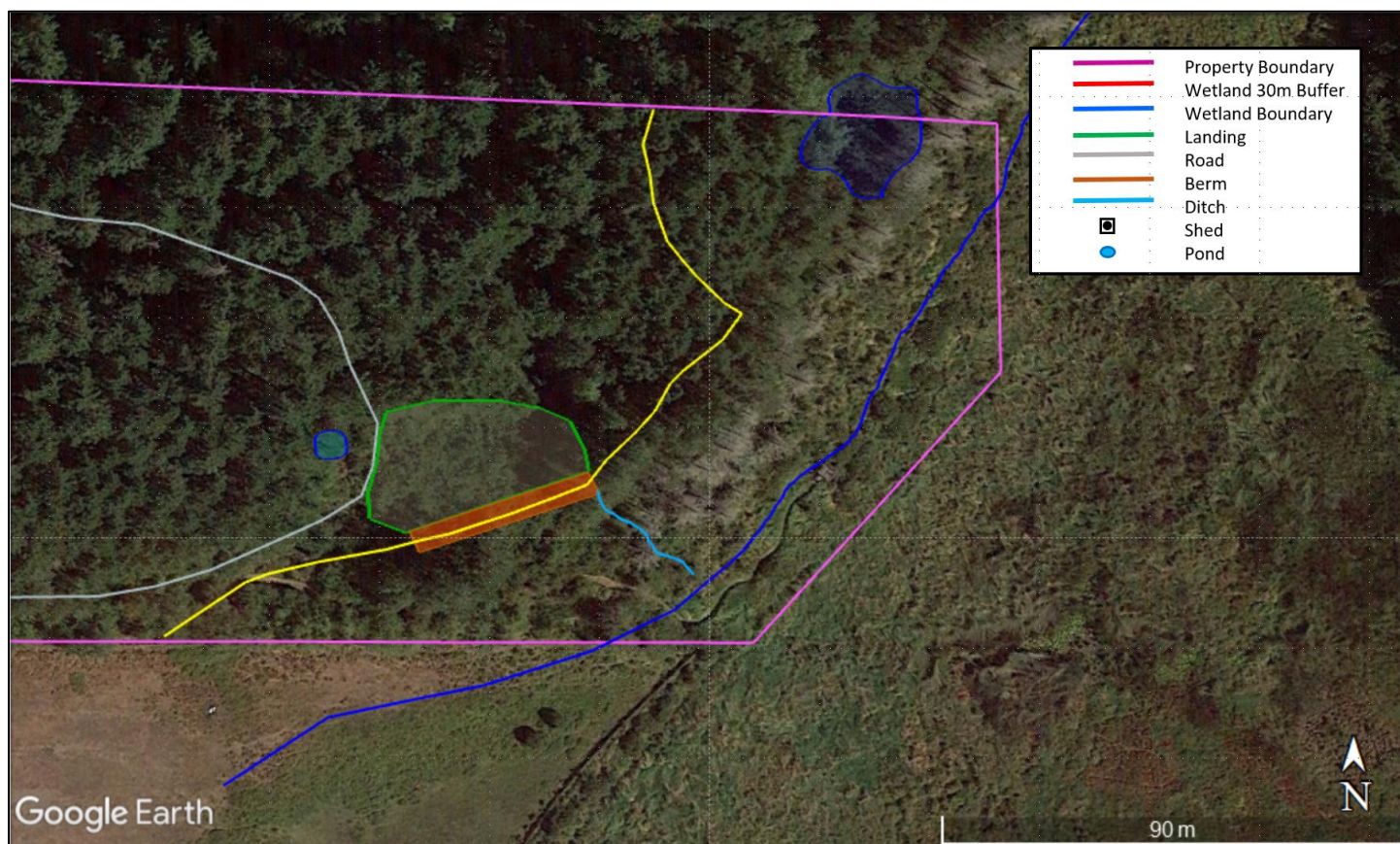


Figure 11 Field determined wetland edge and 30 m buffer in relation to works conducted on Subject Property

4 Sensitive Ecosystems Development Permit Area (DPA 5)

The DPA 5 area within the Subject Property is smaller than the DPA 3 because it does not have a buffer. The sensitive ecosystem identified on the Subject Property is classified as a wetland (Figure 12).

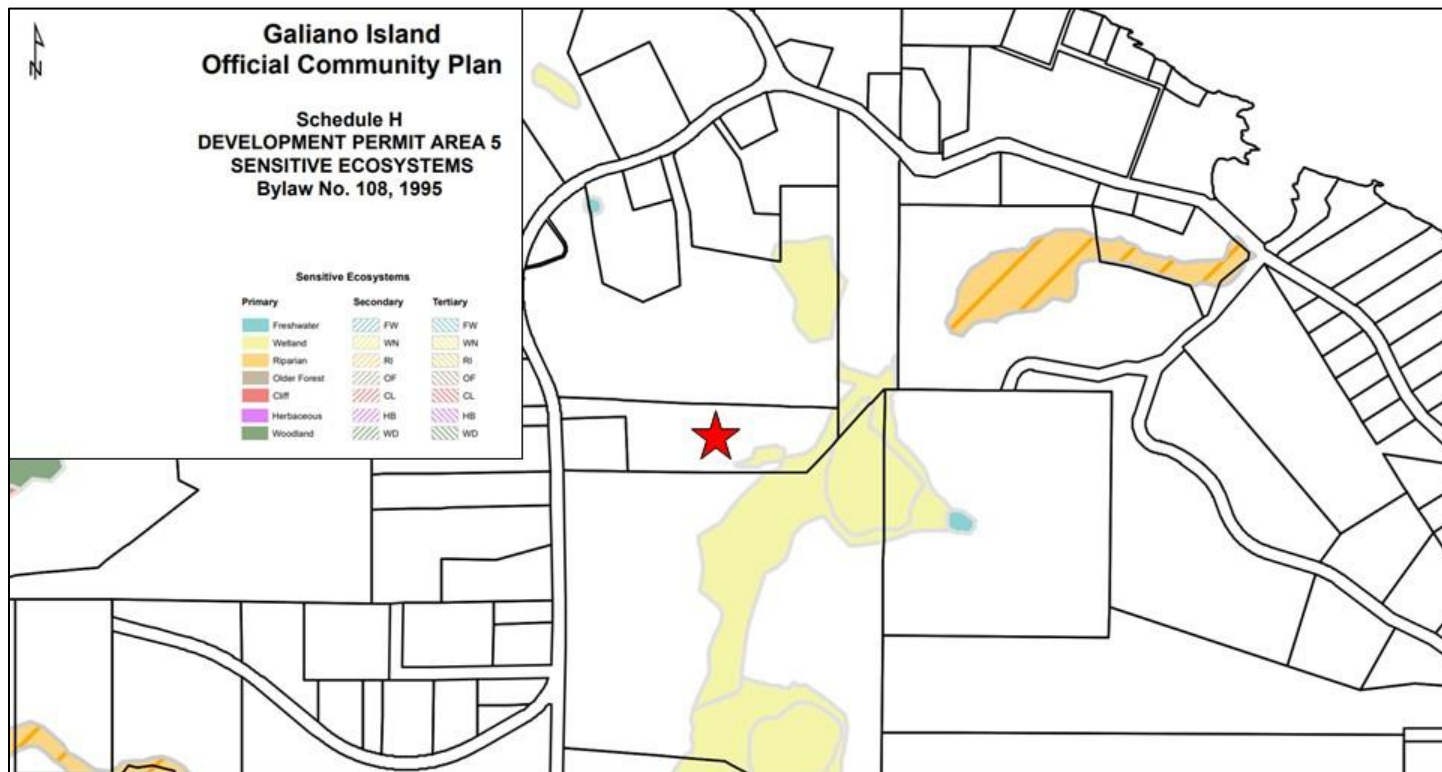


Figure 12 DPA 5 boundaries in relation to the Subject Property

4.1 Site Inventory

4.1.1 Database Review

Provincial spatial data (DataBC) were reviewed. Data queries included, but were not limited to:

- Biogeoclimatic zone and site series
- Incidental observations of at-risk species
- Sensitive Ecosystem Inventory (SEI) polygons
- Watercourses
- Critical habitat for federally-listed species at-risk polygons
- Masked and unmasked sensitive species

4.1.1.1 Incidental Occurrences of At-Risk Species or Raptor and Heron Nests

Spatial data for at-risk species, or raptor and heron nests were analysed to identify documented instances of species occurring within three (3) km of the proposed development area. Three kilometers was chosen because it demonstrates the possibility of a species being in the neighbouring region and therefore an increase in the

probability of occurrence within the Subject Property. Twelve (12) species at risk had incidental occurrences within 3 km of the Subject Property, but none within the property itself. There were no documented nests within 3 km of, or on, the Subject Property.

The likelihood for each species presence within the project footprint based on habitat quality/availability is summarized in Table 3. Potential for a species to occur is ranked as either Probable, Possible or Unlikely. Definitions for each ranking are provided below.

Probable: Habitat exists within the project footprint that is suitable for either foraging, breeding or dispersal for the species. The species is known to exist within the neighbouring region.

Possible: The species makes occasional use of the habitat type within the project footprint or there is quality habitat for the species adjacent to the project footprint. Data may be limited for this species.

Unlikely: Habitat used by the species does not exist within the project footprint and/or data is very limited for the species and/or the species is considered extirpated

Table 3 Species with documented incidental occurrences within 3 km of project footprint and their potential to occur within the DPA 5. SARA status consists of the SARA Schedule followed by the SARA Status code and may be followed by the date that the rank was last reviewed. E=Endangered, T=Threatened, SC=Special Concern.

Scientific Name	Common Name	BC	SARA	Potential to Occur Based on Habitat Quality
<i>Contia tenuis</i>	Sharp-tailed Snake	Red	1-E	Unlikely There is no unifying description of habitat; generally dry woodlands such as dry conifer forests, although also found in open Garry Oak forest. Found under woody debris and even in moist meadows.
<i>Crassula connata</i>	Erect Pigmyweed	Blue	-	Unlikely Limited data for species. Galiano specimen found in 1983 in thin soil on rocky outcrop in Bellhouse Prov. Park
<i>Syntrichia laevipila</i>	Twisted Oak Moss	Blue	1-SC	Unlikely Epiphyte on bark of Garry oak and big-leaf maple, which are not on the Subject Property
<i>Allium amplexans</i>	Slimleaf Onion	Blue	-	Unlikely Species is associated with Garry Oak woodland, sparsely vegetated rocks and bluffs. It may be found in meadows.
<i>Lindley's microseris</i>	Lindley's Microseris	Red	1-E	Unlikely Species occurs in habitats including sandstone cliffs, steep grassy slopes, and xeric, open deciduous or conifer forests on rocky slopes and cliffs.
<i>Corallorhiza maculata</i> <i>var. ozettensis</i>	Ozette Coralroot	Blue	-	Unlikely There is limited data for this species and an occurrence was recently discovered on Galiano Is. on south forested slopes in Bluffs Park. The species occur in needle floors of moist to dry conifer forests and is likely associated with mature Douglas-fir. The species may occur adjacent to the wetland but would not exist in the wetland or meadow areas of the Subject Property.
<i>Erynnis propertius</i>	Propertius Duskywing	Red	-	Unlikely Open oak or mixed woodlands with the oaks being the caterpillars host
<i>Callophrys mossii</i> <i>mossii</i>	Moss' Elfin, Mossii Subspecies	Blue	-	Unlikely This species is a Garry oak ecosystem species.

Scientific Name	Common Name	BC	SARA	Potential to Occur Based on Habitat Quality
<i>Contopus cooperi</i>	Olive-sided Flycatcher	Blue	1-T	Likely Breed in forest areas, especially moist forest with burned area and/or dead standing trees. Nests are usually in conifer trees in open woods or near small clearings and wetlands.
<i>Megascops kennicottii kennicottii</i>	Western Screech-owl, Kennicottii Subspecies	Blue	1-T	Possible Non-migratory and depend year-round on older trees with cavities for roosting and during the breeding season for nesting. May use the meadow/wetland area on property for foraging.
<i>Ardea herodias fannini</i>	Great Blue Heron, Fannini Subspecies	Blue	1-SC	Possible Species may use the wetland and meadow areas for foraging; the absence of fish in the stream may limit its use of this area. Limited nesting opportunity on the property.
<i>Rana aurora</i>	Northern red-legged frog	Blue	-	Likely Extensive use of stream and riparian areas. May move hundreds to thousands of metres between overwintering areas, summer foraging and breeding sites. Frogs will use a variety of forest types outside of breeding season

4.1.1.2 Critical Habitat and At-Risk Ecological Communities

Spatial data for at-risk species were analysed to identify Critical Habitats or at-risk ecological communities occurring within three (3) km of the proposed development area. Critical Habitat for the federally-listed lichen species, Batwing Vinyl, was identified within the search radius. As well, one provincially red-listed ecological community, Douglas-fir / dull Oregon-grape, was identified (Table 4).

Table 4 Critical habitat zones and at-risk ecological communities within 3 km of project footprint

Common Name	Scientific Name	Distance from project footprint (km)	Total Polygon Area (Ha)
Batwing Vinyl	<i>Leptogium platynum</i>	3.0	1.1199
Douglas-fir / dull Oregon-grape	<i>Pseudotsuga menziesii</i> / <i>Berberis nervosa</i>	0.17	2364.12

Douglas-fir / dull Oregon-grape Ecological Community

This red listed ecosystem is extensive throughout Galiano Island, although it is not mapped within the Subject Property. This ecological community is found on mesic and slightly drier than mesic, sites up to 380 m elevation (de Groo *et al.* 2012). Mature and old forests contain moderately open to closed stands typically dominated by Douglas-fir (*Pseudotsuga menziesii*), with one or both of grand fir (*Abies grandis*) and western redcedar (*Thuja plicata*) in the tree canopy. The moderate to dense shrub layer is dominated by (dull Oregon-grape (*Mahonia nervosa*), salal (*Gaultheria shallon*) and ocean spray (*Holodiscus discolor*). The herb layer is generally sparse and usually contains low cover of trailing blackberry (*Rubus ursinus*), broad-leaved starflower (*Trientalis borealis* spp. *latifolia*), sword fern *Polystichum munitum*), vanilla leaf (*Achlys tryphylla*) and bracken fern (*Pteridium aquilinum*).

Batwing Vinyl Lichen

Batwing vinyl is a yellow listed lichen within BC but is listed federally. There is Critical Habitat, as well as incidental observations, for batwing vinyl lichen within 3 km of the project footprint. Generally, there is limited information for this species, but it is usually found over mossy rock in open coastal (especially CDF zone) forests. On Galiano Island it was observed on Sutil Mountain in a partially shaded seep, growing on mosses, at the base of a cliff.

4.1.1.3 Fish Bearing Water Courses

There are no recorded fish observations within the wetland, or its connecting stream as discussed above in Section 3.1.1.

4.1.2 Field Inventory

To assess environmental considerations, and to ground-truth the findings from digital/spatial databases, a field assessment was undertaken that focused on the identification of environmentally sensitive areas, species at-risk and their associated habitats, and fisheries considerations (discussed in the DPA 1 section).

4.1.2.1 Existing Plant Communities

Vegetation within DPA 5 was assessed to verify composition, dominant vegetation, and to identify habitat quality for, or presence of, at-risk species. No at-risk plant species were observed during the reconnaissance and habitat quality is low to moderate within the surveyed area. The site has a history of anthropogenic disturbance and remains a disturbed site with many exotic and invasive plant species present (Photo 10). The wetland area to the east is largely inundated with reed canarygrass and appears to be filling in with vegetation. A stream flows into the wetland area and creates the wetlands west boundary (Photo11). The wetted channel is bordered with hardhack, bull rush and reed canarygrass. A forested area with shrubs and immature Douglas-fir borders the grass meadow and wetland area (Photo 12). Upland of DPA 5 the forest contains older trees and tree diameter increases; instances of western redcedar also increase. Table 5 lists the primary plant species observed within the project footprint. No rare or at-risk plant species were observed during the field reconnaissance.



Photo 10: Meadow area adjacent to wetland.



Photo 11: Primary channel through wetland that runs along the west boundary.



Photo 11: Immature trees bordering the meadow area within DPA 5.

Table 5 Dominant vegetation species occurring within the Subject Property, identified during field reconnaissance. BC listed species are identified as R=red, B=blue, Y=yellow, Ex=exotic.

Species		Details		
Scientific Name	Common Name	Type	Invasive	BC List
<i>Agrostis spp.</i>	Bentgrass spp.	Herb	-	-
<i>Alnus rubra</i>	Red alder	Tree	N	Y
<i>Carex spp.</i>	Sedge spp.	Herb	-	-
<i>Cirsium spp.</i>	Thistle spp.	Herb	-	-
<i>Crataegus monogyna</i>	Common hawthorne	Shrub	Y	Ex

Species		Details		
Scientific Name	Common Name	Type	Invasive	BC List
<i>Cytisus scoparius</i>	Scotch broom	Shrub	Y	Ex
<i>Gallium triflorum</i>	Sweet scented bedstraw	Herb	N	Y
<i>Ilex aquifolium</i>	English holly	Herb	Y	Ex
<i>Juncus effusus</i>	Common rush	Herb	N	Y
<i>Leucanthemum vulgare</i>	Oxeye daisy	Herb	Y	Ex
<i>Lotus corniculatus</i>	bird's-foot trefoil	Herb	N	Ex
<i>Phalaris arundinacea</i> var. <i>arundinacea</i>	Reed canarygrass	Herb	Y	Ex
<i>Prunus emarginata</i>	Bitter cherry	Shrub	N	Y
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	Douglas-fir.	Tree	N	Y
<i>Ranunculus repens</i>	Creeping buttercup	Herb	N	Y
<i>Rosa nutkana</i> ssp. <i>nutkana</i>	Nootka rose	Shrub	N	Y
<i>Rubus armeniacus</i>	Himalayan blackberry	Shrub	Y	Ex
<i>Rubus spectabilis</i>	Salmonberry	Shrub	N	Y
<i>Rubus ursinus</i>	Trailing blackberry	Shrub	N	Y
<i>Schoenoplectus tabernaemontani</i>	Bulrush	Herb	N	Y
<i>Spiraea douglasii</i>	Hardhack	Shrub	N	Y
<i>Thuja plicata</i>	Western red cedar	Tree	N	Y
<i>Trifolium repens</i>	Red clover	Herb	N	Ex
<i>Typha</i> sp.	Cattail spp.	Herb	N	Y
<i>Urtica dioica</i>	Stinging nettle	Herb	N	Y/Ex
<i>Vicia</i> spp.	Vetch spp.	Herb	-	-

4.1.2.2 Aquatic and Terrestrial Habitats

General aquatic and terrestrial habitats were assessed during field reconnaissance. While assessing the vegetation and habitat potential within the Subject Property, observations (visual, aural, or sign) of migrant and resident wildlife utilizing habitat within the proposed project footprint were noted.

Indications that animals travel through, and utilize habitat within, the project footprint were apparent. Pathways were observed in the grasses and through the hardhack to the wetted channel. Areas of high browse were identified throughout the area. No dens or large tunnels were observed. Large cavities were not noted in any trees on the property; however, small cavities from pileated woodpecker were observed (although outside of DPA 5). As well, there are trees with potential for cavities in the mature forests surrounding the property. Some evidence of beaver activity was noted within the wetland area.

The wetland area has low to moderate quality habitat for amphibian species and could offer fish habitat if accessibility was not a factor. There is opportunity for amphibians to utilize the wetland and its main channel for overwintering or breeding. The moist and maturing forest above the wetland could offer overwintering for Northern red-legged frog (discussed more below). Riparian habitat within DPA 5 is low to moderate quality due to expansive reed canarygrass in the wetland and surrounding area; although the hardhack and bulrush offer

some diversity and habitat potential. The forest edge is approximately 25 m away from the wetlands northwest boundary and likely contributes minimal LWD or insect inputs to the system.

Aside from the meadows and wetland area, the Subject Property is bordered by a mature, contiguous forested area. It is assumed that many species such as larger mammals (e.g. deer), pass through and utilize the surrounding forest for cover and food. The meadow and forest area are certainly utilized as a home range for smaller mammals (e.g. rodents) and the wetland and meadows offer foraging opportunity for a variety of species, including raptors and coyotes.

4.1.2.3 Breeding Birds and Nesting Trees

Habitat for breeding birds exists throughout the Subject Property, although no evidence of previous nesting was observed. There are many opportunities for shrub nesters in hardhack and various other shrubs in the wetland and meadow. Open water areas were not observed outside of the main channel, (which was largely covered by overhanging hardhack), and the wetland does not appear to offer quality habitat for waterfowl, although it may offer moderate quality habitat for some wetland associated songbirds. There are opportunities for tree, or small cavity, nesters in the adjacent forest. The large wetland and meadow area surrounded by mature forest are strong indicators that raptor species likely utilize the area for foraging opportunity. No raptors were observed during the field reconnaissance.

4.1.2.4 Species at-risk, Rare Species and Environmentally Sensitive Areas

No at-risk, or rare, wildlife or plant species were observed during the reconnaissance. Using the Provincial spatial data, olive-sided fly catcher, western screech owl, great blue heron and, northern red-legged frog have incidental observations within a three (3) km radius of the Subject Property and habitat within DPA 5 is suitable for either breeding or foraging opportunity for the species. Habitat quality for at-risk species with nearby occurrences were assessed and are described below.

Northern Red-legged Frog

There have been several recorded observations on Galiano Island, including egg masses, tadpole and frog observations. Habitat for this species is generally close to riparian areas, but they are known to utilize all forest types. Northern red-legged frogs breed in shallow, temporary and permanent pools, and wetlands. Reproduction occurs in early spring. Eggs are attached to submerged stems and hatch within 1 to 1.5 months; the larval period is 2.5 to 3.5 months.

The primary channel through the wetland on the Subject Property is likely too deep for breeding. However, east of the channel within the wetland complex, moderate to high breeding opportunity may exist for the species where water is shallow and emergent and submerged vegetation exist adjacent to mature forest. Moist forest habitat, with seeps, leaf litter and some downed wood are present on the Subject Property and offer opportunity for migrating and overwintering adults.

Olive-sided Flycatcher

The species breed in forest areas, especially moist forests with burned area and/or dead standing trees and nests are usually in conifer trees near small clearings or wetlands. Dead standing trees were not observed along

the wetland periphery within DPA, but it is assumed there is nesting opportunity adjacent to the wetland nearby. Nesting flycatchers in the area would likely utilize habitat within the Subject Property for foraging opportunity.

Western Screech owl

The last observation of western screech owl on Galiano island was in 1993 (Habitat Wizard). If the population is extant on the island, it is possible that habitat within the Subject Property could offer foraging opportunity. Screech owls require older trees with cavities for roosting and during the breeding season for nesting; these were not observed on the property but likely exist in adjacent forests. The proximity of mature forest to wetland/meadow area suggests that areas within the DPA could be utilized.

Great Blue Heron

Great blue heron frequently forages in small, shallow streams and wetland areas. However, their primary food source is fish, unless supply is limited. The wetland on the Subject Property has minimal open water and is largely covered by shrub and grasses, as well there are no recorded instances of fish within the watercourse. It is unlikely that heron utilize the wetland area, given its proximity to habitat with better foraging opportunity.

Batwing Vinyl

Critical habitat for the federally listed Batwing Vinyl lichen exists approximately three (3) km away from the Subject Property. Habitat quality for the species within DPA 5 on the property, and immediately adjacent areas, was assessed in the field. The species is typically associated with seeps, mosses and cliff areas. Mossy rock areas do not exist within the wetland area (DPA 5) on the Subject Property, and the species is unlikely to occur here.

Douglas-fir / dull Oregon-grape

The provincially red-listed ecological community Douglas-fir / dull Oregon-grape is extensive throughout Galiano Island, although it is not mapped within the Subject Property, it is mapped within several hundred metres of the property. This ecological community is found on mesic and slightly drier than mesic sites and is considered mature forest with moderately open to closed stands typically dominated by Douglas-fir. The DPA boundary on the Subject Property contains forest edge that is largely closed stand, immature Douglas-fir. Adjacent and above this the forest is not mapped as Douglas-fir/dull Oregon-grape community, but it does contain features of this community such as western redcedar, salal, ocean spray, trailing blackberry and bracken fern. The forest on the Subject Property appeared to be a moist forest with many areas having plant species indicative of seasonal wetting (e.g. skunk cabbage). However, this upper forest was outside of the primary survey area.

4.1.2.5 Slope Stability and Erosional Processes

The Subject Property has minimal slope; it gains 7 m in height over 128 m distance (averaging 5.5% gradient). There were no indications of slope instability throughout the survey area. The area is moist with seasonally running and/or standing water through the forest above the wetland riparian area. Tree removal or other works in the above forest could increase the natural sediment load and runoff into the wetland area. The forest floor is generally well vegetated with herbaceous and shrub cover and natural erosion appeared to be minimal beyond the natural water flow channels. The meadow bordering the wetland area is flat and inundated with reed canarygrass, which would buffer sediment from entering the watercourse.

4.1.2.6 Hydrology and Topography

The property is low gradient above the DPA 5 and flat within the wetland and adjacent meadow area. The slope has a south/southeast aspect and drainage appears to be poor to moderate. The forest area above has low areas where drainage is poor and there is evidence of seasonal wetting. Channels from run-off were also evident in the above forest, with water flowing downhill towards the wetland area. The lower immature forest and meadow area showed evidence of being drier than the above forested area.

The meadow bordering the wetland boundary (wetland riparian area) was dry; muddy sections or soft ground were not noted anywhere within this area during field reconnaissance. It is likely that this area is flooded only during very high precipitation and flooding events. The wetland boundary within the Subject Property is marked by the main channel from which an unnamed stream enters and exits the wetland. The bank top was easily distinguishable on this side; however, the southeast side of the channel was less defined and appeared to remain wetted and/or show signs of regular wetting towards the main wetland complex.

4.2 Impact Assessment

The area within DPA 5 can offer foraging opportunity for several at-risk animal species, as discussed above, and may be part of a corridor for migrating or foraging animals (e.g. olive-sided flycatcher, northern red-legged frog). Breeding habitat is limited within the area due to the degraded nature of the wetland and lack of mature or large dead trees within the wetland riparian area. It is unlikely that the unpermitted works on the Subject Property had, or will have, any direct negative effects on rare or at-risk species. The constructed berm offers covered habitat and is not a barrier for movement or access. Indirectly, felled trees are no longer potential future nesting or perching trees. Additionally, while the area cleared for the landing was not high-quality overwintering habitat (mostly hawthorn), based on historical air-photos, the alterations may reduce the migration options for amphibians.

It does not appear that any works on the Subject Property have altered the hydrology of the area. It is possible that to some extent the berm may prevent water flowing downhill to reach the wetland area, although this is likely countered by the ditch conveying water towards the wetland. The pond may also act as a sink, collecting water that may otherwise have continued to the wetland, although this is assumed to be minimal. The upland forest is generally wetter than the lower forest and wetland riparian area, and it has many depressions where water collects.

5 Tree Cutting and Removal Development Permit Area (DPA 3)

5.1 Site Inventory

Approximately 150 trees of varying age, size and species were felled and cleared on the property (Figure 13). The majority of these trees, 90%, were the result of windfall that occurred from a storm on December 22, 2018 (Photo 12 and 13). The trees were blown down in clusters with multiple hung-up in adjacent trees (widow makers) that were deemed hazard trees and needed to be removed for safety of property guests and staff.

Most of the trees removed were young Douglas-fir with an average DBH estimated to be between 20 – 25 cm and between seven to eight metres tall. Photo # 14 shows the trees adjacent to the landing area, indicating species and size of trees removed in the surrounding area. Most vegetation removed to clear the landing area were black hawthorn. In the forest north and northwest of the landing, cleared trees were likely larger, and most were windfall and subsequently cleared. It is estimated that the cubic metre volume of trees felled was between 11 and 25 m³.



Figure 13 Area where approximately 150 trees were either felled or were windfall and subsequently cleared

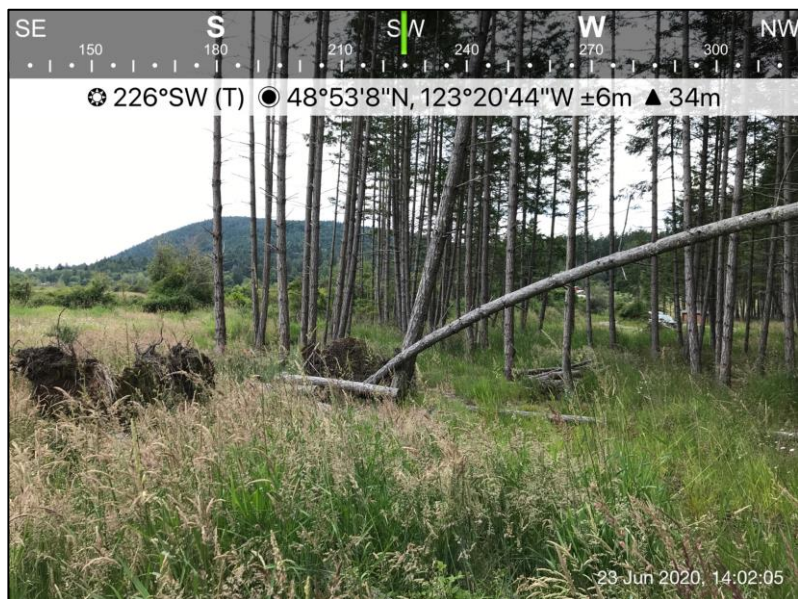


Photo 12: Uprooted trees from a storm adjacent to the meadow.



Photo 13: Uprooted trees from windfall along side bucked up stems

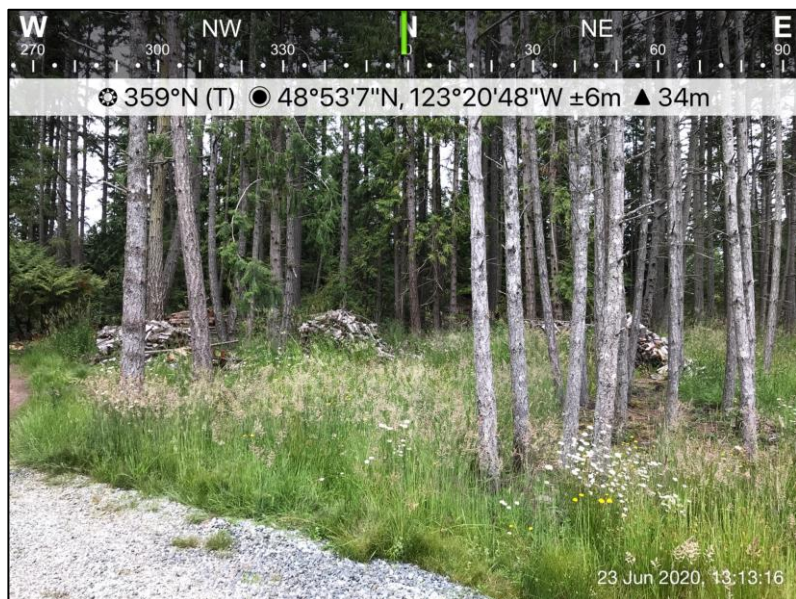


Photo 13: Smaller trees in the lower forested area with bucked up rounds stacked in the cleared forest

5.2 Impact Assessment

As discussed in Section 4.1.2.5 and 4.1.2.6, slope stability is not a concern on the property. The land has a low gradient in the forested area and flat in the lower area where the landing was cleared. Erosional processes do not appear to have been affected from tree removal, as the forest understory is well vegetated. However, the landing area has increased potential for overland flow due an increase in compacted soils from vehicle use and lack of vegetation. Additionally, the cleared lower areas have lost shrub cover and woody debris, decreasing structural diversity as a result.

6 Measures and Restoration

Based on the field assessment, the majority of works took place beyond the field assessed wetland 30 m buffer area. While it appears that there are little to no negative effects on the wetland area, the works were conducted without the required permits or assessments, and the Property Owner is seeking to make compensation. To maintain the health, form and function of the wetland area the following measures and restoration works will be completed; a map of the restoration plan is in Figure 14. General construction measures for working in stream and riparian areas are provided in Appendix 1.

In total, 100 native trees and shrubs will be planted on the Subject Property.

The road, shed and pond are outside the wetland riparian area and it is not anticipated that they will have a negative effect on the health, form or function of the wetland. The road may impede drainage from the above forest and small 6" PVC pipes will be installed where appropriate to facilitate natural drainage patterns. The location, if any, for these will be determined by a Qualified Environmental Professional (QEP).

The berm will be dismantled and the soil from it placed back into the clearing and graded to conform to the area's natural gradient (down sloping towards wetland). Works should be conducted during dry weather with a sediment fence installed along the southern boundary of the berm. Although there is a minimal slope, the fence will ensure that there is no sediment release while the disturbed area establishes a vegetative cover. Soil from the berm will be pulled slowly from the berm north, into the landing. All invasive species growing on the berm will be disposed of off-site at the proper facilities.

The ditch is likely conveying water into the wetland area and not having a negative effect on the area's hydrology. However, it is within the riparian area and will be restored to its natural state. All exotic species will carefully be removed from the ditch and disposed of at an approved facility off property. The ditch will be filled with clean fill, soil from the berm is appropriate. The reclaimed area will be seeded with a certified weed-free, native coastal restoration grass mixture.

The landing area will be seeded with a certified weed-free, native coastal restoration grass mixture and planted with a combination of trees and shrubs. This area is outside of the riparian area and more suited to species observed in the adjacent area such as Douglas-fir, western red-cedar, ocean spray, salal, and bitter cherry. A split rail fence will be built between the road and the landing area to prevent vehicles, including recreational ATV's, from entering the landing or the wetland riparian area.

Areas outside the landing where trees and understorey were removed, will be replanted with trees and shrubs. Woody debris will be restored where appropriate. In the wetland riparian area, riparian planting will include species such as pacific willow (*Salix lucida* ssp. *Lasiandra*), bitter cherry (*Prunus emarginata*), red-osier dogwood (*Cornus stolonifera*), hardhack (*Spiraea douglasii*), and Nootka rose (*Rosa nutkana*).

All planting will be conducted in a manner consistent with the Provincial Riparian Restoration Guidelines (BC MOE 2008), which outlines the following requirements:

- All riparian plantings should be based on 1 tree or shrub per 1 square metre density.
- All tree/shrub species should be of guaranteed nursery stock.
- The botanical name should be used when ordering stock to ensure that the desired native species is being purchased. Each specimen should be tagged with the botanical name and the tag should be left attached after planting.
- Stock planted during the fall (September to October) and spring (March to April) has the greatest likelihood of surviving. Regular watering may be required until the plants are established. Additional advice on proper planting procedures should be obtained from the nursery supplying the stock.
- Planting on a given area being enhanced must be successful to an 80% take. If more than 20% die over one year, replanting is required.
- To the extent feasible, large woody debris should be retained and relocated into the disturbed area to provide structural habitat for small wildlife and amphibians.

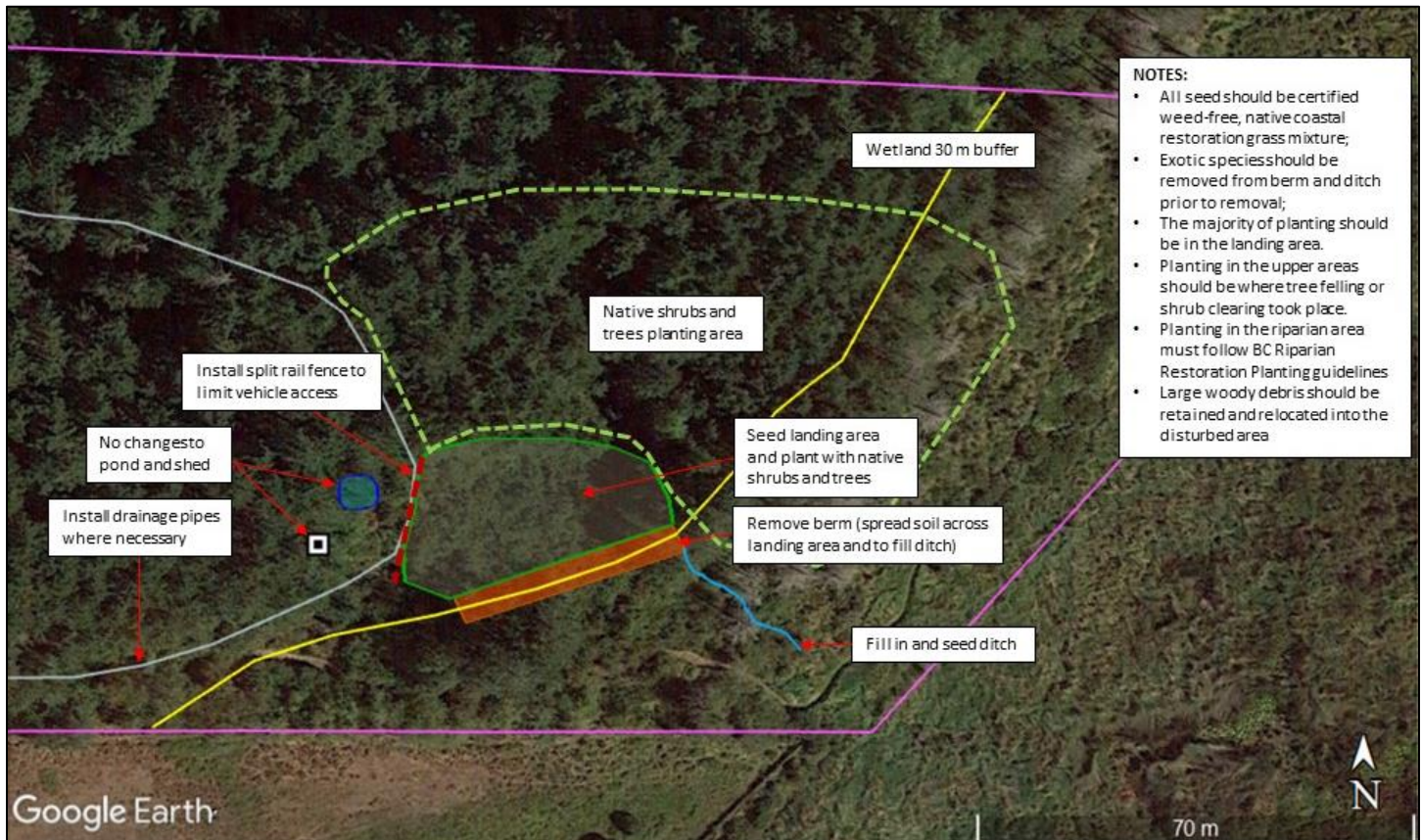


Figure 14 Map of restoration plan for Subject Property as compensation for works completed in DPA's 1, 3 and 5

7 Monitoring

Restoration works will be conducted with the advice of a QEP. A QEP will be on-site during start-up and during any sensitive activities. The QEP has the authority to modify and/or halt any construction activity if deemed necessary for the protection of fish and wildlife populations or their habitats. The QEP shall:

- Oversee adherence to regulatory conditions.
- Have all relevant documents on-site during the construction.
- Hold tailboard meetings to review construction progress, days schedule environmental issues and required BMP's.
- Monitor issues related to contaminants, refuse disposal, wildlife interactions etc.
- Assist with spill response if and as required.
- Prepare a post-construction monitoring report for submission to the regulatory agencies, as required, summarizing details of the restoration sequence, photographs of restoration sequence and contingency measures implemented if/when mitigation measures did not function as prescribed.

7.1 Effectiveness Monitoring

Effectiveness monitoring by a QEP of the implemented restoration measures will focus on several variables, including:

- Assessment of site hydrology
- Inspection of riparian planting success
- Photo documentation of the installed measures

The goals of the monitoring program will be to ensure:

- Wetland hydrology is not affected from upslope development on Subject Property
- Achievement of 80% survival for riparian plantings

7.1.1 Riparian Planting Survival

Replacement planting will be monitored to ensure successful establishment. Plants will be monitored to assess survival rates, with the overall goal of maintaining an 80% survival rate.

A yearly summary report will be prepared in December of each monitoring year to document the results of the effectiveness monitoring and to provide recommendations for adaptive management, if warranted. Table 6 outlines the proposed monitoring timeline, subject to change and revision based on the sequence of instream activities and completion of offsetting measures. Where deficiencies are observed, measures to adjust and repair the deficiency through redesign or repair will be undertaken to ensure the long-term viability of the restoration.

Table 6. Proposed effectiveness monitoring timeline

Proposed Effectiveness Monitoring Timelines	
Spring Year 0	Initial assessment of site hydrology and confirmation of restoration activities, including planting.
Autumn Year 1	Riparian planting assessment.
Autumn Year 2	Riparian planting assessment.

Appendix A

MEASURES TO AVOID CAUSING HARM TO FISH AND FISH HABITAT

Measures

Project Planning

Timing

Time work in water to respect [timing windows](#) to protect fish and amphibians, including their eggs, juveniles, spawning or overwintering adults and/or the organisms upon which they feed.

Minimize duration of in-water work.

Conduct instream work during periods of low flow, or at low tide, to further reduce the risk to fish and their habitat or to allow work in water to be isolated from flows.

Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.

Site Selection

- Design and plan activities and works in waterbody such that loss or disturbance to aquatic habitat is minimized and sensitive spawning habitats are avoided.
- Design and construct approaches to the waterbody such that they are perpendicular to the watercourse to minimize loss or disturbance to riparian vegetation.
- Avoid building structures on meander bends, braided streams, alluvial fans, active floodplains or any other area that is inherently unstable and may result in erosion and scouring of the stream bed or the built structures.
- Undertake all instream activities in isolation of open or flowing water to maintain the natural flow of water downstream and avoid introducing sediment into the watercourse.

Contaminant and Spill Management

- Plan activities near water such that materials such as paint, primers, blasting abrasives, rust solvents, degreasers, grout, or other chemicals do not enter the watercourse.
- Develop a response plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance and keep an emergency spill kit on site.
- Ensure that building material used in a watercourse has been handled and treated in a manner to prevent the release or leaching of substances into the water that may be deleterious to fish.

Erosion and Sediment Control

- Develop and implement an Erosion and Sediment Control Plan for the site that minimizes risk of sedimentation of the waterbody during all phases of the project. Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the waterbody or settling basin and runoff water is clear. The plan should, where applicable, include:
 - Installation of effective erosion and sediment control measures before starting work to prevent sediment from entering the water body.
 - Measures for managing water flowing onto the site, as well as water being pumped/diverted from the site such that sediment is filtered out prior to the water entering a waterbody. For example, pumping/diversion of water to a vegetated area, construction of a settling basin or other filtration system.

- Site isolation measures (e.g., silt boom or silt curtain) for containing suspended sediment where in-water work is required (e.g., dredging, underwater cable installation).
- Measures for containing and stabilizing waste material (e.g., dredging spoils, construction waste and materials, commercial logging waste, uprooted or cut aquatic plants, accumulated debris) above the high-water mark of nearby waterbodies to prevent re-entry.
- Regular inspection and maintenance of erosion and sediment control measures and structures during the course of construction.
- Repairs to erosion and sediment control measures and structures if damage occurs.
- Removal of non-biodegradable erosion and sediment control materials once site is stabilized.

Shoreline Re-vegetation and Stabilization

- Clearing of riparian vegetation should be kept to a minimum: use existing trails, roads or cut lines wherever possible to avoid disturbance to the riparian vegetation and prevent soil compaction. When practicable, prune or top the vegetation instead of grubbing/uprooting.
- Minimize the removal of natural woody debris, rocks, sand or other materials from the banks, the shoreline or the bed of the waterbody below the ordinary high water mark. If material is removed from the waterbody, set it aside and return it to the original location once construction activities are completed.
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.
- Restore bed and banks of the waterbody to their original contour and gradient; if the original gradient cannot be restored due to instability, a stable gradient that does not obstruct fish passage should be restored.
- If replacement rock reinforcement/armouring is required to stabilize eroding or exposed areas, then ensure that appropriately-sized, clean rock is used; and that rock is installed at a similar slope to maintain a uniform bank/shoreline and natural stream/shoreline alignment.
- Remove all construction materials from site upon project completion.

Fish Protection

- Ensure that all in-water activities, or associated in-water structures, do not interfere with fish passage, constrict the channel width, or reduce flows.
- Retain a qualified environmental professional to ensure applicable permits for relocating fish are obtained and to capture any fish trapped within an isolated/enclosed area at the work site and safely relocate them to an appropriate location in the same waters. Fish may need to be relocated again, should flooding occur on the site.
- Screen any water intakes or outlet pipes to prevent entrainment or impingement of fish. Entrainment occurs when a fish is drawn into a water intake and cannot escape. Impingement occurs when an entrapped fish is held in contact with the intake screen and is unable to free itself.
 - In freshwater, follow these measures for design and installation of intake end of pipe fish screens to protect fish where water is extracted from fish-bearing waters:
 - Screens should be located in areas and depths of water with low concentrations of fish throughout the year.
 - Screens should be located away from natural or artificial structures that may attract fish that are migrating, spawning, or in rearing habitat.

- The screen face should be oriented in the same direction as the flow.
- Ensure openings in the guides and seals are less than the opening criteria to make “fish tight”.
- Screens should be located a minimum of 300 mm (12 in.) above the bottom of the watercourse to prevent entrainment of sediment and aquatic organisms associated with the bottom area.
- Structural support should be provided to the screen panels to prevent sagging and collapse of the screen.
- Large cylindrical and box-type screens should have a manifold installed in them to ensure even water velocity distribution across the screen surface. The ends of the structure should be made out of solid materials and the end of the manifold capped.
- Heavier cages or trash racks can be fabricated out of bar or grating to protect the finer fish screen, especially where there is debris loading (woody material, leaves, algae mats, etc.). A 150 mm (6 in.) spacing between bars is typical.
- Provision should be made for the removal, inspection, and cleaning of screens.
- Ensure regular maintenance and repair of cleaning apparatus, seals, and screens is carried out to prevent debris-fouling and impingement of fish.
- Pumps should be shut down when fish screens are removed for inspection and cleaning.

Operation of Machinery

- Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks, invasive species and noxious weeds.
- Whenever possible, operate machinery on land above the high-water mark, on ice, or from a floating barge in a manner that minimizes disturbance to the banks and bed of the waterbody.
- Limit machinery fording of the watercourse to a one-time event (i.e., over and back), and only if no alternative crossing method is available. If repeated crossings of the watercourse are required, construct a temporary crossing structure.
- Use temporary crossing structures or other practices to cross streams or waterbodies with steep and highly erodible (e.g., dominated by organic materials and silts) banks and beds. For fording equipment without a temporary crossing structure, use stream bank and bed protection methods (e.g., swamp mats, pads) if minor rutting is likely to occur during fording.
- Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water.

2. Results of Detailed Riparian Assessment

Refer to Section 3 of Technical Manual

Date: May 27, 2021

Description of Water bodies involved (number, type)

Main wetland and north wetland

Stream	
Wetland	2
Lake	
Ditch	

Number of reaches	
Reach #	

Channel width and slope and Channel Type (use only if water body is a stream or a ditch, and only provide widths if a ditch)

Channel Width(m)		Gradient (%)	
starting point		I, Geoff Smart <i>(name of qualified environmental professional)</i> , hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer <i>(name of developer)</i> ; c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.	
upstream			
downstream			
Total: minus high /low mean			
	R/P	C/P	S/P
Channel Type			

Site Potential Vegetation Type (SPVT)

	Yes	No		
SPVT Polygons		X	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes I, <i>(name of qualified environmental professional)</i> , hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer <i>(name of developer)</i> ; c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.	
Polygon No:			Method employed if other than TR	
SPVT Type	LC	SH		TR
			X	
Polygon No:				Method employed if other than TR
SPVT Type	LC	SH	TR	
Polygon No:				Method employed if other than TR
SPVT Type				

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	Main Wetland	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons					
LWD, Bank and Channel Stability ZOS (m)	15						
Litter fall and insect drop ZOS (m)	15						
Shade ZOS (m) max	30						
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)						
Ditch Fish Bearing	Yes		No		If non-fish bearing insert no fish bearing status report		
SPEA maximum		15	(For ditch use table3-7)				

Segment No:	North Wetland	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons					
LWD, Bank and Channel Stability ZOS (m)	15						
Litter fall and insect drop ZOS (m)	15						
Shade ZOS (m) max	30						
SPEA maximum		30	(For ditch use table3-7)				

Segment No:		If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons					
LWD, Bank and Channel Stability ZOS (m)							
Litter fall and insect drop ZOS (m)							
Shade ZOS (m) max							
SPEA maximum			(For ditch use table3-7)				

I, Geoff Smart (*name of qualified environmental professional*), hereby certify that:

a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;

b) I am qualified to carry out this part of the assessment of the development proposal made by the developer Stephan Orlitzky (*name of developer*);

c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and

d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.

Comments

6/2015

- LWD SPEA (15 m)
- Litter Fall SPEA (15 m)
- Shade SPEA (30 m)
- Wetland Edge
- Property Boundary

Google Earth

90 m



6/2015

- LWD SPEA (15 m)
- Litter Fall SPEA (15 m)
- Shade SPEA (30 m)
- Wetland Edge
- Property Boundary

6/2015

- Final SPEA
- Wetland Edges
- Property Boundary

Google Earth

90 m



From: Oliver Busby <[REDACTED]>
Sent: Wednesday, June 9, 2021 9:55 AM
To: Phil Testemale
Subject: RE: Galiano RAPR Question

Good Morning Phil

Thanks and I have included the estimate for all the works. I haven't seen the site since last year and can only comment on the site based on the pictures I had requested.

Item #	Task	Material/machine works	Material fees	Work/Installation
1	Installation of 6" PVC drain pipes - 3 locations	6 sticks of drain pipe	\$ [REDACTED]	\$
2	Removal of berm	silt fence (2 rolls - 60m)	\$ [REDACTED]	\$
		excavator for soil placement	\$ -	\$
3	In-filling of ditch	excavator for soil placement	\$ -	\$
		restoration seed mix	\$ [REDACTED]	\$
4	Restoration Plantings	plant stock	\$ [REDACTED]	\$
		restoration seed mix	\$ [REDACTED]	\$
5	Fencing	split rail	\$ [REDACTED]	\$
6	QEP monitoring and reporting		\$ -	\$
7	Post Construction monitoring	3 years		\$
		sub-total	\$ 3,260.00	\$
			Total	\$

Please let me know if you have any questions. I am around this week but next week will be working remotely with intermittent access to email and cell.

Cheers

Oliver



Oliver Busby, MBA, RPBio, PAg
Principal
EBB Environmental Consulting Inc.
PO Box 18180 1215C 56th St.
Delta, BC, V4L 2M4
Office: 604.943.3209 | Mobile: 604.219.2412
busby@ebbconsulting.ca
www.ebbconsulting.ca

From: Phil Testemale <ptestemale@islandstrust.bc.ca>
Sent: Wednesday, June 9, 2021 9:28 AM



**GALIANO ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT
GL-DP-2021.1**

To: 1112052 B.C. Ltd.
c/o Roxanne Orilitzy

1. This Development Permit (the "Permit") applies to the land described below and all buildings, structures and other developments therein:

Lot A, District Lot 3, Galiano Island, Cowichan District, Plan 48087
(PID: 013-184-261)

2. This Development Permit GL-DP-2021.1 retroactively authorizes land alteration, tree removal, the construction of a building (shed) and a pond, and further authorizes new restoration works all within **Development Permit Area ("DPA") 1 - Riparian Areas, DPA 3 - Tree Cutting and Removal**, and **DPA 5 - Sensitive Ecosystem**, subject to the following requirements and conditions:

General

- a. All development shall be substantively consistent with Schedules 'A', 'B', 'C', 'D' and 'E', attached to and forming part of this permit.
- b. Any further construction, land alteration, tree removal within DPA 1, 3 and 5 as delineated on Schedule 'A' requires that a new Development Permit or Development Permit Amendment be obtained.

Establishment of SPEA

- c. No construction, land alteration, tree removal or disturbance other than restoration works prescribed herein, and under the supervision of the monitoring Qualified Environmental Professional (QEP), is permitted in the Streamside Protection and Enhancement Area (SPEA) identified as delineated on Schedules 'A' & 'B', attached to and forming part of this permit.
- d. All trees shall be retained and native plant species shall remain undisturbed within the SPEA.
- e. Any standing dead trees ("snags") shall be left in the SPEA to provide habitat.
- f. All restoration work (below) in the SPEA shall use native plant and tree species, and a certified weed-free native coastal restoration grass mixture only.
- g. There shall be no pruning of trees and shrubs in the SPEA, particularly any overhanging the water's edge to maintain maximum shading of aquatic habitat for fish.
- h. In order to minimize soil disturbance, the removal of invasive plants within the SPEA should be undertaken in a manner that minimizes soil disturbance by cutting above-ground growth and not pulling plants along the stream bank. Above-ground growth should be removed on a continual basis over multiple growing seasons.

Encroachment

- i. A permanent shrub line, low split rail fence or combination of both is to be planted and/or erected to delineate the SPEA from the rest of the property.

- j. The delineation line shall form an access barrier to all vehicles and unnecessary foot access, and is to be constructed and/or planted under the supervision of the monitoring QEP.

Restoration Works

- k. The restoration works shall conform to Schedule 'B' and include all prescribed measures detailed on pages 31 to 34 of the "Environmental Impact Assessment and Restoration Plan, Woodstone Manor, Galiano Island" (Oliver Busby, MBA, R.P. Bio., P. Ag., EBB Environmental Consulting Inc., July 2020) and submitted to the Islands Trust, Victoria Office on January 7, 2021.
- l. All restoration work shall be under the supervision of the monitoring QEP (below).
- m. The restoration work shall entail:
 - i. A minimum of one hundred (100) native trees and shrubs shall be planted.
 - ii. The constructed gravel road shall be culverted where required to facilitate natural drainage under the supervision of the monitoring QEP.
 - iii. The berm shall be dismantled and the soil from it placed back into the clearing and graded to conform to the area's natural gradient (down sloping towards wetland).
 - iv. The ditch is to be filled with clean fill from the berm and restored to its natural state
 - v. The landing area, removed berm and filled ditch areas are to be replanted using a combination of a certified weed-free native coastal restoration grass mixture and native trees and shrubs only.
 - vi. The wetland riparian areas shall be replanted using species such as pacific willow (*Salix lucida* ssp. *lasiandra*), bitter cherry (*Prunus emarginata*), red-osier dogwood (*Cornus stolonifera*), hardhack (*Spiraea douglasii*), and Nootka rose (*Rosa nutkana*).
 - vii. Areas outside the landing where trees and understorey were removed, shall be replanted with trees and shrubs. Woody debris will be restored where appropriate.
 - viii. All planting will be conducted in a manner consistent with the Provincial Riparian Restoration Guidelines (BC MOE 2008), as specified in Schedule 'E', attached to and forming part of this permit.
 - ix. All planting should be maintained by the property owner for a minimum of two (2) years from the date of completion of the planting to ensure survival. This includes irrigation, exclusion fencing to prevent deer browsing, and removal of invasive, non-native weeds. Unhealthy, dying or dead stock should be replaced at the owner's expense in the next regular planting season

Sediment and Erosion Control

All necessary measures to protect the wetland sensitive ecosystems, water quality and fish habitat must be used by the property owners and contractors through the restoration process, specifically:

- n. All land alteration and restoration shall be undertaken during dry weather and not during periods of prolonged rainfall deposition.
- o. Any soils exposed or deposited for a period of greater than two (2) weeks shall be covered and maintained by means of tarps in good repair and/or hydromulch (without seeds).
- p. Temporary fencing and silt fencing shall be installed along the southern boundary of the berm in accordance with the specification in Schedule 'E', attached to and forming part of this permit.

- q. Within the DPAs, including the SPEA, any standing trees and snags and natural vegetation shall not be removed to assist in preventing erosion into the stream and lake systems, and to encourage water uptake and drainage.
- r. Outside the DPAs and on the property as whole, disturbance to the natural systems should be minimized and the retention of standing trees and snags and natural vegetation is encouraged to assist in preventing erosion into the wetland or streams, and to encourage water uptake, drainage, and minimize soil saturation around the proposed dwelling.

Construction Management and Timing

- s. All contractors are to be notified of the location of the DPA and the conditions of this Development Permit.
- t. Contractors should inspect their equipment and vehicles to ensure they do not transport invasive plant species seeds onto or off the property. All equipment should be washed prior to arrival. Manual removal of weeds should be performed on a regular basis.
- u. All machinery and equipment is to be inspected for leaks prior to operation.
- v. Machinery and equipment is only to be refuelled at a designated location that is a minimum 15 metres distant and isolated from the DPA and any aquatic ecosystem.
- w. A spill response kit is to be on site during all periods when machinery is being operated and all operators are to be trained in the use of the spill kit.
- x. All construction activities should be avoided during the peak songbird nesting period May 1 and July 22

Invasive Species Management

- y. The removal of invasive plant species (i.e. Scotch broom, spurge-laurel Common periwinkle, English Ivy, Himalayan and cutleaf blackberry) in the SPEA, the DPAs, and on the subject property as a whole is encouraged.
- z. Any removal of invasive or exotic plants should be disposed of off-site and at proper facilities and replaced immediately by native species of trees and shrubs to encourage soil stability.

Monitoring

- aa. Monitoring and guidance is to be conducted by a registered professional biologist (R.P. Bio.) to ensure that all land alteration and restoration conditions herein have been met to the satisfaction of the R.P. Bio.
 - bb. The monitoring QEP(s) shall prepare and submit to the Islands Trust written confirmation of compliance with all conditions with this permit as issued within one (1) month of the restoration work being completed.
3. Pursuant to Section 502 of the Local Government Act, the Local Trust Committee requires security to ensure that any conditions respecting new restoration planting and other landscape elements are satisfied:
- a. Where the Local Trust Committee considers that a condition in the permit respecting restoration works and landscaping has not been satisfied the Local Trust Committee may undertake and complete the works required to satisfy the landscaping condition, at the cost of the permit holder, and may apply the security in payment of the cost of the works with any excess to be returned to the permit holder.

- b. Any interest earned on the security provided under Condition 3 shall accrue to the permit holder and be paid to them immediately on return of the security or, on default, become part of the amount of the security.
- c. The security provided by the permit holder shall be in the form of:
 - I. An irrevocable letter of credit with a clause for automatic renewal, or cash equivalent.
 - II. Payable to the Islands Trust,
 - III. In the amount of 125% of the quoted landscaping cost totaling \$4,075.00 based upon the cost estimate of \$3,260.00 confirmed by Oliver Busby, R.P. Bio. on June 9, 2021.
- 4. The area described herein shall be developed in accordance with the terms, conditions and provisions of this Permit, and any plans and specifications attached to this Permit, which shall form a part thereof.
- 5. Any further development within designated Development Permit Areas will require a new Development Permit, or a Development Permit Amendment.
- 6. This permit is not a building permit and does not remove any obligation on the part of the permittee to comply with all other requirements of Galiano Island Land Use Bylaw No. 127, 1999 and to obtain other approvals necessary for the lawful completion of the proposed development.

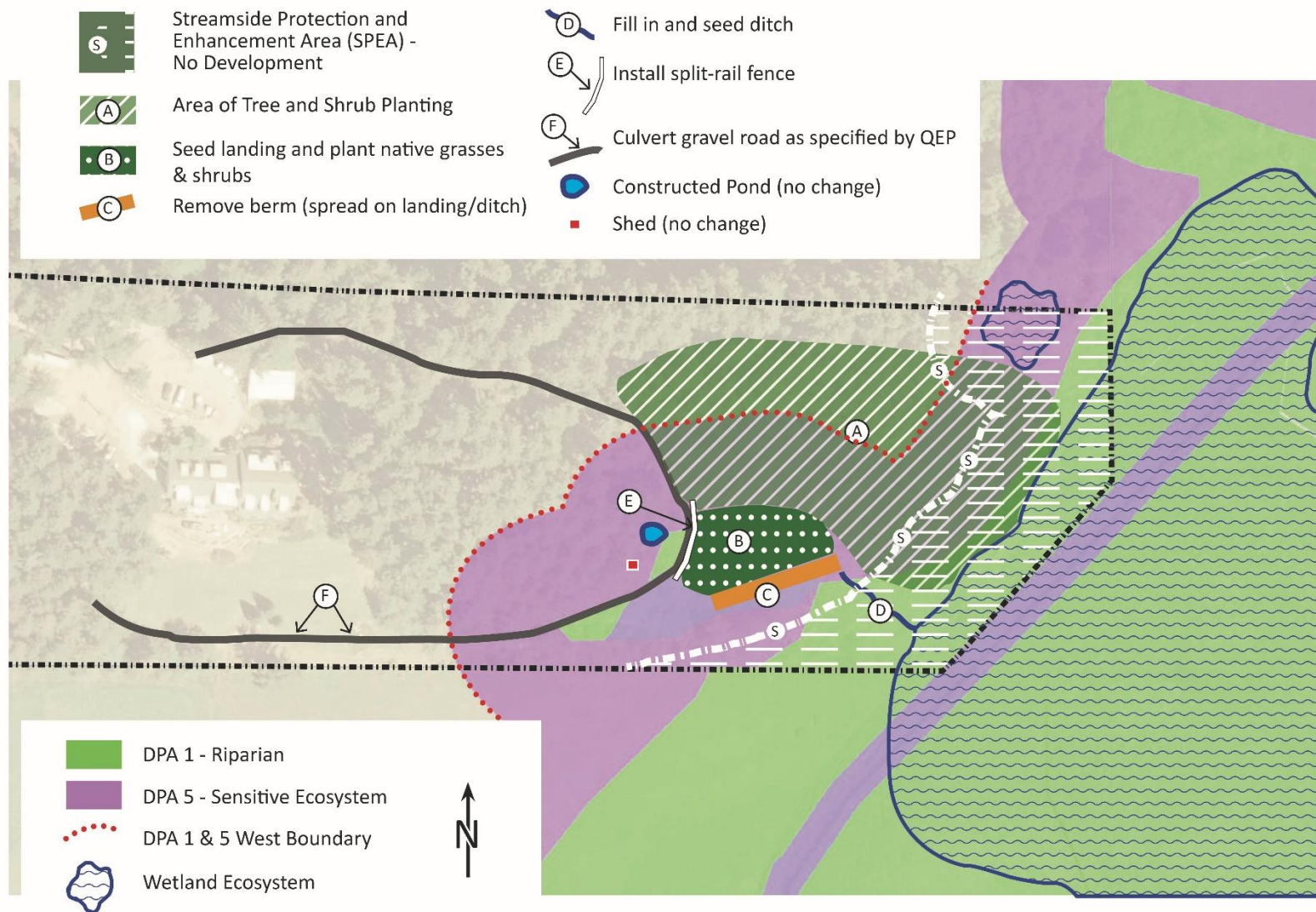
AUTHORIZING RESOLUTION PASSED BY THE GALIANO ISLAND LOCAL TRUST COMMITTEE THIS ##TH DAY OF MONTH, 2021.

Deputy Secretary, Islands Trust

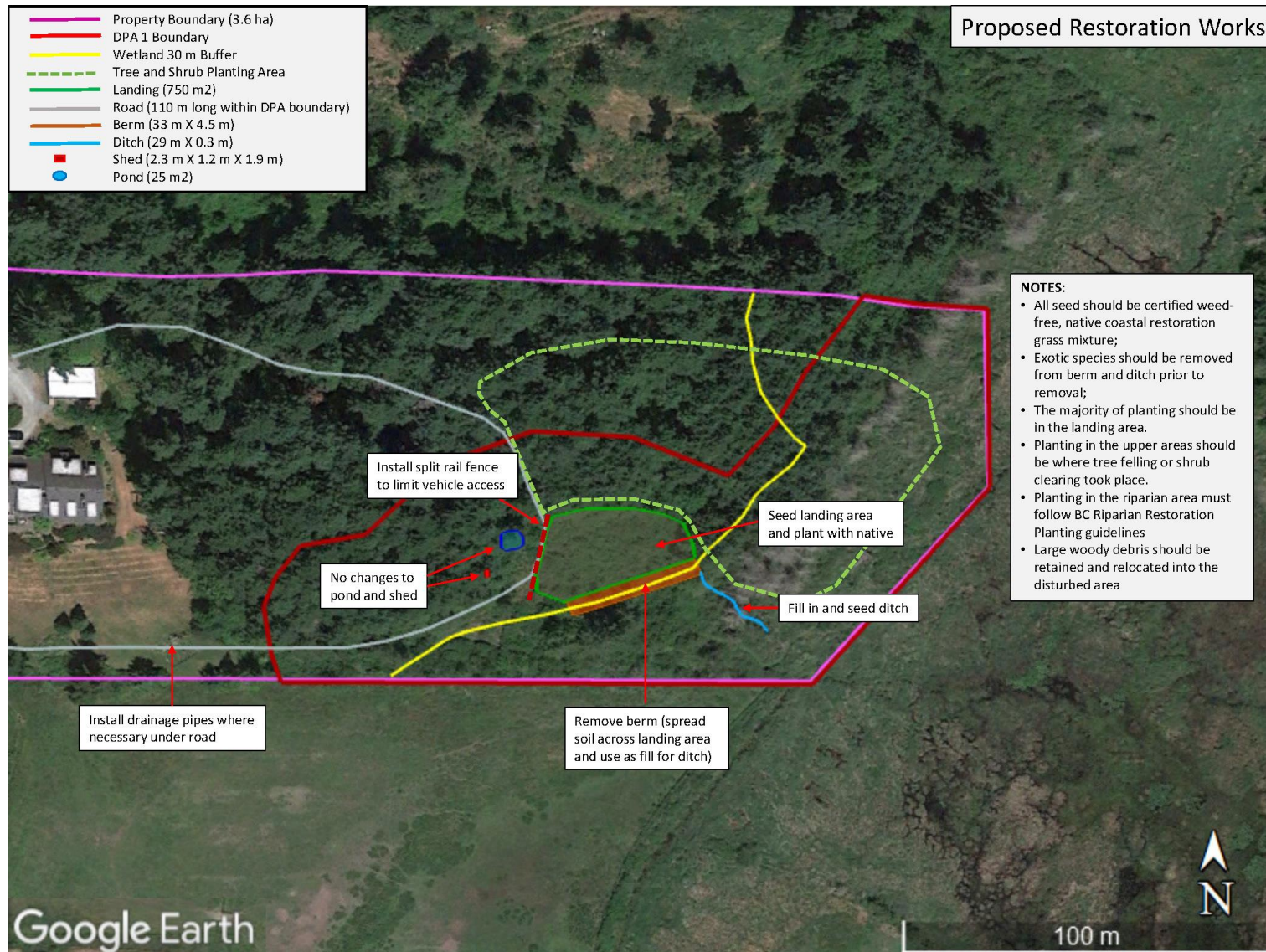
Date of Issuance

IF THE DEVELOPMENT DESCRIBED HEREIN IS NOT COMMENCED BY THE ##rd DAY OF MONTH, 202#, THIS PERMIT AUTOMATICALLY LAPSES.

GALIANO ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT 2021.1
Schedule "A" (Site Plan)



**GALIANO ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT 2021.1
Schedule "B" (Biologist's Restoration Plan)**



**GALIANO ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT 2021.1
Schedule "C" - Measures to Avoid Causing Harm to Fish and Fish Habitat**



Measures

Project Planning

Timing

Time work in water to respect [timing windows](#) to protect fish and amphibians, including their eggs, juveniles, spawning or overwintering adults and/or the organisms upon which they feed.

Minimize duration of in-water work.

Conduct instream work during periods of low flow, or at low tide, to further reduce the risk to fish and their habitat or to allow work in water to be isolated from flows.

Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.

Site Selection

- Design and plan activities and works in waterbody such that loss or disturbance to aquatic habitat is minimized and sensitive spawning habitats are avoided.
- Design and construct approaches to the waterbody such that they are perpendicular to the watercourse to minimize loss or disturbance to riparian vegetation.
- Avoid building structures on meander bends, braided streams, alluvial fans, active floodplains or any other area that is inherently unstable and may result in erosion and scouring of the stream bed or the built structures.
- Undertake all instream activities in isolation of open or flowing water to maintain the natural flow of water downstream and avoid introducing sediment into the watercourse.

Contaminant and Spill Management

- Plan activities near water such that materials such as paint, primers, blasting abrasives, rust solvents, degreasers, grout, or other chemicals do not enter the watercourse.
- Develop a response plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance and keep an emergency spill kit on site.
- Ensure that building material used in a watercourse has been handled and treated in a manner to prevent the release or leaching of substances into the water that may be deleterious to fish.

Erosion and Sediment Control

- Develop and implement an Erosion and Sediment Control Plan for the site that minimizes risk of sedimentation of the waterbody during all phases of the project. Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the waterbody or settling basin and runoff water is clear. The plan should, where applicable, include:
 - Installation of effective erosion and sediment control measures before starting work to prevent sediment from entering the water body.
 - Measures for managing water flowing onto the site, as well as water being pumped/diverted from the site such that sediment is filtered out prior to the water entering a waterbody. For example, pumping/diversion of water to a vegetated area, construction of a settling basin or other filtration system.

- Site isolation measures (e.g., silt boom or silt curtain) for containing suspended sediment where in-water work is required (e.g., dredging, underwater cable installation).
- Measures for containing and stabilizing waste material (e.g., dredging spoils, construction waste and materials, commercial logging waste, uprooted or cut aquatic plants, accumulated debris) above the high-water mark of nearby waterbodies to prevent re-entry.
- Regular inspection and maintenance of erosion and sediment control measures and structures during the course of construction.
- Repairs to erosion and sediment control measures and structures if damage occurs.
- Removal of non-biodegradable erosion and sediment control materials once site is stabilized.

Shoreline Re-vegetation and Stabilization

- Clearing of riparian vegetation should be kept to a minimum: use existing trails, roads or cut lines wherever possible to avoid disturbance to the riparian vegetation and prevent soil compaction. When practicable, prune or top the vegetation instead of grubbing/uprooting.
- Minimize the removal of natural woody debris, rocks, sand or other materials from the banks, the shoreline or the bed of the waterbody below the ordinary high water mark. If material is removed from the waterbody, set it aside and return it to the original location once construction activities are completed.
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.
- Restore bed and banks of the waterbody to their original contour and gradient; if the original gradient cannot be restored due to instability, a stable gradient that does not obstruct fish passage should be restored.
- If replacement rock reinforcement/armouring is required to stabilize eroding or exposed areas, then ensure that appropriately-sized, clean rock is used; and that rock is installed at a similar slope to maintain a uniform bank/shoreline and natural stream/shoreline alignment.
- Remove all construction materials from site upon project completion.

Fish Protection

- Ensure that all in-water activities, or associated in-water structures, do not interfere with fish passage, constrict the channel width, or reduce flows.
- Retain a qualified environmental professional to ensure applicable permits for relocating fish are obtained and to capture any fish trapped within an isolated/enclosed area at the work site and safely relocate them to an appropriate location in the same waters. Fish may need to be relocated again, should flooding occur on the site.
- Screen any water intakes or outlet pipes to prevent entrainment or impingement of fish. Entrainment occurs when a fish is drawn into a water intake and cannot escape. Impingement occurs when an entrapped fish is held in contact with the intake screen and is unable to free itself.
 - In freshwater, follow these measures for design and installation of intake end of pipe fish screens to protect fish where water is extracted from fish-bearing waters:
 - Screens should be located in areas and depths of water with low concentrations of fish throughout the year.
 - Screens should be located away from natural or artificial structures that may attract fish that are migrating, spawning, or in rearing habitat.

- The screen face should be oriented in the same direction as the flow.
- Ensure openings in the guides and seals are less than the opening criteria to make "fish tight".
- Screens should be located a minimum of 300 mm (12 in.) above the bottom of the watercourse to prevent entrainment of sediment and aquatic organisms associated with the bottom area.
- Structural support should be provided to the screen panels to prevent sagging and collapse of the screen.
- Large cylindrical and box-type screens should have a manifold installed in them to ensure even water velocity distribution across the screen surface. The ends of the structure should be made out of solid materials and the end of the manifold capped.
- Heavier cages or trash racks can be fabricated out of bar or grating to protect the finer fish screen, especially where there is debris loading (woody material, leaves, algae mats, etc.). A 150 mm (6 in.) spacing between bars is typical.
- Provision should be made for the removal, inspection, and cleaning of screens.
- Ensure regular maintenance and repair of cleaning apparatus, seals, and screens is carried out to prevent debris-fouling and impingement of fish.
- Pumps should be shut down when fish screens are removed for inspection and cleaning.

Operation of Machinery

- Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks, invasive species and noxious weeds.
- Whenever possible, operate machinery on land above the high-water mark, on ice, or from a floating barge in a manner that minimizes disturbance to the banks and bed of the waterbody.
- Limit machinery fording of the watercourse to a one-time event (i.e., over and back), and only if no alternative crossing method is available. If repeated crossings of the watercourse are required, construct a temporary crossing structure.
- Use temporary crossing structures or other practices to cross streams or waterbodies with steep and highly erodible (e.g., dominated by organic materials and silts) banks and beds. For fording equipment without a temporary crossing structure, use stream bank and bed protection methods (e.g., swamp mats, pads) if minor rutting is likely to occur during fording.
- Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water.

**GALIANO ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT 2021.1
Schedule "D"**

Provincial Riparian Restoration Guidelines (BC MOE 2008)

- All riparian plantings should be based on 1 tree or shrub per 1 square metre density.
- All tree/shrub species should be of guaranteed nursery stock.
- The botanical name should be used when ordering stock to ensure that the desired native species is being purchased. Each specimen should be tagged with the botanical name and the tag should be left attached after planting.
- Stock planted during the fall (September to October) and spring (March to April) has the greatest likelihood of surviving. Regular watering may be required until the plants are established. Additional advice on proper planting procedures should be obtained from the nursery supplying the stock.
- Planting on a given area being enhanced must be successful to an 80% take. If more than 20% die over one year, replanting is required.
- To the extent feasible, large woody debris should be retained and relocated into the disturbed area to provide structural habitat for small wildlife and amphibians.

GALIANO ISLAND LOCAL TRUST COMMITTEE

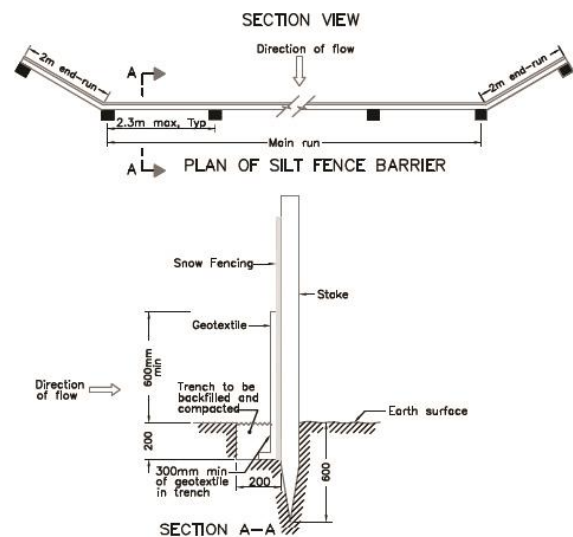
DEVELOPMENT PERMIT 2021.1

Schedule "E"

Erosion and Sedimentation Control Measures

EROSION AND SEDIMENTATION

- 1) PRE-STAKED SILT FENCE TO BE INSTALLED AS SHOWN PRIOR TO CONSTRUCTION AS DIRECTED BY THE ENGINEER.
- 2) TOPSOIL STRIPPED FOR REUSE TO BE STOCKPILED AWAY FROM WATER COURSES, DRAINAGE PATHS AND PROPERTY AND SHALL BE COVERED AND / OR SEEDED TO REDUCE EROSION.
- 3) ALL DISTURBED AREAS TO BE RESTORED AND LANDSCAPED AS SOON AS POSSIBLE FOLLOWING CONSTRUCTION.
- 4) ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED ON A REGULAR BASIS THROUGHOUT THE COURSE OF CONSTRUCTION BY THE CONTRACTOR. THE QUALIFIED ENVIRONMENTAL MONITOR (QEM) JOHN GRODS SHALL HALT PROGRESS OF ANY AND ALL WORK AND SHALL DIRECT CONTRACTOR TO REPAIR / ALTER CONSTRUCTION MITIGATION MEASURES IF THEY ARE NOT PERFORMING ADEQUATELY.



NOTE:

All dimensions are in millimetres or metres unless otherwise shown.

SILT FENCE WITH SNOW FENCE DETAIL

NTS

Attachment 6
Galiano Island
OCP Bylaw No. 108, 1995
Guideline Checklist

Riparian Areas Development Permit Area (DPA 1)

Guideline	Complies			Comments
	Yes	No	N/A	
Guideline a: In general, all development in this DPA should be undertaken in a manner that minimizes impact on the riparian area, water bodies and ecosystems. Where a Qualified Environmental Professional (QEP) or other professional has made recommendations for mitigation measures, enhancement or restoration in order to lessen impacts on the riparian area and ecosystems, the Local Trust Committee may impose permit conditions, including a requirement for security in the form of an irrevocable letter of credit, to ensure the protection of riparian areas and ecosystems consistent with the measures and recommendations described in the report.	☒	☐	☐	Restoration works as conditions in draft DP. Security as a requirement in draft DP.
Guideline b: The development permit should not allow any development activities, including the storage or application of pesticides and other chemicals for non-essential cosmetic purposes, to take place within any Streamside Protection and Enhancement Area (SPEA) identified by the QEP or riparian buffer recommended by another professional adjacent to a non-RAR applicable watercourse, lake or wetland, and the owner should be required to implement a plan for protecting the SPEA or riparian buffer over the long term through measures that may be implemented as conditions of the development permit	☒	☐	☐	SPEA established in Biologist's Report and as condition in draft DP. Delineation of SPEA boundary to limit access a condition in draft DP.
Guideline c: Where the QEP or other professional's report describes an area as suitable for development with special mitigating measures, the development permit should only allow the development to occur in compliance with the measures described in the report. Monitoring and regular reporting by a QEP or other professional at the applicant's expense may be required during construction and development phases, as specified in a development permit.	☒	☐	☐	Retroactive permitting of land alteration and tree removal and construction. Restoration work conditions in draft DP. Monitoring by QEP as condition in draft DP
Guideline d: The following guidelines are applicable to floats and associated structures within the development permit area: i) floats should not be placed in areas identified as important to fish life processes where installation of a float would compromise the functioning of the processes; ii) a ramp or float should not rest on the bed of the water body; iii) the use of treated wood in the water body should be avoided; iv) floatation material should be contained within a durable shell to prevent disintegration; v) pervious surfacing should be used on ramps and floats (e.g. grating or separated boards); vi) any areas disturbed during installation should be restored; vii) where a float is being replaced, all old materials should be removed from the riparian area.	☐	☐	☒	

Guideline	Complies			Comments
	Yes	No	N/A	
Guideline e: If the nature of the proposed project within the DPA changes after the professional report has been prepared such that it is reasonable to assume that the professional's assessment of the impact of the development may be affected, the Local Trust Committee may require the applicant to have the professional update the assessment at the applicant's expense and DP conditions may be amended accordingly.	☐	☐	☒	
Guideline f: The Local Trust Committee may consider variances to subdivision or siting or size regulations where the variance may result in enhanced protection of a SPEA, riparian buffer or riparian ecosystem in compliance with recommendations of a professional's report	☐	☐	☒	

Tree Cutting and Removal Development Permit Area (DPA 3)

Guideline	Complies			Comments
	Yes	No	N/A	
i. Forest Zoned Lands				
permits to cut more than 12 cubic metres per hectare over a 3 year period will be issued only on the basis of development approval information indicating that the cutting and any proposed silviculture and reforestation program are elements of a sustainable forest management strategy on the lot in question and will not impair the quality or quantity of groundwater in the local groundwater region.	☐	☐	☒	
ii. Other Lands				
permits to cut more than 12 cubic metres per hectare over a 3 year period will be issued only if, and to the extent that, the removal of trees is necessary to permit the use of the lot in question for a use permitted by the Galiano Island Land Use Bylaw, at the maximum density that the bylaw specifies for that use.	☒	☐	☐	Retroactive permitting of tree removal (est. 150 trees and windfall). Restoration works (replanting) as conditions in draft DP
activities permitted by the Land Use Bylaw and necessitating the removal of trees should be conducted at those locations on the lot that will involve removal of the fewest trees and the removal of no Garry Oak trees.	☐	☒	☐	As previous. No Garry Oak removed.

Sensitive Ecosystems Development Permit Area (DPA 5)

Guideline	Complies			Comments
	Yes	No	N/A	
a) Avoid development being located in areas containing important, rare or fragile sensitive ecosystems or habitat where reasonable alternative sites exist.	☐	☒	☐	Retroactive permitting of land alteration and tree removal and construction. Restoration work conditions in draft DP.
b) Minimize the area cleared and disturbed for development.	☐	☒	☐	(“)
c) Retain large, connected undisturbed areas, with connections and corridors providing continuity between sensitive ecosystems and important habitat.	☒	☐	☐	Establishing SPEA and restoration work will aid in retaining and enhancing riparian and wetland ecosystems

Guideline	Complies			Comments
	Yes	No	N/A	
d) Site buildings and associated infrastructure to allow sufficient undisturbed space around significant mature or established trees to protect root systems.	☐	☒	☐	Retroactive permitting of construction of shed. Restoration work conditions in draft DP.
e) Retain undeveloped buffer areas around sensitive ecosystems, features or habitat where feasible. Buffer areas should be of sufficient width to limit access by invasive plants.	☒	☐	☐	Establishing SPEA and restoration work will aid in retaining and enhancing riparian and wetland ecosystems
f) Natural features may be retained through incorporation into the design of the development. In particular, unique or special natural features such as native grasses, rare plants, unique land forms, rock outcroppings, mature trees, spits and dunes should be protected.	☐	☐	☒	
g) Preserve native grasses, rare plants, and wildflower ecosystems and associated soils.	☒	☐	☐	Restoration work conditions in draft DP
h) Avoid the planting or introduction of non-native plants. The use of drought resistant and native plants in landscaping should be encouraged.	☒	☐	☐	(“)
i) Avoid removal of mature and old trees, dead and declining trees and the root systems of trees.	☒	☐	☐	(“)
j) Protect denning and nesting sites of rare, threatened or endangered species.	☐	☐	☒	
k) Minimize soil removal and deposit.	☒	☐	☐	
l) Avoid alteration of natural drainage systems in ways that increase or decrease the amount of water available to a sensitive ecosystem.	☐	☐	☐	(“)
m) Locate septic fields in a manner that minimizes potential impacts on sensitive ecosystems or habitat.	☐	☐	☒	
n) Limit driveways and other accesses to the number required for safe access, with shared driveway access where feasible. Driveway lengths and widths should be limited to the minimum necessary. The use of impervious surfaces should be discouraged.	☐	☒	☐	Retroactive permitting of construction of gravel road. Restoration work conditions in draft DP
o) Limit shoreline structural modifications in scale and extent to structures necessary to support or protect an existing use or structure.	☐	☐	☒	
p) In addition to the other guidelines, the following specific guidelines apply to applications within a wetland ecosystem:				
i) Avoid filling or draining of permanent or seasonally wet areas.	☒	☐	☐	
ii) Retain wetland vegetation and structure.	☒	☐	☐	
iii) Avoid locating roads, driveways and utility corridors through wetland ecosystems; where crossings have to be located within the ecosystem the crossing should, to the extent feasible:	☐	☐	☒	Road location does not cross wetland. Conditions in DP for culverting to facilitate natural surface water flow.
• Be narrow and perpendicular to a wetland ecosystem;	☐	☐	☒	
• Share facilities;	☐	☐	☒	
• Minimize impacts on water bodies;	☐	☐	☒	
• Conform to topography to minimize cut and fill;	☐	☐	☒	
• Not restrict the natural movement of surface and groundwater;	☐	☐	☒	
• Have appropriate native vegetation planted on shoulders to provide screening and assist soil stability.	☐	☐	☒	

Guideline	Complies			Comments
	Yes	No	N/A	
iv) Conduct construction involving disturbance of soil in such a manner as to avoid direct run-off into wetlands.	☒	☐	☐	Conditions in draft DP
v) Avoid disruption of natural hydrologic cycles and natural aquatic processes, including water flows, seasonal flooding, channel movements, windthrow or natural slope.	☒	☐	☐	Conditions in draft DP
vi) Maintain vegetation cover which helps stabilize banks and reduce erosion and provides habitat.	☒	☐	☐	Conditions in draft DP
vii) Avoid removal of vegetation that would reduce the natural functions of the sensitive ecosystem.	☒	☐	☐	Conditions in draft DP
viii) Avoid alteration of vernal pools to create year-round water features.	☐	☐	☒	
q) In general, where a professional's report describes an area as suitable for development with special mitigating measures, the development permit should only allow the development to occur in compliance with the measures described in the report. Conditions of a permit may include:				
i) the designation of areas within which no development shall occur;	☒	☐	☐	SPEA established in Biologist's Report and as condition in draft DP.
ii) requirements of building siting, size, design or construction that would minimize impacts, protect or enhance sensitive ecosystems or habitat;	☐	☐	☐	Delineation of SPEA boundary to limit access a condition in draft DP.
iii) use of native vegetation in landscaping;	☒	☐	☐	Conditions in draft DP
iv) the use of pervious surfaces;	☒	☐	☐	Retroactive permitting for gravel road.
v) the placement of permanent or temporary fencing around sensitive features;	☒	☐	☐	Conditions in draft DP
vi) fencing, flagging and posting of notices during construction;	☒	☐	☐	Conditions in draft DP
vii) limits on blasting in sensitive areas;	☐	☐	☒	
viii) limits on construction timing;	☒	☐	☐	Condition in draft DP
ix) provision of works to maintain or restore the quantity or quality of water reaching environmentally sensitive areas or habitat;	☒	☐	☐	Conditions in draft DP
x) restoration or enhancement of disturbed sensitive ecosystems and habitat;	☒	☐	☐	Conditions in draft DP
xi) the layout of lots, including clustering, driveways, access routes, and septic disposal facilities in a plan of subdivision.	☐	☐	☒	
r) Where restoration or enhancement work is required as a condition of a permit, the applicant may be required to provide to the Islands Trust a security deposit, in the form of an irrevocable letter of credit, equal to 125% of the estimated costs of all materials and labour, as determined by a professional with relevant experience.	☒	☐	☐	Security as a requirement in draft DP.
y) The Local Trust Committee may consider variances to subdivision or building siting or size regulations where the variance may result in protection of a sensitive ecosystem or habitat.	☐	☐	☒	

File No.: GL-6500-20 Affordable
Housing - STVR Review

DATE OF MEETING: July 5, 2021
TO: Galiano Island Local Trust Committee
FROM: Brad Smith, Island Planner
Southern Team
COPY: Robert Kojima, Regional Planning Manager
SUBJECT: STVR Review – Adoption of proposed Bylaw No. 275

RECOMMENDATIONS

1. **That the Galiano Island Local Trust Committee Bylaw No. 275, cited as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2020”, be adopted.**
2. **That the Galiano Island Local Trust Committee rescind standing resolutions 2019-057 and 2016-000 and direct staff to remove them from the standing resolutions list.**

REPORT SUMMARY

The purpose of this report is to provide the Galiano Island Local Trust Committee (LTC) with proposed Bylaw No. 275 for consideration of adoption, and to consider existing standing resolutions made by LTC regarding short-term vacation rentals (STVRs).

The recommendations above are supported as:

- Proposed Bylaw No. 275 has been reviewed and approved by the Islands Trust Executive Committee and the Minister of Municipal Affairs; and,
- The two existing standing resolutions in respect of STVRs are no longer relevant following the adoption of proposed Bylaw No. 275.

BACKGROUND

At the June 3, 2019 meeting LTC endorsed a project charter for the Galiano Island STVR Review project. The endorsed project charter includes the following key tasks:

1. Complete review of STVRs currently operating on Galiano Island and research of STVR regulations/policies in other jurisdictions
2. Develop discussion paper summarizing findings of review
3. Complete public/stakeholder outreach (including public meetings)
4. Finalize recommendations and confirm scope of proposed bylaw amendments with LTC
5. Complete bylaw amendment process.

The project is now in the final step of this process, with proposed Bylaw No. 275 having completed Executive Committee (EC) and provincial approvals and now ready for consideration of fourth reading by LTC.

Attachment 1 provides proposed Bylaw No. 275. Additional project information, including previous staff reports and results of public engagement is located here:

<http://www.islandstrust.bc.ca/islands/local-trust-areas/galiano/projects-initiatives/2019-stvr-review/Approval>

Bylaw Approval Steps

Based on direction from LTC, staff prepared draft Bylaw No. 275 which was given first reading by LTC on June 1, 2020, and second reading on November 2, 2020 (Attachment 1).

A Community Information Meeting (CIM) and Public Hearing for proposed Bylaw No. 275 was held electronically on February 1, 2021.

Proposed Bylaw No. 275 was given third reading on February 1, 2021, following the Public Hearing.

Islands Trust Executive Committee approved proposed Bylaw No. 275 on February 24, 2021. The Minister of Municipal Affairs confirmed provincial approval on May 24, 2021.

STVR Standing Resolutions

LTC currently has two standing resolutions with respect to STVRs:

2019-057 (Standing)	Carried	08-Jul-2019
that the Galiano Island Local Trust Committee initiate a moratorium on new TUP applications until the STVR project is completed and that bylaw enforcement is directed to require that unlawful STVRs comply with the land use bylaw.		

2016-000 (Standing)	Carried	05-Dec-2016
Without fettering its discretion, the LTC provided the following guidance with respect to its consideration of TUP applications for Commercial Vacation Rentals: 1. A Commercial Vacation Rental use should only be considered in one dwelling per lot 2. Permits being considered in Water Management Areas should include conditions requiring cisterns with a minimum capacity of 16,000 litres and a water meter. 3. In order to assist in assessing cumulative impacts, staff are requested to continue to provide an updated map showing the location, status, and maximum number of guests of all Commercial Vacation Rental TUP applications.		

Staff recommend that LTC rescind these standing resolutions following adoption of proposed Bylaw No. 275.

Trust Council bylaw enforcement policy authorizes proactive enforcement of advertised unlawful uses.

ALTERNATIVES

1. Deny the application

The LTC may deny the application and proceed no further.

2. Hold the application in abeyance

The LTC may choose to hold the application in abeyance pending receipt of additional information.

3. Receive for information

The LTC may receive the report for information.

NEXT STEPS

If the LTC chooses to proceed the amending bylaws will be consolidated into the base bylaws.

Submitted By:	Brad Smith, Island Planner	June 16, 2021
Concurrence:	Robert Kojima, Regional Planning Manager	June 17, 2021

ATTACHMENTS

1. Bylaw No. 275

PROPOSED

GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 275

A BYLAW TO AMEND GALIANO ISLAND OFFICIAL COMMUNITY PLAN BYLAW NO. 108, 1995

The Galiano Island Local Trust Committee enacts in open meeting assembled as follows:

1. CITATION

This Bylaw may be cited for all purposes as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 1, 2020”.

2. SCHEDULES

Galiano Island Official Community Plan No. 108, 1995 is amended as shown on Schedule 1, attached to and forming part of this bylaw.

3. SEVERABILITY

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS	1 ST	DAY OF	JUNE	2020
READ A SECOND TIME THIS	2 ND	DAY OF	NOVEMBER	2020
PUBLIC HEARING HELD THIS	1 ST	DAY OF	FEBRUARY	2021
READ A THIRD TIME THIS	1 ST	DAY OF	FEBRUARY	2021
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	24 TH	DAY OF	FEBRUARY	2021
APPROVED BY THE MINISTER MUNICIPAL AFFAIRS AND HOUSING THIS	10 TH	DAY OF	MAY	2021
ADOPTED THIS	_____	DAY OF	_____	20__

CHAIR

SECRETARY

**GALIANO ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 275**

SCHEDULE 1

The Galiano Island Official Community Plan No. 108, 1995, is amended as follows:

- 1) Section VII, Subsection 1 (Circumstances) is amended by inserting a new article (iii) as follows:

“iii) A Temporary Use Permit shall not be issued by the Local Trust Committee for the purpose of a commercial vacation rental.”

- 2) Section VII, Subsection 2 (Objectives) is amended by deleting article iii in its entirety.
- 3) Section VII, Subsection 2 (Objectives) is amended by reordering article iv as article iii.

File No.: GL-6500-20 LUB Technical
Review

DATE OF MEETING: July 5, 2021
TO: Galiano Island Local Trust Committee
FROM: Brad Smith, Island Planner
Southern Team
COPY: Robert Kojima, Regional Planning Manager
SUBJECT: Land Use Bylaw Technical Review – Adoption of proposed Bylaw No. 278

RECOMMENDATIONS

1. **That the Galiano Island Local Trust Committee Bylaw No. 278, cited as “Galiano Island Land Use Bylaw 127,1999, Amendment No. 1, 2021” be adopted.**

REPORT SUMMARY

The purpose of this report is to provide the Galiano Island Local Trust Committee (LTC) with proposed Bylaw No. 278 for consideration of adoption.

The recommendations above are supported as:

- Proposed Bylaw No. 278 has been reviewed and approved by the Islands Trust Executive Committee.

BACKGROUND

A technical review of the Galiano Island Land Use Bylaw No.127, 1999 (LUB) has been on the list of LTC projects since 2014. In April 2020, LTC established the LUB technical review as a priority project, and a project charter was subsequently endorsed by LTC at the June 1, 2020 LTC meeting. Process steps in the project charter include:

1. Review LUB for additional potential technical amendments
2. Develop recommendations for consideration by LTC
3. Draft bylaw amendments based on LTC direction
4. Conduct public consultation on proposed amendments
5. First Reading
6. Legislative process

The project is now in the final step of this process, with proposed Bylaw No. 278 having received Executive Committee (EC) approval and now ready for consideration of fourth reading by LTC.

Attachment 1 provides proposed Bylaw No. 278. Additional project information, including previous staff reports and results of public engagement is located here: <https://islandstrust.bc.ca/island-planning/galiano/projects/>

Bylaw Approval Steps

Based on direction from LTC, staff prepared draft Bylaw No. 278 which was given first reading by LTC on March 1, 2021 (Attachment 1).

A Community Information Meeting (CIM) and Public Hearing for proposed Bylaw No. 278 was held electronically on June 1, 2021.

Proposed Bylaw No. 278 was given second and third reading on June 1, 2021, following the Public Hearing.

Islands Trust Executive Committee approved proposed Bylaw No. 278 on June 23, 2021.

ALTERNATIVES

1. Receive for information

The LTC may receive the report for information.

2. Proceed no further

The LTC may decide to proceed no further with the project and/or bylaw amendment.

NEXT STEPS

If the LTC chooses to proceed, the amending bylaw will be consolidated into the base bylaw.

Submitted By:	Brad Smith, Island Planner	June 21, 2021
Concurrence:	Robert Kojima, Regional Planning Manager	June 21, 2021

ATTACHMENTS

1. Bylaw No. 278

PROPOSED

GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 278

A BYLAW TO AMEND GALIANO ISLAND LAND USE BYLAW, 127, 1999

The Galiano Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the Galiano Island Local Trust Area under the *Islands Trust Act*, enacts as follows:

1. Citation

This bylaw may be cited for all purposes as “Galiano Island Land Use Bylaw 127, 1999, Amendment No. 1, 2021”.

2. Galiano Island Local Trust Committee Bylaw No. 127, cited as “Galiano Island Land Use Bylaw 127, 1999,” is amended as follows:

2.1. Part 2 (General Regulations) is amended by the insertion of a new Section 2.13 as follows:

“2.13 Unless a building or structure on a lot is attached to a principal building on the lot by a completely enclosed structure having walls, roof and floor, it is for the purposes of this Bylaw deemed not to be part of the principal building, but is deemed to be an accessory building or structure.”

2.2. Part 2 (General Regulations) Section 2.14 is amended by inserting “and for stairway structures located in the Park Zone” such that it reads “Buildings and structures must be sited at least 7.5 metres from the natural boundary of the sea, and at least 15 metres from any lake, a swamp and any other natural watercourse. This setback from the sea does not apply to structures located on a highway and for stairway structures located in the Park Zone.”

2.3. Part 2 (General Regulations) Section 2.1.9 is amended by renumbering Section 2.1.9 to 2.19.

2.4. Part 2 (General Regulations) Section 2.25 is amended by inserting “to the closest point of the building or structure” such that it reads “If this bylaw requires buildings, structures and uses to be sited a stated distance from another building, a watercourse or well or the sea, or a zone boundary or lot line, the distance must be measured horizontally to the closest point of the building or structure as illustrated in the following sketch:”

2.5. Part 3 (Home Occupation Regulations) is amended by renumbering the second instance of Section 3.7 that reads “No restaurant, cafe, commercial water bottling enterprise, boarding kennel, fur farm, feed lot or manure-based mushroom growing enterprise is permitted as a home occupation” to Section 3.8.

2.6. Section 5.4 (Rural Residential Zone) Subsection 5.4.6 is amended by:

- i) renumbering Article 5.4.3.1 to 5.4.6.1
- ii) renumbering Article 5.4.3.2 to 5.4.6.2
- iii) renumbering Article 5.4.3.3 to 5.4.6.3.

- 2.7. Section 5.4 (Rural Residential Zone) Subsection 5.4.7 is amended by:
- i) renumbering Article 5.4.3.1 to 5.4.7.1
 - ii) renumbering Article 5.4.3.2 to 5.4.7.2
 - iii) renumbering Article 5.4.3.3 to 5.4.7.3.
- 2.8. Section 5.5 (Rural 2 Zone) Subsection 5.5.6 is amended by:
- i) renumbering Article 5.5.3.1 to 5.5.6.1
 - ii) renumbering Article 5.5.3.2 to 5.5.6.2
 - iii) renumbering Article 5.5.3.3 to 5.5.6.3
- 2.9. Section 6.1 (Agriculture Zone) Subsection 6.1.5 is amended by deleting “use for timber production and harvesting must not exceed a height of 9 metres” and replacing it with “used for timber production and harvesting must not exceed a height of 9 metres and agricultural buildings and structures must not exceed two storeys” such that it reads “Accessory buildings and structures must not exceed one storey and a height of 5 metres, except that agricultural buildings and structures and those used for timber production and harvesting must not exceed a height of 9 metres and agricultural buildings and structures must not exceed two storeys.”
- 2.10. Section 6.1 (Agriculture Zone) Subsection 6.1.6 is amended by
- i) renumbering Article 6.1.5.1 to Article 6.1.6.1
 - ii) renumbering Article 6.1.5.2 to Article 6.1.6.2.
- 2.11. Section 6.1 (Agriculture Zone) Subsection 6.1.11 is amended by deleting “AG (Agricultural)” and replacing it with “AG (Agriculture)”.
- 2.12. Section 6.1 (Agriculture Zone) Subsection 6.1.13 is amended by:
- i) deleting “my” and replacing it with “may”
 - ii) deleting “AG (Agricultural)” and replacing it with “AG (Agriculture)”.
- 2.13. Section 7.1 (Forest 1 Zone) Subsection 7.1.2 is amended by deleting the first instance of “in” and replacing it with “on” such that it reads “7.1.2 A single non-residential unenclosed building or structure with a floor area not exceeding 93 square metres is permitted on each lot and every such building or structure must be screened by a landscape screen not less than 9 metres in height and complying with the requirements of subsection 15.1.1 of this bylaw.”
- 2.14. Section 7.2 (Forest 2 Zone) Subsection 7.2.2 is amended by deleting “Section 2.8 - 2.13” and replacing it with “Section 2.9 - 2.13”.
- 2.15. Section 7.3 (Forest 3 Zone) Subsection 7.3.1 Article 7.3.1.2 is amended by deleting “as defined in subsection 17.1.16” such that it reads “7.3.1.2 dwellings accessory to timber production and harvesting uses and home occupations, on lots having an area of 20 hectares and more and highway access”.

- 2.16. Section 7.3 (Forest 3 Zone) Subsection 7.3.4 is amended by deleting in its entirety “No building or structure for a forestry use permitted by this section and no dwelling or accessory building may exceed 9 metres in height” and replacing it with “No building or structure for a use permitted by this section may exceed 9 metres in height. Accessory buildings and structures must not exceed one storey and a height of 5 metres, except that agricultural buildings and structures and those uses for timber production and harvesting must not exceed a height of 9 metres.”
- 2.17. Section 7.4 (Forest 3 Zone) Subsection 7.4.7 is amended by deleting “unless the lot is being created subsequent to the rezoning of a F1 zoned parcel pursuant to Forest policy d) iii) of the Galiano Island Official Community Plan Bylaw No. 108, 1995” such that it reads “7.4.7 No lot having an area less than 65 hectares may be created by subdivision.”
- 2.18. Section 7.5 (Forest Land Reserve Zone) Subsection 7.5.1 Article 7.5.1.2 is amended by deleting “subsection 17.1.16” and replacing it with “section 17.1”.
- 2.19. Section 7.5 (Forest Land Reserve Zone) Subsection 7.5.3 is amended by
 - i) deleting “subsection 17.1.16” and replacing it with “section 17.1”
 - ii) deleting “Section 2.8 - 2.13” and replacing it with “Section 2.9 - 2.13”.
- 2.20. Section 7.5 (Forest Land Reserve Zone) Subsection 7.5.5 is amended by renumbering Article 7.5.5.4 to Article 7.5.5.2.
- 2.21. Section 8.5 (Environmental Education and Nature Protection Zone) Subsection 8.5.5 Article 8.5.5.1 is amended by deleting “(5 ft.)”.
- 2.22. Section 8.5 (Forest Land Reserve Zone) Subsection 8.5.5 Article 8.5.5.2 is amended by deleting the first instance of “at least” such that it reads “8.5.5.2 Buildings and structures used for human habitation or occupancy and not located within the Agriculture (AG) zone must be sited at least 15 metres from the boundary of the Agriculture (AG) zone”.
- 2.23. Section 12.2 (Marine Zone) Subsection 12.2.1 Article 12.2.1.1 is amended by inserting “associated” such that it reads “12.2.1.1 docks, private floats, wharves, piers and associated walkways accessory to the residential use of an abutting upland lot and providing access to that lot”.
- 2.24. Part 13 (Subdivision and Development Regulations) Section 13.1 is amended by inserting “and may exempt a boundary adjustment from minimum average lot size requirements” such that it reads “13.1 Subdivision applications must comply with the minimum and average lot size regulations set out in Parts 5 through 12 of this bylaw except that the approving officer may approve a subdivision creating a single parcel not complying with those regulations for park use only and may exempt a boundary adjustment from minimum average lot size requirements.”
- 2.25. Part 13 (Subdivision and Development Regulations) Section 13.2, Subsection 13.2.1 is amended by
 - i) deleting both instances of “s.941(1)” and replacing them with “s.510(1)
 - ii) deleting “s.941(5)” and replacing it with “s.510(3)

- 2.26. Part 13 (Subdivision and Development Regulations) Section 13.3 is amended by deleting “s.946” and replacing it with “s.514”.
- 2.27. Part 13 (Subdivision and Development Regulations) Section 13.5 (Lot Width) is amended by:
- iii) renumbering Section 13.5 to Section 13.6
 - iv) inserting “exclusive of any panhandle access strip” such that it reads “13.6 No lot may have a width less than one quarter of its depth exclusive of any panhandle access strip”
 - v) renumbering subsequent Part 13 (Subdivision and Development Regulations) sections and subsections accordingly.
- 2.28. Part 13 (Subdivision and Development Regulations) Section 13.9 is amended by deleting “The creation of a lot lying within two or more zones must be is prohibited” and replacing it with “The creation of a lot by subdivision that is lying within two or more zones is prohibited.”
- 2.29. Part 13 (Subdivision and Development Regulations) Section 13.12 is amended by deleting “section 13.12” and replacing it with “section 13.11”.
- 2.30. Part 13 (Subdivision and Development Regulations) is amended by
- i) deleting the section header above Section 13.22 that reads “Standards for Potable Water Supply” and reinserting it above Section 13.23
 - ii) inserting a new section header above Section 13.22 that reads “Water Management Area”.
- 2.31. Part 13 (Subdivision and Development Regulations) Section 13.29 is amended by deleting “Vancouver Island Health Authority” and replacing it with “Island Health”.
- 2.32. Part 14 (Parking Regulations) Section 14.1 is amended by renumbering the second instance of Subsection 14.1.16 that reads “Dwellings for the provision of affordable housing in the SH1 zone” to Subsection 14.1.17.
- 2.33. Part 14 (Parking Regulations) Section 14.6 is amended by deleting “3.5 metres” and replacing it with “5.5 metres”.
- 2.34. Part 16 (Sign Regulations) Section 16, Subsection 16.5 is amended by deleting “section 3.4” and replacing it with “section 3.5.”
- 2.35. Part 16 (Sign Regulations) Section 16.6 is amended by
- iv) renumbering subsection 16.3.1 to subsection 16.6.1
 - v) renumbering subsection 16.3.2 to subsection 16.6.2
 - vi) renumbering subsection 16.3.3 to subsection 16.6.3
 - vii) renumbering subsection 16.3.4 to subsection 16.6.4
 - viii) renumbering subsection 16.3.5 to subsection 16.6.5

- 2.36. Part 17 (Interpretations) Section 17, Subsection 17.1, Article 17.1.21 is amended by deleting “the 6th edition of the Guidelines for Canadian Drinking Water Quality published by Health and Welfare Canada in 1996” and replacing it with “the Health Canada 2020 Guidelines for Canadian Drinking Water Quality - Summary Table.”
- 2.37. Part 17 (Interpretations) Section 17, Subsection 17.1 is amended by
- Deleting Article 17.1.4 “average finished grade” in its entirety
 - Replacing 17.1.22 in its entirety with: ““Height” means the vertical distance between the highest point of a building or structure and the average natural grade, being the average undisturbed elevation of the ground at the perimeter of the building or structure calculated by averaging the elevations at the midpoints of all the exterior walls.”
 - Inserting Figure 1-1 directly below the updated definition within Article 17.1.22 and above Article 17.1.23

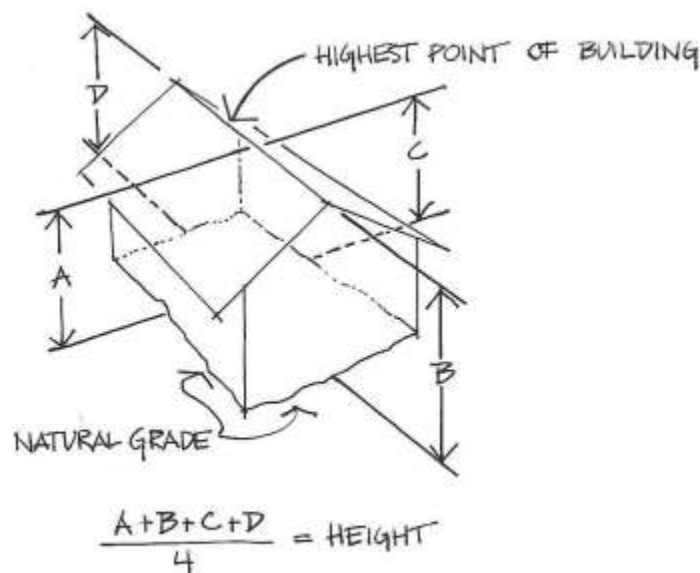


Figure 1-1 Illustration of calculation of height

- 2.38. Part 17 (Interpretations) Section 17, Subsection 17.1, Article 17.1.35 is amended by deleting “Liquor Control Act” and replacing it with “Liquor Control and Licensing Act.”
- 2.39. Part 17 (Interpretations) Section 17, Subsection 17.1 is amended by deleting Article reference numbers in their entirety.

3. SEVERABILITY

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS 1ST DAY OF MARCH 2021.

PUBLIC HEARING HELD THIS 1ST DAY OF JUNE 2021.

READ A SECOND TIME THIS 1ST DAY OF JUNE 2021.

READ A THIRD TIME THIS 1ST DAY OF JUNE 2021.

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS
23RD DAY OF JUNE 2021.

ADOPTED THIS _____ DAY OF _____ 20__

CHAIR

SECRETARY



Top Priorities Report

Galiano Island

1. Affordable Housing Strategy - STVR Review

Responsible

Dates

Phase 1: STVR review: public hearing in February 2021

Brad Smith

Rec'd: 04-Mar-2019
Target: 31-Mar-2021

2. Groundwater Sustainability

Responsible

Dates

Phase 1 and 2: mapping and data analysis - COMPLETING SPRING 2021

Narrisa Chadwick

Rec'd: 02-Apr-2019

Phase 3: Implement of mapping and data analysis

William Shulba

Target: 30-Sep-2022

- Project Charter - February 2021

3. Land Use Bylaw amendments

Responsible

Dates

To review LUB for: any technical/administrative bylaw amendments (e.g. definition references and numbering), shoreline zoning wording, crown lot rezonings, and review park zoning (specifically to allow stairs in setbacks).

Brad Smith

Rec'd: 28-Apr-2020
Target: 31-Mar-2021

LTC review in early 2021, public hearing in spring 2021



Projects Report

Galiano Island

1. *Parking Issues*

Responsible

Date Received

Issue for discussion with MoTI and public parking issues generated from associated islands.

23-Jul-2012

(see correspondence from P. Midgely on agenda of Apr/12)

2. *Light Industrial Zoning*

Responsible

Date Received

A review and inventory assessment of existing and potential light industrial zones.

18-Nov-2013

3. *Coastal Douglas-Fir Protection*

Responsible

Date Received

Review 'Protection of the Coastal Douglas-fir and Associated Ecosystems: An Islands Trust Tool Kit (2018)' and provide recommendations from toolkit.

04-Feb-2019

- LPC is intending to develop a model bylaw in 2021-22.

Include review the Contiguous Forest Mapping in the Islands Trust Area Report.

4. *Cannabis Retail and production*

Responsible

Date Received

Consider review of policies and regulations to address cannabis retail sales and production

05-Mar-2019

5. *Dock review*

Responsible

Date Received

To review policies and regulations relating to private moorage, including suitable locations, siting and size, and incorporating First Nations sites

02-Apr-2019



Projects Report

Galiano Island

6. *Emergency Access Planning*

Responsible

Date Received

Follow-up from CRD emergency planning process - include consideration of developing driveway guidelines for emergency access within land use bylaw

02-Apr-2019

7. *Review of forestry land designations, policies and community benefit approaches*

Responsible

Date Received

Project represents a consolidation of a number of previously identified projects with a similar theme related to forestry zoning on Galiano Island. Project scope within previous projects included: current and potential future approaches to community benefit agreements, use of split zoning, F1 forest lot issues, issues regarding lands without managed forest status, amendments to re-designate and rezone crown owned Forest lots (Bylaws 231, 232 at First Reading)

03-Feb-2020

8. *Review of Road Network Plan*

Responsible

Date Received

Review of Road Network Plan - include December 11th APC memo in review process - meet with MOTI

02-Mar-2020

9. *Review of LUB tiny home/trailer regulations, maximum house sizes and lot coverage*

Responsible

Date Received

01-Jun-2021

10. *Review of LUB water management and cistern regulations*

Responsible

Date Received

02-Nov-2020



Projects Report

Galiano Island

11. *Revisit rezoning of DL 87*

Responsible

Date Received

12-Apr-2021



Applications

Board of Variance

File Number	Applicant Name	Date Received	Purpose
GL-BOV-2021.1	Gathercole, Robert	20-May-2021	555 GANNER DR - repair foundations on a legal non-conforming building that encroaches on the minimum required setback

Planner: Phil Testemale

Planning Status

Status Date: 22-Jun-2021

BOV scheduling in process, applicant updated as to anticipated timeframe -DL

Status Date: 08-Jun-2021

Assigned to Phil T. - DL

Status Date: 25-May-2021

Payment receipt/processing times letter sent. Processing on hold due to volume. -DL

Development Permit

File Number	Applicant Name	Date Received	Purpose
GL-DP-2021.1	ORLITZKY, ROXANNE	06-Jan-2021	743 Georgeson Bay Road - Application for a DP for development in a sensitive ecosystem DPA

Planner: Phil Testemale

Planning Status

Status Date: 28-Jun-2021

On July 5 Agenda for consideration of DP

Status Date: 28-May-2021

SPEA mapping and form rec'd from QEP

Status Date: 28-May-2021

Request for cost estimate for restoration sent to QEP



Applications

Development Permit

File Number	Applicant Name	Date Received	Purpose
GL-DP-2021.2	Hoole, Warren	22-Mar-2021	to replace septic system (1970) -DL

Planner: Phil Testemale

Planning Status

Status Date: 01-Apr-2021

July 5, 2021 agenda for notification and consideration

Status Date: 26-Mar-2021

docs received, sent to Robert for planner assignment -DL\nAssigned to Phil \nPayment received and processed by acct rec.
-DL

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
GL-DVP-2021.3	Hoole, Warren	19-Mar-2021	replace septic system

Planner: Phil Testemale

Planning Status

Status Date: 25-May-2021

July 5, 2021 agenda for consideration.

Status Date: 06-May-2021

physical file folder delivered to Phil - DL

Status Date: 26-Apr-2021

Applicant provided updated survey.

**Applications****Rezoning**

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2005.2	Romagnoli	21-Mar-2005	Application to amend the LUB to rezone from F1 to F3 - Bylaw 210

Planner: Brad Smith**Planning Status****Status Date:** 01-Jun-2021

LTC has given applicants until Sept 30, 2021 to come to suitable terms on a covenant or application will be closed

Status Date: 18-May-2021

Applicant has stalled on reaching agreement with Galiano Conservancy - correspondence from applicant on agenda for June 1 LTC meeting

Status Date: 24-Mar-2021

Planner has requested that applicant work towards mid-June deadline for covenant agreement to have application on July 5 LTC agenda

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2014.1	Crystal Mountain Society	28-Oct-2014	20300 PORLIER PASS RD: Application for rezoning to amend the OCP and LUB to allow for a Forest Retreat Centre - Bylaws 256 (OCP) and 257 (LUB)

Planner: Brad Smith**Planning Status****Status Date:** 14-Jun-2021

Community Information Meeting completed via Zoom on June 14, 2021

Status Date: 27-May-2021

ITC endorsed new site layout with 6 conditions

Status Date: 18-May-2021

Planner met with ITC staff, application on May 25 ITC agenda



Applications

Rezoning

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2019.1	GIGAHS	11-Sep-2019	Georgia View Rd: rezoning application for to amend the OCP and LUB to permit an affordable housing development - Bylaws 276, (OCP), 277 (LUB), 274 (Housing Agreement)

Planner: Brad Smith

Planning Status

Status Date: 24-Jun-2021

Planner met with applicant to review housing agreement

Status Date: 15-Jun-2021

Draft housing agreement received back from legal review, sent to applicant

Status Date: 18-May-2021

Project update on June 1 LTC agenda

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2019.2	Gauvreau, Lisa	01-Oct-2019	Application to amend the LUB rezone to commercial - Bylaw 271 (LUB)

Planner: Brad Smith

Planning Status

Status Date: 22-Jun-2021

Applicant has provided groundwater pump test results, application on July 5, 2021 LTC meeting agenda

Status Date: 11-Mar-2021

CRD has confirmed driveway access is adequate - last item remaining is demonstrating proof of water

Status Date: 19-Feb-2021

Applicant still working to address potable water supply and driveway access



Applications

Rezoning

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2020.1	KING, FRED & DEBBIE	27-Oct-2020	51 Galiano Way - Application for rezoning to amend the OCP to permit residential use - Bylaw 279 (LUB)

Planner: Brad Smith

Planning Status

Status Date: 22-Jun-2021

Applicant working on TOR items - no clear timeline for coming back to LTC

Status Date: 09-Mar-2021

Planner conducted site visit with applicant

Status Date: 01-Feb-2021

Applicant directed to proceed with completing items in TOR

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2021.1	New Commons Development	08-Mar-2021	409 Porlier Pass Road - Application for rezoning to amend the LUB to permit an affordable housing development with a total of 20 units (within 4 buildings). Bylaw 280 (LUB)

Planner: Brad Smith

Planning Status

Status Date: 23-Jun-2021

Planner and freshwater specialist met with applicant to review water reports

Status Date: 01-Jun-2021

LTC received application and directed staff to draft amending bylaw and send to APC at June 1 LTC meeting

Status Date: 18-May-2021

Preliminary staff report on June 1 LTC agenda

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
GL-SUB-2020.1	Mitchell, Glen	19-Dec-2019	GIGHARS - Proposed two lot conventional subdivision referral of Lot 1 District Lots 30 and 31

Planner: Brad Smith

Planning Status

Status Date: 18-May-2021

Applicant has received preliminary conditions approval letter from MOTI - subdivision subject to successful rezoning

Status Date: 19-Feb-2021

Applicant working on referral report items

Status Date: 15-Dec-2020

Referral report reviewed with applicant

Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2020-042 (Standing)	Carried	08-Sep-2020
That the Galiano Island Local Trust Committee request that development permit applications where a variance is requested be processed as a combined application with both a development permit and a development variance permit.		
2020-041 (Standing)	Carried	06-Jul-2020
that the Galiano Island Local Trust Committee adopt the following policy on unlawful land uses and planning applications: a. Where an application is received and a use is continuing in contravention of a land use bylaw, staff are directed to request that the applicant cease the use prior to processing the application, and that staff are directed to continue with enforcement until the use is ceased. b. The applicant may request that the Local Trust Committee proceed with consideration of the application while the use is continuing; and, where the Local Trust Committee considers there is a community need to process the application while the prohibited use is continuing, the Local Trust Committee may direct that bylaw enforcement actions, including the issuing of notices, cease. c. Where the Local Trust Committee does not consider that there is a community need, or the applicant has not made such a request of the Local Trust Committee; bylaw enforcement actions, including the issuing of notices, will continue. d. In deciding whether to grant land use approval for a use that was commenced in contravention of a land use bylaw, the Local Trust Committee may consider whether the applicant has suspended the prohibited land use pending a decision on the application.		

Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2020-013 (Standing)	Carried	03-Feb-2020
that the Galiano Island Local Trust Committee request that prior to expiration of Advisory Planning Commission members terms of office, staff write to commissioners asking if they wish to be reappointed and also advertise for expressions of interest for new commissioners.		
2019-057 (Standing)	Carried	08-Jul-2019
that the Galiano Island Local Trust Committee initiate a moratorium on new TUP applications until the STVR project is completed and that bylaw enforcement is directed to require that unlawful STVRs comply with the land use bylaw.		
2019-053 (Standing)	Carried	03-Jun-2019
that the Local Trust Committee seek to engage in Reconciliation with local First Nations, governments and the island community by honouring the Truth and Reconciliation Commission (TRC) Calls to Action, United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), Draft Principles that Guide the Province of British Columbia's Relationship with Indigenous Peoples, and Islands Trust First Nations Engagement Principles, the Local Trust Committee endeavours to:		
a) Annually, write a letter to First Nations, (re)introducing trustees and staff and provide a schedule of known Local Trust Committee meetings for the upcoming year, as well as, provide an update of current projects and advocacy activities;		
b) For various Local Trust Committee meetings, invite First Nations to attend meetings; as well as, provide a traditional welcome to their territory if they would like;		
c) Work with First Nation governments on cooperative initiatives, including and not limited to, language, place names, territorial acknowledgements, and community education on Coast Salish and local First Nations' cultural heritage and history;		
d) Work with First Nation governments on engagement principles for inclusive land use, marine use, and climate change planning; advocacy, protection and stewardship; and knowledge and information sharing protocols;		
e) Establish and maintain government-to-government dialogue with First Nations, now and into the future, based on respect and recognition of Aboriginal rights and title, treaty rights, and First Nations' traditional territories within the Islands Trust Area.		



Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2019-014 (Standing) that the Galiano Local Trust Committee adopt the following standing resolution with respect to the processing of non-medicinal cannabis retail license applications: - Proposed or amended licenses for non-medicinal cannabis retail establishments require an application to the local trust committee. - The application process shall comprise a public consultation component, which includes at least one notification to neighbours, one public meeting, posting of public notices and one advertisement in a local periodical. - The public consultation process shall be determined by the local trust committee after initial review of the proposal. - However, as a minimum, the local trust committee will mail or otherwise deliver a notice to all owners and residents of properties within a 500 metre radius of the subject property where the establishment is proposed at least 10 days before adoption of a resolution providing comment on the application. The required notice shall include the following information: - o Name of the applicant and a description of the proposal in general terms - o The location of the proposed establishment and the subject site - o The place where, and date and time when, both a public meeting will be held and a resolution of the local trust committee considered. - o The name and contact information of the Islands Trust planning staff member who can provide copies of the proposed or amended license application - o How public comments may be submitted to the local trust committee.	Carried	04-Mar-2019
2018-064 (Standing) that the Galiano Island Local Trust Committee endorses the Telecommunication strategy Project Charter dated June 22, 2016	Carried	04-Jun-2018



Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2016-000 (Standing) Without fettering its discretion, the LTC provided the following guidance with respect to its consideration of TUP applications for Commercial Vacation Rentals: 1. A Commercial Vacation Rental use should only be considered in one dwelling per lot 2. Permits being considered in Water Management Areas should include conditions requiring cisterns with a minimum capacity of 16,000 litres and a water meter. 3. In order to assist in assessing cumulative impacts, staff are requested to continue to provide an updated map showing the location, status, and maximum number of guests of all Commercial Vacation Rental TUP applications.	Carried	05-Dec-2016
2014-029 (Standing) That the Galiano Island Local Trust Committee will consider as a community benefit for all rezoning applications where there is an increase in density, the establishment of an instrumented observation well.	Carried	07-Apr-2014
2014-000 (Standing) On properties where there is an open bylaw enforcement file, planning staff should refer planning applications to the Bylaw Enforcement Manager for comment where one or more of the following circumstances exist: 1. There have been significant delays or longer than typical timelines in the enforcement process 2. The LTC is considering on-going, relevant policy or regulatory changes that could impact enforcement 3. Litigation has been recommended 4. Legal counsel has been involved (beyond providing a basic interpretation) 5. There has been enforcement action beyond seeking voluntary compliance (e.g. a BEN warning or ticket, adjudication, a compliance agreement negotiated, etc.) 6. There has been, or is an expectation of, joint enforcement with other jurisdictions 7. There is potential for impact on other related enforcement files.	Carried	03-Feb-2014

Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2011-205 (Standing)	Carried	17-Oct-2011
That where a Liquor Control and Licensing Branch Special Occasion License referral relates to a property on which Galiano Island Land Use Bylaw No. 127, 1999 permits public assembly uses, such as restaurants or community halls, and where there have been no issues related to parking or past complaints for the preceding three years , staff may approve the Special Occasion License without referral to the Local Trust Committee. All other Special Occasion License referrals are to be referred to the Local Trust Committee for consideration.		
2010-115 (Standing)	Carried	18-Oct-2010
That the Galiano Island Local Trust Committee will advertise Public Hearing Notices in the Active Page Magazine in addition to the legally required advertising in the Driftwood Newspaper.		
2009-085 (Standing)	Carried	11-May-2009
That staff refer all applications adjacent to a park or ocean access to the Galiano Island Parks and Recreation Commission for comment		



ISLANDS TRUST CONSERVANCY REPORT TO LOCAL TRUST COMMITTEES AND BOWEN ISLAND MUNICIPALITY, CC TO EXECUTIVE May 25, 2021

HIGHLIGHTS OF ISLANDS TRUST CONSERVANCY BOARD MEETING (OPEN PORTION)

Islands Trust Conservancy has made changes to the format of this report to make its production and delivery more efficient. For more detail on Conservancy meetings, including meeting minutes, please visit <https://islandstrust.bc.ca/whats-happening/meetings-and-events/>

1. ORGANIZATION UPDATES/TEAM

- Islands Trust Conservancy Manager Kate Emmings introduced the board to Islands Trust Conservancy's newest staff member: Conservation Technician Co-op Student Devin Hentschel. The Conservation Technician role will assist Islands Trust Conservancy Covenant and Outreach Specialist Jemma Green and Property Management Specialist Nuala Murphy with covenant and property monitoring this summer. Devin Hentschel is a fourth-year student at the University of Victoria, majoring in Biology and minoring in Anthropology, has a passion for environmental and wildlife conservation, and is interested in citizen science projects that aim to involve, support, and collaborate with First Nations.

2. STRATEGIC PLANNING/ADMINISTRATION

- Islands Trust Senior Policy Advisor Dilani Hippola presented information on the Islands Trust Policy Statement Amendment Project, confirming that the board would be able to provide a written response after first reading by Trust Council, and emphasizing that it is a living document that will continue to change and evolve over time, with more frequent (e.g., annual) reviews. The board suggested that the project and document re-write focus more on the importance of *island* biodiversity and ecology (as opposed to biodiversity, in general). It was noted that Ecosystem Protection Specialist Kathryn Martell contributed substantively to the current draft, as did Islands Trust Conservancy Manager Kate Emmings. It was also noted that Islands Trust Conservancy is not subject to the Policy Statement as it operates under a separate Five-year Plan. While there are some references to the Conservancy in the current draft, it is not included in the policy directives.

3. COVENANT AND PROPERTY ACQUISITIONS

- Islands Trust Conservancy approved a Morrison-Waxler Biodiversity Protection Legacy Fund Grant of \$5,500 for survey and baseline report costs for a NAPTEP covenant on lands owned by Lisa Baile and Peter Paré, of North Pender Island. The Morrison-Waxler Biodiversity Protection Legacy Fund Grant Program is only available on North and South Pender and is available to landholders who wish to place conservation covenants on their lands.



**ISLANDS TRUST CONSERVANCY
REPORT TO LOCAL TRUST
COMMITTEES AND BOWEN ISLAND
MUNICIPALITY, CC TO EXECUTIVE
May 25, 2021**

4. COVENANT AND PROPERTY MANAGEMENT

- The Islands Trust Conservancy Board reviewed a number of updates to the Crystal Mountain Society proposal to create a new nature reserve on Galiano Island as part of a rezoning process with the Galiano Island Local Trust Committee. The board passed several resolutions and forwarded them to the applicant.¹
- The Islands Trust Conservancy Manager and Covenant and Outreach Specialist outlined the Sidney Island Ecological Restoration Plan to the board, who noted that the plan was compatible with the Islands Trust mandate and actions around First Nations reconciliation and climate change. They also noted their appreciation towards the plan's emphasis on ecosystem restoration and animal welfare.

5. COMMUNICATIONS AND OUTREACH

- Acting Islands Trust Conservancy Fundraising Specialist Carla Funk gave a presentation to board members on how to cultivate a culture of philanthropy, explaining why people give and describing how to inspire others through storytelling.
- The Islands Trust Conservancy Board approved a draft for the 2020/2021 Annual Report after calling for a number of slight rewording amendments, and also asked that the contents of the Annual Report be repurposed or otherwise made available to a wider audience – to which staff replied that a donor-oriented “Impact Report” version of this material was planned for publication in the near term.

6. FUNDRAISING AND CONSERVANCY SUPPORT

- Islands Trust Conservancy approved two Opportunity Fund Grants: one of \$4,000 to be awarded to the Denman Conservancy Association, and one of \$2,500 to be awarded to the Salt Spring Island Water Preservation Society.

¹ Islands Trust Conservancy Manager Kate Emmings left the meeting for the Crystal Mountain Society application due to a previously declared conflict of interest.

MEMORANDUM

File No.: 6500-20
Business Licensing

DATE OF MEETING: June 1, 2021
TO: Galiano Island Local Trust Committee
FROM: Robert Kojima, Regional Planning Manager
Southern Team
COPY: Stefan Cermak, Regional Planning Manager, Salt Spring Region
SUBJECT: Business Licensing

PURPOSE

To update the Local Trust Committee on a potential request to the Capital Regional District to explore the implementation of business licensing, specifically for short term vacation rentals.

- On May 6th several trustees met to discuss issues related to business licensing and STVR enforcement.
- On May 7th, the South Pender Island Local Trust Committee adopted a resolution requesting that the CRD consider the implementation of business licensing (resolution below).
- The SPLTC also requested that other southern LTCs and the Salt Spring LTC be forwarded the resolution for consideration prior to the request being sent to the CRD.
- If the LTC supports the approach, it could consider adopting a similar resolution.

SP-2021-044

WHEREAS the South Pender Island Local Trust Committee is implementing additional policies and zoning to regulate and manage short term vacation rentals on South Pender island, the Local Trust Committee lacks the full range of tools for enforcement and administration of vacation rentals;

THEREFORE the South Pender Island Local Trust Committee requests that the Capital Regional District explore the implementation of business licensing for tourist accommodation and specifically for short term vacation rentals.

CARRIED

NEXT STEPS

Once all LTCs have considered the resolution, they will be forwarded to the CRD.

Submitted By:	Robert Kojima, Regional Planning Manager	May 10, 2021
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