Gabriola Island Local Trust Committee
Special Meeting Agenda

Date: November 25, 2021
Time: 10:30 am
Location: Electronic Meeting

Pages

1. CALL TO ORDER 10:30 AM - 10:35 AM

"Please note, the order of agenda items may be modified during the meeting. Times are provided for convenience only and are subject to change."

2. APPROVAL OF AGENDA

3. REPORTS 10:35 AM - 11:00 AM

3.1. Trustee Reports

3.2. Chair's Report

3.3. Electoral Area Director's Report

3.4. First Nation Reports

4. TOWN HALL - no town hall available

5. MINUTES 11:00 AM - 11:05 AM

5.1. Local Trust Committee Minutes dated October 21, 2021 – for adoption 4 - 12

5.2. Section 26 Resolutions-Without-Meeting Report dated November 18, 2021 13 - 13

5.3. Advisory Planning Commission Minutes - none

6. BUSINESS ARISING FROM MINUTES 11:05 AM - 11:45 AM

6.1. Follow-up Action List dated November 18, 2021 14 - 17

6.2. Model Fees Bylaw Update - Staff Report 18 - 29

6.3. Cell Tower Strategy - Trustee Langereis - discussion 30 - 41

7. APPLICATIONS AND REFERRALS 11:45 AM - 12:15 PM

7.1. GB-SUB-2020.2 - (Centre Stage Holdings Ltd. - Seymour Road, Gabriola) - Staff Report 42 - 45

7.2. GB-DP-2021.2 - (1167433 BC Ltd. - Silva Bay Resort and Marina) - Staff Report 46 - 221

8. LOCAL TRUST COMMITTEE PROJECTS 12:10 PM - 1:15 PM

8.1. Business Case for Gabriola Biocultural and Housing Diversity Program - Staff Report 222 - 259

8.2. Active Transportation Grant - Final Report - to be distributed

9. DELEGATIONS - none

10. CORRESPONDENCE

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

------ BREAK 1:15 PM to 1:45 PM ------

11. NEW BUSINESS

12. REPORTS 1:45 PM - 2:00 PM

12.1. Climate Change Action Update

12.2. First Nations Relationship Building

12.3. Trust Conservancy Report

12.3.1. The Heron - Autumn, 2021 260 - 263

12.4. Applications Report dated November 18, 2021 264 - 270

12.5. Trustee and Local Expense Report dated September, 2021 271 - 271

12.6. Adopted Policies and Standing Resolutions 272 - 274

12.7. Local Trust Committee Webpage

13. WORK PROGRAM 2:00 PM - 2:20 PM

13.1. Top Priorities Report dated November 18, 2021 275 - 275

13.2. Projects List Report dated November 16, 2021 276 - 280

14. CLOSED MEETING 2:20 PM - 2:35 PM

14.1. Motion to Close the Meeting

That the meeting be closed to the public in accordance with the Community Charter, Part 4, Division 3, s.90(1) (d), (f) and (i) for the purpose of considering Adoption of In-Camera Meeting Minutes dated October 21, 2021; Bylaw Enforcement and the receipt of Advice that is Subject to Solicitor-Client privilege and that the recorder and staff attend the meeting.

14.2. Recall to Order

14.3. Rise and Report

15. UPCOMING MEETINGS

15.1. Next Regular Meeting Scheduled for Thursday, January 27, 2021 at 10:30 am at the Gabriola Arts and Heritage Centre

16. ADJOURNMENT

2:35 PM - 2:35 PM

Gabriola Island Local Trust Committee
Minutes of Regular Meeting

Date: October 21, 2021
Location: The Haven, Heron Room
240 Davis Road
Gabriola, BC V0R 1X3

Members Present: Dan Rogers, Chair
Kees Langereis, Local Trustee
Scott Colbourne, Local Trustee

Staff Present: Heather Kauer, Regional Planning Manager
Sonja Zupanec, Island Planner
Teresa Mahikwa, Island Planner
Nadine Mourao, Recorder

Others Present: There were approximately four (4) members of the public in attendance.

1. CALL TO ORDER

"Please note, the order of agenda items may be modified during the meeting. Times are provided for convenience only and are subject to change."

Chair Rogers called the meeting to order at 10:31 am and welcomed the public. He introduced Trustees, Staff and Recorder and acknowledged that the meeting was being held in the territory of the Coast Salish First Nations.

2. APPROVAL OF AGENDA

The following additions to the agenda were presented for consideration:

- Add 8.3 Update on the Housing Options & Impacts Project and the Financial Planning Committee (FPC) meeting; and
- Add 13.4 Proposed dates for 2022 Gabriola Island Local Trust Committee (LTC) meetings.

By general consent the agenda was approved as amended.

3. REPORTS

3.1 Trustee Reports

Trustee Colbourne reported the following and his attendance at the following meetings and events:

- Trust Council (TC);
- National Climate Caucus; and
- Discussions with local community members.

Trustee Langereis reported the following and his attendance at the following meetings and events:

- Regional Planning Committee (RPC);
- Discussions with local community members regarding concerns with Degnen Bay and noted that the area is multi-jurisdictional;
- TC; and
- Will bring forward Model Cell Tower Protocol report to next meeting.

3.2 Chair's Report

Chair Rogers reported the following:

- A cell tower application has not yet been received;
- Attended TC;
- Attended Financial Planning Committee (FPC) with focus on next fiscal year budget discussions; and
- Next TC meeting will be in Victoria, with allowance of up to 10 trustees to attend virtually.

3.3 Electoral Area Director's Report

Trustee Colbourne summarized Vanessa Craig's, Regional District of Nanaimo (RDN) Electoral Area B report and noted the following:

- Huxley park scheduled to complete this winter;
- Some maintenance of the Village Trail was completed recently;
- Met with consultant regarding the ferry to Village trail to discuss lessons learned from Village Trail project;
- 2021 Well Smart Webinars Monday, October 25, 2021 at 6:00 p.m. and Wednesday, October 27, 2021 at 2:00 p.m. https://www.rdn.bc.ca/wellsmart;
- Accepting applications for volunteering on committees https://www.rdn.bc.ca/board-appointments-rdn-advisory-committees;
- 2021 Operational Plan discussions;
- Additional interactive heat map with the location of new dwellings available;
- In 2022 there will be a rebate for water flow meter on wells;
- Listing of Development cost charges (DCCs) are available https://www.rdn.bc.ca/development-cost-charges;
- Apply $154,000 fire smart funding, GVFD grant awarded;
- Gabriola Volunteer Fire Department (GVFD) was awarded fire smart grant;
- Discussions regarding payment requirements for electric vehicle charging stations at Descanso Bay park;
- RDN Climate Action Committee recommendations go to RDN board for review; and
- RDN move to hybrid virtual and in person meeting model.

3.4 First Nation Reports

Trustee Langereis noted RPC support for a program for indigenous youth and elders to meet, with discussions around relationships with land and water.

Trustee Colbourne is in discussions with Senior Intergovernmental Policy Advisor, Lisa Wilcox regarding protocol agreements and establishment of regular business meeting schedule.

Chair Rogers noted a proposal to continue cultural heritage mapping in cooperation with First Nations consultants to identify and map cultural heritage area that are not currently identified and protected.

4. TOWN HALL

A member of the public noted they did not support waiving the public hearing regarding Bylaw 303, as this was a trust initiated amendment bylaw and voiced concerns with the vague definition of 'community resource centre' in the application and asked the LTC to consider review of the term 'community centre' which was also open for interpretation. Secondly, they suggested the LTC publish updates monthly in the local newspaper.

A member of the public noted support for waiving public hearing on Bylaw 303, as the public had other ways to share their feedback and comments. They also noted their support for a reduction in fees for affordable housing applications for charities and non-profits on the Fees Bylaw Update discussion item.

5. MINUTES

5.1 Local Trust Committee Minutes dated September 9, 2021 – for adoption

The following amendments to the minutes of September 9, 2021 were presented for consideration:

- Page 2, 3.2 Trustee Reports, Trustee Langereis reported, first bullet, first sub bullet, should read "challenges experienced in reading revised…"

By general consent the minutes of September 9, 2021 were adopted as amended.

5.2 Section 26 Resolutions-Without-Meeting - none

5.3 Advisory Planning Commission Minutes dated September 9, 2021 - for receipt

Received.

6. BUSINESS ARISING FROM MINUTES

6.1 Follow-up Action List dated October 12, 2021

Received.

6.2 Update on the Church-Spruce Road Opening and Clarification of Public Trail Connections - for discussion

Trustee Colbourne enquired on the status of trail connections signage and thanked Staff for all their work on the project.

Planner Zupanec noted that persons may contact RDN Parks Planning Department for an update on trail mapping and encouraged patience as RDN Staff are currently working on the project.

7. APPLICATIONS AND REFERRALS

7.1 GB-DVP-2021 (Jerry Ellins for Egan & Klus - 1045 Horseshoe Road) - Staff Report

Planner Mahikwa provided an overview of the report which asked the LTC to consider a reduction in the minimum lot line setback from Horseshoe Road from 10.0 metres, to a minimum of 9.74 metres to correct an error that occurred when pouring the concrete foundation and noted:

- No comments received from neighbouring properties;
- No other public comments received;
- Encroachment is minor and such a variance has little or no impact on neighbouring properties; and
- The variance does not affect the Development Variance Permit (DVP) that was issued previously.

GB-2021-083
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee approve issuance of Development Variance Permit GB-DVP-2021.3 (Egan & Klus).

CARRIED

7.2 GB-RZ-2020.1 - Gabriola Housing Society - verbal update

Planner Zupanec noted that since the last consideration of bylaws, Staff have received Ministerial approval, a meeting with the Snuneymuxw First Nations to discuss their comments may be delayed as Snuneymuxw have upcoming elections in February 2022 and Staff are considering how to proceed in advance of the anticipated dialogue.

7.3 Gambier Island Local Trust Committee Bylaw Nos. 153 and 154 - Referral Request for Response

Chair Rogers provided an overview of the Referral Form, which requested the LTC to comment on the potential effect on their agency's interests.

Trustees noted in future they would be interested in inclusion of the full Bylaw details in the Agenda package, as it is good to see what other islands are doing and makes it easier to make decisions on their agency's interests.

GB-2021-084
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee finds their 'Interests Unaffected by Bylaw' for Gambier Island Local Trust Area – Keats Island Bylaw Nos. 153 (Official Community Plan) & 154 (Land Use Bylaw).

CARRIED

7.4 Bylaw No. 303 - for consideration of adoption

GB-2021-085
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee Bylaw No. 303, cited as "Gabriola Island Land Use Bylaw No. 177, 1999, Amendment No. 1, 2019", be adopted.

CARRIED
Trustee Colborne opposed

By general consent the meeting was recessed at 11:44 am and reconvened at 12:15 pm.

8. LOCAL TRUST COMMITTEE PROJECTS

8.1 Land Use Bylaw Amendments to Expand Community Uses in the IN1 Zone Project - Staff Report

Trustee Langereis declared that he had a potential conflict of interest with the upcoming item, due to the fact that he was a Director of Gabriola Island Recycling Organization (GIRO) prior to being elected as a Trustee.

Trustee Langereis left the meeting at 12:15 pm.

Planner Mahikwa summarized the report which asked the LTC to consider further readings and noted the following points:

- Supported waiving Public Hearing (PH) as the public may provide their comments to Staff and Trustees via email, mail, or telephone at any time, project information is available on the website to inform and engage the public, the public may engage with the LTC at their regular business meetings, public notices in the local newspaper indicated comments may be forwarded directly to Planner Mahikwa, and as long as the proposed changes are allowable within the Official Community Plan (OCP) they may waive the PH;
- Community Resource Centre was added for consistency, as that definition is in the Land Use Bylaw (LUB); and
- No other public comments have been received.

Trustees noted that the OCP and LUB for Gabriola are in need of updating and supported waiving the PH, as the public has other avenues to voice their comments on minor amendments that serve the community.

GB-2021-086
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee Bylaw No. 310 cited as "Gabriola Island Land Use Bylaw, 1999, Amendment No. 2, 2021", be read a second time.

CARRIED

GB-2021-087
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee Bylaw No. 310 cited as "Gabriola Island Land Use Bylaw, 1999, Amendment No. 2, 2021" be read a third time.

CARRIED

GB-2021-088
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee Bylaw No. 310 cited as "Gabriola Island Land Use Bylaw, 1999, Amendment No. 2, 2021" be forwarded to the Secretary of the Islands Trust for approval by the Islands Trust Executive Committee.

CARRIED

Trustee Langereis returned to the meeting at 12:27 pm.

8.2 Density Donation Outreach Program - verbal update

Planner Zupanec provided a verbal update and noted the following:

- Working on refining draft text and graphics for project webpage;

- Refining topical issues and messaging on how donations make a difference;
- Plan to refer to the Housing Advisory Planning Commission (HAPC) by the end of the year;
- Islands Trust (IT) is to act as a navigator for property owners and community members to access relevant information and dovetail with other networks and organizations to make sure everyone has access to options and information;
- Currently, there is one density that is waiting to be donated to the density bank; and
- Project budget would cover the cost of covenant drafting, such as providing a template, and registration of properties.

Trustees noted their support for alleviation of cost implications for density donations.

8.3 Update on the Housing Options & Impacts Project and the Financial Planning Committee (FPC) meeting

Chair Rogers provided an update and noted the following key points:

- FPC has received the budget request for the Housing Options & Impacts Project and is awaiting the business case;
- There is no surplus budget in general revenues to draw upon for larger multi-year projects and may need tax increase or special tax requisition to fund;
- Staff to provide the FPC with outline and conditions of the special tax requisition process; and
- A special tax requisition request would need to be received by March, 2022, a tight deadline to meet for this round of funding.

Discussion ensued and the following was noted by Trustees:

- Timing for a March, 2022 special tax requisition request that includes community consultation is too tight a timeline; and
- Interested in possibility of special tax requisition for an OCP review, as current OCP is out of date.

9. DELEGATIONS - none

10. CORRESPONDENCE

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

11. NEW BUSINESS

11.1 Fees Bylaw Update - Request for Decision

Planning Manager Kauer provided a summary of the report which asked the LTC to update all LTC's fee bylaws to be consistent with the new Application Processing Services policy and noted:

- If Trustees would like to amend the Fees Bylaw significantly or have a public engagement process, would need to put on the Top Priorities Project list.

Trustees noted the following key points:

- Interested in significant reduction in fees for affordable housing projects; and

- Interested in comparison document with current Fees Bylaw and Draft Fees Bylaw to see the differences between the two.

GB-2021-089
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee request Staff to draft a new Fee Bylaw based on the Model Fee Bylaw attached to Trust Council Policy "5.6.1 Application Processing Services" and based on unique provisions of the existing Gabriola Fee Bylaw.

CARRIED

11.2 Request from Director Craig to Support a Rainbow-Coloured Crosswalk - for discussion

GB-2021-090
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee support Vanessa Craig, Regional District of Nanaimo, Electoral Area B, letter to Ministry of Transportation and Infrastructure regarding a rainbow-coloured crosswalk on Gabriola Island.

CARRIED

12. REPORTS

12.1 Climate Change Action Update

Received.

12.2 First Nations Relationship Building

None.

12.3 Trust Conservancy Report – none

12.4 Applications Report dated October 12, 2021

Received. Trustees noted that some items were on the report for many years, interested in possibility of deadlines.

GB-2021-091
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee request Staff to provide an update on GB-DVP-2016.3.

CARRIED

12.5 Trustee and Local Expense Report dated August, 2021

Received.

12.6 Adopted Policies and Standing Resolutions

Received.

12.7 Local Trust Committee Webpage

No updates requested.

13. WORK PROGRAM

13.1 Top Priorities Report dated October 12, 2021

Received.

GB-2021-092
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee request Staff to add the "Development of an Ecological Protection Zone" project back to the Top Priority List after the "IN1 Zoning Review" project is completed.

CARRIED

GB-2021-093
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee request Staff to remove the "Develop Cannabis Production Regulations" from the Top Priority List.

CARRIED

13.2 Projects List Report dated October 12, 2021

Received.

13.4 Proposed dates for 2022 Gabriola Island Local Trust Committee (LTC) meetings

GB-2021-094
It was MOVED and SECONDED
that the Gabriola Island Local Trust Committee schedule its regular business meetings on the following dates in 2022: January 27, March 3, April 7, May 12, June 16, July 28, September 29, October 27, and December 1 and request the June 16 meeting to be a late afternoon meeting.

CARRIED

14. CLOSED MEETING

14.1 Motion to Close the Meeting

GB-2021-095
It was MOVED and SECONDED
that the meeting be closed to the public in accordance with the Community Charter, Part 4, Division 3, s.90(1) (a) and (d) for the purpose of considering Appointment of Advisory Planning Commission Members and Adoption of In-Camera Meeting Minutes dated June 17, 2021 and that the recorder and staff attend the meeting.

CARRIED

14.2 Recall to Order

Recall to order 1:55 pm.

14.3 Rise and Report

Adopted In-camera Minutes of the Local Trust Committee meeting of June 17, 2021; appointed Peter Maidstone, Susan Yates, Don Elkington, Jennefer Laidley, Deborah Ferens and Jeff Malmgren to the Gabriola Island Advisory Planning Commission, with thanks for their service to their community.

15. UPCOMING MEETINGS

15.1 Next Regular Meeting Scheduled for Thursday, November 25, 2021 at 10:30 am at the Gabriola Arts and Heritage Centre

16. ADJOURNMENT

By general consent the meeting was adjourned at 1:56 pm.

_____
Dan Rogers, Chair

Certified Correct:

_____
Nadine Mourao, Recorder

DRAFT

Print Date: November 18, 2021

Resolutions Without Meetings Log

Gabriola Island

Resolution Number	Action	Date
2021-003	**Carried**	**15-Nov-2021**

"That Gabriola Island Local Trust Committee Bylaw No. 310, cited as "Gabriola Island Land Use Bylaw, 1999, Amendment No. 2, 2021", be adopted."

Islands Trust

Print Date: November 18, 2021

Follow Up Action Report

Gabriola Island

28-Nov-2019

	Activity	Responsibility	Dates	Status
1	LTC approved issuance of GB-DVP-2017.1 conditional upon registration of a restrictive covenant and registration of a S. 32 HCA notice on title. (Awaiting registration of covenant and HCA notice)	Becky McErlean Ian Cox		In Progress
2	LTC approved issuance of GB-DP-2017.2 following issuance of GB-DVP-2017.1 (Awaiting registration of covenant and HCA notice)	Becky McErlean Ian Cox		In Progress

10-Sep-2020

	Activity	Responsibility	Dates	Status
1	GB LTC resolution to purchase a subscription to the Welcome Wagon up to $100. *Waiting on updated brochures from TAS. Welcome Wagon rep moved to SSI but still available for Gabriola business.*	Wil Cottingham		In Progress

26-Nov-2020

	Activity	Responsibility	Dates	Status

Follow Up Action Report

Gabriola Island

26-Nov-2020

	Activity	Responsibility	Dates	Status
1	GB-RZ-2020.1 (GHS) Proposed Bylaw No. 308 (Housing Agreement) LTC request applicant submit approved water licence prior to final reading of BL 306 and 307. *Submitted.* March 4 2021: Staff to prepare amendments to the Housing Agreement Bylaw as per the LTC resolution; defer items i) and n) to future LTC meeting and not proceed with further readings until consultation with Snuneymuxw First Nation is completed.	Becky McErlean Jaime Dubyna		In Progress

---

29-Jul-2021

	Activity	Responsibility	Dates	Status
1	Staff to schedule a protocol meeting with the Regional District of Nanaimo in fall 2021. *Staff-2-Staff meeting to be held prior to RDN protocol meeting with GB LTC per discussion between RDN CAO and IT CAO. Plan to hold Staff-2-Staff meeting in December 2021.*	Wil Cottingham		In Progress

---

Follow Up Action Report

Gabriola Island

29-Jul-2021

Activity	Responsibility	Dates	Status
2 Staff prepare a draft business case for management/LTC review for submission to IT FPC as per the staff recommendation for the Biocultural and Housing Diversity Program.	Sonja Zupanec		Completed

21-Oct-2021

Activity	Responsibility	Dates	Status
1 GB-DVP-2021.3 issued.	Becky McErlean Penny Hawley Teresa Mahikwa		Completed
2 Referral of GM BL 153 and 154 - interests unaffected.	Jaime Dubyna		Completed
3 Bylaw 303 adopted.	Becky McErlean Heather Kauer		Completed
4 Bylaw 310 given 2nd, 3rd reading and forward to EC for approval.	Becky McErlean Teresa Mahikwa		Completed
5 Bring forward the model fee bylaw for LTC consideration as per LTC resolution Oct 21 2021.	Becky McErlean Heather Kauer		Completed
6 All six members appointed to APC as per in-camera decision.	Penny Hawley		Completed

Follow Up Action Report

Gabriola Island

21-Oct-2021

Activity	Responsibility	Dates	Status
7 Provide status update on GB-DVP-2016.3 for Nov 25 LTC meeting.			In Progress
8 Add the Ecological Protection Zone project to the Top Priorities list once IN1 project is completed.	Sonja Zupanec		Completed
9 LTC meeting schedule for 2022 adopted as presented. June 16 meeting to begin late afternoon ~4pm.	Wil Cottingham		Completed

STAFF REPORT

DATE OF MEETING:	November 25, 2021
TO:	Gabriola Island Local Trust Committee
FROM:	Heather Kauer, Regional Planning Manager Northern Team
SUBJECT:	Model fees bylaw

RECOMMENDATION

1. **That the Gabriola Island Local Trust Committee request Staff to draft a new Fee Bylaw based on the model fee bylaw attached to Trust Council Policy "5.6.1 Application Processing Services" with the following modification:**

    a. **That the fee for an Official Community Plan or Land Use Bylaw amendment, or combination thereof for affordable housing where the applicant is a registered charity or a non-profit society, be $1,000.**

REPORT SUMMARY

The purpose of this report is to make a recommendation regarding a recent version of a model fees bylaw and modifications that could be made to make it more in alignment with current provisions of the Gabriola fees bylaw.

BACKGROUND

At their October 21, 2021 regular meeting, the Gabriola Island Local Trust Committee passed the following resolution:

> **GB-2021-089**
> **It was MOVED and SECONDED**
> that the Gabriola Island Local Trust Committee request Staff to draft a new Fee Bylaw based on the Model Fee Bylaw attached to Trust Council Policy "5.6.1 Application Processing Services" and based on unique provisions of the existing Gabriola Fee Bylaw.
> **CARRIED**

ANALYSIS

The following table outlines the key differences between the fees listed in the current Gabriola fees bylaw and the model fees bylaw presented to the LTC at their October 21st meeting:

MODEL BYLAW APPLICATION DESCRIPTIONS		EXISTING BYLAW
TABLE 1 – Bylaw Amendments (OCP and Zoning Bylaw)		
Type of Application	**Fee : MODEL BYLAW**	**BYLAW NO. 300**
1. Major (e.g. change to density or OCP)	$7,800	$5,900 (Bylaw 300 applications under 2. Apply to the Model description)
2. Minor (e.g. regulation change without changing density or OCP amendment)	$4,600	$5,250 (Bylaw 300 applications under 1. and 3. Apply to the Model description)
*Official Community Plan or Land Use Bylaw amendments for affordable housing and the applicant is a registered charity or a non-profit society	Does not exist in Model Bylaw	$1000.00

MODEL BYLAW APPLICATION DESCRIPTIONS		EXISTING BYLAW
TABLE 2 – Permits		
Development Permit in Respect of:	**Fee : MODEL BYLAW**	**BYLAW NO. 300**
1. Protection of Natural Environment, Ecosystems and Biological Diversity	$1,000 (applies to DP-1, DP-2, DP-4, DP-5, DP-6 and DP-3)	$525 (DP-1, DP-2, DP-4, DP-5, DP-6) $240 (DP-3)
2. Protection of Development from Hazardous Conditions	$1,000 (DP6)	$525 (DP-6)
3. Protection of Farming	$1,000	Not in existing Bylaw
4. Objectives for Form and Character	$1,700	$800
5. Objectives to Promote Energy Conservation	$1,000	Not in existing Bylaw
6. Objectives to Promote Water Conservation	$1,000	Not in existing Bylaw

MODEL BYLAW APPLICATION DESCRIPTIONS		EXISTING BYLAW
7. Objectives to Promote the Reduction of Greenhouse Gas Emissions	$1,000	Not in existing Bylaw
8. Development Permit Amendment	$1,000	$200
9. Development variance permit (commercial, industrial or institutional development)	$1900	$1,125
10. Development variance permit (residential development)	$1900	$850
Type of Temporary Use Permit	**Fee : MODEL BYLAW**	**BYLAW NO. 300**
11. Temporary Use Permit (residential/commercial/industrial)	$2150	$1,300
12. Temporary Use Permit for residential uses or commercial uses under 95 square metres that provide community benefit.	$1000	Not in existing Bylaw
13. Temporary Use Permit Renewal	$700	$200
14. Temporary Use Permit Renewal (Community Benefit)	$350	Not in existing Bylaw
Other Permits	**Fee : MODEL BYLAW**	**BYLAW NO. 300**
15. Heritage Alteration Permit	$1,700	Not in existing Bylaw
Combination Applications	**Fee : MODEL BYLAW**	**BYLAW NO. 300**
16. Development Permit in respect of a protection area or water and energy conservation in combination with a companion application for a Development Variance Permit	$2,500	$925 (residential) $1,125.00 (commercial) (applies to Table 2 – #7. and #8. In existing bylaw.)

MODEL BYLAW APPLICATION DESCRIPTIONS		EXISTING BYLAW
TABLE 3 – Subdivision Referrals		
Type of Application	**Fee : MODEL BYLAW**	**BYLAW NO. 300**
1. Application for Subdivision Review – base fee	$1,000	$1,300
2. Application for Subdivision Review – per additional lot created	$100	$130
3. Application for Subdivision Review – parcel line adjustments only, creating no additional parcels	$500	$400

MODEL BYLAW APPLICATION DESCRIPTIONS		EXISTING BYLAW
TABLE 4 – Other Applications		
Type of Application	**Fee : MODEL BYLAW**	**BYLAW NO. 300**
1. Board of Variance	$2,200	$1,200
2. Land Use Contract amendment	$2,000	$5,250
3. Liquor & Cannabis Regulation Branch – Retail License Application and Process and referrals requiring local government consultation	$1,500	$1,000/$2000 (Table 4 - #3 and #4 are no longer application in existing bylaw due to changes in licensing)
4. Liquor & Cannabis Regulation Branch – Temporary License Change	$500	$100
5. Strata Conversions	$1,500	$1,300
Zoning Confirmation Letter	Does not exist in Model Bylaw	$100

In summary, the model bylaw includes fees that are generally increases from those currently listed in the Gabriola fees bylaw.

The Executive Committee of Islands Trust has indicated that their policy is that any amendments to existing bylaws or adoption of the model fees bylaw that proposes different fees than those listed in the model should not deviate by more than 20%. The current Gabriola fees bylaw lists a $1,000 fee for OCP or LUB applications for affordable housing proposed by non-profits or charitable organizations. $1,000 is more than a 20% deviation from the model fees bylaw proposed fees of $7,820 for OCP or Major LUB amendments or $4,600 for minor LUB amendments. If the LTC decides to retain the $1,000 fee for affordable housing applications, there is some risk that the Executive Committee would decline to approve the bylaw.

Should the LTC accept staff's recommendation, staff would draft a new bylaw for a future LTC meeting. The LTC could give the bylaw first, second, and third reading at the same meeting as the bylaw is administrative in nature. The bylaw would then be presented to the Executive Committee for approval.

Rationale for Recommendation

Due to an expressed interest from the Gabriola Island LTC in retaining the $1,000 fee for affordable housing, staff are recommending that this be retained. Staff are further recommending that this be the only modification to the model fees bylaw as these are the fees recommended by the Regional Planning Committee and Executive Committee.

ALTERNATIVES

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

1. **Request further information**

   The LTC may request further information prior to making a decision. Staff advise that the implications of this alternative are that the model fees bylaw would need to be added to a projects list and wait for further staffing resources. 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 Gabriola Island Local Trust Committee request that staff add "Model Fees Bylaw" to the Top Priorities project list and submit [identify information to be provided] to the LTC.

2. **Recommend further amendments to the model fees bylaw**

   The LTC may wish to modify the model bylaw in ways other than those recommended by staff. Recommended wording for the resolution is as follows:

   That the Gabriola Local Trust Committee request Staff to draft a new fee bylaw based on the model fee bylaw attached to Trust Council Policy "5.6.1 Application Processing Services" with the following modifications: [list modifications].

3. **Receive for information**

   The LTC may receive the report for information

NEXT STEPS

If the LTC accepts the recommendation on page one of this report, staff will bring back to the LTC a bylaw to consider for first, second, and third reading.

Submitted By:	Heather Kauer, MPA, RPP, MCIP, AICP Regional Planning Manager	November 16, 2021

ATTACHMENTS

1. Model Fees Bylaw

[INSERT LTC NAME] LOCAL TRUST COMMITTEE

BYLAW NO. [XX]

A bylaw to prescribe fees for amending bylaws, issuing permits, examining applications for subdivision, and examining other referrals and applications. Model fees reflect the cost recovery for application processing.

WHEREAS Section 462 of the *Local Government Act* provides that a local government may, by bylaw, impose fees related to applications and inspections; Section 41 of the *Liquor Control and Licensing Act* and Section 35 of the *Cannabis Control and Licensing Act* provides that a local government may, by bylaw, impose fees for referral of a license under that Act, [DENMAN AND HORNBY ONLY and Section 31(2)(b) of the Islands Trust Act provides that a local trust committee may impose a fees to recover the cost of processing siting and use permits] ;

NOW THEREFORE the [Insert LTC Name] Local Trust Committee, being the Local Trust Committee having jurisdiction in respect of the [Insert LTC Name] Local Trust Area in the Province of British Columbia pursuant to the *Islands Trust Act*, enacts as follows:

Citation

1.1 This bylaw may be cited as the "[Insert LTC Name] Local Trust Committee Fees Bylaw, No. [XX]".

Interpretation

2.1 In this bylaw:

"Applicant" means:

2.1.1 the person authorized under the _____ Island Local Trust Committee Procedures Bylaw No. ____, _____ to make an application in respect of a bylaw or permit under the *Islands Trust Act* or Part 14 or Part 15 of the *Local Government Act*;

2.1.2 an applicant for a license under the *Liquor Control and Licensing Act* in respect of which the Local Trust Committee is requested or required to provide comments or recommendations;

2.1.3 an applicant for a license under the *Cannabis Control and Licensing Act* in respect of which the Local Trust Committee is requested or required to provide comments or recommendations;

2.1.4 an applicant for subdivision review under the *Land Title Act* or the *Strata Property Act*;

2.1.5 an applicant for the conversion of a previously occupied building to strata lots under the *Strata Property Act*;

2.1.6 an applicant for a soil deposit permit or soil removal permit issued pursuant to a bylaw enacted under Part 14 of the *Local Government Act*; or

2.1.7 an applicant to a board of variance established under Part 14 of the *Local Government Act*.

"Application Processing Fee" means the initial amount payable to the Islands Trust in respect of any application under this bylaw.

"Community Benefit" refers to an application that results in provision of an amenity that is of value to the community, and identified in the Official Community Plan as a community benefit.

[NOTE: This is in relation to temporary use permits for a use under a specified size that provides a community benefit. The local trust committee would define community benefit here based on its official community plan definition of community benefit]

"General Service Cost" includes average hourly cost of each staff position involved in processing the applications multiplied by the average number of hours taken to complete processing of that type of application, and includes administrative overhead costs..

"Estimated Direct Costs" for bylaw amendments listed in Table 1 means the Islands Trust's estimate of its actual average cost of disbursements associated with the processing of an application, including:

1. newspaper advertising for one community meeting,
2. notifications, postal and delivery costs of statutory notifications for one public hearing,
3. rental of premises for one community meeting meetings and/or one public hearing,
4. contract minute-taker costs recording or preparation of minutes of one community meeting and/or one public hearing and,
5. staff travel expenses for one site visit, one community meeting and one public hearing.

"Estimated Direct Costs" for temporary use permits listed in Table 2 means the Islands Trust's estimate of its actual average cost of disbursements associated with the processing of an application, including

1. one newspaper advertisement, notifications, postal and delivery costs of statutory notifications for one community meeting,
2. rental of premises for one community meeting,
3. contract minute-taker costs recording or preparation of minutes of one community meeting, and
4. staff travel expenses for one site visit, one community meeting.

"Islands Trust" means the Director of Local Planning Services or their authorized representative.

Application Fees

3.1 Prior to the processing of an application listed in Column 1 of Table 1, Table 2, Table 3 or Table 4, the applicant must deliver to Islands Trust the corresponding application processing fee in the amount shown in Column 2 subject to section 4. The application fee includes general service costs and estimated direct costs.

TABLE 1 – Bylaw Amendments (OCP and Zoning Bylaw)	
Column 1: Type of Application	**Column 2: Fee**
1. Major (e.g. change to density or land use designation)	$7,800
2. Minor (e.g. policy change without changing density or land use designation not requiring an OCP amendment)	$4,600

TABLE 2 – Permits	
Column 1: Development Permit in Respect of:	**Column 2: Fee**
1. Protection of Natural Environment, Ecosystems and Biological Diversity	$1,000
2. Protection of Development from Hazardous Conditions	$1,000
3. Protection of Farming	$1,000
4. Objectives for Form and Character	$1,700
5. Objectives to Promote Energy Conservation	$1,000
6. Objectives to Promote Water Conservation	$1,000
7. Objectives to Promote the Reduction of Greenhouse Gas Emissions	$1,000
8. Development Permit Amendment	$1,000

Type of Development Variance Permit	
9. Development variance permit (commercial, industrial or institutional development)	$1900
10. Development variance permit (residential development)	$1900
Type of Temporary Use Permit	
11. Temporary Use Permit (residential/commercial/industrial)	$2150
12. Temporary Use Permit for residential uses and commercial uses under 95 square metres that provide community benefit..	$1000
13. Temporary Use Permit Renewal	$700
14. Temporary Use Permit Renewal (Community Benefit)	$350
Other Permits	
15. Siting and Use Permit	$250
16. Heritage Alteration Permit	$1,700
Combination Applications	
17. Development Permit in respect of a protection area or water and energy conservation in combination with a companion application for a Development Variance Permit	$2,500
18. Development Permit in respect of form and character in combination with a companion application for a Development Variance Permit	$3,000

TABLE 3 – Subdivision Referrals	
Column 1	**Column 2: Fee**
1. Application for Subdivision Review – base fee	$1,000
2. Application for Subdivision Review – per additional lot created	$100
3. Application for Subdivision Review – parcel line adjustments only, creating no additional parcels	$500

TABLE 4 – Other Applications	
Column 1: Type of Application	**Column 2: Fee**
1. Board of Variance	$2,200
2. Land Use Contract amendment	$2,000
3. Liquor & Cannabis Regulation Branch – Retail License Application and Process	$1,500
4. Liquor & Cannabis Regulation Branch – Temporary License Change	$500
5. Strata Conversions	$1,500

4. Fee for After-the-Fact Application

4.1 An application for a permit or bylaw amendment to authorize work or an activity already undertaken, or in operation as of the date the application is made, the rated in 3.1 will be subject to a 20% surcharge.

5. Collection and Refund of Application Processing Fee Amounts

5.1 The total application processing fee must be received before the processing of the application can begin.

5.2 An applicant may withdraw their application at any time through written notice to the Planning Assistant and/or the Planner responsible for processing the application.

5.3 If an applicant withdraws an application before staff undertakes any planning work on the application, the Islands Trust must refund to the applicant the Application Fee, less $100.

5.4 For an application in Table 1, or a Temporary Use Permit in Table 2, the applicant will be eligible for: 75% refund if the application is withdrawn once the file has been assigned by the regional planning manager to the planner; 50% refund if the first staff report has been submitted to the LTC; 25% refund once public notice of a public hearing or permit has been sent out, no refund will be provided after a Public Hearing or after consideration of the Permit by the local trust committee.

5.5 For applications in Table 2 (except for Temporary use Permit applications), Table 3 and Table 4, the applicant will be eligible for: 75% refund if the application is withdrawn once the file has been assigned to the planner; no refund will be provided if the first staff report has been submitted to the LTC.

6. Extraordinary Service Costs (ESC)

6.1 Extraordinary Services Costs will be paid by the Applicant through a cost recovery agreement, entered into with Islands Trust, in addition to the application processing fee.

6.2 Where legal work is required for the preparation of covenants, registration of covenant at Land Title Offices, registration of notice of a permit or housing agreement at the Land Title Office or for other purposes related to the application, staff will provide the Applicant with an estimate of the costs. The Applicant will pay a deposit of 150% of this estimate.

6.3 Where site visits involving First Nations are required for the processing of an application, staff will provide the Applicant with an estimate of the costs. The Applicant will pay a deposit of 150% of this estimate.

6.4 Where there may be need for additional community information meeting or public hearing not covered by the application processing fee, staff will provide the Applicant with an estimate of costs. The Applicant will pay a deposit of 150% of this estimate.

6.5 Where other additional costs beyond the general service costs and estimated direct costs not specified above are required for processing of an application, staff will provide the Applicant with an estimate of the costs. The Applicant will pay a deposit of 150% of this estimate.

6.6 If the amount paid by Islands Trust in respect of Extraordinary Service Costs is less than the deposit provided to the Islands Trust, the Islands Trust shall provide the Applicant with the amount and the applicant shall pay the amount upon receipt. The local trust committee may withhold the consideration of issuance of any permit or hold the consideration of adoption of any bylaw in abeyance until the amount has been paid.

6.7 Islands Trust must refund the unused portion of any Extraordinary Service Costs deposit to the applicant if it is unused for any reason.

7. Annual Fee Increases

7.1 Fees in section 3.1 increase by 2% on April 1st of each year following the date of adoption of the bylaw.

7.2 The (Insert LTC Name) will maintain a record of annual 2% increases and make that record available for public inspection.

8. Application Fee Sponsorship

8.1 Pursuant to Islands Trust Policy 4.1.13, Guidelines for Executive Committee Sponsored or Local Trust Committee Initiated Development Applications, an applicant may apply to the Executive Committee of Islands Trust for development application fee sponsorship.

9. Severability

9.1 In the event a portion of this bylaw is set aside by a court of competent jurisdiction, the invalid portion shall be severed and the remainder of the bylaw remains in force and in effect.

10. Repeal

10.1 "[Insert LTC Name] Local Trust Committee Fees Bylaw No. **[XX]"** is repealed upon adoption of this bylaw.

10.2 Any application for which a fee has been fully paid at the time this bylaw comes into force shall be processed to completion in accordance with the fee provisions of the repealed bylaw.

READ A FIRST TIME this st day of , 20

READ A SECOND TIME this st day of , 20

READ A THIRD TIME this st day of , 20

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST

this th day of , 20

ADOPTED this th day of , 20

_____ _____

Chair **Deputy Secretary**

TO: Gabriola Island Local Trust Committee

ISSUE:

The scope of public consultation set out in the Islands Trust's developed "Model Public Consultation Protocol for Local Trust Areas" (Islands Trust Protocol).

BACKGROUND:

The federal Innovation, Science and Economic Development (ISED) Department document entitled CPC 2-0-03: *Radiocommunication and Broadcasting Antenna Systems* (CPC Protocol) sets out the steps anyone installing or modifying an antenna system must follow.

The CPC Protocol applies to telecommunication carriers, businesses, governments Crown agencies, operators of broadcasting undertakings and the public (including for amateur radio operation and over-the-air TV reception) and third-party tower owners.

There are different rules based on who is applying for a license, but the following discussion only focuses on provisions applicable to telecommunication providers, operators of broadcasting undertakings and third-party tower owners, hereafter referred to as "proponents".

The CPC Protocol list four (4) types[1] of works with respect to the installation of, or modification to, antennas systems for which proponents do not need consult with the local community. The following discussion only applies to two of the exemptions. These are exemptions related to:

- Existing Antenna Systems: modifications to an existing antenna system comprised of a purpose-built tower. Modifications could include equipment upgrades (eg to 5G from LTE), co-location on a tower by another telecommunication provider or the addition of antennas, and
- Non-Tower Structures: siting of antennas on non-tower structures such as hydro power poles and buildings.

The primary steps set out in the CPC Protocol are:

(1) the proponent must contact the local land use authority to determine whether there is a locally established antenna system protocol in effect. If one exists, the proponent is directed to follow that local protocol. However, the CPC Protocol qualifies this requirement by stating the proponent does not need to contact the local land use authority if the proposed work falls within the one of the exemption categories.
(2) If the work is exempted no further local consultation steps by the proponent are necessary.

[1] New Antenna Systems; Existing Antenna Systems; Non-Tower Structure; and Temporary Antenna Systems

(3) Assuming a local protocol is in effect, if that protocol does not include a process for public consultation, proponents must follow the public consultation requirements set out in the CPC Protocol (ie the default protocol).
(4) Whether the CPC Protocol or local Protocol is followed, once consultation is concluded the local land use authority would be asked to issue a statement of concurrence or non-concurrence with the proposal. The statement of concurrence or non-concurrence would be considered by ISED in any final decision on the proposed works.

Determination of exempted works:

With respect to exemptions for modifications to an existing antenna system and non-tower structures, a proponent does not need to consult the local land use authority or community:

1. If the proposed modification:
    - is to an antenna system whose initial overall height is at least 15 metres, and
    - any increase to the overall height of the antenna system is not more than 25%, and
2. if the placement of antennas on a non-tower structure does not increase the above ground height of that structure, exclusive of appurtenances, by more than 25%

DISCUSSION:

Islands Trust Protocol

The Islands Trust Protocol (adopted by the Gabriola local trust committee in 2020) is intended to be harmonized with the CPC Protocol but augments the CPC Protocol with additional requirements related to the how the consultation is to be carried out. However, there are some distinctions between the two protocols with respect to wording and criteria in the "non-tower" exemption. As well, while the "exemption" categories may appear to be readily discernable, there are other instructions in the protocols which introduce an element of ambiguity.

Comparison of the exemptions for siting "antennas on a non-tower structure"

The non-tower policy set out in the Islands Trust Protocol differs slightly from that in the CPC Protocol. Both protocols do trigger public consultation if the overall height of the structure and antenna is not increased by more than 25%.

However, the Islands Trust Protocol includes an additional condition and has slightly different wording. See the text box below for comparison of wording for the CPC Protocol and the Islands Trust Protocol. (underlining added)

E**XEMPTION FROM CONSULTATION FOR SITING ANTENNAS ON NON-TOWER STRUCTURES**
CPC Protocol: Section 6.
The following proposals are excluded from land-use authority and public consultation requirements: Non-Tower Structure: antennas on buildings, water towers, lamp posts, etc. may be excluded from consultation provided that the height above ground of the non-tower structure, exclusive of appurtenances, is not increased by more than 25% (underlining added)

Islands Trust Protocol:
Non-tower structure: antennas on buildings, water towers, lamp posts, and similar structures, are excluded from consultation provided that the height above ground of the non-tower structure, exclusive of appurtenances, is not increased by more than 25% and have been reviewed by Islands Trust staff who will provide comment in accordance with LTA[2] design guideline.

Wording difference: the CPC Protocol says modifications "may be exempted"; the Islands Trust Protocol says modifications "are excluded". The phrase "may be excluded" implies a decision point; someone other than the proponent must make a decision to exempt what is proposed even if the height increase threshold is not exceeded.

When queried about the difference in wording with respect to the use of the term "may", ISED staff said the policy intent was that expressed in the Islands Trust Protocol. They recognized the possibility of confusion and would look to amend the wording at the next revision of their protocol. Arguably, local land use authorities relying upon the CPC Protocol wording when establishing a protocol may as a result introduce the need to consul.

New condition: In addition to the height increase threshold condition, the Islands Trust Protocol adds another requirement if the proposed work is exempted. The requirement is for staff to review the proposal and provide comments in accordance with any "design guidelines" set out in the Islands Trust Protocol. What is not clear is whether the "staff review" includes or could include any staff discussion with the LTC and/or public consultation.

When queried about the new condition, ISED staff responded that Island Trust could ask for this, but it would be up to the proponent to decide if they want to do that. ISED staff indicated the CPC Protocol is the overriding document and the height increase threshold is the only mandatory criteria to determine if the exemption applies.

Based on what ISED staff indicated, subject to any height increase, if the proponent does not agree to a staff review, the proposal is exempt, and no local consultation need occur. Alternatively, if the proponent agrees to a staff review, the question is whether the "staff review" could include public consultation.

[2] LTA refers to "Local Trust Area"

If consultation is agreed to, it would be limited to design criteria but could open the door for public comment on matters other than "design". A further consideration is whether the Islands Trust Protocol as adopted by the Gabriola Local Trust Committee sets out any "preferred design guidelines". If none exist, presumably staff would have no comment to make, and no consultation would occur.

Ambiguity in policy

The above discussion applies to the policy extracts cited above and while some policy ambiguity exists, it is generally clear. However, the Islands Trust Protocol closely reflects the wording in the CPC Protocol which in some sections introduces ambiguity on how an exemption is to be determined with respect to other factors besides "height".

For example, the Islands Trust Protocol includes the following two statements:

> "*This section outlines the criteria for identifying Antenna system excluded from the consultation process by ISED, the need to consider local circumstances for all exempt structures, and the process for proponents to notify and discuss proposed exempt structures with the LTA."*
>
> AND
>
> *"Therefore, when applying the criteria for exclusion, proponents are encouraged to consult the LTA when it is prudent to do so in consideration of any of the following:*
> - *The antenna system's physical dimensions, including the antenna, mast, and tower, is significant compared to the local surroundings,*
> - *The relative location of the proposed antenna system on the property and its proximity to neighbouring residents;*
> - *The likelihood of an area being in a community-sensitive location; and*
> - *The nature of Transport Canada's marking and lighting requirements for the proposed structure."*

In reading the two sentences above, "local circumstances" refers to the four items listed in the second extract: (1) antenna system dimensions, (2) location to nearby residents, (3) community-sensitive locations and (4) impact of Transport Canada's marking and lighting requirements. The list is exhaustive but leaves it to the proponent to decide if it is "prudent" to consult on one or more of these criteria.

If a proponent believes it is not prudent to do so, consultation with the local land use authority does not need to occur for that reason. If, however, the proponent deems it prudent to do so, the question then becomes whether consultation with the local land use authority includes public consultation.

Furthermore, the list of local circumstances includes "community-sensitive locations". That phrase is defined in the Islands Trust Protocol as places such as schools, daycares, parks and

"other sensitive locations". This is presumably intended to address proximity of persons to the antenna system where EMF radiation may be a health factor.

If agreed to by the proponent, the LTC may provide advice on any of these circumstances and possibly request some degree of public consultation. Should the proponent refuse to consult to any degree, the only recourse for the LTC could be to ultimately issue a statement of non-compliance.

The course of events, to a large degree, hinges on whether a proponent feels it is prudent to undertake consultation with the LTC and secondly how ISED could view the process when making a final decision.

The CPC Protocol has a comparable provision with respect to local circumstances but differs in scope. The comparable CPC Protocol provision states:

> *"Individual circumstances vary with each antenna system installation and modification, and the exclusion criteria below should be applied in consideration of local circumstances. Consequently, it may be prudent for the proponent to consult even though the proposal meets an exclusion noted below. Therefore, when applying the criteria for exclusion, proponents should consider such things as"*
> - *the antenna system's physical dimensions, including the antenna, mast, and tower, compared to the local surroundings;*
> - *the location of the proposed antenna system on the property and its proximity to neighbouring residents;*
> - *the likelihood of an area being a community-sensitive location; and*
> - *Transport Canada's marking and lighting requirements for the proposed structure.*

The Islands Trust Protocol list is exhaustive whereas the CPC Protocol list is not exhaustive. It says "should consider such things as" which indicates other factors may also be considered. In this respect the Islands Trust Protocol reduces the potential scope of consultation based on what local circumstances could include, albeit only if the proponent deems it prudent to do so.

Both protocols are consistent in that the proponent has the discretion to decide on whether consultation is undertaken while being cognizant of how any refusal may affect the statement of concurrence sought from the LTC and ISED's view of the process.

Another statement in the CPC Protocol statement introduces an element of ambiguity:

> "*Proponents who are not certain if their proposals are excluded, or whether consultation may still be prudent, are advised to contact the land-use authority and/or Industry Canada for guidance."*

Height is relatively easy to determine. The above statement reinforces the notion that a change in height may not be the only factor a proponent has to consider. This is further reinforced by another statement in the CPC Protocol which states:

> "*Where proponents believe the local consultation requirements are unreasonable, they may contact the local Industry Canada office in writing for guidance*."

The statement could refer to how consultations are to be carried out but could also include a requirement that consultation occur for proposed works exempted under the CPC Protocol guidelines.

Telecommunication provider comments:

The policy ambiguity in the CPC Protocol was raised by Roger's Communications in their recent submission to ISED on the CPC Protocol. Their submission (attached as appendix A) highlights the fact local governments include provisions not intended by ISED because of the policy ambiguity. Notably, the Roger's submission makes no mention of the option for ISED to provide "guidance" on unreasonable requirements, which leads one to believe that avenue may not be a viable or desired option for proponents.

The CPC Protocol policy is considered paramount, yet that policy directs proponents to comply with local protocols. This has the potential for conflicting policies arising when ambiguity in policy exists. Moreover, the CPC Protocol can suggest provisions a local government should include in their own protocol, but it cannot mandate their inclusion. It would appear ISED is relying to a large degree on local governments interpreting CPC Protocol policy in the manner intended by ISED and leaving it primarily for proponents and local land use authorities to resolve differences.

If local protocols exceed CPC Protocol requirements, ISED has the authority to waive the need for proponents to meet those local requirements. ISED could also discuss the issue with the local land use authority and/or consider a dispute resolution process (see section 5 of the ISED protocol). Note however that the Model Strategy does not include any dispute resolution process policy. Regardless, the dispute resolution could proceed under the jurisdiction of the CPC Protocol.

Roger's Communication raises the point that local governments interpret the ambiguity in policy to establish conditions that may not reflect those in the CPC Protocol. Roger's Communication recommends amending the CPC Protocol to forestall interpretation issues.

Summary:

Islands Trust developed a model strategy to provide a more standardized trust-wide approach with local trust committees being able to amend it to account for local circumstances. Gabriola

made no amendments to the Islands Trust Protocol and, exclusive of the differences noted, follows the general scope of the CPC Protocol.

In Dec 2019, Telus queried whether the Gabriola LTC 2010 Cell Tower Protocol would trigger a need to consult locally when equipment upgrades were to be made to an existing antenna system. From my perspective, it would have triggered a need to consult. This would have also applied to the placement of antennas on non-tower structures. If the LTC had determined equipment upgrades required consultation, the options for Telus would be to, if I am correct in my understanding of the Islands Trust Protocol and CPC Protocol,

(a) consult with ISED and seek guidance on whether the local requirement was unreasonable and what options were available to resolve the issue,
(b) agree to consult, or
(c) as was the case on Gabriola, indicate they would likely proceed due to business case considerations.

The key change implemented by the Islands Trust Protocol is the exemption from public consultation when equipment upgrades (possibly 5G mm wave technology) are made, and small-cell relay units are placed on non-tower structures. I believe small cell units would not exceed the 25% height increase threshold, thereby not triggering any need for public consultation.

Conclusion:

Under the Islands Trust Protocol:

(a) public consultation must be carried out by a proponent intending to install a new antenna system, regardless of the tower's height.
(b) public consultation by a proponent:
    - is required if modifications to an antenna system or the placement of antennas on non-tower structures increase the overall height by more than 25%, and
    - irrespective of any height increase, may be carried out if the proponent considers it prudent to do so.

Respectfully submitted,

Kees Langereis,

Gabriola Island Local Trustee

Attachment: Appendix A

Howard Slawner
350 Bloor Street East, 6th Fl
Toronto, Ontario M4W 0A1
regulatory@rci.rogers.com

April 16, 2021

Via email: ic.spectrumoperations-operationsduspectre.ic@canada.ca

Mr. Marc-Andre Rochon
Innovation, Science and Economic Development Canada
Senior Director, Spectrum Management Operations Branch
235 Queen Street
Ottawa ON K1A 0H5

Dear Mr. Rochon

Re: *Consultation on Amending CPC-2-0-03 – Radiocommunication and Broadcasting Antenna Systems (DGSO*-002-21) – Rogers Comments

Attached, please find the comments of Rogers Communications Canada Inc. ("Rogers") in response to DGSO-002-21: *Consultation on Amending CPC-2-0-03 – Radiocommunication and Broadcasting Antenna Systems.*

Rogers thanks the Department for the opportunity to provide input on this important matter.
Sincerely,



Howard Slawner
HS/gf
Attach

Executive Summary

EI Rogers believes the current review of Innovation Science and Economic Development ("ISED") Canada's antenna tower siting procedures known as CPC-2-0-03: *Radiocommunication and Broadcasting Antenna Systems* is an excellent starting point. Given the changing technologies and the introduction of 5G and small cells the Department should initiate a more comprehensive review of the CPC to address certain issues of interpretation over wording within Section 6 concerning exemptions from consultation.

EII With regards to the proposed official languages requirements, Rogers supports Option 2 of the proposal to introduce official languages requirements for the public consultation process.

EIII Rogers also supports ISED's proposed minor amendments to update the CPC to refer to ISED throughout the document and to update references to certain documents related to environmental assessment and aeronautical clearances.

Introduction

1. Rogers is pleased to provide its comment on DGSO-002-21: *Consultation on Amending CPC-2-0-03 – Radiocommunication and Broadcasting Antenna Systems* (the "Consultation Paper"). In an effort to balance the efficient and orderly deployment of antenna systems in Canada with the concerns of the public residing within the areas where the antennas systems will be installed, the Department introduced a public consultation process known as CPC 2-0-03: *Radiocommunication and Broadcasting Antenna Systems* (the "CPC"), now in its fifth iteration. The CPC sets out a default consultation process, general and technical requirements, as well as a dispute resolution mechanism for proponents seeking to install antenna systems. It also excludes certain types of antenna installations from the requirement to undertake municipal and public consultation.

2. The Department has proposed introducing official languages requirements for the ISED default public consultation process. The Department has also proposed minor housekeeping revisions to the CPC to update references to certain documents such as those referring to environmental assessment and aeronautical clearances. Further details regarding our positions on both proposals are provided in the following comments.

3. In addition, Rogers takes this opportunity to provide comment on an additional issue Rogers encounters when following the CPC to consult with the public. One of the tenets on this policy is that municipal protocols cannot be more burdensome than the requirements of the Department's CPC.[1] Despite this wording, some municipalities have implemented more stringent requirements in order to gain more control over siting. For instance, some municipal protocols ban antenna sites in or within a certain radius of residential areas. Other municipal protocols require public consultation for all proposed sites, including those that are specifically exempted from consultation under the CPC. Some also view proposed sites as a revenue opportunity and charge various fees for applications, permits, zoning applications, public consultation and environmental assessments. Unfortunately, these fees and protocol requirements make it difficult and expensive to build sites. They also discourage legitimate attempts to use existing infrastructure such as rooftops that require consultations even though they are exempt under the CPC.

4. For instance, the CPC is peppered with vague and unenforceable wording that can lead to municipalities overstepping their local jurisdiction. Section 6 of the CPC outlines several types of antenna systems that are exempt from both municipal and public consultation requirements. These exemptions apply when modifying or replacing an existing site, adding antennas to existing structures (buildings, water towers, lamp posts) or putting up a temporary structure. Despite the clear intent of these exemptions, Rogers continues to encounter issues with municipalities over interpretation when applying the policy. For example, there is ambiguity in the wording used in Section 6 which attempts to qualify the exclusions from consultation:

> *Individual circumstances vary with each antenna system installation and modification, and the exclusion criteria below should be applied in consideration of local circumstances. Consequently, it may be prudent for the proponent to consult even though the proposal meets an exclusion noted below.*

[1] See ISED Guide to Assist Land-Use Authorities in Developing Antenna System Siting Protocols, Section 2.1.

5. Some land-use authorities interpret this wording to mean that proponents should consult on all proposals, even when they clearly meet the exclusion criteria. Still, other land-use authorities believe this gives them the power to edit or remove exclusions from the Department's list of exclusions when drafting their own siting protocols. This unfortunate wording acts as a barrier to deployment as it introduces ambiguity into the policy. This ambiguity allows municipalities to insist on public consultation for these consultation exempt sites and causes delays in deploying infrastructure with minor aesthetic impact. To facilitate the roll out of 5G, it is important that small cells not be subject to the same consultation requirements and fees applied to 50 metre towers. \

6. Rogers believes the current review is an excellent starting point to revisit the CPC as it has not been updated since 2014. Given the changing technologies and the introduction of 5G and small cells, it would be beneficial if the Department were to initiate a more comprehensive review of the CPC to address certain issues that have proven to be problematic.

6.1 Proposed implementation of official languages requirements for the public consultation process

Q1

ISED invites comments on:

a. the introduction of official language requirements and whether they should be applied across Canada or in the communities set out above
b. the timing of the introduction of the requirements proposed by ISED
c. any other aspects related to the wording or implementation of the proposals

7. The Department proposes to introduce official language requirements to the CPC. The Department proposes wording for two different options:

Option 1:

Whether the proponent follows the land-use authority's consultation process or ISED's default public consultation process, initial communications with the public (including but not limited to notification packages and public notices) must be made in both official languages. If a member of the public provides written or verbal public comments or public reply comments, the proponent must respond in the official language in which the comments were made.

Option 2:

Whether the proponent follows the land-use authority's consultation process or ISED's default public consultation process, consultation with communities located in the census subdivisions listed in annex A, as amended from time to

time, being those that have an official (English or French) linguistic minority population of 5% or higher, must be conducted in both official languages. If a member of the public provides written or verbal public comments or public reply comments, the proponent must respond in the official language in which the comments were made. Proponents must follow the consultation process established by the land-use authority, where one exists. In the event that a land-use authority's existing process requires bilingual communications with the public, proponents must follow those public consultation requirements regardless of the linguistic minority population figures.

8. It is of utmost importance that proponents communicate in the appropriate official language during the public consultation phase. For its part, when Rogers proposes a site requiring public consultation, the company typically reaches out to the Land-use Authority ("LUA") to obtain direction and guidance on the form of consultation. The vast majority of LUA protocols, and the Department's own default notification process, are clear that proponents are required to contact the LUA to determine local consultation requirements.[2] It is during this step where Rogers currently obtains direction from the LUA on the language to use for the public notification package as the LUA knows the members of its community and their language requirements best. Rogers believes that the current CPC requirements work well.

9. However, of the two proposed options, Rogers supports Option 2 since it requires bilingual consultation in those areas with an official language minority population of 5% or greater, which will reduce the work for proponents in areas where there is little to no linguistic minority population.

10. Rogers also supports the proposed April 22, 2022 implementation date of these changes as it will provide proponents time to adjust to the new requirements.

6.2 Other amendments

Q2

ISED invites comments on the proposal to make minor amendments to CPC-2-0-03, including updating the name of the Department to ISED throughout, and updating references relating to the environmental considerations and aeronautical safety responsibilities as described above.

11. The Department has proposed minor amendments to update the CPC to refer to ISED throughout the document and to update references to certain documents such referring to environmental assessment and aeronautical clearances.

12. Rogers supports the proposed amendments.

13. Rogers thanks the Department for the opportunity to share its views and participate in this consultation process.

[2] See ISED CPC-2-0-03- Radiocommunication and Broadcasting Antenna Systems, Section 4.

STAFF REPORT

File No.: GB-SUB-2021.2 (Centre Stage Holdings Ltd.)

DATE OF MEETING:	November 25, 2021
TO:	Gabriola Island Local Trust Committee
FROM:	Sonja Zupanec, Island Planner Northern Team
SUBJECT:	Request for 10% Frontage Waiver for four proposed lots Applicant: Scott Stevenson Location: Lot 20, Section 8 Gabriola Island, Nanaimo District Plan VIP82759 (PID 027-086-500)

RECOMMENDATION

1. **That the Gabriola Island Local Trust Committee exempt Proposed Lot C, D, E and F of the proposed 6-lot subdivision of Lot 20, Section 8 Gabriola Island, Nanaimo District Plan VIP82759 (PID 027-086-500) from Section 512(1)(a) of the *Local Government Act* which requires that each parcel has a highway frontage that is greater than 10% of the perimeter of the lot.**

REPORT SUMMARY

The applicant has applied for a conventional six-lot subdivision through the Ministry of Transportation and Infrastructure (MOTI), and MOTI has referred the application to Islands Trust for review. In the Subdivision Referral Report dated September 28, 2021, Islands Trust staff included a condition that requires the applicant to obtain a 10% highway frontage waiver for Proposed Lots C, D, E and F. The Gabriola Island Local Trust Committee (LTC) is asked to consider waiving the 10% highway frontage requirement, in order that the proposed subdivision may receive final approval.

BACKGROUND

Under Section 512 of the *Local Government Act* (*LGA*) – *minimum parcel frontage on a highway*, each lot being created by subdivision must have a minimum highway (road) frontage of the greater of 10% of the perimeter of the lot that fronts on the highway *and* the minimum frontage required by a local government bylaw, unless exempted by a local government. The applicant has amended the plan of subdivision for the subject property and increased the number of lots from three, to six (Figure 1) now with four lots requiring a panhandle access off Seymour Road, and 10% frontage waiver:

Proposed Lot A – 70.8 metres frontage (15.8%)
Proposed Lot B – 73.5 metres frontage (16.3%)
Proposed Lot C – 10.1 metres frontage (0.92%)
Proposed Lot D – 10.2 metres frontage (0.99%)
Proposed Lot E – 10.3 metres frontage (0.65%)
Proposed Lot F – 12.5 metres frontage (0.91%)

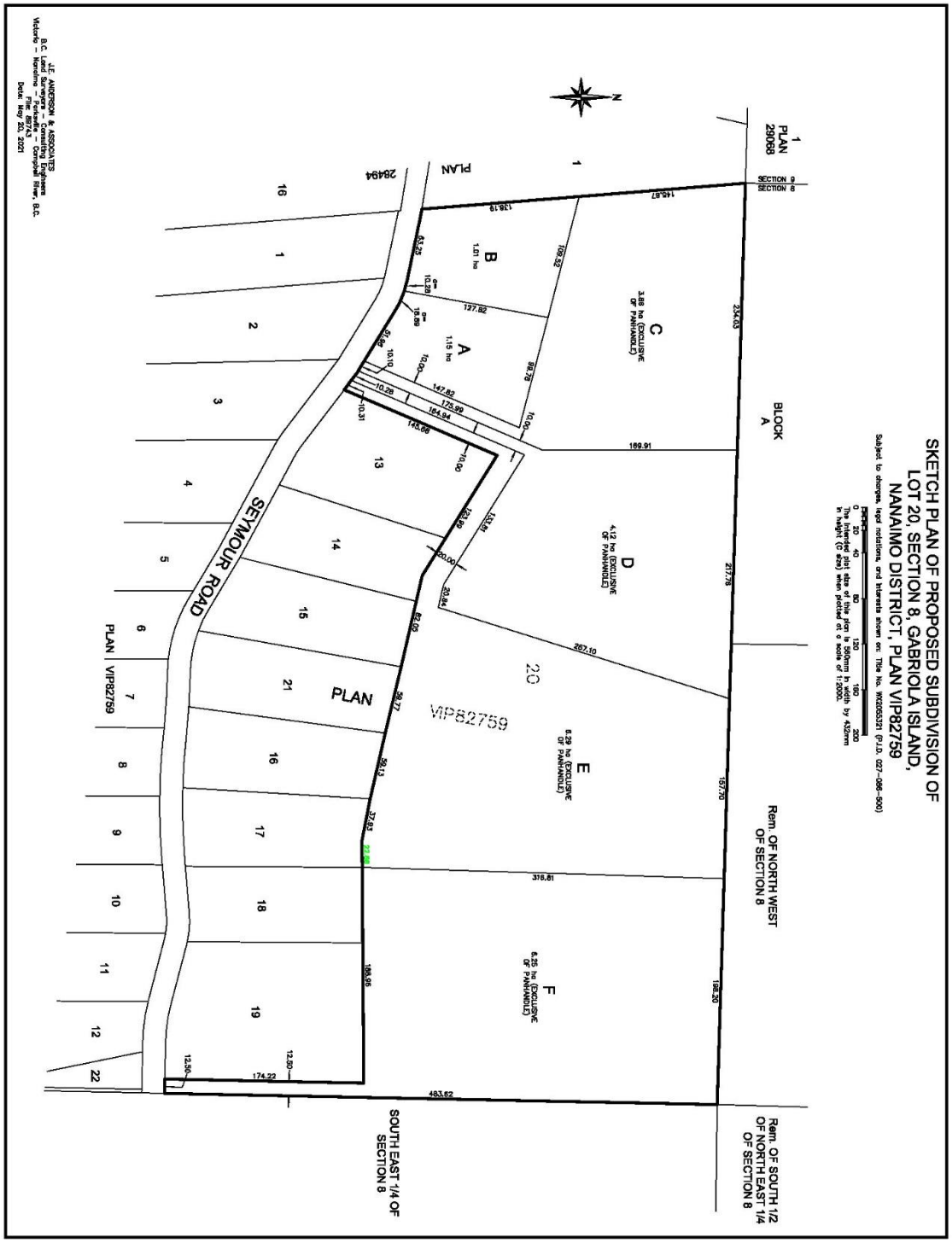


FIGURE 1. PROPOSED PLAN OF SUBDIVISON

The proposed six lot configuration will result in a decreased number of proposed lots being approved for concurrent subdivision application GB-SUB-2020.3 (PID 003-134-806).

ANALYSIS

Policy/Regulatory
Land Use Bylaw:
Section E.1.6.3 of the Gabriola Island Land Use Bylaw (LUB) states:

"PURSUANT TO SECTION 941(1) OF THE "MUNICIPAL ACT", THE HIGHWAY FRONTAGE OF ANY LOT IN A PROPOSED SUBDIVISION MUST BE AT LEAST TEN PERCENT OF ITS PERIMETER UNLESS WAIVED BY THE GABRIOLA ISLAND LOCAL TRUST COMMITTEE UNDER SECTION 941(2) OF THE "MUNICIPAL ACT". "

Local Government Act:
The proposed lots meet the LUB requirement for a minimum 10 metre frontage for subdivision, but not Section 512 of the *LGA* which states:

Minimum parcel frontage on highway
512 *(1) If a parcel being created by a subdivision fronts on a highway, the minimum frontage on the highway must be the greater of (a) 10% of the perimeter of the lot that fronts on the highway, and (b) the minimum frontage that the local government may, by bylaw, provide.*
(2) A local government may exempt a parcel from the statutory or bylaw minimum frontage provided for in subsection (1).

It is noted, under the above Section 512(2), a local government may exempt the statutory minimum with the understanding that the Provincial Approving Officer (PAO) would make a decision taking into account the public interest and suitability of the proposed frontage.

Where a local government opts out of the authority granted under Section 512 of the *LGA*, the authority then falls to the Provincial Approving Officer (PAO). Staff have discussed with the PAO the general considerations that would go into granting an exemption, which include:
- Safety considerations, is there an appropriate amount of space for reasonable and safe access?
- Is the terrain suitable where the frontage is provided?
- Is there an adequate building envelope?
- Will further subdivision potential be limited by the proposed frontage?

CONSULTATION
No public hearing or consultation is required or recommended for this application.

FIRST NATIONS
Subdivision is considered "development" and has the potential to impact cultural heritage and archaeological sites that are protected by the *Heritage Conservation Act* (*HCA*), whether on Crown Provincial or private land. They are non-renewable, very susceptible to disturbance and are finite in number. Archaeological sites are protected for the historical, cultural, scientific and educational value to First Nations, local communities and the general public. Impacts to archaeological sites must be avoided or managed by development proponents. It is recommended that the property owners discuss their development plans with the Archaeology Branch to ascertain the need for any permitting under the *Heritage Conservation Act*.

RATIONALE FOR RECOMMENDATION
The LUB requires that highway frontage of a parcel created by subdivision be at least 10 percent of the parcel's perimeter and be no less than 10 meters in width. There do not appear to be any issues related to safety, terrain

or impacting future subdivision. The proposed subdivision plan indicates the frontage of Proposed Lots C, D, E and F meet the minimum 10 metres requirement, but are less than the 10% minimum frontage stipulated in Section E. 1. 6. 4 of the LUB and Section 512 of the *LGA*.

Staff are satisfied the proposed subdivision has taken into consideration ensuring appropriate access to the proposed lot. Therefore, staff are recommending in favour of the 10% highway frontage for this proposed subdivision. The staff recommendation is noted on page 1 of this report.

ALTERNATIVES

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

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 Gabriola Island Local Trust Committee request the following information prior to making a decision [information requested to be provided by LTC].

2. **Deny the request**
The LTC may deny the request. If this alternative is selected, the LTC should state the reasons for denial. Recommended wording for the resolution is as follows:

That the GABRIOLA Island Local Trust Committee not waive the 10% highway frontage requirement for Lot 20, Section 8 Gabriola Island, Nanaimo District Plan VIP82759 (PID 027-086-500) for the following reasons (state rationale).

3. **Receive for information**
The LTC may receive the report for information.

NEXT STEPS

If the LTC concurs with staff's recommendation and approves highway frontage waiver, Preliminary Layout Approval could be issued by the MOTI and the subdivision could proceed as per the proposed plan.

Submitted By:	Sonja Zupanec, RPP, MCIP, Island Planner	November 3, 2021
Concurrence:	Heather Kauer, MPA RPP, MCIP, AICP Regional Planning Manager	November 4, 2021

STAFF REPORT

File No.: GB-DP-2021.2

(x-ref: GB-DP-2020.2 (Silva Bay Resort Ltd.)

DATE OF MEETING:	November 25, 2021
TO:	Gabriola Island Local Trust Committee
FROM:	Teresa Mahikwa, Island Planner Northern Team
SUBJECT:	Development Permit Application **GB-DP-2021.2 to Amend Development Permit GB-DP-2020.2** for works within Development Permit Area No. 4 – Flat Top Islands Area Applicant: 1167433 BC Ltd. Jari Eikenaar (Agent w/Hemmera) Location: 3383 South Road, Gabriola Island

RECOMMENDATION

1. **That the Gabriola Island Local Trust Committee approve issuance of GB-DP-2021.2 subject to the conditions imposed therein.**

REPORT SUMMARY

The purpose of this staff report is for the Gabriola Island Local Trust Committee (LTC) to consider approving the issuance of Development Permit application GB-DP-2021.2, which would amend existing Development Permit GB-DP-2020.2, which was issued on August 20, 2021 (Attachment 2), as the development is within Development Permit Area No. 4 – Flat Top Islands Area. The previous DP was brought to the LTC for consideration at the July 29, 2021 regular business meeting. Staff is recommending issuance of GB-DP-2021.2, as it continues to meet the relevant Development Permit guidelines for DPA-4.

BACKGROUND

At its regular business meeting on July 29, 2021, the LTC passed the following resolution:

> **GB-2021-071**
> **It was MOVED and SECONDED**
> that the Gabriola Island Local Trust Committee approve issuance of GB-DP-2020.2 subject to the conditions imposed therein. **CARRIED**

Staff then issued the finalized DP to the applicant on August 20, 2021 (Attachment 2). After issuance, and through discussion with Fisheries and Oceans Canada (DFO), the applicant identified a potential DP amendment:

i.e. to add a new area to the site plan, in order to conduct additional works at a location referred to as the "Apron Deck" (see Figure 2 below). **This amendment will add a Schedule "E". Schedules "A" through "D" are the same.**

For comparison between the current DP and the requested amendment DP, the areas are shown below:

Figure 1: Aerial image showing areas (outlined in yellow) in previously-issued GB-DP-2020.2



Figure 2: Aerial image showing addition of new "Apron Deck" area (outlined in blue) for amendment GB-DP-2021.2



Detailed explanation of proposed amendments for Draft GB-DP-2021.2

Attachment 1 of this report contains the draft Permit for GB-DP-2021.2. **This DP amendment will add a Schedule "E". Schedules "A" through "D" are to remain the same.** For clarity, staff provide the following comments:

Section 2 of the draft Permit contains a description of what is being authorized by the Permit:

a. Demolition and reconstruction of the "Stores Deck";
   - No change. This is existing in the current permit and as **no amendments are being proposed for these works**, it would carry over to the new GB-DP-2021.2 as well.

b. Demolition and removal of the "Shipyard Building";
   - Staff have only changed the word "Boathouse" to "Shipyard Building" to more clearly reflect the area that was identified in the site plan (no other reference to "Boathouse" made interpretation of the previous Permit confusing). **No amendments are being proposed for these works**, so the same would carry over to the new GB-DP-2021.2 as well.

c. Demolition and removal of the "Travel Lift Pier", and addition of new fill;
   - No change. This is existing in the current permit and as **no amendments are being proposed for these works**, it would carry over to the new GB-DP-2021.2 as well.

d. Demolition of an electrical shed;
   - No change. This is existing in the current permit and as **no amendments are being proposed for these works**, it would carry over to the new GB-DP-2021.2 as well.

e. Repairs to the Marina Wharf Head;
   - These repairs were previously-authorized under GB-DP-2020.2 but were not clearly identified in Section 2 of the Permit (they were only previously mentioned in Schedule "A", section 2.2.3). Thus, as **no amendments are being proposed for these works**, staff have just added this wording to Section 2 to more clearly identify that these works have been authorized. Note too that Condition 3.3 of both GB-DP-2020.2 and draft GB-DP-2021.2 gives regard to the Wharf Head reconstruction to use steel or equivalent pilings instead of creosote pilings. This was considered and included as a permit Condition by the LTC at the July 29 meeting, and the applicant has confirmed that the design has since been changed to steel instead of creosote-treated wood pilings.

f. Demolition and replacement of the "Apron Deck", including the addition of new fill.
   - **This is the proposed amendment, as per "Schedule E" of Attachment 1.**
   - Previous GB-DP-2020.2 did not authorize any works for this area.
   - New draft GB-DP-2021.2 proposes (as per "Schedule E" of Attachment 1) to authorize:
     - Demolition and replacement of the top of the "Apron Deck" (~144m2)
       a. i.e. a new Apron Deck will be built on top of the lock-block/rip rap foundation (with no change in footprint to area that is covered by the Apron Deck, but some additional alteration to footprint/intertidal disturbance for the rip rap area as noted below);
     - Removal of 51 creosote timber piles;
     - New construction to fortify the underlying shoreline and mitigate ongoing erosion: Existing retaining wall will be fortified by vertical concrete lock-block construction, and backfilled between the lock-blocks and old retaining wall; Rip rap will be used to fortify the lock-blocks.

a. Intertidal footprint for new construction includes the destruction of 144m2 of muddy, shaded intertidal habitat area, as it will be converted into a new lock-block/backfill foundation/retaining wall

b. Rip rap will alter 77m2 of existing muddy, shaded intertidal area, into 82m2 of sloped rocky rip rap and 7.5m2 of vertical concrete lock-block retaining wall

c. Total area of intertidal disturbance = 144m2 + 77m2 = 221m2

Section 3 of the draft Permit contains the conditions. No further changes are being proposed, so all the same conditions will carry over to the new GB-DP-2021.2, **including the requirements for engagement with and employment of a Site Monitor from Snuneymuxw First Nation, to the satisfaction of SFN.**

DFO Review and Comments

Staff has confirmed that the DFO has reviewed the Memorandum (i.e. "Schedule E" of the draft Permit – Attachment 1) regarding the additional works proposed for the "Apron Deck" and considers the proposed changes to be minor and would not require further review or a revision to their issued Letter of Advice (LOA), provided the relevant avoidance/mitigation measures proposed and stated in the LOA are followed.

There are no other proposed changes, and so the Issued Permit is to otherwise remain the same.

ANALYSIS

Time-Sensitivity for Consideration of Amendment

This DP amendment is being brought to the LTC for consideration at the November 25, 2021 meeting, as the next regular business meeting is not scheduled until January 27, 2022. The applicant has noted that DFO has a strict Fisheries timeline for the aquatic works to occur, in order to minimize disturbance to fish and habitat. The applicant has advised that that timeline window is Dec 1 – Feb 15, and that waiting until the January meeting for consideration and potential issuance of the amendment would not leave them much time to complete the works within the DFO's required window of time.

Known and Potential Archaeological Sites & Further Engagement with Snuneymuxw First Nation

As was noted in the staff report (dated June 17, 2021) for the previously-issued DP (application GB-DP-2020.2), although specific information regarding archaeology sites cannot be publically disclosed, the property does contain areas of archaeological and cultural heritage and the potential for others. This is not only understood by provincial mapping but through indication by Snuneymuxw Fist Nation (SFN) of the importance of the location. Per instruction by the Senior Intergovernmental Policy Advisor (SIPA), staff contacted both SFN and the provincial Archaeology Branch for input and direction with respect to application GB-DP-2020.2. Staff received confirmation from SFN of their ***support with conditions*** for the DP application works for the previous DP (see Attachment 2).

Staff feel that, although no additional comments have been received from SFN regarding the proposed amendment at the time of writing this report, because the proposed amendment appears to be minor in nature, supported by DFO, and since SFN's previous letter and requested conditions are very clearly laid out, that including SFN's letter and conditions as part of GB-DP-2021.2 as well, would very likely cover any additional comments they may have for this DP amendment, and **therefore staff have included SFN's letter and conditions as a requirement for the proposed amended permit GB-DP-2021.2 as well** (see Attachment 1, Schedule "C").

DPA 4 – Flat Top Islands Area Guidelines

For staff's assessment of how the original application meets the DPA 4 Guidelines, refer to the two staff reports dated June 17, 2021, and July 29, 2021 and their attachments. The following staff comments consider only the proposed Permit amendments for GB-DP-2021.2 against the Guidelines in the Gabriola Island Land Use Bylaw No. 177 (LUB).

F.4.2 DPA-4 Guidelines (LUB)	Complies?	Staff Comments
F.4.2.1 There shall be no disturbance of the vegetation or use of chemicals within 30 metres of the natural boundary of the sea except in accordance with any conditions specified in the permit.	n/a	There is no use of creosote nor vegetation removal or disturbance proposed by these amendments to the previously-issued Permit. This amendment actually proposes the removal of additional creosote timber piles from the aquatic environment.
F.4.2.2 Garry oak meadows and similar indigenous species shall be identified and their habitats protected from disturbance.	n/a	No Garry oak meadows or similar within project area as proposed works are along previously developed foreshore.
F.4.2.3 There shall be no alteration or disturbance which would cause a negative impact to the foreshore habitat.	Yes.	As noted in the Memorandum from Tim Edgell (R.P. Biologist) to DFO dated October 6, 2021 (see Attachment 1, Schedule "E"), in order to remove and replace the "Apron Deck" onto a backfilled concrete lock-block and rip rap foundation/retaining wall for support, there will be a permanent destruction of 144m2 of muddy, shaded intertidal habitat where the existing creosote timber pilings are located. However, the significance of this impact to habitat loss was classified by the Biologist to be "Low" for species at risk, species and habitat resiliency, habitat rarity and contribution to fish productivity, aggregation, and "Moderate" for species dependence on this habitat (see page 5 of the Memorandum in Schedule "E" of Attachment 1). As a result of this type of habitat and location, the Memo concludes that no new details are required as project updates to the previous Aquatic Effects Assessment (AEA) and "no new mitigation measures are required as these works will be adequately managed under the project's overall Construction Environmental Management Plan (CEMP) and conditions described in the [DFO] LOA." Therefore, given the Biologist's assessments and Memorandum on the habitat of the area, staff feel that the new proposed works would not have a negative

		impact on existing foreshore habitat, and that this DPA Guideline would be complied with.
F.4.2.4 Buildings shall be integrated with the surrounding landscape and sited to minimize removal of vegetation.	n/a	There are no buildings proposed in this amendment to the existing Permit.
F.4.2.5 Other than within existing marine lease areas, applicant shall provide an assessment of environmental impacts and mitigation measures, prepared by a qualified professional, prior to any expansions or new developments.	Yes.	Similar to Guideline F.4.2.3, given the Biologist's assessments and Memo, staff felt that an additional assessment of environmental impacts and mitigation measures would not be required, and that the existing AEA, CEMP and the DFO's LOA would suffice for the proposed amendment, and thus that this DPA Guideline would be complied with.
F.4.2.6 Existing trees and vegetation shall be retained along the upland area and adjacent to the foreshore in order to maintain the habitat and prevent erosion.	n/a	There is no vegetation removal or disturbance proposed by these amendments to the previously-issued Permit.
F.4.2.7 Septic systems shall not be constructed within 30 metres of the natural boundary of any watercourse (including a body of water or the sea).	n/a	There is no septic system proposed by these amendments to the previously-issued Permit.
F.4.2.8 Areas subject to flooding shall be subject to a 15 metre setback unless waived by the Ministry of Environment.	n/a	n/a
F.4.2.9 Where this area includes trees that bear the nests of eagles or other species of birds, a buffer area around each nest tree should be left undisturbed. The size of the buffer should be determined prior to development by a qualified professional, with advice from the Ministry of Environment or the Canadian Wildlife Service.	n/a	There are no currently mapped/known raptor nests on the subject property, however proponents continue to be subject to the BC Wildlife Act and federal Species at Risk Act, regardless of mapping.

Rationale for Recommendation

Staff finds the application and proposed amendment information submitted to meet the Gabriola LUB Guidelines for DPA 4, and recommends approval of issuance of amendment Permit GB-DP-2021.2, given that:

- the DFO is in agreement with the proposed amendment (including the additional proposed destruction of some muddy, shaded intertidal habitat) and is not requiring a revision to their LOA;
- the proposed works appear to be a marked improvement to the site overall through the removal of 51 additional harmful creosote piles, and proposed fortification to mitigate ongoing shoreline erosion in the area; and
- Snuneymuxw First Nation's previous letter and conditions will continue to apply to the proposed amended works.

ALTERNATIVES

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

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 Gabriola Island Local Trust Committee request that the following information be provided for GB-DP-2021.2 [insert requested information].

2. **Deny the application**

   The LTC may deny the application. Staff advise that if this alternative is selected, the reasons for denial should be clearly stated in the resolution. A decision to deny a development permit application must be accompanied by the reasons that the LTC finds an application does not meet the DPA Guidelines. Recommended wording for the resolution is as follows:

   That the Gabriola Island Local Trust Committee deny issuance of GB-DP-2021.2 for the follows reasons [insert reasons].

NEXT STEPS

Subject to concurrence with staff's recommendation on page 1 of this report, staff will issue the amendment DP.

Submitted By:	Teresa Mahikwa, RPP, MCIP Island Planner	November 16, 2021
Concurrence:	Heather Kauer, MPA, RPP, MCIP, AICP Regional Planning Manager	November 16, 2021

ATTACHMENTS

1. Draft (Amendment) Development Permit GB-DP-2021.2
2. Current GB-DP-2020.2 (previously-issued August 20, 2021)
3. Site context (same as from staff report dated June 17, 2021)

DRAFT

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2021.2
(AMENDMENT TO GB-DP-2020.2)

To: Silva Bay Resort & Marina – 1167433 BC Ltd.

1. This permit applies to the property described below:

   PID: 030-792-606
   Legal Description: Lot 1, Section 5 Gabriola Island Nanaimo District Plan EPP90534

2. Whereas the subject property as described above lies within "Development Permit Area No. 4 – Flat Tops Islands Area" designated under Gabriola Island Official Community Plan Bylaw No. 166, this Development Permit is issued under Gabriola Island Land Use Bylaw No. 177, that authorizes the:
   a. Demolition and reconstruction of the "Stores Deck";
   b. Demolition and removal of the "Shipyard Building";
   c. Demolition and removal of the "Travel Lift Pier", and addition of new fill;
   d. Demolition of an electrical shed;
   e. Repairs and reconstruction to the Marina Wharf Head; and
   f. Demolition and replacement of the "Apron Deck", including the addition of new fill.

   in accordance with the following Schedules:
   - "A" Aquatic Effects Assessment (AEA) Report by Hemmera Envirochem Inc. dated February 2, 2021;
   - "B" Fisheries and Oceans Canada "Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat" dated September 24, 2020;
   - "C" Snuneymuxw Response Letter with conditions dated May 20, 2021;
   - "D" Electrical Shed Location; and
   - "E" Memorandum from Hemmera Envirochem Ltd. to DFO dated October 6, 2021, outlining the location and proposed works for the demolition and replacement of the "Apron Deck".

   all attached to and forming part of this permit.

3. This Permit is subject to the following conditions:

   3.1 All required authorizations under the *Heritage Conservation Act* as issued by the BC provincial Archaeology Branch for the proposed works.

   3.2 All necessary approvals and conditions of Fisheries and Oceans Canada (FCO) to be met as prescribed in Schedule "B" for the proposed works.

   3.3 Creosote pilings should not be used as replacement pilings, but rather the applicant shall be limited to steel or equivalent replacement pilings for the Stores Deck and Wharf Head reconstruction.

   3.4 Engagement with Snuneymuxw First Nation fisheries department to the satisfaction of the First Nation.

3.5 Employment of a site monitor from Snuneymuxw First Nation, at the expense of the applicant and to the extent which satisfies the requirements of the First Nation.

3.6 Aquatic Effects Assessment by Hemmera Envirochem Ltd. dated December 22, 2020 with specific relevant sections:

- Section 6.0 - MEASURE TO AVOID OR MITIGATE EFFECTS TO FISH, FISH HABITAT AND AT-RISK SPECIES
- APPENDIX A - STRUCTURAL GENERAL ARRANGEMENT PLAN, APPENDIX B - STORES DECK DEMOLITION PLAN, APPENDIX C – TRAVEL LIFT RIP RAP, and APPENDIX D – STORES DECK CONSTRUCTION PLAN.

This permit does not relieve the applicant from complying with the provisions of *the Gabriola Island Official Community Plan Bylaw No. 166, 1997* and the Gabriola *Island Land Use Bylaw No. 177, 1999,* nor does it provide permission to construct any works without other lawfully required approvals and permits from any other local, provincial, or federal authority.

AUTHORIZING RESOLUTION PASSED BY THE GABRIOLA ISLAND LOCAL TRUST COMMITTEE
THIS __ DAY OF ____, 2021.

_____ _____

Deputy Secretary, Islands Trust Date Issued

IF THE DEVELOPMENT HEREIN IS NOT COMMENCED BY THE _____TH DAY OF_____, 20____

THIS PERMIT AUTOMATICALLY LAPSES.

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2021.2
(AMENDMENT TO GB-DP-2020.2)

Schedule "A"

Schedule "A" – Aquatic Effects Assessment (AEA) Report by Hemmera Envirochem Inc. dated February 2, 2021

(PDF document begins on next page)

Aquatic Effects Assessment:
Silva Bay Marine Resort, Gabriola Island, BC

Prepared for:

Silva Bay Marine Resort
3383 South Road
Gabriola BC V0R1X7

Project No. 103069-01

February 2, 2021

Prepared by:

Hemmera Envirochem Inc.
16th Floor, 4730 Kingsway
Burnaby, BC V5H 0C6
T: 604.669.0424
F: 604.669.0430
hemmera.com

Hemmera Envirochem Inc.
18th Floor, 4730 Kingsway
Burnaby, BC V5H 0C6
T: 604.669.0424
F: 604.669.0430
hemmera.com

February 2, 2021
Project No. 103069-01

Silva Bay Resort & Marina Ltd.
3383 South Road
Gabriola, BC V0R 1X7

Attention: Dean Chen

Dear Mr. Chen

Re: Aquatics Effects Assessment: Silva Bay Resort and Marina, 3383 South Road, Gabriola Island

On behalf of Hemmera, we are pleased to provide you with this electronic copy of the Aquatic Effects Assessment for Silva Bay Marine Resort.

We appreciate the opportunity to have worked with you on this Project and trust that this report meets your requirements. Please feel free to contact the undersigned by phone or email regarding any questions or further information that you may require.

Regards,
Hemmera Envirochem Inc.

Laura White, PhD, R.P.Bio.
Senior Project Manager
604.379.2251
lwhite@hemmera.com

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Proponent Contact Information 1
1.2 Regulatory context 1
1.2.1 Fisheries Act 1
1.2.2 Species at Risk Act 2
2.0 PROJECT DESCRIPTION 4
2.1 Location 4
2.2 Key features of the Proposed Project 4
2.2.1 Demolition Components 4
2.2.2 Construction Components 7
2.2.3 Marina Wharfhead Repairs: 7
2.3 Objectives 7
3.0 METHODS 8
4.0 HABITAT DESCRIPTION AND FISH SPECIES PRESENT 9
4.1 General Characteristics of the Project Site 9
4.2 Physical Characteristics of the Project Site 10
4.3 Biological Characteristics of the Project Site 10
4.3.1 Intertidal Environment 10
4.3.2 Subtidal Environment 11
4.3.3 At-Risk Marine Species and Habitats 14
4.3.4 Terrestrial Vegetation 15
4.3.5 Birds 15
4.3.6 Wildlife 15
4.3.7 At-Risk Terrestrial Species and Habitats 16
5.0 PROJECT COMPONENTS AND MECHANISMS WITH POTENTIAL TO AFFECT FISH AND FISH HABITAT 18
5.1 Potential Effects of the Proposed Project on Fish and Fish Habitat 18
6.0 MEASURES TO AVOID OR MITIGATE EFFECTS TO FISH, FISH HABITAT AND AT-RISK SPECIES 20
6.1 Timing Windows 20
6.2 Recommended Strategies for Minimizing Disturbance to Fish, Wildlife and Habitat 20
6.3 Recommended Strategies for Mitigation of Potential Adverse Effects on Water Quality 21
6.4 Recommended Mitigation for Avoiding/Managing Spills and Contaminants 21

7.0 EFFECTS ASSESSMENT 22
7.1 Assessment Approach for Residual Effects 22
7.2 Harmful Alteration, Disruption or Destruction of Fish Habitat 24
7.3 Assessment Summary 26
8.0 CLOSURE 26
9.0 LITERATURE CITED 27

LIST OF TABLES (WITHIN TEXT)

Table 1 Climate Summary 10
Table 2 At-Risk Marine Species that May Occur at or near the Project Site 14
Table 3 At-Risk Terrestrial Species that May Occur at or near the Project Site 16
Table 4 Direct and Indirect potential impacts of the Project 18
Table 5 Spatial Extent of Effects 23
Table 6 Habitat Sensitivity 23
Table 7 Summary of Affected Fish Habitats 24
Table 8 Effects Matrix of Project Components with the Residual Effects 25

LIST OF FIGURES (WITHIN TEXT)

Figure 1 Local Area Map showing the Project Site 3
Figure 2 Project Infrastructure Components 4
Figure 3 Rockfish Conservation Area 17 (RCA 17) nearest to the Project Site (to the north) (DFO 2018) 9
Figure 4 Subtidal Habitat Map of the Project Site 13

LIST OF PHOTOS (WITHIN TEXT)

Photo 1 Shipyard building with deteriorated timber pilings to be removed 5
Photo 2 Existing rip rap at Travel Lift pier 6
Photo 3 Deteriorated Stores Deck structure to be removed and replaced 6
Photo 4 Mid to high intertidal areas at the Project Site A) to the southwest, and B) to the northeast. 11
Photo 5 A) Predominant soft benthic substrates throughout the Site, and B) abundance of shell debris in shallow water at the southwest portion of the Site 12
Photo 6 Sparse eelgrass (*Zostera marina*) at the Project Site 12

LIST OF APPENDICES

Appendix A Structural General Arrangement Plan
Appendix B Stores Deck Demolition Plan
Appendix C Travel Lift Rip Rap
Appendix D Store Deck Construction Plan

1.0 INTRODUCTION

A condition assessment (Ausenco 2018) at the Silva Bay Marine Resort on Gabriola Island, British Columbia, concluded that existing marina infrastructure is in a state of advanced deterioration and needing replacement. The Project Site is located at Silva Bay, Gabriola Island (**Figure 1**). Geotechnical investigations at the Project Site were undertaken in March 2019. Following the recommendations of the condition assessment, Silva Bay Marine Resort proposes to remove and, where possible, repair the deteriorated infrastructure.

Silva Bay Marine Resort retained Hemmera Envirochem Inc. (Hemmera) to undertake an Aquatic Effects Assessment (AEA) to determine if demolition, repair and replacement works would affect fish, fish habitat or aquatic species at risk.

1.1 Proponent Contact Information

Silva Bay Marine Resort
3383 South Road
Gabriola, BC V0R 1X7
http://www.silvabay.com

Contact Information:

Dean Chen, Operations Manager
Office: (250) 247-8662
Email: dean.chen@silvabay.com

1.2 Regulatory context

1.2.1 Fisheries Act

The *Fisheries Act* (FA) is the main federal law governing fisheries in Canada. The purpose of the Act (Section 2.1) is to provide a framework for:

a. the proper management and control of fisheries; and,
b. the conservation and protection of fish and fish habitat, including by preventing pollution.

Fish habitat, as defined by the FA under Subsection 2(1) is:

> *"water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas"*

The fish and fish habitat protection provisions apply to all fish and fish habitat throughout Canada.

The Fish and Fish Habitat Protection and Pollution Prevention provisions of the Act include the following:

- a prohibition against causing the death of fish, by means other than fishing (section 34.4)
- a prohibition against causing the Harmful Alteration, Disruption or Destruction of fish habitat (section 35)

- a framework of considerations to guide the Minister's decision-making functions (section 34.1)
- ministerial powers to ensure the free passage of fish or the protection of fish or fish habitat with respect to existing obstructions (section 34.3)

Subsection 34.4(2)(b) and 35(2)(b) qualifies these prohibitions and allows for the authorization of harmful impacts to fish and fish habitat by the Minister of Fisheries and Oceans.

DFO applies a risk-based approach when evaluating the impacts of works, undertakings or activities on fish habitat. Harmful Alteration, Disruption or Destruction (HADD) is defined as any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish.

DFO's Fisheries Protection Policy Statement (http://www.dfo-mpo.gc.ca/pnw-ppe/policy-politique-eng.html) provides direction regarding the FA. The goal of the Fish and Fish Habitat Protection Policy Statement is to provide a framework for the conservation and protection of fish and fish habitat.

Proponents of works, undertakings, or activities taking place in or near water may harmfully impact fish or fish habitat are expected to:

- understand the types of harmful impacts their works, undertakings, or activities are likely to cause
- take measures to avoid harmful impacts, including following relevant standards, codes of practice, or regulations
- request an exception (Authorization Concerning Fish and Fish Habitat Protection Regulations) to the section 34.4 and 35 prohibitions when it is not possible to avoid harmful impacts to fish and fish habitat.

1.2.2 Species at Risk Act

Federally, the *Species at Risk Act* (SARA) prohibits the killing, harm, harassment, and capture of a species listed on Schedule 1 of SARA as *Extirpated*, *Endangered*, or *Threatened* as per Sections 32 of SARA. Additional provisions are contained in SARA that prohibit the damage or destruction of the residence of one or more individuals listed on Schedule 1 of SARA (Section 33). Furthermore, the destruction of critical habitat of listed species as identified in the recovery strategy or action plan for that species is prohibited under Section 58(1) of SARA.

Furthermore, proponents are required to ensure that their actions conform to all other statutory requirements, such as federal, provincial, territorial or Indigenous legislation.



Silva Bay Marine Resort
Silva Bay, Gabriola Island, BC

Project Site

Legend

Site Boundary

Parcel Boundary

Notes

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand-alone" document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the maps of services and limitations described therein.

Sources

- Contains information licensed under the Open Government Licence - Regional District of Nanaimo & British Columbia
- Site Boundary: Survey Plan of District Lot 2099, 2100, & 2101, Tanner Land Surveying (2018).
- Aerial Image: ESRI World Imagery, 2017
- Land Summary: ESRI World Topographic Map

N

1:1,500

0 20 40 60 80 100

NAD 1983 UTM Zone 10N

Page Size: 11" x 17"

1200615-01	Production Date: May 2, 2019	Figure 1

Hemmera — Silva Bay Marine Resort

2.0 PROJECT DESCRIPTION

2.1 Location

The Project Site is located on the southeastern shore of Gabriola Island, in Silva Bay, and includes an upland marina facilities area, a shipyard, and approximately 1067 metres (3500 feet) of moorage space over four floats (**Figure 1**). Key infrastructure components of the marina included in the Project include the shipyard building, travel lift pier, and stores deck (**Figure 2**).



Figure 2 Project Infrastructure Components

Surrounding land and water uses includes residential properties and recreational boating and fishing.

2.2 Key features of the Proposed Project

Proposed Project Activities relevant to the AEA include demolition of existing, deteriorated infrastructure components and construction of some replacement infrastructure components.

2.2.1 Demolition Components

Shipyard building:

Demolition and removal of the Shipyard building superstructure and substructure includes:

- Removal of 60 deteriorated creosote treated timber piles (30 cm diam.).
- Removal of 356 m^2 shipyard building.

For the detailed design of the shipyard building structures to be removed, see **Appendix A**.

Travel lift pier:

The travel lift pier was deemed unsafe for public access during the condition assessment due to deterioration of timber structures. Existing structures will be demolished and removed from site. The existing timber bulkhead and support piles and retaining wall vertical logs will remain in place for structural support. (**Appendix A**). Components to be removed include:

- 31 vertical creosote treated timber piles of 30 cm diam.
- Top of travel lift pier (56 m² area).

Stores Deck:

Demolition and removal of the stores deck includes:

- Removal of 30 x 30 cm diam. deteriorated creosote treated timber piles (15 in the intertidal area, 15 in the upland).
- Decking area of ~220 m².

For the detailed design of the existing stores deck structures to be demolished, see **Appendix B**.



Photo 1 Shipyard building with deteriorated timber pilings to be removed



Photo 2 Existing rip rap at Travel Lift pier



Photo 3 Deteriorated Stores Deck structure to be removed and replaced

2.2.2 Construction Components

Travel lift pier:

No new construction is planned for the travel lift pier. When the existing infrastructure is removed, an existing small area of rip rap (approximately 6 m²) (**Photo 2**) will be supplemented with additional rip rap to increase the stability of an exposed timber retaining wall (**Appendix C**). The existing rip rap will be incorporated into the final design.

- Addition of 264 m³ of new rip rap armouring over an area of 197 m².

Stores Deck:

A new steel pile and timber deck structure will be constructed to replace the demolished Stores Deck (**Appendix D**). Components will include:

- Six (6) steel piles of 30 cm. diam. in the intertidal area.
- Nine (9) concrete footings (75 x 75 cm).
- Pile caps, timber stringers and Timber Decking/Guardrails treated with ACZA in accordance with CSA 080.
- Decking area of ~220 m²

2.2.3 Marina Wharfhead Repairs:

- Replacement of six (6) timber piles, like for like.
- Replacement of nine (9) sections of creosote timber stringers and pile caps

Methodologies for demolition and construction activities will be determined through consultation with the contractor and environmental monitor. Installation and construction methods are anticipated to be from barge mounted equipment from the water. Piles are expected to be pulled using a vibratory hammer.

New steel piles for the Stores Deck will be installed using impact driving techniques to set the tip of the pile into the rock. Since the deck is being anchored using footings on the upper portion of the slope, the new piles do not need to be drilled.

2.3 Objectives

The objectives of this AEA include:

- Describing and classifying the intertidal and subtidal environment at, and immediately adjacent to the Project, through background review and an in-field site assessment;
- Assessing potential for adverse effects of the proposed Project activities on fish, fish habitat and aquatic species at risk;
- Identifying mitigation measures to reduce or avoid potentially adverse effects to fish or fish habitat; and,
- Identifying residual adverse effects that may remain following implementation of recommended mitigation measures and determining whether these effects would result in the death of fish, the harmful alteration, disruption or destruction of fish habitat (HADD), or negative effects to aquatic species at risk.

3.0 METHODS

Observational assessment of accessible intertidal and surrounding backshore areas, and drop camera survey of lower intertidal and subtidal areas, were conducted on April 4th, 2019 during a low tide of 2.1 m above Chart Datum (CD) at 12:28 pm to classify biophysical characteristics at the Site. Transect methodology was adapted from Fisheries and Oceans Canada's (DFO) working draft *Marine Foreshore Environmental Assessment Procedure* document (DFO 2002). The geographic scope of the subtidal assessment encompassed the crown tenure (**Figure 1**). Marine life present was identified to the species level, where possible. Substrates were characterized visually based on size classes presented in DFO (2004):

- Boulder (> 256 mm)
- Cobble (64 mm to 256 mm)
- Gravel (2 mm to 64 mm)
- Sand (0.0625 mm to 2 mm)
- Silt/Mud/Clay (< 0.0625 mm)

Information related to the biophysical conditions at the Project Site was obtained from the following sources:

- Review of available ortho-imagery (Google Earth) to determine habitat types and quality;
- Review stream and salmon habitat through Habitat Wizard;
- Review of known Species at Risk occurrences through iMap BC (iMap BC 2016); and,
- On-line databases:
  - BC Conservation Data Centre (BC CDC 2002);
  - Committee on the Status of Endangered Wildlife in Canada (COSEWIC 2003);
  - Sensitive Habitat Inventory and Mapping database (SHIM 2013);
  - BC Species and Ecosystems Explorer database (BC Ministry of Environment 2013); and,
  - E-fauna BC database (eFauna 2016).

Note that this assessment was conducted to address portions of the *Fisheries Act* and the *Species at Risk Act*; we have also included a description of existing conditions for wildlife species with potential to occur at the Site.

4.0 HABITAT DESCRIPTION AND FISH SPECIES PRESENT

4.1 General Characteristics of the Project Site

Gabriola Island lies in Fisheries Management Area 17, subarea 10 and due to the risk of sanitary and biotoxin contamination, bivalve shellfish harvesting is closed to all species except for butter clam, littleneck clam, Manila clam, mussels and oysters; however, shellfish harvesting in Silva Bay is permanently closed throughout the year (DFO 2018).

The nearest Rockfish Conservation Area (RCA) to the Project Site is approximately 1.3 km toward the southeast, in the Gabriola Passage (**Figure 3**, Site not shown on figure). Harvesting rockfish within the RCA is prohibited, and recreational fishing is restricted to hand picking invertebrates, harvesting crab and shrimp by trap, and smelt by gillnet (DFO 2018). Commercial fishing within the RCA is restricted to harvesting crab and prawns by trap, salmon and herring by seine or gillnet, sardine and smelt by gillnet, and krill and groundfish by mid-water trawl (DFO 2018).

A search using Habitat Wizard indicated that there are no freshwater streams discharging within 1.2 km of the Project Area. The nearest salmon bearing streams to the Project Area are the Nanaimo River and Holden Creek, located approximately 14 km northwest and 11 km southwest respectively (HabWiz 2018). There are no salmon bearing streams documented on Gabriola Island.

Recreational fishing for Dungeness (*Metacarcinus magister*) and red rock (*Cancer productus*) crab occurs in the subtidal zone at Silva Bay.



Figure 3 Rockfish Conservation Area 17 (RCA 17) nearest to the Project Site (to the north) (DFO 2018)

4.2 Physical Characteristics of the Project Site

The Project Site is in the Coastal Douglas Fir moist maritime (CDFmm) biogeoclimatic zone (CMN 2013). The CDFmm occurs at elevations <150 m above sea level and typically has warm, dry summers and mild, wet winters; mean annual temperature is 9.2 to 10.5°C and mean annual precipitation ranges from 647 to 1263 mm (Nuszorfer et al. 1991).

The Project is situated within the Pacific Maritime climate zone. The highest runoff occurs during the winter months, and lowest runoff generally occurs in late August through September (Ecological Framework of Canada 2016). Weather and climatic conditions for the area are summarized in **Table 1**.

Table 1 Climate Summary

Climate Zone	Pacific Maritime Ecozone
Average Temperature Range	5˚C to 20˚C
Average Total Annual Precipitation	958 mm
Weather Forecasts	www.weather.gc.ca; www.theweathernetwork.com
Weather Phone (Environment Canada)	604.885.4100
Weather Notices (Environment Canada)	https://weather.gc.ca/marine/region_e.html?mapID=02

(Environment Canada, 2016)

4.3 Biological Characteristics of the Project Site

4.3.1 Intertidal Environment

The narrow intertidal area at the Project Site is highly disturbed. At the southeast portion of the Site, the intertidal area comprises coarse substrates with mixed cobble and boulder (**Photo 4A**). Refuse and concrete is dispersed throughout the area. A low (<5%) cover of macroalgae colonizes the cobble and boulder substrate, including rockweed (*Fucus gardneri*) and *Acrosiphonia* sp. Invertebrate abundance is very low and limited to a few acorn barnacles (*Balanus glandula*). Shell debris from blue mussels (*Mytilus* sp.), Pacific oysters (*Crassostrea gigas*) and clams (various sp.) are dispersed throughout the intertidal area. The northeast intertidal area is armoured with rip rap, the lower extent being colonized by the same macroalgal species (**Photo 4B**).



Photo 4 Mid to high intertidal areas at the Project Site A) to the southwest, and B) to the northeast.

4.3.2 Subtidal Environment

The low intertidal and subtidal substrates at the Project Site were fairly homogenous, comprising predominantly sand with some scattered broken shell (clam and Pacific oyster) (**Photo 5A, Figure 2**). The abundance of shell debris increased in shallow water and decreased with increasing water depth (**Photo 5B**). Patches of diatoms coated the benthic substrates, indicating low water flow at the Site. One rock outcrop at the southeast of the Site provided hard substrate for Pacific oysters (**Figure 4**). Two small patches of eelgrass (*Zostera marina*) were observed at two distinct locations within the tenure area (**Figure 4**). Eelgrass is important because it provides a number of important ecosystem functions, including foraging areas and shelter to young fish and invertebrates, food for migratory waterfowl and spawning surfaces for species such as Pacific herring (*Clupea pallasii*). By trapping sediment, stabilizing the substrate, and reducing the force of wave energy, eelgrass beds also reduce coastal erosion (NOAA Fisheries 2014). Abundance was low (<1 per m^2 at the south and <1 per $3m^2$ at the north) (**Photo 6**). The different habitat types at the Site are shown in **Figure 4**.

The unconsolidated substrates at the Site are preferred habitat for crab species and invertebrate burrows were evident throughout the Site. A few (n=4) Dungeness crab (*Metacarcinus magister*) were observed during the assessment of the Project Site. Other invertebrate species were limited to a few (n=3) ochre sea stars (*Pistaster ochraceous*) on bottom substrates.

Macroalgal abundance was very low and limited to small patches of sea lettuce (*Ulva* sp.) attached to shell fragments dispersed throughout the Site. No kelp species were present, and the lack of hard substrate indicates that productivity at the Site would not increase significantly during the late spring or summer.

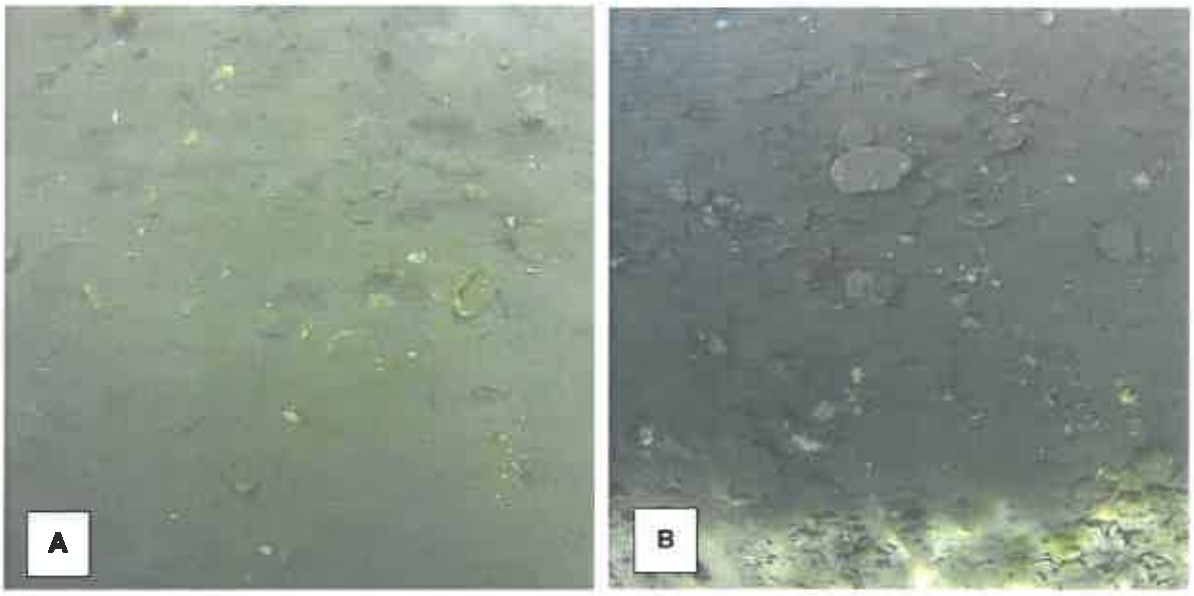


Photo 5 **A) Predominant soft benthic substrates throughout the Site, and B) abundance of shell debris in shallow water at the southwest portion of the Site**



Photo 6 **Sparse eelgrass (*Zostera marina*) at the Project Site**



Silva Bay Marine Resort
Silva Bay, Gabriola Island, BC

Habitat Map

Legend

- Site Boundary
- Parcel Boundary

Habitat Types

- Soft Sand
- Rock Outcrop
- Eelgrass
- Dense Shell

Notes

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand-alone" document, but a visual plot of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.

Sources

- Coastline Information Sourced under the Open Government Licences - Regional District of Nanaimo & British Columbia
- Site Boundary: Survey Plan of District Lot 2099, 2100, & 2101, Tanner Land Surveying (2018).
- Aerial Image: ESRI World Imagery, 2017

N

1:1,800

0 20 40 60 80 100

NAD 1983 UTM Zone 10N

Page Size: 11" x 17"

103089-01	Production Date: May 2, 2019	Figure 2

Hemmera — Silva Bay Marine Resort

The dock and piling structures hosted typical fouling communities, blue mussel (*Mytilus* sp.), *Ulva* sp., non-native wire weed *(Sargassum muticum*), rock weed (*Fucus gardneri*), hydroids, ochre stars (*Pisaster ochraceous*), acorn barnacles and plumose anemones (*Metridium farcimen*).

No fish were observed during the assessment. Refuse was distributed on the bottom throughout the Site.

4.3.3 At-Risk Marine Species and Habitats

The Conservation Data Centre (CDC) assesses the level that B.C. species or ecological communities are at risk of being lost. Based on that, the CDC assigns a provincial Conservation Status Rank that can be used to set conservation priorities. Based on their conservation status rank, each species and ecosystem is assigned to the red, blue or yellow list to help set conservation priorities and provide a simplified view of the status of B.C.'s species and ecosystems.

The Red list includes species that have been legally designated as Endangered or Threatened under the Wildlife Act (see below), are extirpated, or are candidates for such designation. The Blue List includes species not immediately threatened, but of concern because of characteristics that make them particularly sensitive to human activities or natural events. The Yellow List includes uncommon, common, declining and increasing species (BC Conservation Data Centre 2002).

A search of the BC Conservation Data Centre (BC CDC 2018) identified 14 at-risk marine species with potential to occur at the Project Site, including six mammals, three fish, four birds and one invertebrate (**Table 2**). Of the species identified, 13 are federally listed under the SARA.

Table 2 At-Risk Marine Species that May Occur at or near the Project Site

Common Name	Scientific Name	SARA[1]	BC List[2]
Marine Mammals			
Harbour Porpoise	*Phocoena phocoena*	Threatened	Blue
Humpback Whale	*Megaptera novaeangliae*	Threatened	Blue
Killer Whale (southern resident population)	*Orcinus orca* pop. 5	Endangered	Red
Killer Whale (west coast transient population)	*Orcinus orca* pop. 3	Threatened	Red
Sea Otter	*Enhydra lutris*	Special Concern	Blue
Steller Sea Lion	*Eumetopias jubatus*	Special Concern	Blue
Birds			
Northern Goshawk	*Accipiter gentilis laingi*	Threatened	Red
Marbled Murrelet	*Brachyramphus marmoratus*	Threatened	Blue
Ancient Murrelet	*Synthliboramphus antiquus*	Special Concern	Blue
Double-crested Cormorant	*Phalacrocorax auritus*	None	Blue

Common Name	Scientific Name	SARA[1]	BC List[2]
Fish			
Green Sturgeon	*Acipenser medirostris*	Special Concern	Red
Rougheye Rockfish	*Sebastes aleutianus*	Special Concern	None
Yelloweye Rockfish	*Sebastes ruberrimus*	Special Concern	None
Invertebrates			
Olympia Oyster	*Ostrea conchaphila*	Special Concern	Blue

Note: [1] SARA listing: 1 = schedule 1, 3 = schedule 3, E = Endangered, T = Threatened, SC = Special Concern, – = no listing.
[2] BC List: Red = Species that are extirpated, endangered, or threatened; Blue = Species of special concern; Yellow = species and ecological communities that are secure.

The Project Site does not overlap with Critical Habitat that has been defined under SARA for the species identified. Gabriola Island waters currently do not comprise critical habitat for Southern Resident Killer Whales under the SARA but are within draft critical habitat for West Coast Transient Killer Whales and is pending formally designation by DFO (Government of Canada 2017). While killer whales are not known from the Site, both Southern Resident Killer Whales and West Coast Transient Killer Whales populations could both occur in the vicinity of the Project (i.e., within Fisheries Management Area 17). Olympia oyster (*Ostrea conchaphila*), listed as a species of Special Concern on Schedule 1 of SARA, has the potential to occur at the Site, but are not historically known from the Site (Stafford 1913b) and were not observed during the survey.

4.3.4 Terrestrial Vegetation

The upland portion of the Project Site adjacent to the water is paved. A narrow strip of ornamental vegetation approximately 5 m long is located at the top of the bank on the northeast portion of the Site.

4.3.5 Birds

Glaucous-winged gulls (*Larus glaucescens*) were observed during the site assessment. While not observed at the Site, Canada geese (*Branta canadensis*) and great blue heron (*Ardea herodias*) may occur at the Site. Great blue heron are listed under the *Species at Risk Act* as species of Special Concern (**Table 3**). The Site may provide roosting habitat for marine/intertidal foraging species, as well as foraging habitat for insectivorous birds. The general nesting period that covers most federally protected migratory bird species typically extended from early as mid-March and to late August (Environment and Climate Change Canada 2017).

4.3.6 Wildlife

No wildlife species were observed at the Project Site during the assessment. The riparian backshore may provide potential habitat for species that forage in intertidal areas. Possible species include mink (*Mustela vison*) and raccoon (*Procyon lotor*).

4.3.7 At-Risk Terrestrial Species and Habitats

A search of the BC Conservation Data Centre (CDC) (BC CDC 2016) identified a list of 32 at-risk terrestrial species with potential to occur in suitable sites in the vicinity of the Project, which was refined to a list of 29 species based on professional knowledge of the Project Site and species' habitat requirements: 19 birds, six mammals and four reptiles and amphibians. Of the species identified, 14 are federally listed under the *Species at Risk Act* (SARA).

Table 3 At-Risk Terrestrial Species that May Occur at or near the Project Site

Scientific Name	English Name	BC List[1]	SARA[2]
BIRDS			
Short-billed Dowitcher	Limnodromus griseus	Blue	--
Northern Goshawk	*Accipiter gentilis laingi*	Red	Threatened
Great Blue Heron	*Ardea herodias fannini*	Blue	Special Concern
Short-eared Owl	*Asio flammeus*	Blue	Special Concern
American Bittern	*Botaurus lentiginosus*	Blue	--
Rough-legged Hawk	*Buteo lagopus*	Blue	--
Red Knot	*Calidris canatus*	Red	1-E/T
Common nighthawk	*Chordeiles minor*	Yellow	Threatened
Olive-sided Flycatcher	*Contopus cooperi*	Blue	Threatened
Black Swift	*Cypseloides niger*	Blue	
Peregrine Falcon	*Falco peregrinus pealei*	Blue	Special Concern
Northern Pygmy-Owl	*Glaucidium gnoma swarthi*	Blue	--
Barn Swallow	*Hirundo rustica*	Blue	--
Western Screech-Owl	*Megascops kennicottii kennicottii*	Blue	Special Concern
Band-tailed Pigeon	*Patagioenas fasciata*	Blue	Special Concern
Vesper Sparrow	*Pooecetes gramineus affinis*	Red	Endangered
Purple Martin	*Progne subis*	Blue	--
Western Meadowlark (Georgia Depression population)	*Sturnella neglecta*	Red	--
Barn Owl	*Tyto alba*	Red	--
WILDLIFE			
Mammals			
Townsend's Big-eared Bat	*Corynorhinus townsendii*	Blue	--
Vancouver Island Marmot	*Marmota vancouverensis*	Red	--
Ermine	*Mustela erminea anguinae*	Blue	--
Keen's Myotis	*Myotis keenii*	Blue	--
Little Brown Myotis	*Myotis lucifugus*	Yellow	Endangered
American Water Shrew	*Sorex navigator brooksi*	Red	--

Scientific Name	English Name	BC List[1]	SARA[2]
Reptiles and Amphibians			
Western Toad	*Anaxyrus boreas*	Blue	Special Concern
Wandering Salamander	*Aneides vagrans*	Blue	--
Painted Turtle - Pacific Coast Population	*Chrysemys picta*	Red	Endangered
Northern Red-legged Frog	*Rana aurora*	Blue	Special Concern

Note: [1] BC List: Red = Species that are extirpated, endangered, or threatened; Blue = Species of special concern; Yellow = species and ecological communities that are secure.
[2] SARA listing: 1 = schedule 1, 3 = schedule 3, E = Endangered, T = Threatened, SC = Special Concern, -- = no listing.

The Project Site does not overlap with Critical Habitat as defined under SARA for the species identified. Based on data available from iMap BC and eFauna (2016), no known occurrences of vertebrate or invertebrate species at-risk are found within the search radius of 1 km of the Project Site. Given that the upland portion of the Site is paved and lacking natural vegetation, it is unlikely that any of the wildlife species identified in Table 3 would occur there. At-risk marine species (**Table 2**) that have potential to use riparian areas at the Project Site as perching or roosting habitat are Brandt's cormorant (*Phalacrocorax penicillatus*), double-crested cormorant (*Phalacrocorax auritus*) and Caspian tern (*Hydroprogne caspia*).

5.0 PROJECT COMPONENTS AND MECHANISMS WITH POTENTIAL TO AFFECT FISH AND FISH HABITAT

This section describes the potential effects identified from Project Activities that have the potential to affect fish or fish habitat and/or have the potential to affect listed at-risk species. Where applicable, mitigation measures are prescribed for those potential effects, and anticipated residual effects are summarized. Project components that may cause the harmful alteration, disruption or destruction (HADD) of fish and fish habitat, as defined under the *Fisheries Act*, are outlined in **Table 4**.

5.1 Potential Effects of the Proposed Project on Fish and Fish Habitat

The proposed Project has the potential to cause HADD to fish and fish habitat through:

- Direct HADD of benthic substrate through piling, addition of rip rap and concrete footings.
- Temporary disruption to intertidal fish and fish habitat, interstitial organisms, wildlife and birds by heavy equipment noise.
- Introduction of suspended sediment from pile driving and demolition activities.
- Introduction of contaminants entering the marine environment from Project-related activities such as piling, resuspension of sediments, concrete work and potential spills.

Table 4 Direct and indirect potential impacts of the Project

Project Component	Project Activity	Habitat	Deconstruction		Construction	
			Direct effect (footprint)	Indirect effect (shading)	Direct effect (footprint)	Indirect effect (shading)
Shipyard building	Pile removal (60 deteriorated creosote treated timber piles of 30 cm diam.)	Intertidal mud/sand	4.24 m^2	N.A.	N.A.	N.A.
	Roof removal	Intertidal mud/sand	N.A.	356 m^2	N.A.	N.A.
Travel lift pier	Pile removal (31 vertical creosote treated timber piles of 30 cm diam.)	Intertidal mud/sand	2.2 m^2	N.A.	N.A.	N.A.
	Removal of top of travel lift pier	Intertidal mud/sand	N.A.	56 m^2	N.A.	N.A.
	Rip rap armouring	Intertidal mud/sand	N.A.	N.A.	197 m^2	N.A.

Project Component	Project Activity	Habitat	Deconstruction		Construction	
			Direct effect (footprint)	Indirect effect (shading)	Direct effect (footprint)	Indirect effect (shading)
Stores deck	Pile removal (15 vertical creosote treated timber piles of 30 cm diam.)	Intertidal rock	1.06 m^2	N.A.	N.A.	N.A.
	Pile removal (15 vertical creosote treated timber piles of 30 cm diam.)	Upland	1.06 m^2	N.A.	N.A.	N.A.
	Pile install (6 steel piles of 30 cm diam.)	Intertidal rock	N.A.	N.A.	0.42 m^2	N.A.
	Addition of nine (9) concrete footings (75 x 75 cm)	Upland	N.A.	N.A.	5.06 m^2	N.A.
	Decking area	Intertidal rock	N.A.	~73 m^2	N.A.	~73 m^2
		Upland	N.A.	~146 m^2	N.A.	~146 m^2
Total habitat gain/loss			**+8.56 m^2**	**+632 m^2**	**-202.5 m^2**	**-220 m^2**

The removal of creosote treated, deteriorated timber piles will result in a 6.44 m^2 decrease in direct piling footprint on intertidal sand/mud substrates and a 0.64 m^2 piling footprint decrease on intertidal rock (**Table 7**), providing a net benefit to the marine environment through the removal of a contaminant source and making altered habitat back to a natural state.

Any subsurface or interstitial organisms, and sessile organisms colonizing existing timber structures, will be subject to disturbance and mortality during removal of timber piles. Mobile species such as crabs, fish, and birds are expected to move away from the area of activity due to disturbance by construction equipment (e.g., noise, vibrations). No marine mammals are expected at the Project Site. Disturbance of mobile species is expected to be temporary and restricted to on-site Project Activities.

Disruption of shoreline/riparian vegetation (e.g., cutting/clearing) is not considered in the assessment due to the lack of vegetation within the Project Site.

The potential exists for contaminants (i.e., hydrocarbons, concrete) to enter the marine environment from Project-related equipment and vessel traffic on Site. Accidents and malfunctions during vessel and other marine operations further increase the potential for spills and leaks of deleterious substances into the marine environment. No effects of barotrauma or stranding of fish are anticipated as the Project Site comprises soft substrates. No permanent alteration of fish habitat is expected to occur from the proposed Project Activities.

Project related effects are expected to be temporary (short duration), localized, and of small scale. Effects will be mitigated by following recommended guidelines and Best Management Practices (BMPs) outlined in **Section 6.0.** and in the project CEMP.

6.0 MEASURES TO AVOID OR MITIGATE EFFECTS TO FISH, FISH HABITAT AND AT-RISK SPECIES

The recommended mitigation measures below are intended to address and mitigate potentially adverse effects of the proposed Project on the fish habitat at the Project Site identified in **Section 5.1**.

6.1 Timing Windows

Through consideration of the seasonal distribution and abundance of fish and the timing of their sensitive life stages and processes (e.g., reproductive periods, migration of Pacific salmon), DFO identifies periods of lower (least) risk for the timing of in-water and near-water works. Generally, in-water Project Activities should be timed to occur within DFO's least risk work windows, to avoid or limit possible adverse effects on fish and aquatic species during sensitive life history stages. The Project Site lies within DFO Fisheries Management Area 17-10. Timing windows of least risk for this area are:

- Summer Window: **June 1 - September 1**
- Winter Window: **December 1 - February 15**

6.2 Recommended Strategies for Minimizing Disturbance to Fish, Wildlife and Habitat

For Pile Removal:

- An exclusion device such as protective netting or geotextile material suspended in the water column around the pile may be required to prevent access to fish and other marine fauna.
- Appropriate erosion and sediment control measures, including use of silt curtains if necessary, should be in place during pile removal and install activities.

For pouring concrete:

As cement and concrete are toxic to aquatic organisms, especially fish, any concrete work should follow the "Guide to the Code of Practice for the BC Concrete and Concrete Products Industry – Version 6", particularly Chapter 7 – Authorized Discharge: Effluent and Surface and Marine Water Quality (Millennium EMS Solutions Ltd. 1993).

- All concrete work shall conform to the requirements of CSA A23.1 and A23.2 (Concrete Materials and Methods of Concrete Construction/Methods of Test for Concrete).
- To prevent release of deleterious substances, ensure that all works involving the use of concrete, cement, mortars, and/or other Portland cement or lime-containing construction materials will not deposit (directly or indirectly) sediments, debris, concrete, leachate concrete fines, wash or contact water into or about any watercourse.
- Isolate pour area and/or install caisson.
- Cast in place concrete must remain isolated from water inside clean, sealed formed structures until cured (approximately 48-72 hours), as concrete leachate is highly toxic to fish and other aquatic life.
- Pour concrete at low tide.
- pH testing of isolated water for changes in acidity.
- Ensure a carbon dioxide (CO_2) tank with regulator, hose and gas diffuser is readily available during concrete work to neutralize pH levels should a spill occur. Staff must be trained in its proper use.

- Dust control methods in place to prevent particulates entering the marine environment.
- No wastewater or wood discharged into the marine environment.
- All equipment will be cleaned offsite away from storm drains.

6.3 Recommended Strategies for Mitigation of Potential Adverse Effects on Water Quality

Monitor sediment generation resulting from piling. If piling results in the generation of excessive amounts of fine sediment, stop work, determine the cause, and adjust work procedures (i.e., through containment). Have surface protection measures available on Site (e.g., silt fence) to be used as required.

6.4 Recommended Mitigation for Avoiding/Managing Spills and Contaminants

Heavy equipment working in the marine environment should be clean, in good working order and, where practical, use biodegradable lubrication and hydraulic fluids. Store the drill rig above the HWM and put spill prevention materials in place (drip trays, absorbent booms, spill pads) to eliminate the potential for leaks to come in contact with the ground or water. Do not store any hazardous materials or fluids with the rig. The work Site and equipment (e.g., drill rig, bob cat) must have emergency spill kits (pads, sorbent booms, etc.) available. The kits shall be suitable for the quantities and types of material stored at the Site and shall contain sufficient materials to contain any leaks resulting from accidents or malfunctions. Site personnel will be trained in the proper use of the kits in case of a spill. All spills to ground and water, will be contained and reported to relevant environmental agencies. All debris and deleterious substances associated with the Project Activities shall be appropriately contained in the immediate work area, collected, and disposed of in accordance with all applicable legislations, guidelines and best management practices.

If the recommended mitigation measures are implemented, it is unlikely that residual adverse effects relating to fish and fish habitat will result from the Project.

If the death of fish, or the Harmful Alteration, Disruption or Destruction of fish habitat is observed, the proponent is required to report to DFO immediately through the DFO-Pacific Observe, Record and Report phone line (toll free) at 1.800.465.4336.

7.0 EFFECTS ASSESSMENT

7.1 Assessment Approach for Residual Effects

The *Fisheries Act* prohibits the death of fish by means other than fishing and sub-lethal effects to fish and aquatic species at risk. In managing the fish habitat resource, DFO interprets the harmful alteration, disruption or destruction of fish habitat as;

> *"Any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life history processes of fish."*

Temporary or permanent changes to fish habitat resulting from a project can directly or indirectly impair the capacity of habitat to support one or more life history processes of fish. Mitigation designed to reduce the potential risk of a project to fish habitat will ensure that fish and fish habitat are conserved and protected.

Residual effects to fish and habitat resulting from the interaction between Project Activities and fish and fish habitat, following the implementation of avoidance and mitigation measures, will be assessed using the criteria defined in **Table 5**. This assessment relies on available scientific literature and field studies, the experience of the assessment team, and follows the guidance provided by DFO's Fish and Fish Habitat Protection Policy Statement (DFO 2019).This assessment will consider effects to fish and the magnitude of effects to habitat by considering;

- The habitat components being affected;
- The spatial extent of the area affected by the project relative to the habitat components in the area;
- The sensitivity of the habitat being affected; and,
- The expected persistence of the effects.

The evaluation will be undertaken in the context of the aquatic ecosystem, considering the habitat components (e.g., substrate, aquatic vegetation, water depth, oxygen, etc.) that support habitat functions (i.e. spawning, rearing, nursing, feeding, migrating) of the relevant fish and will depend on the nature of the affected habitat, the fish species present, their life history and related habitat requirements. The following will be taken into consideration for this assessment of residual harm:

Identification of habitat components: the structural features that support the requisite habitat functions required to meet the life history processes of fish (e.g., spawning, rearing, etc.). Habitat components are used as a proxy for habitat functions. Habitat components (**Section 4.0**) affected by the project will be identified and the most significant species use will be considered. If multiple components are significant to a species, there may be a need to assess multiple habitat components.

Spatial extent: the overlap of the area affected by the project with the habitat component. The affected area is the areas within which all project related activities are likely to occur either directly or indirectly. Once the primary habitat component(s) is selected, a rough estimate of its geographical extent (i.e., area) will be made to approximate the percentage located within the affected area.

The scale considered will include site, local and widespread. They are described below in **Table 5**.

Table 5 Spatial Extent of Effects

Site	Local	Widespread
The affected area overlaps with the habitat component by up to 5% of the area occupied by the habitat component	The affected area overlaps with the habitat component between 5 and 50% of the area occupied by the habitat component.	The affected area overlaps with the habitat component by between 50 and 100% of the area occupied by the habitat component
The affected area overlaps a minor or negligible portion of the habitat component	The affected area overlaps a portion of the area occupied by the habitat component.	The affected area overlaps much of the area occupied by the habitat component.

Habitat sensitivity: habitat and species sensitivity are critical elements when assessing the risk of temporary or permanent change to fish habitat resulting from the project are likely to directly or indirectly impair a habitats capacity to support one or more life processes of fish. The assessment will determine whether affected habitat is of low, moderate or high sensitivity. A determination matrix is presented in **Table 6**.

Table 6 Habitat Sensitivity

	Low Sensitivity	Moderate Sensitivity	High Sensitivity
Species Resiliency	Species present are resilient to change and perturbation	Species present are moderately resilient to change and perturbation	Species present are highly sensitive to perturbations
Species Dependence on Habitat	Habitat not used by fish for any life stage except occasionally transiting through or feeding in the area	Habitat is suitable and may be used as migratory corridor, rearing or spawning habitat. Habitat characteristics used in a variable way by fish.	Habitat is limited and the fish are dependent on it for survival of the species (e.g., groundwater upwelling zone supporting spawning habitat or deep pools providing the only overwintering habitat). Habitat characteristics used in a specific way by fish.
Habitat Rarity	Habitat is prevalent and widespread with many areas that are similar in features	Habitat is neither widespread or unique, rare or distinct.	Habitat is unique, rare and distinct.
Habitat Resiliency	The habitat is robust, resistant to perturbation or rapidly recovers	The habitat is neither robust nor sensitive, is somewhat resistant to perturbation and recovers at a moderate rate.	The habitat is highly sensitive, easily perturbed, and slow to recover.
Aggregation	Habitat does not support a specific function; fish densities are typically low.	Habitat supports a minimum of one function; fish densities periodically high.	Habitat supports more than one function; fish densities frequently high.
Habitat contribution to Fisheries Productivity	Habitats contribution to fisheries productivity is low. Large amounts of change to the affected species or habitat is expected to have relatively low impacts on fisheries productivity	Habitats contribution to fisheries productivity is moderate. Amount of change to the affected species or habitat is proportional to impacts on fisheries productivity (small change/small impacts; large change/large impacts)	Habitats contribution to fisheries productivity is high. Small amounts of change to the species or habitat is expected to have relatively large impacts on fisheries productivity

	Low Sensitivity	Moderate Sensitivity	High Sensitivity
Abiotic and Biotic Suitability of Habitat	No key structure-providing species (abiotic) in area of WUA.	Key structure providing species is present in location of the WUA but is not a limiting component	Key structure providing species present in location of WUA and is a limiting component
Species at Risk	Not within distribution area of a listed aquatic species at risk.	Within distribution area of an aquatic species at risk, but not in critical habitat. Non-critical habitat of aquatic species at risk that supports their lifecycle functions within their distribution area.	Critical Habitat and/or residence of aquatic species at risk identified in the proposed or final Recovery Strategy or Action Plan. Habitat supporting species of special concern.

Persistence of effects: the length of time needed for an effect to disappear. Assessment is based on three categories:

- Low - weeks
- Moderate – months; and,
- High – more than 1 year.

7.2 Harmful Alteration, Disruption or Destruction of Fish Habitat

With the application of mitigation measures, 197 m² of intertidal sand/mud habitat will be altered to rip rap habitat (**Table 7**). Indirect impacts (through shading of berth infrastructure) will increase at the Project Site by 412 m². Residual effects to fish and habitat resulting from the interaction between Project Activities and fish and fish habitat are presented in **Table 7**.

Table 7 Summary of Affected Fish Habitats

Component	Habitat Type	Area of Directly Affected Habitat (footprint)	Area of Indirectly Affected Habitat
Existing infrastructure removal	Intertidal mud/sand	6.44 m²	412 m²
	Intertidal rock	1.06 m²	74 m²
	Upland	1.06 m²	146 m²
	Habitat gain	8.56 m²	632 m²
New pile installation	Intertidal rock	0.42 m²	74 m²
New footing installation	Upland	5.06 m²	146 m²
Rip rap armoring	Intertidal mud/sand	197 m²	--
	Habitat loss	202.5 m²	220 m²
	Net habitat loss	-194 m²	+412 m²

Table 8 Effects Matrix of Project Components with the Residual Effects

Habitat Zone	Description of Pre-Construction Habitat	Effect Type	Area of Habitat Affected (m^2)	Description of Post-Construction Habitat	Spatial extent of effects	Species Resiliency	Species Dependence on Habitat	Habitat rarity	Habitat Resilience	Aggregation	Habitat Contribution to Fish Productivity	Species at-Risk	Persistent Effects
Intertidal	Timber piles	Alteration	6.44	Intertidal soft sediments	Site	Low	Moderate	Low	Low	Low	Low	Low	High
Upland	Timber piles/upland	Alteration	4.0	Concrete footings	Site	Low	Moderate	Low	Low	Low	Low	Low	High
Intertidal	Timber piles/intertidal rock	Alteration	0.42	Steel piles/intertidal rock	Site	Low	Moderate	Low	Low	Low	Low	Low	High
Intertidal	Intertidal mud/sand	Alteration	197	Rip rap	Local	Low	Low	Low	Low	Low	Low	Low	High

* within defined Project Site (Figure 1,2).

7.3 Assessment Summary

Project Activities will result in 6.44 m^2 of intertidal habitat being converted back to a natural state and a contaminant source (creosote) being removed from the marine environment. The replacement steel piles will offset the loss of artificial hard substrate for colonization from the removal of the deteriorated timber piles. Further, shading impacts at the Project Site will be reduced by 412 m^2.

Extension of the rip rap area at the travel lift pier will alter 197 m^2 of sand/mud substrate into vertically complex habitat that will provide hard substrate for colonization and may provide refuge to organisms from predation, thereby increasing productivity at the Project Site. Soft mud/sand intertidal substrate is widespread both at the Site and in the surrounding area and will not be limiting in availability to marine organisms. Impacts of the proposed removal and partial replacement Project are expected to be small and local (confined to the Project Site). Permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish are not expected.

8.0 CLOSURE

This report was prepared by Hemmera for sole benefit and use by Silva Bay Marine Resort. In performing this work, Hemmera has relied in good faith on information provided by others and has assumed that the information provided by those individuals is complete and accurate. This work was performed to current industry standard practice for similar environmental work, in the jurisdiction. The findings presented herein should be considered within the context of the scope of work and Project terms of reference. The conclusions and recommendations contained in this report are based upon the applicable guidelines, regulations, and legislation existing at the time the report was produced; any changes in the regulatory regime may alter the conclusions and/or recommendations.

We sincerely appreciate the opportunity to have assisted you with this project and if there are any questions, please do not hesitate to contact the undersigned by phone at 604.669.0424.

Report prepared by:
Hemmera Envirochem Inc.

Hilary Evans, B.Sc. (Hons), GIT
Senior Scientist
250.388.3584 (283)
hevans@hemmera.com

Senior reviewed by:
Hemmera Envirochem Inc.

Laura White, PhD, R.P.Bio.
Project Manager
604.379.2251
lwhite@hemmera.com

9.0 LITERATURE CITED

BC CDC. 2014. BC Species and Ecosystem Explorer. http://a100.gov.bc.ca/pub/eswp/. Accessed 22 April 2019.

BC Conservation Data Centre. 2002. http://www.env.gov.bc.ca/wld/documents/ranking.pdf Accessed 22 April 2019.

BC Marine and Pile Driving Association Contractors. 2003. Best Management Practices for Pile Driving and Related Operations.

BC Ministry of Environment. 2013. BC Species and Ecosystems Explorer. Accessed 16th April 2019 from: http://a100.gov.bc.ca/pub/eswp/

COSEWIC. 2003. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 47 pp. (www.sararegistry.gc.ca/status/status_e.cfm).

DFO. 2019. https://www.dfo-mpo.gc.ca/pnw-ppe/policy-politique-eng.html. Accessed 20 September 2019.

DFO. 2018. http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/sani/a-s-17-eng.html. Accessed 22 April 2019.

DFO. 2013. http://www.pac.dfo-mpo.gc.ca/science/species-especes/shellfish-coquillages/clam-palourde/index-eng.html. Accessed 30 March 2019.

DFO. 2012. Fisheries Act. http://laws-lois.justice.gc.ca. Accessed 22 April 2019.

DFO. 2002. Marine Foreshore Environmental Assessment Procedure. Nanaimo, B.C.

eFauna. 2016. https://ibis.geog.ubc.ca/biodiversity/efauna/. Accessed 22 April 2019.

Environment Canada. 2016. http://climate.weather.gc.ca/climate_normals/results_1981_2010_e.html?searchType=stnProv&lstProvince=BC&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=172&dispBack=0. Accessed 22 April 2019.

Environment and Climate Change Canada. 2017. https://www.canada.ca/en/environment-climate-change/services/birds-canada/migratory-birds-overview.html. Access 22 April 2019.

Habitat Wizard BC (HabWiz). 2018. http://maps.gov.bc.ca/ess/hm/habwiz/ . Accessed January 28, 2019.

Hutton, K.E. and S.C. Samis. 2000. Guidelines to Protect Fish and Fish Habitat from Treated Wood Used in Aquatic Environments in the Pacific Region. Canadian Technical Report of Fisheries and Aquatic Sciences 2314.

iMap BC. 2016. On-line resource http://maps.gov.bc.ca/ess/sv/imapbc/. Accessed 16th March 2019.

Millennium EMS Solutions Ltd. 1993. Ready Mix Concrete Industry – Environmental Code of Practice. Prepared by Envirochem Special Projects Inc. on behalf of Conservation and Protection, Environment Canada, North Vancouver, BC.

NOAA Fisheries. 2014. https://www.westcoast.fisheries.noaa.gov/stories/2014/04_11072014_eelgrass_mitigation.html. Accessed April 21, 2019.

Nuszorfer, F.C., K. Klinka and D. Demarchi. 1991. Ecosystems of British Columbia: coastal Douglas Fir. BC Ministry of Forests, Victoria, BC.

Province of British Columbia. 2017. Wildlife Management Areas. http://www.env.gov.bc.ca/fw/habitat/conservation-lands/wma/

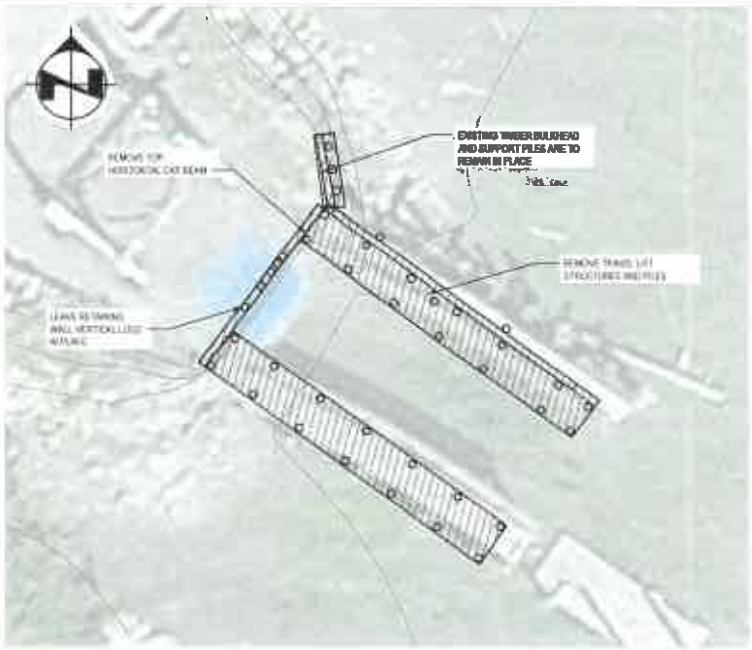
SHIM. 2013. https://www.cmnbc.ca/atlasgallery/shim-sensitive-habitat-inventory-and-mapping/. Accessed 22 April 2019.

Stafford, J. 1913. Canada Commission of Conservation. Committee of Fisheries, Games and Fur-bearing Animals. The Mortimer Co., Ltd. Ottawa ON.

APPENDIX A
Structural General Arrangement Plan



SHIPYARD BUILDING DEMOLITION PLAN
1:200



SHIPYARD TRAVEL LIFT DEMOLITION PLAN
1:200

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM : 3.55 m, ACCORDING TO BM 97625003
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE 103069-000-W-0000 AND 103069-000-W-0001
5. CONTRACTOR TO REVIEW AND CONFIRM BOUNDARY OF DEMOLITION WITH AUSENCO IN THE FIELD PRIOR TO THE START OF DEMOLITION.

LEGEND:

AREA OF DEMOLITION

APPROXIMATE EXISTING PILE LOCATION

SCALE = 1:200

PRELIMINARY

REF.	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	CHKD	ENG	APPR
			0						
			B	EB	19-03-2020	ISSUED FOR CLIENT REVIEW	AD	JD	JD
			A	F	19-03-2020	ISSUED FOR CLIENT REVIEW	CD	EB	JD

DRAWN	EFRANCO	23-07-2020
DWG. CHECKED	L.BIRD	23-07-2020
DESIGNED	L.BIRD	23-07-2020
DES. APPR.	ADAMSEBIRDIN	23-07-2020
PROJ. APPR.	T.DEANDALE	23-07-2020

Ausenco

CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
DEMOLITION PLAN
SHEET 1 OF 2

COPYRIGHT © Ausenco

PROJECT No.	SCALE	SIZE
103069-01	AS NOTED	A1

DRAWING No. 103069-0000-W-0006 REV C

APPENDIX B
Stores Deck Demolition Plan



STORES DECK DEMOLITION PLAN
1:50

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM : 3.68 m, ACCORDING TO BM # 102660
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE 103069-000-W-0000 AND 103069-000-W-0001
5. CONTRACTOR TO REVIEW AND CONFIRM BOUNDARY OF DEMOLITION WITH AUSENCO IN THE FIELD PRIOR TO THE START OF DEMOLITION.

LEGEND:

AREA OF DEMOLITION

0 0.5 1.0 2.0 3.0 4.0m

PRELIMINARY

SILVA BAY RESORT AND MARINA

REV	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	DRAWN	CHKD	APPD
			C			Issued for Review	JD	DS	DS
			B	KB	15-Jul-19	Issued for Review	JD	DS	DS
			A	KB	25-Jun-19	Issued for Review	JD	DS	DS

DRAWN	D.HUGHES	23-07-2019
ENG. CHECKED	L.SHEA	23-07-2019
DESIGNED	L.SHEA	23-07-2019
DES.APPR.	A.[illegible]	23-07-2019
PROJ.APPR.	T.MEAGHER	23-07-2019

Ausenco
[illegible], British Columbia, Canada
T +1 604 684 8011
W www.ausenco.com

CLIENT: SILVA BAY MARINE RESORT

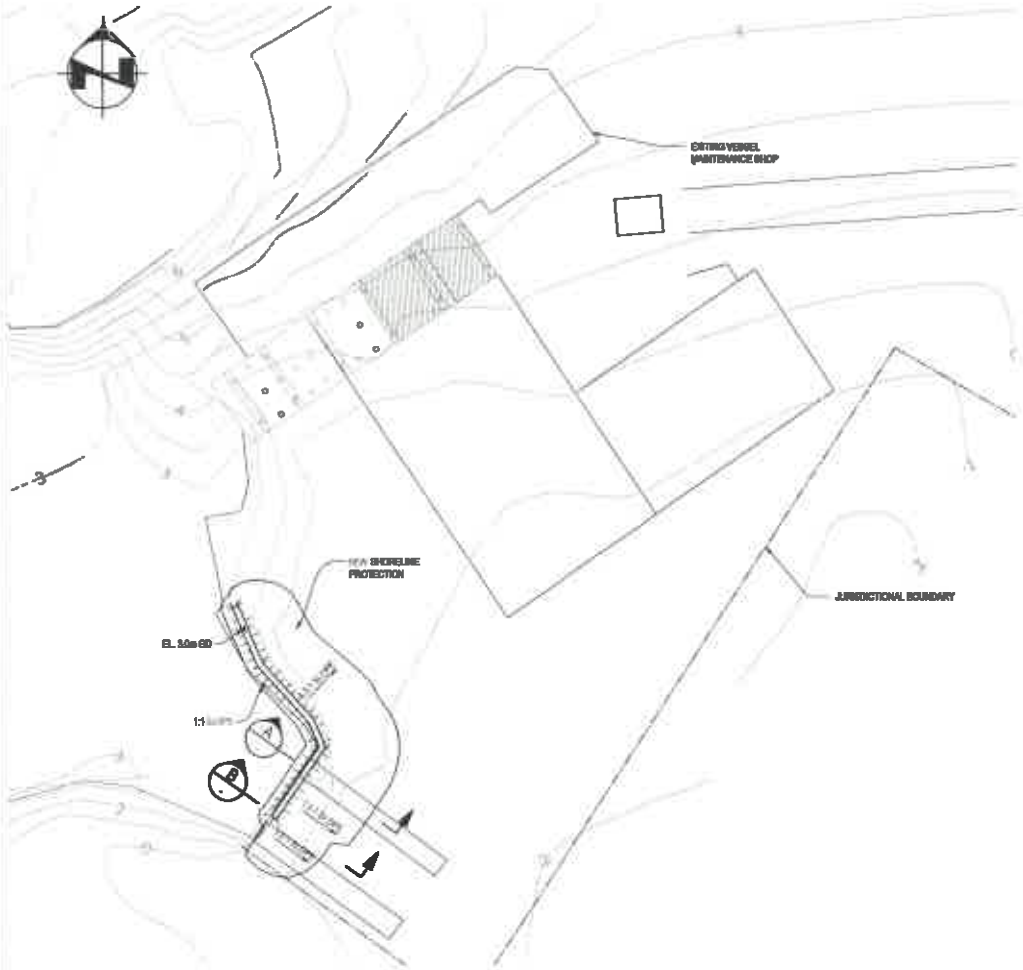
TITLE: SILVA BAY MARINE WORKS
DEMOLITION PLAN
SHEET 2 OF 2

COPYRIGHT © Ausenco

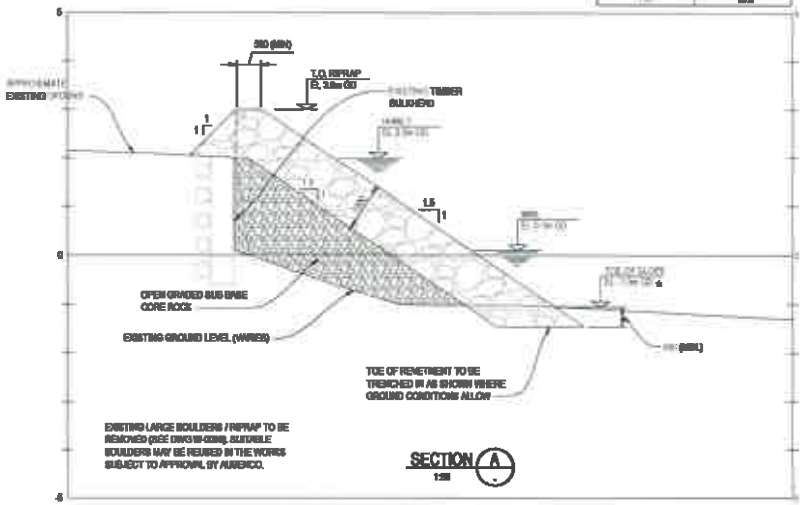
PROJECT No. 103069-01 | SCALE AS NOTED | SIZE A1

DRAWING No. 103069-0000-W-0007 | REV C

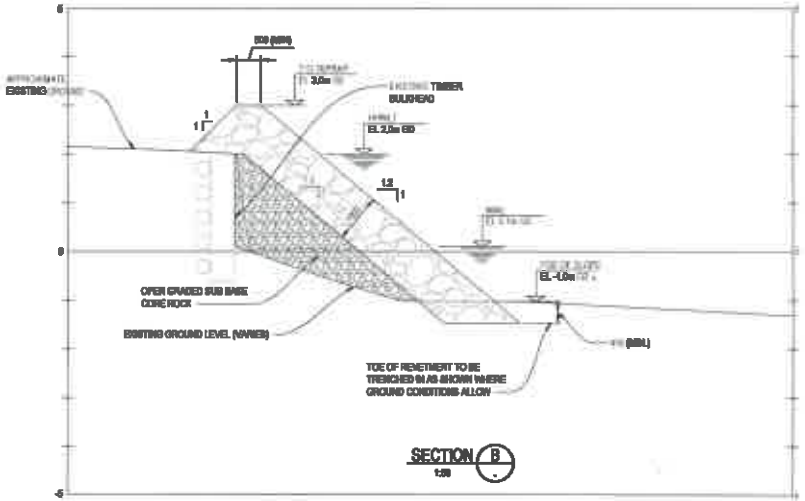
APPENDIX C
Travel Lift Rip Rap



PLAN
1:200



SECTION A
1:200



SECTION B
1:200

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM : 3.03 m, ACCORDING TO BM #1 DRAWING
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE 103069-000-W-0000 AND 103069-0000-W-0001

SCALE = 1:20

SCALE = 1:200

NOT FOR CONSTRUCTION **PRELIMINARY**

SILVA BAY
RESORT AND MARINA

REV	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	DWG	ENG	APP
			0	P	04-09				
			C	A	03-09				
			B	RB	12-08				
			A	RB	08-08				

DRAWN	D.HERBER	24-07-08
DSN. CHECKED	L.WEB	24-07-08
DESIGNED	L.WEB	24-07-08
DES. APPR.	A.MCINTOSH	24-07-08
PROJ. APPR.	T.BLENDELL	24-07-08

Ausenco
Vancouver, British Columbia, Canada
T +1 604 684 8611
W www.ausenco.com

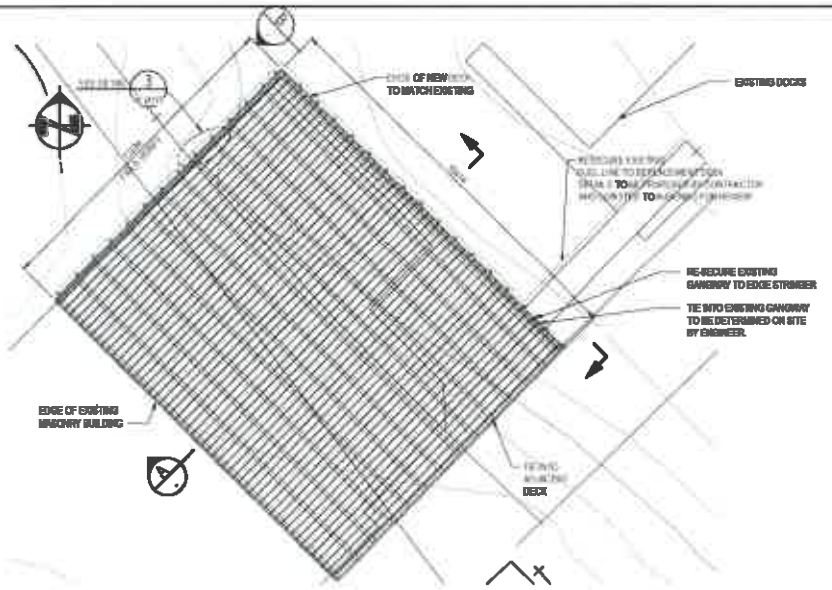
CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
TRAVEL LIFT PIER
RIPRAP SLOPE PROTECTION
LAYOUT

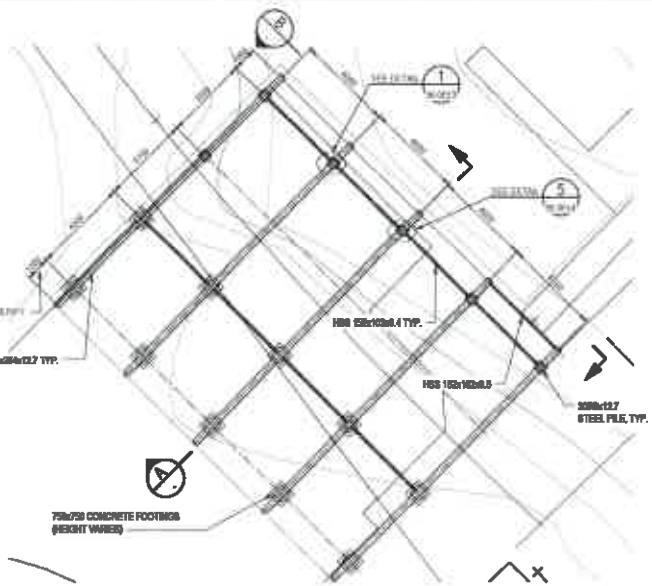
COPYRIGHT © Ausenco

PROJECT No. 103069-01
SCALE AS NOTED
SIZE A1
DRAWING No. 103069-0000-W-0008
REV D

APPENDIX D
Store Deck Construction Plan



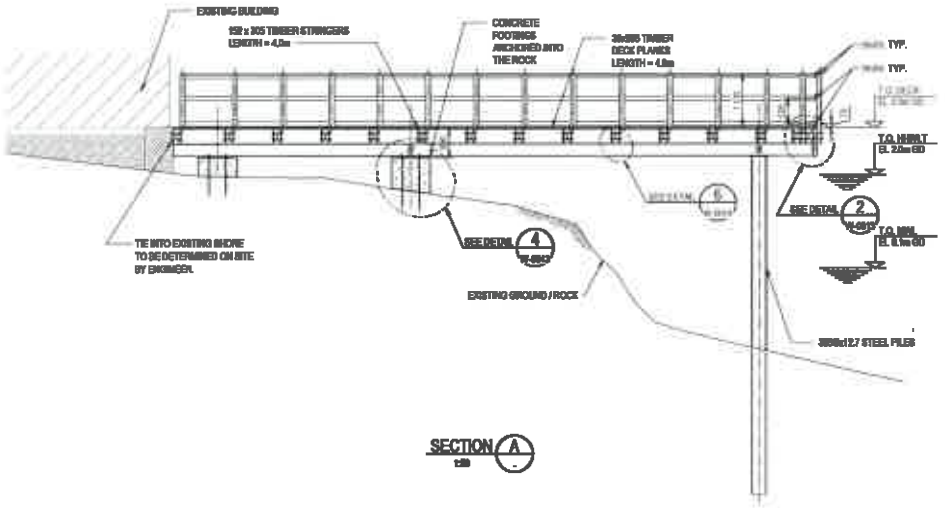
TIMBER DECK LAYOUT
1:100



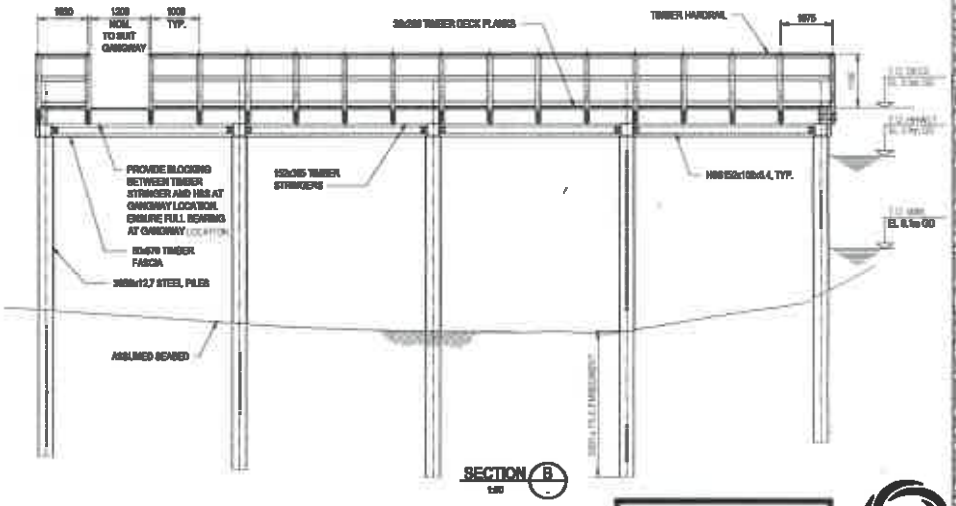
STEEL SUBSTRUCTURE LAYOUT
1:100

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM : 3.09 m, ACCORDING TO BM M 102X03
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE 103069-000-W-0010 AND 103069-000-W-0011
5. REFER TO DRAWING 103069-000-W-0012 FOR FOOTING SIZES AND PILE DETAILS



SECTION A
1:50



SECTION B
1:50

SCALE = 1:50

SCALE = 1:100

PRELIMINARY

REF.	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION/ISSUE	CHK'D	APP'D
			B				CE	RB
			A	JH	19-11-20	ISSUED FOR TENDER		

DRAWN	D.HUGHES	23-09-20
DWG. CHECKED	R.HOWES	23-09-20
DESIGNED	R.HOWES	23-09-20
DES. APPR.	A.BRENNEMAN	23-09-20
PROJ. APPR.	T.ARMSTRONG	23-09-20

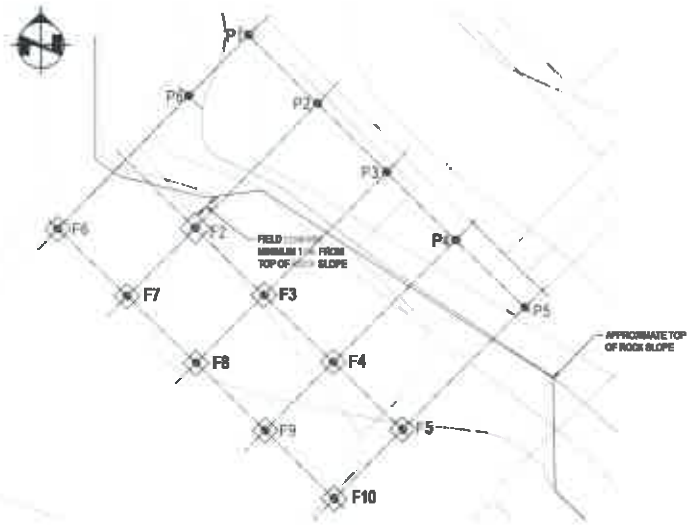
SILVA BAY MARINE RESORT

SILVA BAY MARINE WORKS
STORES DECK REPLACEMENT
GENERAL ARRANGEMENT

COPYRIGHT © Ausenco

PROJECT No. 103069-01 | SCALE AS NOTED | SIZE A1

DRAWING No. 103069-0000-W-0011 | REV B



PILE AND PEDESTAL LAYOUT
1:100

NOTE: FOR COORDINATES OF PILES AND FOOTINGS, SEE TABLES

CONCRETE FOOTING SCHEDULE

FOOTING No.	EASTING	NORTHING	DIMENSIONS (mm)	ESTIMATED FOUND EL.	TOP OF FOOTING EL. (m)
F2	448169.679	5448324.497	900 x 900	1.695	2.370m
F3	448188.977	5448331.389	750 x 750	1.695	2.370m
F4	448191.784	5448338.289	750 x 750	1.574	2.370m
F5	448194.611	5448345.970	750 x 750	1.695	2.370m
F6	448180.413	5448324.370	750 x 750	2.000	2.370m
F7	448188.288	5448331.969	750 x 750	2.169	2.370m
F8	448186.167	5448338.751	750 x 750	1.695	2.370m
F9	448188.954	5448345.841	750 x 750	2.169	2.370m
F10	448191.863	5448338.131	750 x 750	2.574	2.370m

PILE SCHEDULE

PILE No.	EASTING	NORTHING	PILE DIAMETER (mm)	PILE THICKNESS (mm)	PILE CUT OFF EL. (m)	ESTIMATED REVISED EL. (m)	ESTIMATED PILE TIP EL. (m)
P1	448169.200	5448342.342	355	12.7	2.300	-1.042	-2.300
P2	448184.127	5448333.662	355	12.7	2.300	-1.619	-2.300
P3	448188.874	5448338.723	355	12.7	2.300	-1.542	-2.300
P4	448189.831	5448335.913	355	12.7	2.300	-1.376	-2.000
P5	448180.888	5448334.184	355	12.7	2.300	-1.176	-2.000
P6	448180.522	5448329.888	355	12.7	2.300	0.580	-2.300

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CGVD28 DATUM : 0.00 m, ACCORDING TO BM 92Z0048
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE 103069-000-W-0000 AND 103069-000-W-0001

1 0 1 2 3 4 5 6 7 8 9 10m
SCALE = 1:100

PRELIMINARY

Safety

SILVA BAY
RESORT AND MARINA

REF.	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	CHD	ENG	APPD
			A	DS	13-MAR-19	ISSUED FOR REVIEW	JH	SM	AB

DRAWN	B. HUGHES	23-09-2019
DWG. CHECKED	B.HUGHES	23-09-2019
DESIGNED	B.HUGHES	23-09-2019
DES. APPR.	A.MEYERHANS	23-09-2019
PROJ. APPR.	T.BLOEDOW	23-09-2019

Ausenco
Vancouver, British Columbia, Canada
T +1 604 684 8241
W www.ausenco.com

CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
STORES DECK
PILE LAYOUT AND SCHEDULE

COPYRIGHT © Ausenco

PROJECT No. 103069-01
SCALE AS NOTED
SIZE A1
DRAWING No. 103069-0000-W-0012
REV B

97

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2021.2
(AMENDMENT TO GB-DP-2020.2)

Schedule "B"

Schedule "B" – Fisheries and Oceans Canada "Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat" dated September 24, 2020

(PDF document begins on next page)

Fisheries and Oceans Canada
Pêches et Océans Canada

Pacific Region
Ecosystem Management Branch
417 2nd Avenue W
Prince Rupert, BC
V8J 1G8

Région du Pacifique
Gestion des ecosystems
417, 2e Avenue Ouest
Prince Rupert, (C.-B.)
V8J 1G8

September 24, 2020

Our file *Notre référence*
20-HPAC-00762

Silva Bay Resort and Marina Ltd.
ATTENTION: Dean Chen
3383 South Road
Gabriola, BC, V0R 1X7

Via email: dean.chen@silvabay.com

Dear Dean Chen:

Subject: Marina Upgrades, Silva Bay, Gabriola Island – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on June 18, 2020. We understand that you propose to conduct marina upgrades in Silva Bay on Gabriola Island. Proposed works include:

- Removing 121 existing creosote timber piles (0.30 m diameter) in the intertidal area;
- Removing deteriorating marina infrastructure including the roof of the shipyard building, top of the travel lift pier and the decking area on the stores deck;
- Installing a new decking area for the stores deck over the same footprint as the existing stores deck;
- Installing six new steel piles (0.30 m diameter) and replacing six existing timber piles to support the new stores deck infrastructure; and
- Installing riprap on the travel pier shoreline to increase the stability of an exposed timber retaining wall.

We understand the following aquatic species listed under the *Species at Risk Act* may use the area in the vicinity of where your proposal is to be located:

- Basking Shark (Pacific population), Killer Whale (Northeast Pacific Southern Resident population), Northern Abalone and Leatherback Sea Turtle (Pacific population) listed as Endangered;
- Killer Whale (Northeast Pacific Transient population) listed as Threatened; and
- Bluntnose Sixgill Shark, Longspine Thornyhead, Rougheye Rockfish Type I and II, Tope, Yelloweye Rockfish (Pacific Ocean Inside and Outside Waters), Grey Whale (Eastern North Pacific population), Harbour Porpoise (Pacific Ocean

population), Humpback Whale (North Pacific population) and Steller Sea Lion listed as Special Concern.

Our review considered the following information:

- *Request for Review* form submitted by Laura White, Hemmera (Victoria), submitted June 18, 2020;
- *Aquatics Effects Assessment: Silva Bay Resort and Marina, 3383 South Road, Gabriola Island* prepared by Hemmera (Burnaby), dated June 18, 2020;
- *Silva Bay Resort and Marine Condition Assessment* report prepared by Ausenco Engineering Canada Inc. dated October 19, 2018;
- Silva Bay Resort and Marina Project Site Photographs submitted June 18, 2020; and
- Project Overview Map prepared by Hemmera, dated May 2, 2019.

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), we recommend implementing the measures listed below:

- Conduct in-water works within the least risk timing window for the project area (Area 17 – Summer: June 1 – September 1; Winter: December 1 – February 15).
- Conduct in-water works (e.g., pile removal and installation activities, infrastructure removal and installation, riprap installation, etc.) during daylight hours and when weather conditions permit visual observations for marine mammals. Avoid conducting in-water work during periods of adverse weather.
- Retain a qualified environmental professional(s) to be on-site full time to conduct environmental monitoring and marine mammal monitoring during all project activities that may result in potential adverse effects to fish and fish habitat.
- Conduct works, undertakings and activities that are required in the intertidal zone (e.g., pile removal and installation activities) in the dry (e.g., when the site is dewatered during a low or falling tide) whenever feasible.
- Minimize movements/ repositioning of barge(s) and subsequent spudding to minimize direct, physical disturbance to the seabed.
- A debris management plan (containment and removal) should be developed for removal activities to address construction materials and debris (treated wood

fragments, sawdust, cuttings, etc.) entering aquatic habitats. Infrastructure removed from the marine environment should be contained immediately after removal to prevent any adhering sediment from re-entering the water.

- Pile removal should be conducted slowly. If piles cannot be removed via vibratory hammer and require cutting, they should be cut off at or near the level of existing substrate with any debris cleaned up and removed from the marine environment.
- Keep a sediment curtain readily available on-site in sufficient quantities for local conditions and deploy around the in-water works as required.
- Manage sediment that may be associated with extracted piles by disposing of the sediment off-site at a facility approved for the material rather than depositing in fish habitat.
- The Environmental Monitor should conduct water quality sampling during in-water works to confirm turbidity levels in the water column outside the immediate vicinity of the site are below the approved *BC Approved Water Quality Guidelines: Aquatic Life, Wildlife and Agriculture*. If water quality guideline exceedances are detected, stop work and implement additional mitigation measures (e.g., slow work, install silt curtain, etc.) to minimize sedimentation.
- If there is a risk of harm to a marine mammal from direct contact, temporarily suspend construction until there is no longer risk of harm from direct contact.
- All stabilization riprap materials are to be non-acid generating, clean and free of debris and fine sediment. If necessary, the material should be washed in a location where the wash cannot enter fish habitat prior to installing in the marine environment.
- Place riprap slowly and carefully as opposed to dumping into the intertidal. If the work area is wetted, material should be released underwater or as close to the water surface as possible.
- For impact pile driving:
    - Conduct hydroacoustic monitoring during impact pile driving to monitor underwater sound thresholds;
    - Install and use an effective sound attenuation device (e.g., bubble curtain) to reduce peak sound pressure levels to below 206 dB re:1uPa and a SEL_{CUM} of 180 dB re uPa^2s outside of the sound attenuation device;
    - Establish a marine mammal exclusion zone (e.g., perimeter around the source) prior to impact pile driving where sound levels are not to exceed 160 dB_{RMS} re: 1uPa at the edge of the marine mammal exclusion zone during impact pile driving;
    - Monitor for marine mammals within the marine mammal exclusion zone for at least 30 minutes prior to the start of impact pile driving. If a marine mammal enters the marine mammal exclusion zone, temporarily suspend impact pile driving until the individual has left the exclusion zone or has not been sighted for 30 minutes; and
    - If hydroacoustic monitoring indicates sound levels in excess of the above-mentioned thresholds, impact pile driving should cease and only resume after additional mitigation measures are implemented to effectively reduce sound levels to below the above-mentioned thresholds.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal is not likely to result in the contravention of the above mentioned prohibitions and requirements.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations.*

It is also your Duty to Notify DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to the DFO-Pacific Observe, Record and Report phone line at 1-800-465-4336 or by email at DFO.ORR-ONS.MPO@dfo-mpo.gc.ca.

We recommend that you notify this office at least 10 days before starting your project and that a copy of this letter be kept on site while the work is in progress. It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

Please note that this Letter of Advice does not provide relief from the obligations set out in the government of British Columbia's Riparian Areas Protection Regulations (RAPR), and cannot be construed to provide authorization pursuant to section 3(2) of the RAPR, for any work, undertaking or activity within the Riparian Assessment Area. For more information on the RAPR, including contacts, please visit: https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/fish/riparian-areas-regulation.

If you have any questions with the content of this letter, please contact the undersigned at our Nanaimo office at 778-268-3874 or by email at Larissa.Chin@dfo-mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

Ian Bergsma
A/Senior Biologist
Fish & Fish Habitat Protection Program

cc: Laura White, Hemmera (Victoria), lwhite@hemmera.com

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2021.2
(AMENDMENT TO GB-DP-2020.2)

Schedule "C"

Schedule "C" – Snuneymuxw Response Letter with conditions dated May 20, 2021

(PDF document begins on next page)

Snuneymuxw First Nation

www.snuneymuxw.ca

May 20, 2021

Laura White
Hemmera Envirochem
18th Floor- 4730 Kingsway
Burnaby BC
V5H 0C6

RE: Gabriola Island Local Trust Committee Development Permit Application GB-DP-2020.2 (Silva Bay Resort LTD)

Snuneymuxw First nation would like to thank you for your cooperation in the Snuneymuxw Referral Process, a consent-based framework advancing the recognition of rights. As articulated in our previous correspondence, SFN has a constitutionally protected Treaty of 1854 with the Crown which are solemn promises to protect Snuneymuxw Villages, enclosed fields, harvesting and gathering sites, waterways and resources, and the right to carry on hunting and fisheries as formally.

After carefully reviewing the file, Snuneymuxw has no objection to the proposed project but are requesting that certain conditions are met, such as:

- A site visit with SFN Site monitor. SFN expects that the applicant cover the costs associated with the Site Monitor.
- Implementation of DFO's recommendations to avoid and mitigate adverse effects to fish and fish habitat.
- Have the qualified environmental professional engage with SFN fisheries department.

Any additional requests, questions or concerns related to this file can be directed to the SFN lands Clerk, Desiree Thomas, at landsclerk@snuneymuxw.ca or 250-824-1351 from Monday to Friday, 8:00 AM- 4:00 PM

Thank you,

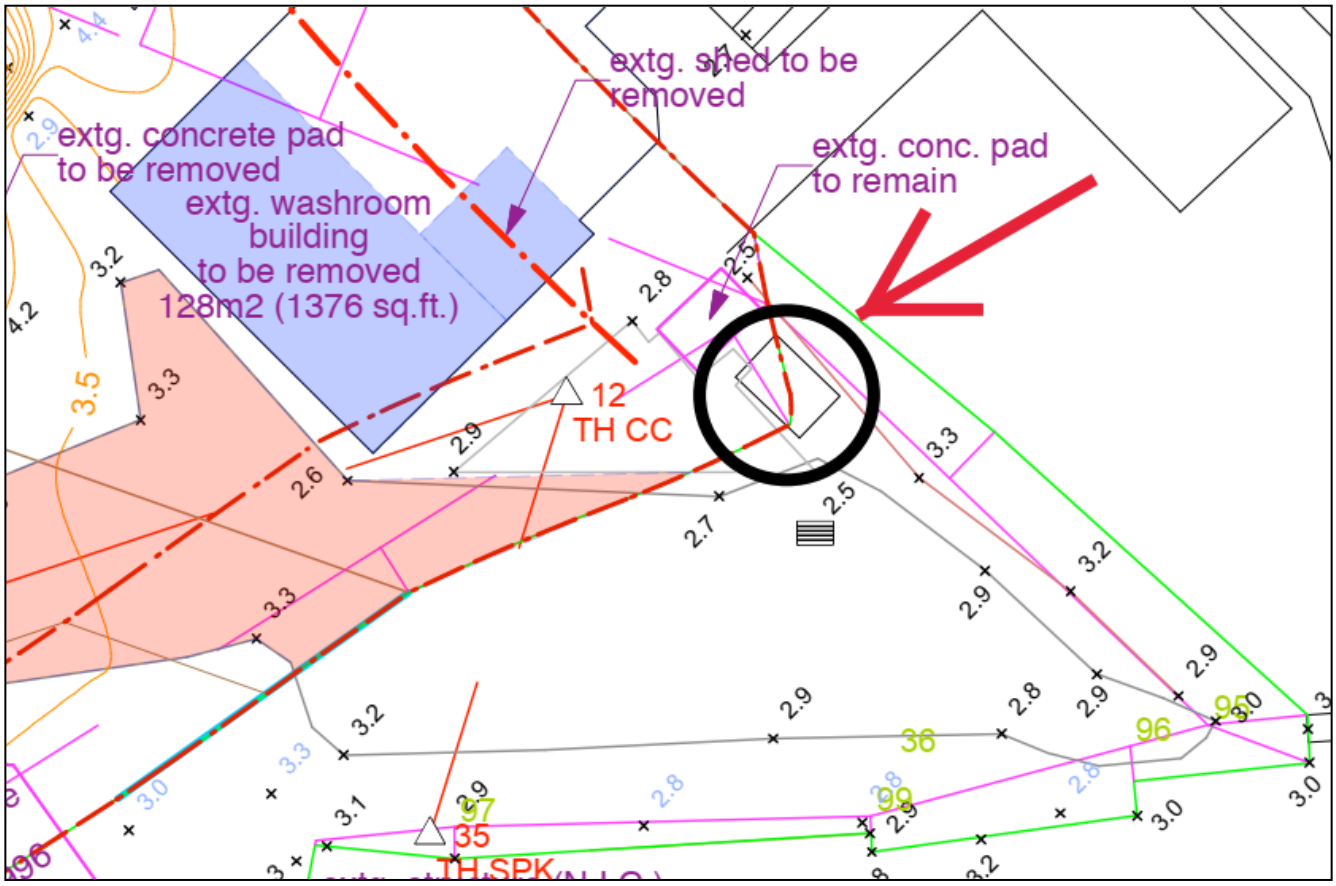
Chief Mike Wyse

Snuneymuxw First Nation, 668 Centre St., Nanaimo, B.C. V9R 4Z4
Tel: 250-740-2300 / 1-888-636-8789 Fax: 250-753-3492 info@snuneymuxw.ca

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2021.2
(AMENDMENT TO GB-DP-2020.2)

Schedule "D"

Schedule "D" – Electrical Shed Location



Schedule "E"

Schedule "E" – Memorandum from Hemmera Envirochem Ltd. to DFO dated October 6, 2021, outlining the location and proposed works for the demolition and replacement of the "Apron Deck"

(PDF document begins on next page)

Hemmera
An Ausenco Company

MEMORANDUM

Date:	October 6, 2021
To:	Ian Bergsma, Fisheries and Oceans Canada
From:	Tim Edgell, R.P.Bio.
File:	103069-01
Re:	Project design update for LOA file #20-HPAC-00762

1.0 BACKGROUND

On September 24, 2020, DFO issued a Letter of Advice (LOA, attached as **Appendix A**) for marina upgrades at the Silva Bay Resort and Marina property on Gabriola Island, BC (DFO File #20-HPAC-00762). The location of the Site is shown on **Figure 1**.

The proponent's application was received by DFO on June 18, 2020, including the following documents:

- Request for Review form submitted by Laura White, Hemmera (Victoria), submitted June 18, 2020.
- *Aquatics Effects Assessment: Silva Bay Resort and Marina, 3383 South Road, Gabriola Island* prepared by Hemmera (Burnaby), dated June 18, 2020 (Hemmera 2020), **Appendix B**.
- *Silva Bay Resort and Marine Condition Assessment* report prepared by Ausenco Engineering Canada Inc. dated October 19, 2018 (Ausenco 2018), **Appendix C**.
- Silva Bay Resort and Marina Project Site Photographs submitted June 18, 2020, **Appendix D**.
- Project Overview Map prepared by Hemmera, dated May 2, 2019.

This memo is meant to provide DFO with an update to the project design; specifically, the replacement of an apron deck that is in disrepair. The location of the apron deck in question is shown in **Figure 2** (structure #3), in context of project components that were addressed by the initial AEA and existing LOA (File #20-HPAC-00762).



Photo 20 - Shipyard Building: Retaining Wall has severe undermining of the retaining wall located on the west side of Bent No. 1.

Figure 3 Copy of photo 20 from the *Silva Bay Resort and Marine Condition Assessment* (Ausenco 2018), showing "severe undermining" of the retaining wall that supports the apron deck.

2.1 Description of works: Apron Deck Removal

Demolition and removal of the apron deck includes:

- Removal of 51 x 30 cm diameter deteriorated creosote-treated timber piles in the intertidal area.
- Removal of the top of the apron deck, which has a surface area of approximately 144 m^2.

2.2 Description of works: New Apron Deck Construction

The detailed design drawing for the Apron Deck is attached as **Appendix E**.

- The total area of intertidal disturbance will be 221 m^2.
- The existing retaining wall (shown in **Figure 3**) will be fortified using vertical lock-block construction and backfilled between the lock-block and old retaining wall (**see Appendix E**).
- The intertidal footprint for this lock-block and backfill construction is approximately equal to the dimensions of the existing apron (i.e., 144 m^2).
- Riprap will be used to fortify the lock-block construction, which will alter approximately 77 m^2 of muddy, shaded intertidal into sunlit rocky intertidal.

2.3 Habitat Balance Calculations

Fortification of the existing retaining wall and replacement of the apron deck will result in:

- A loss of approximately 144 m^2 of permanently shaded, muddy intertidal and creosote timber pilings.
- An alteration of 77 m^2 of muddy intertidal and creosote timber pilings into 89.5 m^2 rocky intertidal substrate, comprising 82 m^2 of sloped rocky riprap and 7.5 m^2 of vertical concrete lock-block.

Results of the impact assessment for replacement of the apron deck and fortification of the existing retaining wall is described in Table 1.

Table 1 Summary Of Effects to Intertidal Fish Habitat Caused by Replacement of the Apron Deck

Habitat Zone	Description of Pre-Construction Habitat	Effect Type	Area of Habitat Affected (m^2)	Description of Post-Construction Habitat	Spatial extent of effects	Species Resiliency	Species Dependence on Habitat	Habitat rarity	Habitat Resilience	Aggregation	Habitat Contribution to Fish Productivity	Species at-Risk	Persistent Effects
Intertidal	Shaded muddy intertidal with cobble and timber piles	Destruction	144	Backfilled lock-block retaining wall and support for apron deck	Site	Low	Moderate	Low	Low	Low	Low	Low	High
Intertidal	Muddy intertidal with cobble and timber piles	Alteration	77 (89.5)[1]	Sloped rocky riprap and vertical concrete retains wall	Site	Low	Moderate	Low	Low	Low	Low	Low	High

1. 77 m^2 of existing "muddy intertidal with cobble and timber piles" will be replaced by 89.5 m^2 of "sloped rocky riprap and vertical concrete retains wall."

FIGURE

APPENDIX A
DFO Permit

population), Humpback Whale (North Pacific population) and Steller Sea Lion listed as Special Concern.

Our review considered the following information:

- *Request for Review* form submitted by Laura White, Hemmera (Victoria), submitted June 18, 2020;
- *Aquatics Effects Assessment: Silva Bay Resort and Marina, 3383 South Road, Gabriola Island* prepared by Hemmera (Burnaby), dated June 18, 2020;
- *Silva Bay Resort and Marine Condition Assessment* report prepared by Ausenco Engineering Canada Inc. dated October 19, 2018;
- Silva Bay Resort and Marina Project Site Photographs submitted June 18, 2020; and
- Project Overview Map prepared by Hemmera, dated May 2, 2019.

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), we recommend implementing the measures listed below:

- Conduct in-water works within the least risk timing window for the project area (Area 17 – Summer: June 1 – September 1; Winter: December 1 – February 15).
- Conduct in-water works (e.g., pile removal and installation activities, infrastructure removal and installation, riprap installation, etc.) during daylight hours and when weather conditions permit visual observations for marine mammals. Avoid conducting in-water work during periods of adverse weather.
- Retain a qualified environmental professional(s) to be on-site full time to conduct environmental monitoring and marine mammal monitoring during all project activities that may result in potential adverse effects to fish and fish habitat.
- Conduct works, undertakings and activities that are required in the intertidal zone (e.g., pile removal and installation activities) in the dry (e.g., when the site is dewatered during a low or falling tide) whenever feasible.
- Minimize movements/ repositioning of barge(s) and subsequent spudding to minimize direct, physical disturbance to the seabed.
- A debris management plan (containment and removal) should be developed for removal activities to address construction materials and debris (treated wood

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal is not likely to result in the contravention of the above mentioned prohibitions and requirements.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations.*

It is also your Duty to Notify DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to the DFO-Pacific Observe, Record and Report phone line at 1-800-465-4336 or by email at DFO.ORR-ONS.MPO@dfo-mpo.gc.ca.

We recommend that you notify this office at least 10 days before starting your project and that a copy of this letter be kept on site while the work is in progress. It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

Please note that this Letter of Advice does not provide relief from the obligations set out in the government of British Columbia's Riparian Areas Protection Regulations (RAPR), and cannot be construed to provide authorization pursuant to section 3(2) of the RAPR, for any work, undertaking or activity within the Riparian Assessment Area. For more information on the RAPR, including contacts, please visit: https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/fish/riparian-areas-regulation.

If you have any questions with the content of this letter, please contact the undersigned at our Nanaimo office at 778-268-3874 or by email at Larissa.Chin@dfo-mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

Ian Bergsma
A/Senior Biologist
Fish & Fish Habitat Protection Program

cc: Laura White, Hemmera (Victoria), lwhite@hemmera.com

Hemmera
An Ausenco Company

Aquatic Effects Assessment: Silva Bay Marine Resort, Gabriola Island, BC

Prepared for:

Silva Bay Marine Resort
3383 South Road
Gabriola BC V0R1X7

Project No. 103069-01

June 3, 2020

Prepared by:

Hemmera Envirochem Inc.
18th Floor, 4730 Kingsway
Burnaby, BC V5H 0C6
T: 604.669.0424
F: 604.669.0430
hemmera.com

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Proponent Contact Information 1
1.2 Regulatory context 1
2.0 PROJECT DESCRIPTION 4
2.1 Location 4
2.2 Key features of the Proposed Project 4
2.2.1 Demolition Components 4
2.2.2 Construction Components 7
2.2.3 Marina Wharfhead Repairs: 7
2.3 Objectives 7
3.0 METHODS 8
4.0 HABITAT DESCRIPTION AND FISH SPECIES PRESENT 9
4.1 General Characteristics of the Project Site 9
4.2 Detailed Physical Characteristics of the Project Site 10
4.3 Detailed Biological Characteristics of the Project Site 10
4.3.1 Intertidal Environment 10
4.3.2 Subtidal Environment 11
4.3.3 At-Risk Marine Species and Habitats 14
4.3.4 Terrestrial Vegetation 15
4.3.5 Birds 15
4.3.6 Wildlife 15
4.3.7 At-Risk Terrestrial Species and Habitats 16
5.0 PROJECT COMPONENTS AND MECHANISMS WITH POTENTIAL TO AFFECT FISH AND FISH HABITAT 18
5.1 Potential Effects of the Proposed Project on Fish and Fish Habitat 18
6.0 MEASURES TO AVOID OR MITIGATE EFFECTS TO FISH, FISH HABITAT AND AT-RISK SPECIES 20
6.1 Timing Windows 20
6.2 Recommended Strategies for Minimizing Disturbance to Fish, Wildlife and Habitat 20
6.3 Recommended Strategies for Mitigation of Potential Adverse Effects on Water Quality 21
6.4 Recommended Mitigation for Avoiding/Managing Spills and Contaminants 21

LIST OF APPENDICES

Appendix A Structural General Arrangement Plan
Appendix B Stores Deck Demolition Plan
Appendix C Travel Lift Rip Rap
Appendix D Store Deck Construction Plan

Subsection 34.4(2)(b) and 35(2)(b) qualifies these prohibitions and allows for the authorization of harmful impacts to fish and fish habitat by the Minister of Fisheries and Oceans.

DFO applies a risk-based approach when evaluating the impacts of works, undertakings or activities on fish habitat. Harmful Alteration, Disruption or Destruction (HADD) is defined as any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish.

DFO's Fisheries Protection Policy Statement (http://www.dfo-mpo.gc.ca/pnw-ppe/policy-politique-eng.html) provides direction regarding the FA. The goal of the Fish and Fish Habitat Protection Policy Statement is to provide a framework for the conservation and protection of fish and fish habitat.

Proponents of works, undertakings, or activities taking place in or near water may harmfully impact fish or fish habitat are expected to:

- understand the types of harmful impacts their works, undertakings, or activities are likely to cause
- take measures to avoid harmful impacts, including following relevant standards, codes of practice, or regulations
- request an exception (Authorization Concerning Fish and Fish Habitat Protection Regulations) to the section 34.4 and 35 prohibitions when it is not possible to avoid harmful impacts to fish and fish habitat.

Furthermore, proponents are required to ensure that their actions conform to all other statutory requirements, such as federal, provincial, territorial or Indigenous legislation.

2.0 PROJECT DESCRIPTION

2.1 Location

The Project Site is located on the southeastern shore of Gabriola Island, in Silva Bay, and includes an upland marina facilities area, a shipyard, and approximately 1067 metres (3500 feet) of moorage space over four floats (**Figure 1**). Key infrastructure components of the marina included in the Project include the shipyard building, travel lift pier, and stores deck (**Figure 2**).



Figure 2 Project Infrastructure Components

Surrounding land and water uses includes residential properties and recreational boating and fishing.

2.2 Key features of the Proposed Project

Proposed Project Activities relevant to the AEA include demolition of existing, deteriorated infrastructure components and construction of some replacement infrastructure components.

2.2.1 Demolition Components

Shipyard building:

Demolition and removal of the Shipyard building superstructure and substructure includes:

- Removal of 60 deteriorated creosote treated timber piles (30 cm diam.).
- Removal of 356 m² shipyard building.



Photo 2 Existing rip rap at Travel Lift pier



Photo 3 Deteriorated Stores Deck structure to be removed and replaced

3.0 METHODS

Field site assessments of accessible intertidal and surrounding backshore areas were conducted on April 4th, 2019 during a moderately low tide of 2.1 m above Chart Datum (CD) at 12:28 pm to classify biophysical characteristics at the Site. Transect methodology was adapted from Fisheries and Oceans Canada's (DFO) working draft *Marine Foreshore Environmental Assessment Procedure* document (DFO 2004). The geographic scope of the subtidal assessment encompassed the crown tenure (**Figure 1**). Marine life present was identified to the species level, where possible. Substrates were characterized visually based on size classes presented in DFO (2004):

- Boulder (> 256 mm)
- Cobble (64 mm to 256 mm)
- Gravel (2 mm to 64 mm)
- Sand (0.0625 mm to 2 mm)
- Silt/Mud/Clay (< 0.0625 mm)

Information related to the biophysical conditions at the Project Site was obtained from the following sources:

- Review of available ortho-imagery (Google Earth) to determine habitat types and quality;
- Review stream and salmon habitat through Habitat Wizard;
- Review of known Species at Risk occurrences through iMap BC (iMap BC 2016); and,
- On-line databases:
  - BC Conservation Data Centre (BC CDC 2002);
  - Committee on the Status of Endangered Wildlife in Canada (COSEWIC 2003);
  - Sensitive Habitat Inventory and Mapping database (SHIM 2013);
  - BC Species and Ecosystems Explorer database (BC Ministry of Environment 2013); and,
  - E-fauna BC database (eFauna 2016).

Note that this assessment was conducted to address portions of the *Fisheries Act* and the *Species at Risk Act*; we have also included a description of existing conditions for wildlife species with potential to occur at the Site.

4.2 Detailed Physical Characteristics of the Project Site

The Project Site is in the Coastal Douglas Fir moist maritime (CDFmm) biogeoclimatic zone (CMN 2013). The CDFmm occurs at elevations <150 m above sea level and typically has warm, dry summers and mild, wet winters; mean annual temperature is 9.2 to 10.5°C and mean annual precipitation ranges from 647 to 1263 mm (Nuszorfer et al. 1991).

The Project is situated within the Pacific Maritime climate zone. The highest runoff occurs during the winter months, and lowest runoff generally occurs in late August through September (Ecological Framework of Canada 2016). Weather and climatic conditions for the area are summarized in **Table 1**.

Table 1 Climate Summary

Climate Zone	Pacific Maritime Ecozone
Average Temperature Range	5˚C to 20˚C
Average Total Annual Precipitation	958 mm
Weather Forecasts	www.weather.gc.ca; www.theweathernetwork.com
Weather Phone (Environment Canada)	604.885.4100
Weather Notices (Environment Canada)	https://weather.gc.ca/marine/region_e.html?mapID=02

(Environment Canada, 2016)

4.3 Detailed Biological Characteristics of the Project Site

4.3.1 Intertidal Environment

The narrow intertidal area at the Project Site is highly disturbed. At the southeast portion of the Site, the intertidal area comprises coarse substrates with mixed cobble and boulder (**Photo 4A**). Refuse and concrete is dispersed throughout the area. A low (<5%) cover of macroalgae colonizes the cobble and boulder substrate, including rockweed (*Fucus gardneri*) and *Acrosiphonia* sp. Invertebrate abundance is very low and limited to a few acorn barnacles (*Balanus glandula*). Shell debris from blue mussels (*Mytilus* sp.), Pacific oysters (*Crassostrea gigas*) and clams (various sp.) are dispersed throughout the area. The northeast intertidal area is armoured with rip rap, the lower extent being colonized by the same macroalgal species (**Photo 4B**).

Macroalgal abundance was very low and limited to small patches of sea lettuce (*Ulva* sp.) attached to shell fragments dispersed throughout the Site. No kelp species were present, and the lack of hard substrate indicates that productivity at the Site would not increase significantly during the late spring or summer.

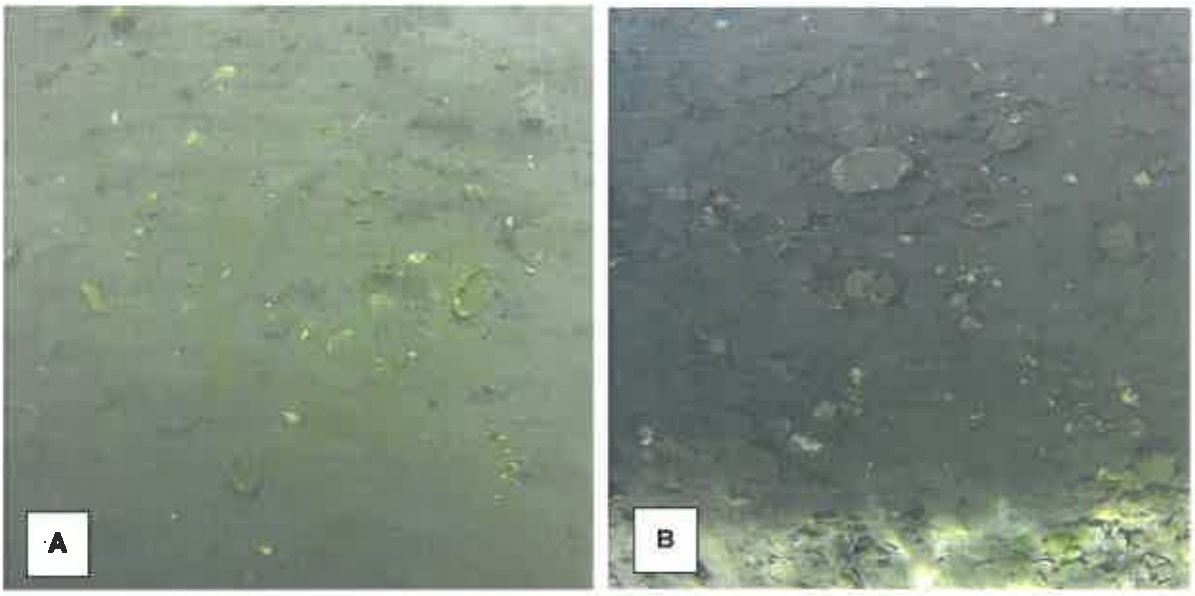


Photo 5 **A) Predominant soft benthic substrates throughout the Site, and B) abundance of shell debris in shallow water at the southwest portion of the Site**

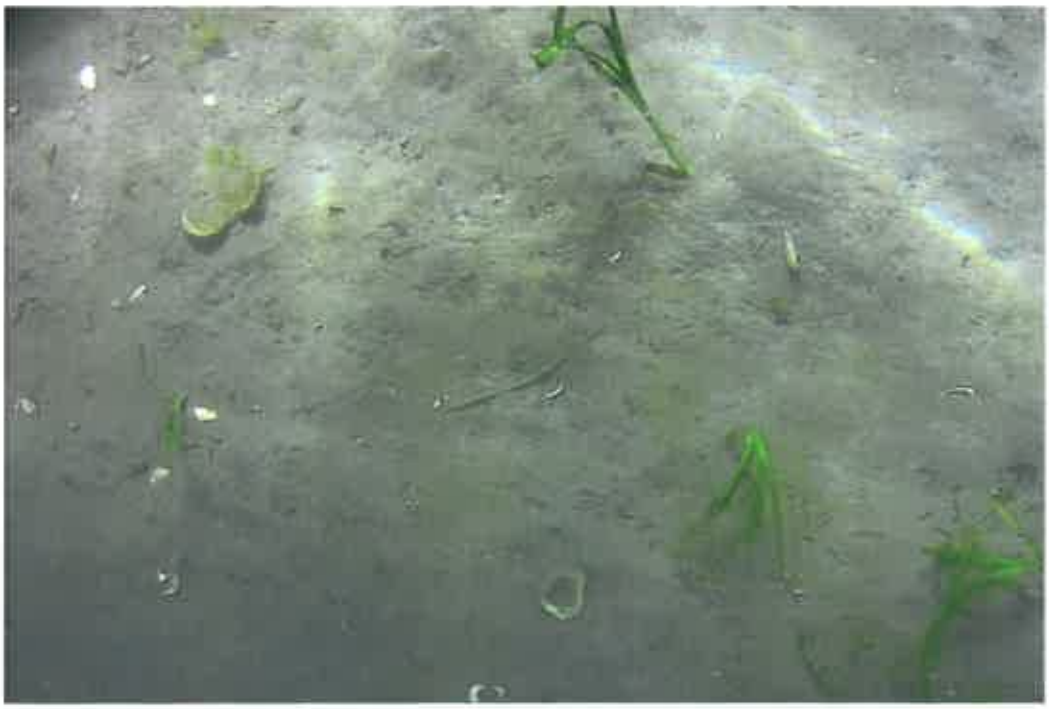


Photo 6 **Sparse eelgrass (*Zostera marina*) at the Project Site**

The dock and piling structures hosted typical fouling communities, blue mussel (*Mytilus* sp.), *Ulva* sp., non-native wire weed *(Sargassum muticum)*, rock weed (*Fucus gardneri*), hydroids, ochre stars (*Pisaster ochraceous*), acorn barnacles and plumose anemones (*Metridium farcimen*).

No fish were observed during the assessment. Refuse was distributed on the bottom throughout the Site.

4.3.3 At-Risk Marine Species and Habitats

The Conservation Data Centre (CDC) assesses the level that B.C. species or ecological communities are at risk of being lost. Based on that, the CDC assigns a provincial Conservation Status Rank that can be used to set conservation priorities. Based on their conservation status rank, each species and ecosystem is assigned to the red, blue or yellow list to help set conservation priorities and provide a simplified view of the status of B.C.'s species and ecosystems.

The Red list includes species that have been legally designated as Endangered or Threatened under the Wildlife Act (see below), are extirpated, or are candidates for such designation. The Blue List includes species not immediately threatened, but of concern because of characteristics that make them particularly sensitive to human activities or natural events. The Yellow List includes uncommon, common, declining and increasing species (BC Conservation Data Centre 2002).

A search of the BC Conservation Data Centre (BC CDC 2018) identified 14 at-risk marine species with potential to occur at the Project Site, including six mammals, three fish, four birds and one invertebrate (Table 2). Of the species identified, 13 are federally listed under the *Species at Risk Act* (SARA).

Table 2 At-Risk Marine Species that May Occur at or near the Project Site

Common Name	Scientific Name	SARA[1]	BC List[2]
Marine Mammals			
Harbour Porpoise	*Phocoena phocoena*	Threatened	Blue
Humpback Whale	*Megaptera novaeangliae*	Threatened	Blue
Killer Whale (southern resident population)	*Orcinus orca* pop. 5	Endangered	Red
Killer Whale (west coast transient population)	*Orcinus orca* pop. 3	Threatened	Red
Sea Otter	*Enhydra lutris*	Special Concern	Blue
Steller Sea Lion	*Eumetopias jubatus*	Special Concern	Blue
Birds			
Northern Goshawk	*Accipiter gentilis laingi*	Threatened	Red
Marbled Murrelet	*Brachyramphus marmoratus*	Threatened	Blue
Ancient Murrelet	*Synthliboramphus antiquus*	Special Concern	Blue
Double-crested Cormorant	*Phalacrocorax auritus*	None	Blue

4.3.7 At-Risk Terrestrial Species and Habitats

A search of the BC Conservation Data Centre (CDC) (BC CDC 2016) identified a list of 32 at-risk terrestrial species with potential to occur in suitable sites in the vicinity of the Project, which was refined to a list of 29 species based on professional knowledge of the Project Site and species' habitat requirements: 19 birds, six mammals and four reptiles and amphibians. Of the species identified, 14 are federally listed under the *Species at Risk Act* (SARA).

Table 3 At-Risk Terrestrial Species that May Occur at or near the Project Site

Scientific Name	English Name	BC List[1]	SARA[2]
BIRDS			
Short-billed Dowitcher	Limnodromus griseus	Blue	–
Northern Goshawk	*Accipiter gentilis laingi*	Red	Threatened
Great Blue Heron	*Ardea herodias fannini*	Blue	Special Concern
Short-eared Owl	*Asio flammeus*	Blue	Special Concern
American Bittern	*Botaurus lentiginosus*	Blue	–
Rough-legged Hawk	*Buteo lagopus*	Blue	–
Red Knot	*Calidris canatus*	Red	1-E/T
Common nighthawk	*Chordeiles minor*	Yellow	Threatened
Olive-sided Flycatcher	*Contopus cooperi*	Blue	Threatened
Black Swift	*Cypseloides niger*	Blue	
Peregrine Falcon	*Falco peregrinus peelei*	Blue	Special Concern
Northern Pygmy-Owl	*Glaucidium gnoma swarthi*	Blue	–
Barn Swallow	*Hirundo rustica*	Blue	–
Western Screech-Owl	*Megascops kennicottii kennicottii*	Blue	Special Concern
Band-tailed Pigeon	*Patagioenas fasciata*	Blue	Special Concern
Vesper Sparrow	*Pooecetes gramineus affinis*	Red	Endangered
Purple Martin	*Progne subis*	Blue	–
Western Meadowlark (Georgia Depression population)	*Sturnella neglecta*	Red	–
Barn Owl	*Tyto alba*	Red	–
WILDLIFE			
Mammals			
Townsend's Big-eared Bat	*Corynorhinus townsendii*	Blue	–
Vancouver Island Marmot	*Marmota vancouverensis*	Red	–
Ermine	*Mustela erminea anguinae*	Blue	–
Keen's Myotis	*Myotis keenii*	Blue	–
Little Brown Myotis	*Myotis lucifugus*	Yellow	Endangered
American Water Shrew	*Sorex navigator brooksi*	Red	–

5.0 PROJECT COMPONENTS AND MECHANISMS WITH POTENTIAL TO AFFECT FISH AND FISH HABITAT

This section describes the potential effects identified from Project Activities that have the potential to affect fish or fish habitat and/or have the potential to affect listed at-risk species. Where applicable, mitigation measures are prescribed for those effects, and any anticipated residual effects are summarized. Project components that may cause the harmful alteration, disruption or destruction (HADD) of fish and fish habitat, as defined under the *Fisheries Act*, are outlined in **Table 4**.

5.1 Potential Effects of the Proposed Project on Fish and Fish Habitat

The proposed Project has the potential to cause HADD to fish and fish habitat through:

- Direct disturbance of benthic substrate through piling, addition of rip rap and concrete footings.
- Temporary disturbance to intertidal fish and fish habitat, interstitial organisms, wildlife and birds by heavy equipment noise, demolition and piling activities.
- Introduction of suspended sediment from pile driving and demolition activities.
- Introduction of contaminants entering the marine environment from Project-related activities such as piling, concrete work and potential spills.

Table 4 Direct and Indirect potential impacts of the Project

Project Component	Project Activity	Habitat	Deconstruction		Construction	
			Direct effect (footprint)	Indirect effect (shading)	Direct effect (footprint)	Indirect effect (shading)
Shipyard building	Pile removal (60 deteriorated creosote treated timber piles of 30 cm diam.)	Intertidal mud/sand	4.24 m^2	N.A.	N.A.	N.A.
	Roof removal	Intertidal mud/sand	N.A.	356 m^2	N.A.	N.A.
Travel lift pier	Pile removal (31 vertical creosote treated timber piles of 30 cm diam.)	Intertidal mud/sand	2.2 m^2	N.A.	N.A.	N.A.
	Removal of top of travel lift pier	Intertidal mud/sand	N.A.	56 m^2	N.A.	N.A.
	Rip rap armouring	Intertidal mud/sand	N.A.	N.A.	197 m^2	N.A.

6.0 MEASURES TO AVOID OR MITIGATE EFFECTS TO FISH, FISH HABITAT AND AT-RISK SPECIES

The recommended mitigation measures below are intended to address and mitigate potential adverse effects of the proposed Project on the fish habitat at the Project Site identified in **Section 5.1.**

6.1 Timing Windows

Through consideration of the seasonal distribution and abundance of fish and the timing of their sensitive life stages and processes (e.g., reproductive periods, migration of Pacific salmon), DFO identifies periods of lower (least) risk for the timing of in-water and near-water works. Generally, in-water Project Activities should be timed to occur within DFO's least risk work windows, to avoid or limit possible adverse effects on fish and aquatic species during sensitive life history stages. The Project Site lies within DFO Fisheries Management Area 17-10. Timing windows of least risk for this area are:

- Summer Window: **June 1 - September 1**
- Winter Window: **December 1 - February 15**

6.2 Recommended Strategies for Minimizing Disturbance to Fish, Wildlife and Habitat

For Pile Removal:

- An exclusion device such as protective netting or geotextile material suspended in the water column around the pile may be required to prevent access to fish and other marine fauna.
- Appropriate erosion and sediment control measures, including use of silt curtains if necessary, should be in place during pile removal and install activities.

For pouring concrete:

As cement and concrete are toxic to aquatic organisms, especially fish, any concrete work should follow the "Guide to the Code of Practice for the BC Concrete and Concrete Products Industry – Version 6", particularly Chapter 7 – Authorized Discharge: Effluent and Surface and Marine Water Quality (Millennium EMS Solutions Ltd. 1993).

- All concrete work shall conform to the requirements of CSA A23.1 and A23.2 (Concrete Materials and Methods of Concrete Construction/Methods of Test for Concrete).
- To prevent release of deleterious substances, ensure that all works involving the use of concrete, cement, mortars, and/or other Portland cement or lime-containing construction materials will not deposit (directly or indirectly) sediments, debris, concrete, leachate concrete fines, wash or contact water into or about any watercourse.
- Isolate pour area and/or install caisson.
- Cast in place concrete must remain isolated from water inside clean, sealed formed structures until cured (approximately 48-72 hours), as concrete leachate is highly toxic to fish and other aquatic life.
- Pour concrete at low tide.
- pH testing of isolated water for changes in acidity.
- Ensure a carbon dioxide (CO_2) tank with regulator, hose and gas diffuser is readily available during concrete work to neutralize pH levels should a spill occur. Staff must be trained in its proper use.

7.0 EFFECTS ASSESSMENT

7.1 Assessment Approach for Residual Effects

The *Fisheries Act* prohibits the death of fish by means other than fishing and sub-lethal effects to fish and aquatic species at risk. In managing the fish habitat resource, DFO interprets the harmful alteration, disruption or destruction of fish habitat as;

> *"Any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life history processes of fish."*

Temporary or permanent changes to fish habitat resulting from a project can directly or indirectly impair the capacity of habitat to support one or more life history processes of fish. Mitigation designed to reduce the potential risk of a project to fish habitat will ensure that fish and fish habitat are conserved and protected.

Residual effects to fish and habitat resulting from the interaction between Project Activities and fish and fish habitat, following the implementation of avoidance and mitigation measures, will be assessed using the criteria defined in **Table 5**. This assessment relies on available scientific literature and field studies, the experience and professional judgment of the assessment team, and follows the guidance provided by DFO's Fish and Fish Habitat Protection Policy Statement (DFO 2019).This assessment will consider effects to fish and the magnitude of effects to habitat by considering;

- The habitat components being affected;
- The spatial extent of the area affected by the project relative to the habitat components in the area;
- The sensitivity of the habitat being affected; and,
- The expected persistence of the effects.

The evaluation will be undertaken in the context of the aquatic ecosystem, considering the habitat components (e.g., substrate, aquatic vegetation, water depth, oxygen, etc.) that support habitat functions (i.e. spawning, rearing, nursing, feeding, migrating) of the relevant fish and will depend on the nature of the affected habitat, the fish species present, their life history and related habitat requirements. The following will be taken into consideration for this assessment of residual harm:

Identification of habitat components: the structural features that support the requisite habitat functions required to meet the life history processes of fish (e.g., spawning, rearing, etc.). Habitat components are used as a proxy for habitat functions. Habitat components (**Section 4.0**) affected by the project will be identified and the most significant species use will be considered. If multiple components are significant to a species, there may be a need to assess multiple habitat components.

Spatial extent: the overlap of the area affected by the project with the habitat component. The affected area is the areas within which all project related activities are likely to occur either directly or indirectly. Once the primary habitat component(s) is selected, a rough estimate of its geographical extent (i.e., area) will be made to approximate the percentage located within the affected area.

The scale considered will include site, local and widespread. They are described below in **Table 5**.

	Low Sensitivity	Moderate Sensitivity	High Sensitivity
Abiotic and Biotic Suitability of Habitat	No key structure-providing species (abiotic) in area of WUA.	Key structure providing species is present in location of the WUA but is not a limiting component	Key structure providing species present in location of WUA and is a limiting component
Species at Risk	Not within distribution area of a listed aquatic species at risk.	Within distribution area of an aquatic species at risk, but not in critical habitat. Non-critical habitat of aquatic species at risk that supports their lifecycle functions within their distribution area.	Critical Habitat and/or residence of aquatic species at risk identified in the proposed or final Recovery Strategy or Action Plan. Habitat supporting species of special concern.

Persistence of effects: the length of time needed for an effect to disappear. Assessment is based on three categories:

- Low - weeks
- Moderate – months; and,
- High – more than 1 year.

7.2 Harmful Alteration, Disruption or Destruction of Fish Habitat

With the application of mitigation measures, project related works will result in a 4 m^2 footprint increase on upland habitat. 197 m^2 of intertidal sand/mud habitat will be altered to rip rap habitat (**Table 7**). Indirect impacts (through shading of berth infrastructure) will increase at the Project Site by 412 m^2. Residual effects to fish and habitat resulting from the interaction between Project Activities and fish and fish habitat are presented in **Table 7**.

Table 7 Summary of Affected Fish Habitats

Component	Habitat Type	Area of Directly Affected Habitat (footprint)	Area of Indirectly Affected Habitat
Existing infrastructure removal	Intertidal mud/sand	6.44 m^2	412 m^2
	Intertidal rock	1.06 m^2	74 m^2
	Upland	1.06 m^2	146 m^2
	Habitat gain	8.56 m^2	632 m^2
New pile installation	Intertidal rock	0.42 m^2	74 m^2
New footing installation	Upland	5.06 m^2	146 m^2
Rip rap armoring	Intertidal mud/sand	197 m^2	–
	Habitat loss	202.5 m^2	220 m^2
	Net habitat loss	-194 m^2	+412 m^2

7.3 Assessment Summary

Project Activities will result in 6.44 m² of intertidal habitat being converted back a natural state and a contaminant source (creosote) being removed from the marine environment. The replacement steel piles will offset the loss of artificial hard substrate for colonization from the removal of the deteriorated timber piles. Further, shading impacts at the Project Site will be reduced by 412 m².

Replacement of the Stores Deck structure will result in a 4 m² footprint increase in the upland but is within the existing 220 m² footprint of the existing structure that is being replaced.

Extension of the rip rap area at the travel lift pier will alter 197 m² of sand/mud substrate into vertically complex habitat that will provide hard substrate for colonization and may provide refuge to organisms from predation, thereby increasing productivity at the Project Site. Soft mud/sand intertidal substrate is widespread both at the Site and in the surrounding area and will not be limiting in availability to marine organisms. Impacts of the proposed removal and partial replacement Project are expected to be small and local (confined to the Project Site). Permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish are not expected.

8.0 CLOSURE

This report was prepared by Hemmera for sole benefit and use by Silva Bay Marine Resort. In performing this work, Hemmera has relied in good faith on information provided by others and has assumed that the information provided by those individuals is complete and accurate. This work was performed to current industry standard practice for similar environmental work, in the jurisdiction. The findings presented herein should be considered within the context of the scope of work and Project terms of reference. The conclusions and recommendations contained in this report are based upon the applicable guidelines, regulations, and legislation existing at the time the report was produced; any changes in the regulatory regime may alter the conclusions and/or recommendations.

We sincerely appreciate the opportunity to have assisted you with this project and if there are any questions, please do not hesitate to contact the undersigned by phone at 604.669.0424.

Report prepared by:
Hemmera Envirochem Inc.

Hilary Evans, B.Sc. (Hons), GIT
Intermediate Scientist
250.388.3584 ext. 617
hevans@hemmera.com

Senior reviewed by:
Hemmera Envirochem Inc.

Laura White, B.Sc. (Hons), PhD
Project Manager
604.379.2251
lwhite@hemmera.com

Millennium EMS Solutions Ltd. 1993. Ready Mix Concrete Industry – Environmental Code of Practice. Prepared by Envirochem Special Projects Inc. on behalf of Conservation and Protection, Environment Canada, North Vancouver, BC.

NOAA Fisheries. 2014. https://www.westcoast.fisheries.noaa.gov/stories/2014/04_11072014_eelgrass_mitigation.html. Accessed April 21, 2019.

Nuszorfer, F.C., K. Klinka and D. Demarchi. 1991. Ecosystems of British Columbia: coastal Douglas Fir. BC Ministry of Forests, Victoria, BC.

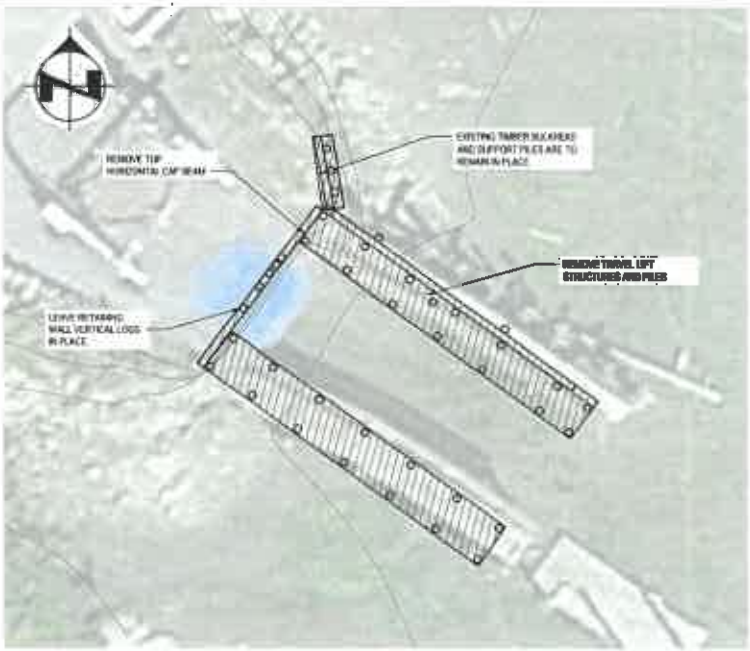
Province of British Columbia. 2017. Wildlife Management Areas. http://www.env.gov.bc.ca/fw/habitat/conservation-lands/wma/

SHIM. 2013. https://www.cmnbc.ca/atlasgallery/shim-sensitive-habitat-inventory-and-mapping/. Accessed 22 April 2019.

Stafford, J. 1913. Canada Commission of Conservation. Committee of Fisheries, Games and Fur-bearing Animals. The Mortimer Co., Ltd. Ottawa ON.



SHIPYARD BUILDING DEMOLITION PLAN
1:200



SHIPYARD TRAVEL LIFT DEMOLITION PLAN
1:200

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM : 3.05 m, ACCORDING TO BM 9628006
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE 103069-000-W-0000 AND 103069-002-W-0001
5. CONTRACTOR TO REVIEW AND CONFIRM BOUNDARY OF DEMOLITION WITH AUSENCO IN THE FIELD PRIOR TO THE START OF DEMOLITION.

LEGEND:

AREA OF DEMOLITION

APPROXIMATE EXISTING PILE LOCATION

SCALE = 1:100

SCALE = 1:200

PRELIMINARY

REF.	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	CHKD	ENGD	APPD
			C			ISSUED FOR REVIEW	JP	JP	PG
			B	BB	13-NOV-2020	ISSUED FOR CONSTRUCTION	JP	JP	PG
			A	JP	29-OCT-2020	ISSUED FOR CONSTRUCTION REVIEW	JP	JP	PG

DRAWN	LFRANCO	29-OCT-2020
DES. CHECKED	L.SHAW	29-OCT-2020
DESIGNED	L.SHAW	29-OCT-2020
DES. APPR.	A.ARMSTRONG	29-OCT-2020
PROJ. APPR.	T.DESMEDT	29-OCT-2020

Ausenco
Vancouver, British Columbia, Canada
T +1 604 684 4211
W www.ausenco.com

CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
DEMOLITION PLAN
SHEET 1 OF 2

COPYRIGHT © Ausenco

PROJECT No. 103069-01 | SCALE AS NOTED | SIZE A1

DRAWING No. 103069-0000-W-0006 | C



STORES DECK DEMOLITION PLAN
1:50

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE.
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM: 3.80 m, ACCORDING TO CHS TIDE 5555
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE 103069-000-W-0005 AND 103069-000-W-0001
5. CONTRACTOR TO REVIEW AND CONFIRM BOUNDARY OF DEMOLITION WORK AGREED IN THE FIELD PRIOR TO THE START OF DEMOLITION.

LEGEND:

AREA OF DEMOLITION

0 2 4 6 8 10m
SCALE 1:50

PRELIMINARY

SILVA BAY
RESORT AND MARINA

REV	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	DRN	CHK	APP
			C	KB	15-Feb-19	ISSUED FOR REVIEW	JD	JD	JD
			A	KB	26-Jan-19	ISSUED FOR REVIEW	JD	JD	JD

DRAWN	D. HORNER	23-Feb-19
CHECKED	L. BIRD	23-Feb-19
DESIGNED	L. BIRD	23-Feb-19
DES. APPR.	A. [illegible]	23-Feb-19
PROJ. APPR.	T. ELSENDALE	23-Feb-19

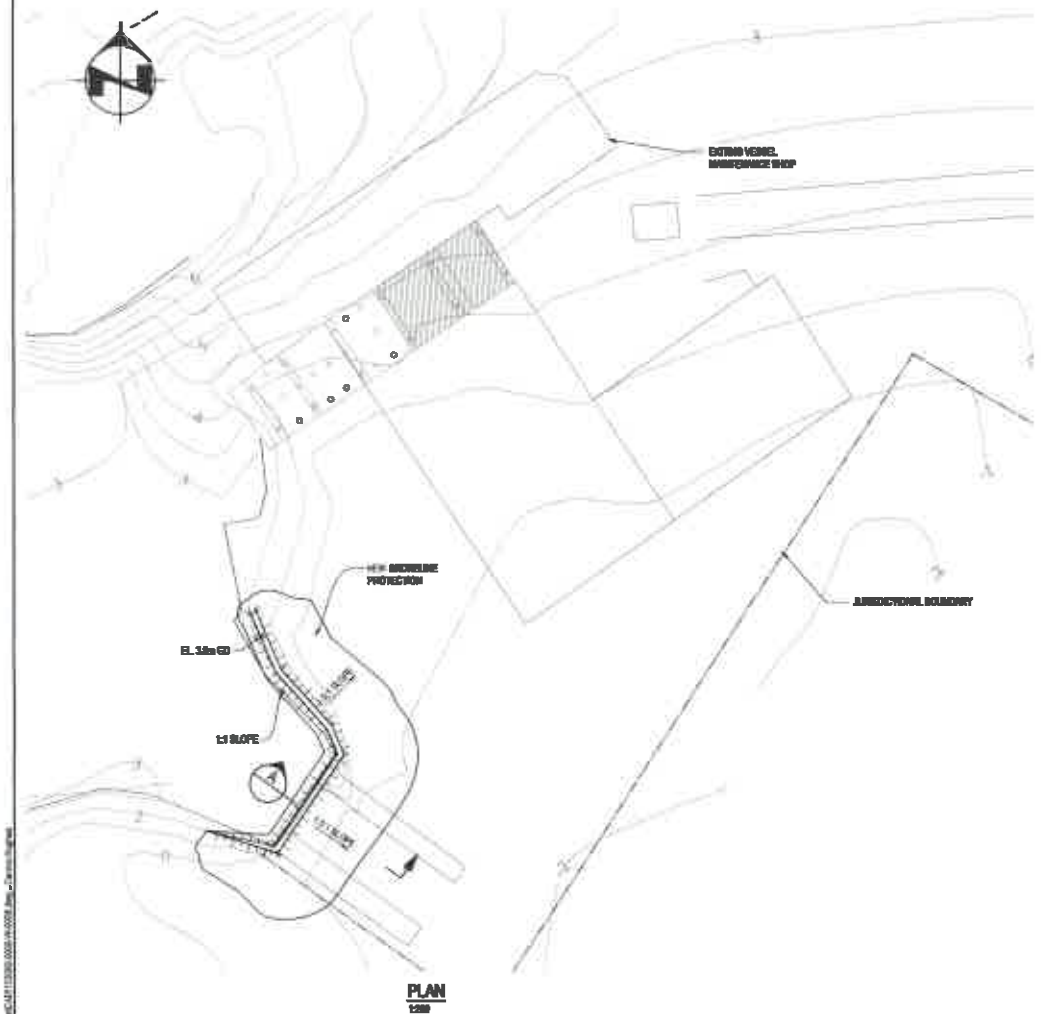
Ausenco
[illegible], British Columbia, Canada
T +1 604 684 8011
W www.ausenco.com

CLIENT: SILVA BAY MARINE RESORT

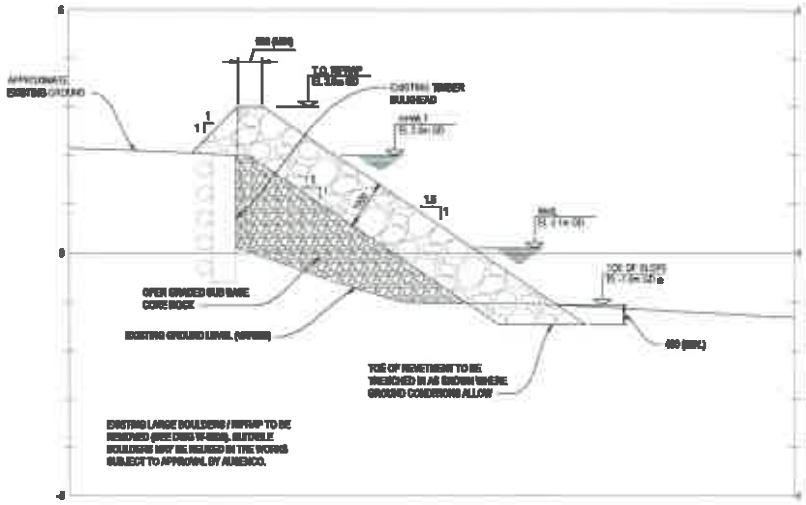
TITLE: SILVA BAY MARINE WORKS
DEMOLITION PLAN
SHEET 2 OF 2

COPYRIGHT © AUSENCO

PROJECT No. 103069-01
SCALE AS NOTED
SIZE A1
DRAWING No. 103069-0000-W-0007
REV C



PLAN
1:250



SECTION A
1:25

RIP RAP GRADATION	
20	60%
200	50
700	100

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM : 3.80 m, ACCORDING TO SHOM DATA
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE 103069-0000-W-0001 AND 103069-0000-W-0002

SCALE 1:100

SCALE 1:250

PRELIMINARY

SILVA BAY
RESORT AND MARINA

NO.	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	ENG	DES	APP
			C						
			B	BS	13-12-2018	ISSUED FOR REVIEW	SP	BS	JD
			A	BS	23-07-2018	ISSUED FOR REVIEW	SP	BS	JD

DRAWN	B. HUGHES	23-07-2018
ENG. CHECKED	L.BIRD	23-07-2018
DESIGNED	L.BIRD	23-07-2018
DES. APPR.	ADVERTISING	23-07-2018
PROJ. APPR.	T.ALEXANDALE	23-07-2018

Ausenco
Vancouver, British Columbia, Canada
T +1 604 684 8071
W www.ausenco.com

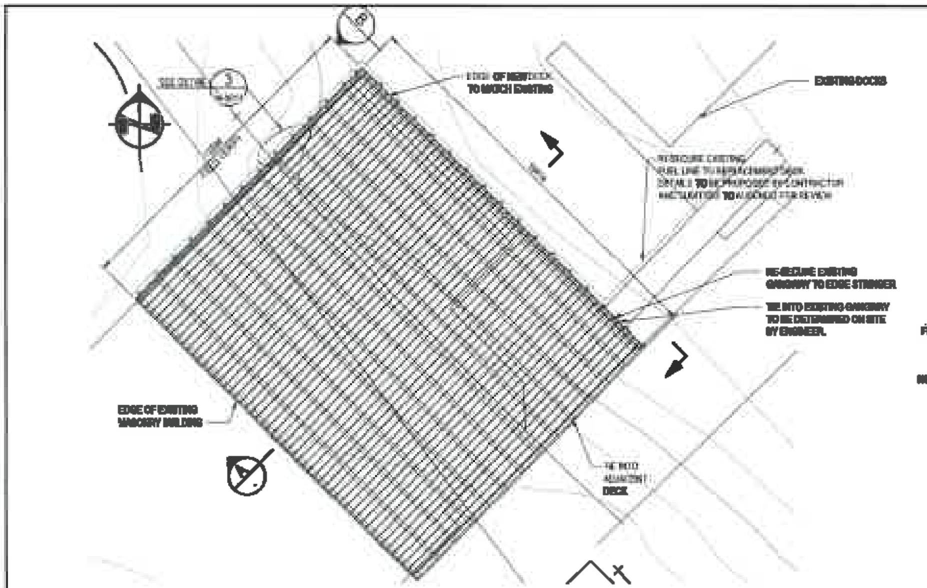
CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
BOAT LAUNCH DRAWING AND
RIPRAP SLOPE PROTECTION
LAYOUT

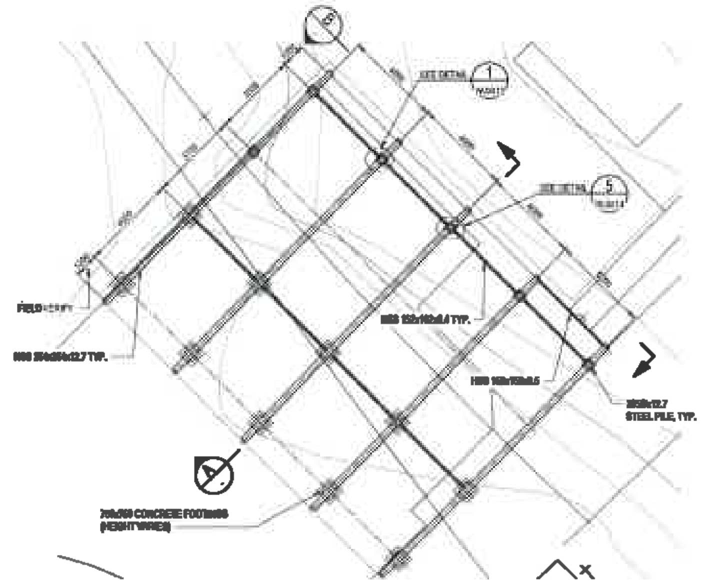
COPYRIGHT © Ausenco

PROJECT No. 103069-01 | SCALE AS NOTED | SIZE A1

DRAWING No. 103069-0000-W-0008 | REV C



TIMBER DECK LAYOUT

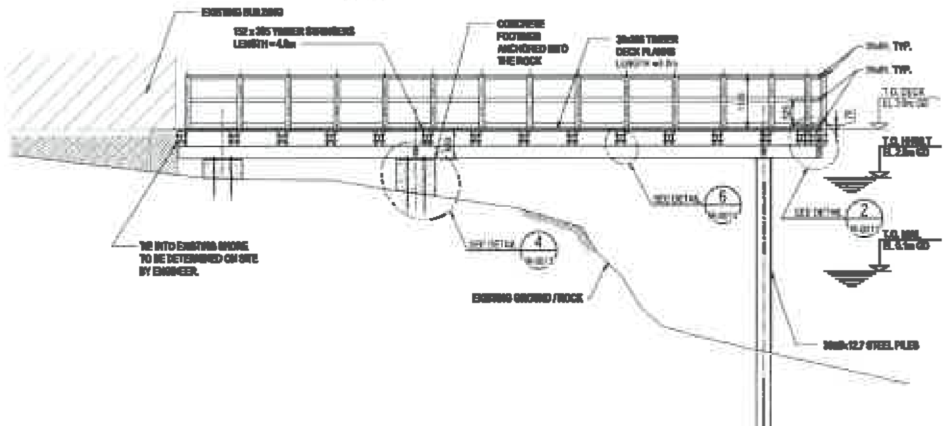


STEEL SUBSTRUCTURE LAYOUT

1:100

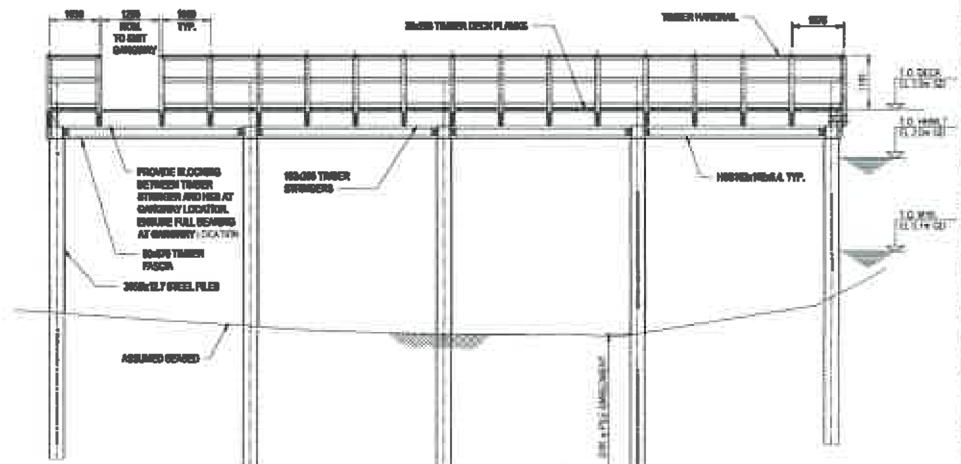
NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM : [illegible] m, ACCORDING TO [illegible]
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE [illegible] AND [illegible]
5. REFER TO DRAWING [illegible] FOR FOOTING SIZES AND PILE DETAILS



SECTION A

1:50



SECTION B

1:100

SCALE = 1:50

SCALE = 1:100

PRELIMINARY

SILVA BAY

CLIENT	SILVA BAY MARINE RESORT
TITLE	SILVA BAY MARINE WORKS STORES DECK REPLACEMENT GENERAL ARRANGEMENT
COPYRIGHT	© Ausenco
PROJECT No.	103069-01
SCALE	AS NOTED
SIZE	A1
DRAWING No.	103069-0000-W-0011
REV	B

Ausenco

APPENDIX C
Silva Bay Resort and Marina Condition Assessment Report

Ausenco

Revision Status

Revision	Date	Description	Author		Reviewer		Approver	
			FirstName LastName	Position Title	FirstName LastName	Position Title	FirstName LastName	Position Title
A	Oct 19 2018	Submitted for Client Review	Bourton Scott	Marine Technologist	Carol Turner	Department Manager, Consulting Engineering	Tony Blessdale	Director, Maritime Asset Management

Ausenco

Table of Contents

1	**Introduction**	**1**
1.1	Purpose of Inspection	1
1.2	Site Overview	1
2	**Inspection Methodology**	**5**
3	**Inspection Results**	**6**
3.1	Travel Lift	6
3.2	Shipyard Building	8
3.3	Workshop and Office Building	12
3.4	Demolished Stores Deck	13
3.5	Marina Wharf	15
4	**Cost Estimates**	**17**
5	**Residual Life Estimates**	**20**

Appendix 1 – Photographs

Appendix 2 - Project Memo Email



Figure 1 - General Layout of the Silva Bay Resort and Marina Structures with Load Restricted and Barricade Areas

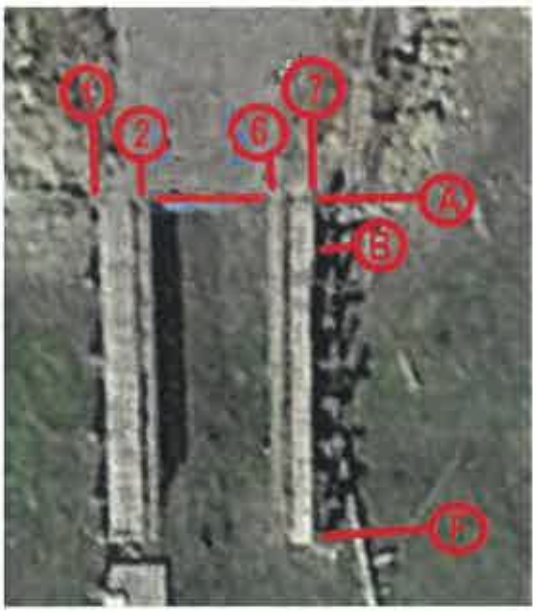


Figure 2 - Travel Lift - General Layout and Reference System

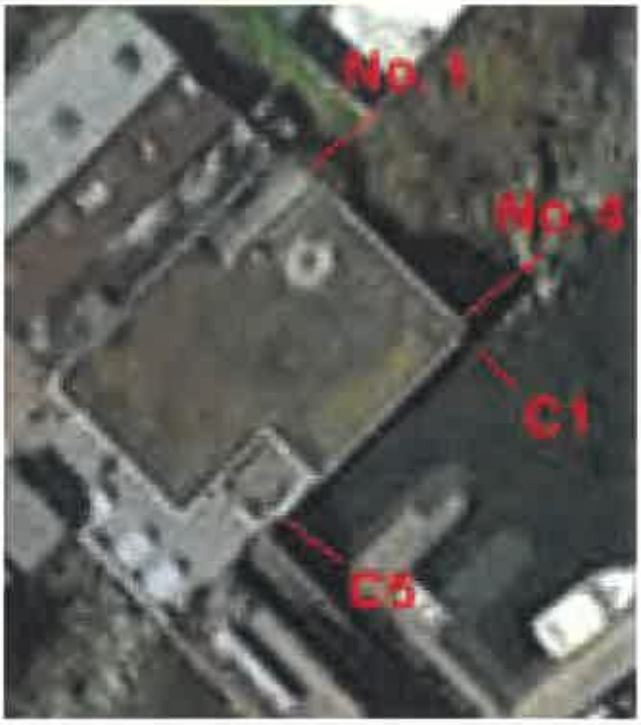


Figure 5 - Demolished Stores Deck - General Layout and Reference System



Figure 6 - Marina Wharfhead - General Layout and Reference System

3 Inspection Results

3.1 Travel Lift

The Travel Lift is in a poor condition due to the extensive deterioration of the timber elements. Specific inspection observations and recommendations are presented in the sections below.

Due to the extent of deterioration to the Bulkhead and Piers, use of the lift should not be allowed, with only pedestrian access permitted onto the structure and barricades installed to prevent vehicle access. Vehicles should be kept back a minimum of 5.0 m inshore of the bulkhead wall. In addition to the above, daily monitoring by marina staff is also recommended for evidence of movement, crushing, settlement or any physical changes to the superstructure, with inspections twice a month by Ausenco staff or another qualified marine structural engineer or technologist. If any changes are observed by marina staff to these areas and to the shipyard building, all access should be prevented and Ausenco shall be notified immediately. It is important to note that the above conditions are subject to change pending further reviews and field inspections.

3.1.1 Bulkhead Wall

The bulkhead wall is no longer in a serviceable condition due to deterioration as a result of fungal decay and marine borer attack. Specific inspection observations and recommendations are presented in *Table A*.

Table A: Travel Lift Bulkhead Wall Observations and Recommendations

Element	Location	Observation	Recommendations
Bulkhead Logs	—	Severe marine borer cavities (MBC's) at the ends of all logs and widespread decay along the bottom five rows of logs (Photo 11).	The bulkhead wall has deteriorated beyond repairs. Subject to the intended use of the facility, it is recommended that that the bulkhead be replaced. Options for replacement include: • The placement of armour rock in front of the bulkhead which limits the size of boats due to the increased footprint of the rock slope. • Replacement in kind which is more expensive than the armour rock option. • A sheetpile wall. This is considered the most expensive options and given the rock outcroppings, a sheetpile wall may not be feasible.
	East End	3.0 m long x 0.75 m x 0.5 m void behind the missing logs at the east end of the wall (Photo 12).	
	Top of wall Adjacent to Pile No. 4	1.2 m x 0.75 m x 0.3 m void at the top of the bulkhead wall with missing logs (Photo 13).	
	Mid Height Bulkhead Wall	2.0 m x 2.0 m x 1.5 m at the east end of the bulkhead wall with missing logs.	
Pile Cap	Pile No. 1	90% cross sectional loss (CSL) due to fungal decay above the pile (Photo 14).	
	Pile No. 3	25% CSL due to fungal decay above the pile.	
	Pile No. 4	50% CSL due to fungal decay above the pile.	
Piles	Pile No. 1	50% CSL in the top 0.3 m, 10% CSL from 0.3 m to 0.6 m due to fungal decay.	
	Pile No. 5	Wet internal fibers.	
	Pile No. 7	10% CSL due to fungal decay in the top 0.3 m.	

East Travel Lift Pier			
Beam	Pile No. 6A	Severe fungal decay and mechanical damage to the beam above the bulkhead (Photo 17).	Replace beam to 6B and continue to monitor for further deterioration.
	Pile No. 6D	10% CSL due to fungal decay above the pile.	
	Pile No. 6E	25% CSL with wet internal fibers above the pile.	
Stringers	Pile No. 7C	50% CSL due to fungal decay in the end of the east stringer (Photo 18) and 25% CSL due to fungal decay in the end of the west stringer.	Replace east stringer from 7B to 7D.
	Pile No. 7C to 7D	Severe fungal decay with crushing in the stringer between the bents.	
Pile Caps	Pile No. 6C	10% CSL and wet internal fibers due to fungal decay above the pile.	Monitor for further deterioration.
	Pile No. 7C	10% CSL due to fungal decay above the pile.	Monitor for further deterioration.
	Pile No. 6D	10% CSL due to fungal decay above the pile.	Replace pile cap.
	Pile No. 7D	50% CSL due to fungal decay above the pile.	
	Pile No. 6E	25% CSL with wet internal fibers due to fungal decay above the pile.	Replace pile cap.
	Pile No. 7E	10% CSL due to fungal decay above the pile.	
Piles	Pile No. 7C	50% CSL in the top 0.3 m, 25% CSL from 0.3 m to 0.6 m due to fungal decay.	Replace pile.
	Pile No. 7D	10% CSL due to fungal decay in the top 0.3 m of the pile.	Monitor for further deterioration.
	Pile No. 7E	50% CSL in the top 0.3 m, 25% CSL from 0.3 m to 0.6 m, 10% CSL from 0.6 m to 0.9 m due to fungal decay.	Replace pile.
	Pile No. 6F	75% CSL in the top 0.3 m, 50% CSL from 0.3 m to 0.6 m, 25% CSL from 0.6 m to 0.9 due to fungal decay.	Replace pile.

In addition to the above noted repairs, and subject to an ongoing inspection and maintenance program, it is anticipated that additional timber repairs will be required in 4 to 5 years to the areas with the initial findings of minor deterioration due to fungal decay.

3.1.3 Travel Lift Safety Ladders

The safety ladder at the offshore end of the west travel lift pier is in poor condition as a result of severe mechanical damage and moderate corrosion scaling (Photo 19). There is no ladder located on the east pier.

Replacement of the safety ladder on the west pier and installation of a ladder on the east pier is recommended.

3.2 Shipyard Building

The shipyard building is in poor condition due to severe deterioration due to fungal decay and marine borer activity in the timber elements. Throughout the structure, repairs have been carried

3.2.3 Pile Caps

The timber pile caps are generally in a poor condition due to widespread and extensive severe deterioration due to fungal decay, resulting in crushing and areas of partial localized collapse throughout the structure. Specific inspection observations are presented in *Table C.*

Table C:Shipyard Building Pile Cap Observations

Location	Observation
5A	Three untreated laminated 50 mm x 300 mm boards for repair.
Pile No. 5F North	Three untreated laminated 50 mm x 300 mm boards for repair not in full bearing with the pile (Photo 26).
Pile No. 5F South	Severe fungal decay south of Pile No. 5F (Photo 27).
Pile No. 5G	Severe fungal decay above the pile.
Pile No. 5H	25% CSL due to fungal decay above the pile.
Pile No. 5J	25% CSL due to fungal decay above the pile.
Pile No. 5K	Cap replacement with 3 laminated 100 mm x 300 mm untreated boards (Photo 28).
Pile No. 6A	Severe fungal decay in the laminated 50 mm x 300 mm boards and unsupported past the pile (Photo 29).
Pile No. 7A	Severe fungal decay in the laminated 50 mm x 300 mm and unsupported past the pile (Photo 30).
Pile No. 7F	The pile cap is notched and there is severe fungal decay above the pile.
Pile No. 7G	Severe fungal decay at the south side of the splice.
Pile No. 7H	Severe fungal decay above the pile.
Pile No. 7J	Severe fungal decay above the pile resulting in crushing and partial collapse (Photo 31).
Pile No. 7K	Severe fungal decay above the pile resulting in crushing and partial collapse (Photo 32).
Pile No. 11F North	75% CSL due to fungal decay above the pile (Photo 33).
Pile No. 13C	25% CSL due to fungal decay above the pile.

3.2.4 Piles

The timber piles are generally in a poor condition due to extensive severe deterioration due to fungal decay and/or marine borer attack in the intertidal zone. Specific inspection observations are presented in *Table D.*

3.3 Workshop and Office Building

The Workshop and Office building is in a poor condition resulting from severe deterioration due to fungal decay and marine borer activity, predominately to the piles. Throughout the structure, repairs have been carried out in the past using untreated timber. Specific inspection observations and recommendations are presented in the below sections.

As the deterioration predominately pertains to the piles, repairs are considered to be practical; however, it should also be noted that, subject to an ongoing inspection and maintenance program, it is anticipated that additional timber repairs will be required in 4 to 5 years to the areas with the initial findings of minor deterioration due to fungal decay and to the untreated timber elements. Conceptual repairs would consist of a steel jacket repair to the piles under the building structure, with full replacements for the areas at the edge of the building substructure that can be accessed by a pile driving derrick.

Until repairs or demolition have been carried out, it is strongly recommended that access should be restricted to pedestrian only to the building, with vehicle access discontinued at the existing chain barricade adjacent to the vessel maintenance building along the roadway. In addition to the above, daily monitoring by marina staff is also recommended for evidence of movement, crushing, settlement or any physical changes to the superstructure, with inspections twice a month by Ausenco staff or another qualified marine structural engineer or technologist. If any changes are observed by marina staff to these areas and to the shipyard building, all access should be prevented and Ausenco shall be notified immediately. It is important to note that the above conditions are subject to change pending further reviews and field inspections.

3.3.1 Pile Caps

The timber pile caps are generally in a serviceable condition. It should be noted, however, there are widespread repairs that were carried out using untreated timbers. As a result, and subject to an ongoing inspection and maintenance program, repairs/replacements are expected to be required in the next 4 to 5 years.

Although repairs are not currently required, continued monitoring is recommended.

3.3.2 Piles

The timber piles are generally in a poor condition resulting in extensive severe deterioration due to fungal decay and marine borer activity in the intertidal zone. Specific inspection observations and recommendations are presented in *Table E*.

Table E: Workshop and Office Building Pile Observations

Element	Location	Observation	Recommendations
Piles	Pile No. 14 A1	50% CSL due to MBC at the mudline on the pile (Photo 45).	Install new piles and a section of pile cap.
	Pile No. 14 A2	90% CSL in the top 0.3 m, 75% CSL from 0.3 m to 0.6 m, 50% CSL from 0.6 m to 0.9 m due to fungal decay in the top of the pile (Photo 46).	
	Pile No. 14 A4	90% CSL in the top 0.6 m, 75% CSL from 0.6 m due to fungal decay in the top of the pile.	
	Pile No. 14 A7	25% to 50% CSL due to MBC's through the ITZ of the pile (Photo 47).	Install new section of pile and steel jacket repair across pile spice.

Until repairs or demolition has been carried out, it is strongly recommended that the barricades remain in place and all access (pedestrian, vehicle and vessel) should be prohibited. Additional barricades should be placed at the north end of the approach to this area and the marina wharf to prevent vehicle access to this area. In addition to the above, daily monitoring of the float access ramp and connections by marina staff is also recommended for evidence of movement, crushing, settlement or any physical changes to the superstructure, with inspections twice a month by Ausenco staff or another qualified marine structural engineer or technologist. If any changes are observed by marina staff to this area, all access should be prevented and Ausenco shall be notified immediately. It is important to note that the above conditions are subject to change pending further reviews and field inspections.

Table F: Demolished Stores Deck Inspection Observations

Element	Location	Observation
Pile Cap	Pile No. 2 C1 to Pile No. 2 C2	The pile cap is missing between piles.
	Pile No. 4 C4	Corbel block is missing.
Piles	Pile No. 1 C1	The pile is not pinned at the top or bottom and is unsecured (Photo 51).
	Pile No. 2 C1	Pile is missing.
	Pile No. 2 C2	The pile is not pinned at the top or bottom and is unsecured.
	Pile No. 2 C3	The pile is not pinned at the bottom - condition unknown.
	Pile No. 2 C4	The pile is not pinned at the bottom - condition unknown.
	Pile No. 2 C5	The pile is not pinned at the bottom - condition unknown.
	Pile No. 3 C2	50% CSL due to MBC in the ITZ.
	Pile No. 3 C3	Concrete footing is in a poor condition. Condition or confirmation of the pile being pinned was not confirmed.
	Pile No. 3 C4	75% CSL due to MBC at the base of the pile and the pile is not pinned on the bedrock (Photo 52).
	Pile No. 3 C4.5	75% CSL due to MBC at the base of the pile and the pile is not pinned on the bedrock (Photo 53).
	Pile No. 3 C5	All the timber posts are not in bearing at the base with severe MBC's in the ITZ.
	Pile No. 4 C1 North	50% CSL due to MBC in the ITZ.
	Pile No. 4 C3	50% CSL due to MBC in the ITZ.
	Pile No. 4 C4	75% CSL due to MBC in the ITZ and 50% CSL due to fungal decay in the top 0.6 m.
	Pile No. 4 C5 South	50% CSL due to MBC in the ITZ. There is a north pile at this location.
Retaining Wall	Inshore	No access and, therefore, the condition is unknown.

3.5.2 Pile Caps

The log pile caps are generally in fair condition due to localized severe deterioration due to fungal decay throughout. Specific inspection observations and recommendations are presented in *Table H.*

Table H:Marina Wharf Pile Cap Observations and Recommendations

Location	Observation	Recommendations
Pile No. 2 B1	50% CSL due to fungal decay in the pile cap above the pile.	Replace log pile cap with a milled and treated timber between Pile Nos. 1 B1 and 2 B1.
Pile No. 8 B6	75% CSL due to fungal decay in the log pile cap (Photo 55).	Replace log pile cap with a milled and treated timber between Pile Nos. 7 B6 and 6 B6.

3.5.3 Piles

The timber piles are generally in a poor condition due to extensive severe deterioration due to fungal decay and marine borer activity in the intertidal zone. Note that the spans between Bents No. 1 to 3 appear to be too large for the dimensions and design of the timber. Specific inspection observations and recommendations are presented in *Table I.*

Table I: Marina Wharf Pile Cap Observation and Recommendations

Element	Location	Observation	Recommendations
Piles	Pile No. 5 B3	75% CSL due to MBC in the lower ITZ of the pile.	Replace pile.
	Pile No. 6 B3 South	90% CSL due to MBC in the lower ITZ of the pile (Photo 56).	Replace pile.
	Pile No. 6 B5	50% CSL due to MBC in the lower ITZ of the pile.	Replace pile.
	Pile No. 7 B5	50% CSL due to MBC in the lower ITZ of the pile.	Replace pile.
	Pile No. 7 B6	50% CSL in the top 0.3 m, 25% CSL from 0.3 to 0.6 m due to fungal decay with a 25% to 50% MBC in the ITZ.	Replace pile.
	Pile No. 7 B2	75% to 90% CSL due to fungal decay in the top 0.9 m of the pile.	Replace pile.

Item	Description	Estimated Cost (CDN)
12	Replace the Shipyard Building and Apron Deck	50,000
13	Replace the Shipyard Building and Apron Stringers	75,000
14	Replace the Shipyard Building and Apron Pile Caps	100,000
15	Replace the Shipyard Building and Apron Piles	375,000
16	Replace the Shipyard Building Bracing	40,000
Sub-total		1,170,000
Contingency, Engineering & Permitting (40%)		468,000
Total Shipyard Building		**1,638,000**
Office and Workshop Building		
Mobilization/Demobilization		25,000
17	Install partial Bent (Cap and Piles)	40,000
18	Install double pile and subcaps at 2 locations	35,000
19	Replace six piles	48,000
20	Install steel jacket pile repairs at 4 locations	40,000
Sub-total		188,000
Contingency, Engineering & Permitting (30%)		56,500
Total Office and Workshop Building		**244,500**
Demolished Stores Deck Structure		
Mobilization/Demobilization		20,000
21	Demolition and disposal of substructure (Allowance)	30,000
Sub-total		50,000
Contingency, Engineering & Permitting (30%)		15,000
Total Demolished Stores Deck Structure		**65,000**
Marina Pier		
Mobilization/Demobilization		25,000
22	Replace log stringers at seven locations	70,000
23	Replace log pile caps at two locations	40,000
24	Replace six piles	48,000
Sub-total		183,000
Contingency, Engineering & Permitting (35%)		64,000

5 Residual Life Estimates

The residual life estimates for the noted structures are presented in Table K below. In reviewing the residual life estimates, it is important to note the following assumptions:

- The accuracy is based on the results of the assessment at the time of inspection.
- No changes of use or the frequency of use.
- The estimates do not account for marine incidents exceeding the design criteria, collisions/allisions, seismic events or abnormally intense storms.
- Recommended repairs/replacements are carried out as soon as possible and that no further damage is incurred as a result of any delays.
- Maintenance on the structures will be carried out by qualified marine contractors and Maintenance staff.
- Repairs for deterioration identified but not warranting remedial measures at this time is expected to accelerate due to the weakened members/elements or deferral of repairs.
- SBRM will perform ongoing inspections as per previous emails and this report.

Table K: Estimated Remaining Service Life for the Silva Bay Shipyard Structures

Component	Estimated Residual Life	Comments
Travel Lift	5 to 10 years	After completion of repairs. Note life could be extended indefinitely with an ongoing inspection and maintenance program.
Shipyard Building Substructure	0 years	Replacement 50+ years.
Workshop and Office Buildings	5 to 10 years	After completion of repairs. Note life could be extended indefinitely with an ongoing inspection and maintenance program.
Demolished Stores Deck	0 years	
Marina Wharf	5 to 10 years	After completion of repairs. Note life could be extended indefinitely with an ongoing inspection and maintenance program.



Photo 3 - General View: West travel lift pier looking east.



Photo 4 - General View: East travel lift pier looking west.



Photo 7 - General View: Workshop and office building looking west.



Photo 8 – General View: Demolished stores wharf looking west.



Photo 11 - Travel Lift: Severe marine borer cavities in the end of the mill logs at the bulkhead.



Photo 12 - Travel Lift: 3.0 m x 0.75 m x 0.5 m void at the east end of the bulkhead wall.



Photo 15 - Travel Lift: Several fungal decay and mechanical damage to the travel lift guardrails.



Photo 16 - Travel Lift: 75% CSL due to fungal decay in the pile cap at Pile No. 1C.



Photo 19 - Travel Lift: West safety ladder with severe mechanical damage and moderate corrosion.



Photo 20 - Shipyard Building: Retaining Wall has severe undermining of the retaining wall located on the west side of Bent No. 1.



Photo 23 - Shipyard Building: Severe fungal decay and marine borer cavities with posts not in bearing at the lower posts below the Apron between Bent No. 7 and No.10.



Photo 24 - Shipyard Building Apron between Bent No. 7 and No. 10: Typical severe fungal decay of the lower apron posts.



Photo 27 - Shipyard Building: Severe fungal decay in the pile cap on the south side of Pile No. 5F.



Photo 28 - Shipyard Building: Cap replacement of three 100 mm x 300 mm untreated timbers at Pile No. 5K.



Photo 31 - Shipyard Building: Severe fungal decay above the pile resulting in crushing and partial collapse above Pile No. 7J.



Photo 32 - Shipyard Building: Severe fungal decay above the pile resulting in crushing and partial collapse above Pile No. 7K.



Photo 35 - Shipyard Building: 75% MBC in the ITZ of Pile No. 5H.



Photo 36 - Shipyard Building: 90% MBC at the ITZ of Pile No. 5K.



Photo 39 - Shipyard Building: 75% to 90% CSL due to MBC in the ITZ of Pile No. 7F.



Photo 40 - Shipyard Building: 50% MBC in the lower ITZ of the Pile No. 7G.



Photo 43 - Shipyard Building: 75% in the lower ITZ of Pile No. 7K.



Photo 44 - Shipyard Building: 90% MBC in the lower ITZ of Pile No. 11F south.



Photo 47 - Workshop and Office Building: 25% to 50% MBC through the ITZ of Pile No. 14 A7.



Photo 48 - Workshop and Office Building: 100% MBC at the mudline of Pile No. 14.5 A5.



Photo 51 - Demolished Stores Deck: Pile not pinned at the top or bottom connection of Pile No. 1 C1.



Photo 52 - Demolished Stores Deck: 75% MBC at the base of the pile with the pile not pinned on the bedrock at Pile No. 3 C4.



Photo 55 - Marina Wharf: 75% CSL due to fungal decay in the log pile cap above Pile No. 8 B6.



Photo 56 - Marina Wharf: 90% MBC in the lower ITZ of Pile No. 6 B3 south.

Ausenco Engineering Canada Inc.
855 Homer Street
Vancouver, BC V6B 2W2
Canada

T +1 604 684 9311
F +1 604 688 5913
W www.ausenco.com

10 September 2018
Project No. 103069-01, LET-0001, Rev. A

Allison Tang
Marketing Director
Silva Bay Resort & Marina
6055-4000 No.3 Rd,
Richmond, BC, V6X 0J8

Sent via email: allison.tang@silvabay.com

Dear Ms. Tang,

As you are aware, Ausenco was on site yesterday (September 9, 2018) to carry out an inspection of the timber marine substructure components for the Travel Lift, Shipyard Building, Workshop and Office Building, Demolished Stores Deck (adjacent to the washroom/shower building) and Marina Wharfhead structures.

In general, and as discussed on site, the marine structures are in very poor condition, with extensive and widespread deterioration due to fungal decay (rot) and marine borer attack, with localized areas already exhibiting partial collapse, particularly to the Shipyard Building and adjacent apron (see attached photos). In addition, there are areas where repairs appear to have been carried out in the past without adequate engineering assistance or standard marine detailing.

As a result, and until repairs/replacements have been carried out, the following measures are strongly recommended to be implemented immediately. Please also see the attached figure.

- The Travel Lift should not be used to remove/place vessels from/into the water. Only pedestrian access should be allowed. Furthermore, any vehicles and equipment should stay back a minimum of 5.0 from the timber bulkhead wall, with barricades installed to prevent access.
- All access should be prohibited (vehicle, equipment and even pedestrian) into the Shipyard Building. This includes the timber apron deck which runs alongside the shipyard maintenance shop. Barricades should be placed at the east and west ends of the timber apron.
- Pedestrian only access should be allowed for the office building area. Vehicle access to this area should be discontinued at the existing chain barricade adjacent to the Vessel maintenance building along the roadway.
- Pedestrian only access should be allowed for the Wharfhead area to access the marina floats. Barricades should be placed on the access road at least 5m inshore of the Wharfhead approach to prevent vehicle access.
- The Demolished Stores Deck (adjacent to the washroom/shower building) should continue to be barricaded to prevent all access.

In addition to the above, the areas that have been limited to pedestrian access only should be monitored daily by marina staff for evidence of movement, crushing, settlement or any physical changes to the superstructure, with inspections twice a month by Ausenco staff or another qualified marine structural

Ausenco


Vessel Maintenance Building
Shipyard
Maintenance Shop
Demolished
Stores Deck
Marina
Wharfhead
Barricades
Barricades
Apron
Shipyard
Building
Workshop
& Office
Travel Lift

Silva Bay Resort and Marina

Project Site Photographs



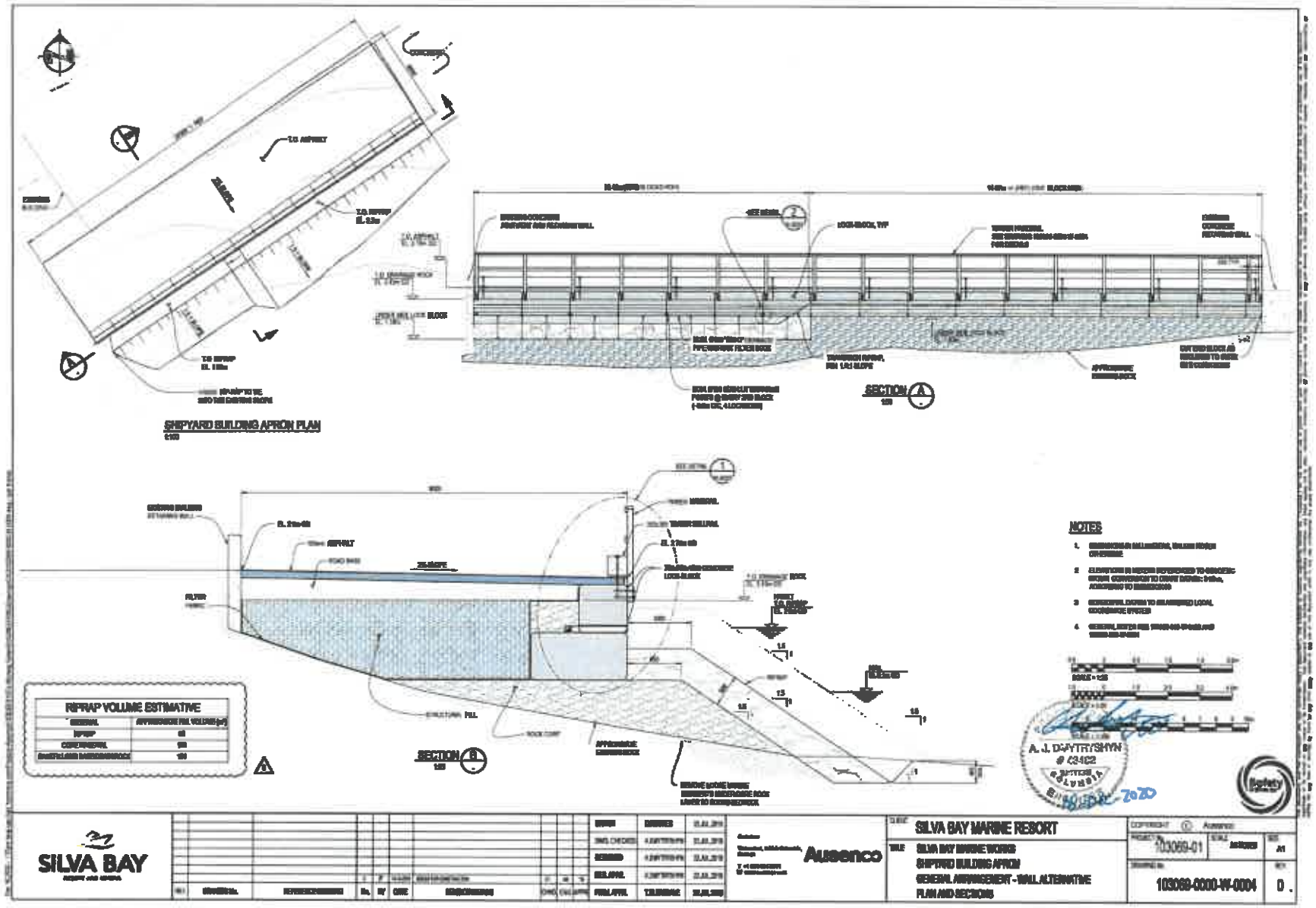
Photo 1: Shipyard building with deteriorated timber pilings to be removed.



Photo 2. Existing rip rap at Travel Lift pier.



Photo 5. Intertidal areas at the Project Site, view to northeast.


SHIPYARD BUILDING APRON PLAN
SECTION A
SECTION B
NOTES
RIPRAP VOLUME ESTIMATIVE
SILVA BAY
SILVA BAY MARINE RESORT
SILVA BAY MARINE WORKS
SHIPYARD BUILDING APRON
GENERAL ARRANGEMENT - WALL ALTERNATIVE
PLAN AND SECTIONS
103069-0000-W-0004
Ausenco

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2020.2

To: Silva Bay Resort & Marina – 1167433 BC Ltd.

1. This permit applies to the property described below:

   PID: 030-792-606
   Legal Description: Lot 1 Section 5
   Gabriola Island Nanaimo District Plan
   EPP90534

2. Whereas the subject properties as described above lie within "Development Permit Area No. 4 – Flat Tops Islands Area" designated under Gabriola Island Official Community Plan Bylaw No. 166, this development permit is issued under Gabriola Island Land Use Bylaw No. 177 that authorizes the **demolition and reconstruction of the "Stores Deck", demolition and removal of the "Boathouse", demolition and removal of the Travel Lift Pier and addition of new fill, demolition of an electrical shed** in accordance with Schedules "A" Aquatic Effects Assessment (AEA) Report by Hemmera Envirochem Inc. dated December 22, 2020; Schedule "B" Fisheries and Oceans Canada "Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat" dated September 24, 2020; Schedule "C" Snuneymuxw Response Letter with conditions dated May 20, 2021; and Schedule "D" Electrical Shed Location, all attached to and forming part of this permit.

3. This Permit is subject to the following conditions:

   3.1 All required authorizations under the *Heritage Conservation Act* as issued by the BC provincial Archaeology Branch for the proposed works.

   3.2 All necessary approvals and conditions of Fisheries and Oceans Canada (FCO) to be met as prescribed in Schedule "B" for the proposed works.

   3.3 Creosote pilings should not be used as replacement pilings, but rather the applicant shall be limited to steel or equivalent replacement pilings for the Stores Deck and Wharf Head reconstruction.

   3.4 Engagement with Snuneymuxw First Nation fisheries department to the satisfaction of the First Nation.

   3.5 Employment of a site monitor from Snuneymuxw First Nation, at the expense of the applicant and to the extent which satisfies the requirements of the First Nation.

   3.6 Aquatic Effects Assessment by Hemmera Envirochem Ltd. dated December 22, 2020 with specific relevant sections:

   - Section 6.0 – MEASURE TO AVOID OR MITIGATE EFFECTS TO FISH, FISH HABITAT AND AT-RISK SPECIES
   - APPENDIX A - STRUCTURAL GENERAL ARRANGEMENT PLAN, APPENDIX B - STORES DECK DEMOLITION PLAN, APPENDIX C – TRAVEL LIFT RIP RAP, APPENDIX D – STORES DECK CONSTRUCTION PLAN.

This permit does not relieve the applicant from complying with the provisions of *the Gabriola Island Official Community Plan Bylaw No. 166, 1997* and the Gabriola *Island Land Use Bylaw No. 177, 1999,* nor does it provide permission to construct any works without other lawfully required approvals and permits from any other local, provincial, or federal authority.

AUTHORIZING RESOLUTION PASSED BY THE GABRIOLA ISLAND LOCAL TRUST COMMITTEE THIS 29TH DAY OF JULY, 2021.

August 20, 2021

Deputy Secretary, Islands Trust

Date Issued

IF THE DEVELOPMENT HEREIN IS NOT COMMENCED BY THE 20 TH DAY OF AUGUST, 2023 THIS PERMIT AUTOMATICALLY LAPSES.

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2020.2

Schedule "A" – Aquatic Effects Assessment (AEA) Report by Hemmera Envirochem Inc. dated December 22, 2020

(PDF document begins on next page)

I hereby certify this to be Schedule "A" which is attached to and forms part of Development Permit No. GB-DP-2020.2.

Signature of Islands Trust Official

August 20, 2021
Date of Issuance

Aquatic Effects Assessment:
Silva Bay Marine Resort, Gabriola Island, BC

Prepared for:

Silva Bay Marine Resort
3383 South Road
Gabriola BC V0R1X7

Project No. 103069-01

Prepared by:

Hemmera Envirochem Inc.
18th Floor, 4730 Kingsway
Burnaby, BC V5H 0C6
T: 604.669.0424
F: 604.669.0430
hemmera.com

February 2, 2021

Hemmera
An Ausenco Company

Hemmera Envirochem Inc.
18th Floor, 4730 Kingsway
Burnaby, BC V5H 0C6
T: 604.669.0424
F: 604.669.0430
hemmera.com

February 2, 2021
Project No. 103069-01

Silva Bay Resort & Marina Ltd.
3383 South Road
Gabriola, BC V0R 1X7

Attention: Dean Chen

Dear Mr. Chen

Re: Aquatics Effects Assessment: Silva Bay Resort and Marina, 3383 South Road, Gabriola Island

On behalf of Hemmera, we are pleased to provide you with this electronic copy of the Aquatic Effects Assessment for Silva Bay Marine Resort.

We appreciate the opportunity to have worked with you on this Project and trust that this report meets your requirements. Please feel free to contact the undersigned by phone or email regarding any questions or further information that you may require.

Regards,
Hemmera Envirochem Inc.



Laura White, PhD, R.P.Bio.
Senior Project Manager
604.379.2251
lwhite@hemmera.com

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Proponent Contact Information 1
1.2 Regulatory context 1
1.2.1 Fisheries Act 1
1.2.2 Species at Risk Act 2
2.0 PROJECT DESCRIPTION 4
2.1 Location 4
2.2 Key features of the Proposed Project 4
2.2.1 Demolition Components 4
2.2.2 Construction Components 7
2.2.3 Marina Wharfhead Repairs: 7
2.3 Objectives 7
3.0 METHODS 8
4.0 HABITAT DESCRIPTION AND FISH SPECIES PRESENT 9
4.1 General Characteristics of the Project Site 9
4.2 Physical Characteristics of the Project Site 10
4.3 Biological Characteristics of the Project Site 10
4.3.1 Intertidal Environment 10
4.3.2 Subtidal Environment 11
4.3.3 At-Risk Marine Species and Habitats 14
4.3.4 Terrestrial Vegetation 15
4.3.5 Birds 15
4.3.6 Wildlife 15
4.3.7 At-Risk Terrestrial Species and Habitats 16
5.0 PROJECT COMPONENTS AND MECHANISMS WITH POTENTIAL TO AFFECT FISH AND FISH HABITAT 18
5.1 Potential Effects of the Proposed Project on Fish and Fish Habitat 18
6.0 MEASURES TO AVOID OR MITIGATE EFFECTS TO FISH, FISH HABITAT AND AT-RISK SPECIES 20
6.1 Timing Windows 20
6.2 Recommended Strategies for Minimizing Disturbance to Fish, Wildlife and Habitat 20
6.3 Recommended Strategies for Mitigation of Potential Adverse Effects on Water Quality 21
6.4 Recommended Mitigation for Avoiding/Managing Spills and Contaminants 21

7.0 EFFECTS ASSESSMENT 22
7.1 Assessment Approach for Residual Effects 22
7.2 Harmful Alteration, Disruption or Destruction of Fish Habitat 24
7.3 Assessment Summary 26
8.0 CLOSURE 26
9.0 LITERATURE CITED 27

LIST OF TABLES (WITHIN TEXT)

Table 1 Climate Summary 10
Table 2 At-Risk Marine Species that May Occur at or near the Project Site 14
Table 3 At-Risk Terrestrial Species that May Occur at or near the Project Site 16
Table 4 Direct and Indirect potential Impacts of the Project 18
Table 5 Spatial Extent of Effects 23
Table 6 Habitat Sensitivity 23
Table 7 Summary of Affected Fish Habitats 24
Table 8 Effects Matrix of Project Components with the Residual Effects 25

LIST OF FIGURES (WITHIN TEXT)

Figure 1 Local Area Map showing the Project Site 3
Figure 2 Project Infrastructure Components 4
Figure 3 Rockfish Conservation Area 17 (RCA 17) nearest to the Project Site (to the north) (DFO 2018) 9
Figure 4 Subtidal Habitat Map of the Project Site 13

LIST OF PHOTOS (WITHIN TEXT)

Photo 1 Shipyard building with deteriorated timber pilings to be removed 5
Photo 2 Existing rip rap at Travel Lift pier 6
Photo 3 Deteriorated Stores Deck structure to be removed and replaced 6
Photo 4 Mid to high intertidal areas at the Project Site A) to the southwest, and B) to the northeast. 11
Photo 5 A) Predominant soft benthic substrates throughout the Site, and B) abundance of shell debris in shallow water at the southwest portion of the Site 12
Photo 6 Sparse eelgrass (*Zostera marina*) at the Project Site 12

LIST OF APPENDICES

Appendix A Structural General Arrangement Plan
Appendix B Stores Deck Demolition Plan
Appendix C Travel Lift Rip Rap
Appendix D Store Deck Construction Plan

1.0 INTRODUCTION

A condition assessment (Ausenco 2018) at the Silva Bay Marine Resort on Gabriola Island, British Columbia, concluded that existing marina infrastructure is in a state of advanced deterioration and needing replacement. The Project Site is located at Silva Bay, Gabriola Island (Figure 1). Geotechnical investigations at the Project Site were undertaken in March 2019. Following the recommendations of the condition assessment, Silva Bay Marine Resort proposes to remove and, where possible, repair the deteriorated infrastructure.

Silva Bay Marine Resort retained Hemmera Envirochem Inc. (Hemmera) to undertake an Aquatic Effects Assessment (AEA) to determine if demolition, repair and replacement works would affect fish, fish habitat or aquatic species at risk.

1.1 Proponent Contact Information

Silva Bay Marine Resort
3383 South Road
Gabriola, BC V0R 1X7
http://www.silvabay.com

Contact Information:

Dean Chen, Operations Manager
Office: (250) 247-8662
Email: dean.chen@silvabay.com

1.2 Regulatory context

1.2.1 Fisheries Act

The *Fisheries Act* (FA) is the main federal law governing fisheries in Canada. The purpose of the Act (Section 2.1) is to provide a framework for:

a. the proper management and control of fisheries; and,
b. the conservation and protection of fish and fish habitat, including by preventing pollution.

Fish habitat, as defined by the FA under Subsection 2(1) is:

> *"water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas"*

The fish and fish habitat protection provisions apply to all fish and fish habitat throughout Canada.

The Fish and Fish Habitat Protection and Pollution Prevention provisions of the Act include the following:

- a prohibition against causing the death of fish, by means other than fishing (section 34.4)
- a prohibition against causing the Harmful Alteration, Disruption or Destruction of fish habitat (section 35)

- a framework of considerations to guide the Minister's decision-making functions (section 34.1)
- ministerial powers to ensure the free passage of fish or the protection of fish or fish habitat with respect to existing obstructions (section 34.3)

Subsection 34.4(2)(b) and 35(2)(b) qualifies these prohibitions and allows for the authorization of harmful impacts to fish and fish habitat by the Minister of Fisheries and Oceans.

DFO applies a risk-based approach when evaluating the impacts of works, undertakings or activities on fish habitat. Harmful Alteration, Disruption or Destruction (HADD) is defined as any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish.

DFO's Fisheries Protection Policy Statement (http://www.dfo-mpo.gc.ca/pnw-ppe/policy-politique-eng.html) provides direction regarding the FA. The goal of the Fish and Fish Habitat Protection Policy Statement is to provide a framework for the conservation and protection of fish and fish habitat.

Proponents of works, undertakings, or activities taking place in or near water may harmfully impact fish or fish habitat are expected to:

- understand the types of harmful impacts their works, undertakings, or activities are likely to cause
- take measures to avoid harmful impacts, including following relevant standards, codes of practice, or regulations
- request an exception (Authorization Concerning Fish and Fish Habitat Protection Regulations) to the section 34.4 and 35 prohibitions when it is not possible to avoid harmful impacts to fish and fish habitat.

1.2.2 Species at Risk Act

Federally, the *Species at Risk Act* (SARA) prohibits the killing, harm, harassment, and capture of a species listed on Schedule 1 of SARA as *Extirpated*, *Endangered*, or *Threatened* as per Sections 32 of SARA. Additional provisions are contained in SARA that prohibit the damage or destruction of the residence of one or more individuals listed on Schedule 1 of SARA (Section 33). Furthermore, the destruction of critical habitat of listed species as identified in the recovery strategy or action plan for that species is prohibited under Section 58(1) of SARA.

Furthermore, proponents are required to ensure that their actions conform to all other statutory requirements, such as federal, provincial, territorial or Indigenous legislation.

Silva Bay Marine Resort
Silva Bay, Gabriola Island, BC

Project Site

Project Location

Legend

Site Boundary

Parcel Boundary

Notes

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "street-view" document, but a visual aid of the information contained within the referenced Report, it is intended to be used in conjunction with the maps of surface and foreshore described therein.

Sources

- Cadastre Information Request under the Open Government Licence - Regional District of Nanaimo & Islas Colorado
- Site Boundary: Survey Plan of District Lot 2088, 2100, & 2101, Texas Land Recording (2018).
- Aerial Imagery: ESRI World Imagery, 2017
- Land Boundary: ESRI World Topographic Map

N

1:1,250

Meters

NAD 1983 UTM Zone 10N

Page Size 11" x 17"

183089-01	Production Date: May 2, 2019	Figure 1

Hemmera

Silva Bay Marine Resort

2.0 PROJECT DESCRIPTION

2.1 Location

The Project Site is located on the southeastern shore of Gabriola Island, in Silva Bay, and includes an upland marina facilities area, a shipyard, and approximately 1067 metres (3500 feet) of moorage space over four floats (Figure 1). Key infrastructure components of the marina included in the Project include the shipyard building, travel lift pier, and stores deck (Figure 2).



Figure 2 Project Infrastructure Components

Surrounding land and water uses includes residential properties and recreational boating and fishing.

2.2 Key features of the Proposed Project

Proposed Project Activities relevant to the AEA include demolition of existing, deteriorated infrastructure components and construction of some replacement infrastructure components.

2.2.1 Demolition Components

Shipyard building:

Demolition and removal of the Shipyard building superstructure and substructure includes:

- Removal of 60 deteriorated creosote treated timber piles (30 cm diam.).
- Removal of 356 m² shipyard building.

For the detailed design of the shipyard building structures to be removed, see **Appendix A.**

Travel lift pier:

The travel lift pier was deemed unsafe for public access during the condition assessment due to deterioration of timber structures. Existing structures will be demolished and removed from site. The existing timber bulkhead and support piles and retaining wall vertical logs will remain in place for structural support. **(Appendix A).** Components to be removed include:

- 31 vertical creosote treated timber piles of 30 cm diam.
- Top of travel lift pier (56 m^2 area).

Stores Deck:

Demolition and removal of the stores deck includes:

- Removal of 30 x 30 cm diam. deteriorated creosote treated timber piles (15 in the intertidal area, 15 in the upland).
- Decking area of ~220 m^2.

For the detailed design of the existing stores deck structures to be demolished, see **Appendix B.**



Photo 1 Shipyard building with deteriorated timber pilings to be removed



Photo 2 Existing rip rap at Travel Lift pier



Photo 3 Deteriorated Stores Deck structure to be removed and replaced

2.2.2 Construction Components

Travel lift pier:

No new construction is planned for the travel lift pier. When the existing infrastructure is removed, an existing small area of rip rap (approximately 6 m²) (Photo 2) will be supplemented with additional rip rap to increase the stability of an exposed timber retaining wall (Appendix C). The existing rip rap will be incorporated into the final design.

- Addition of 264 m³ of new rip rap armouring over an area of 197 m².

Stores Deck:

A new steel pile and timber deck structure will be constructed to replace the demolished Stores Deck (Appendix D). Components will include:

- Six (6) steel piles of 30 cm. diam. in the intertidal area.
- Nine (9) concrete footings (75 x 75 cm).
- Pile caps, timber stringers and Timber Decking/Guardrails treated with ACZA in accordance with CSA 080.
- Decking area of ~220 m²

2.2.3 Marina Wharfhead Repairs:

- Replacement of six (6) timber piles, like for like.
- Replacement of nine (9) sections of creosote timber stringers and pile caps

Methodologies for demolition and construction activities will be determined through consultation with the contractor and environmental monitor. Installation and construction methods are anticipated to be from barge mounted equipment from the water. Piles are expected to be pulled using a vibratory hammer.

New steel piles for the Stores Deck will be installed using impact driving techniques to set the tip of the pile into the rock. Since the deck is being anchored using footings on the upper portion of the slope, the new piles do not need to be drilled.

2.3 Objectives

The objectives of this AEA include:

- Describing and classifying the intertidal and subtidal environment at, and immediately adjacent to the Project, through background review and an in-field site assessment;
- Assessing potential for adverse effects of the proposed Project activities on fish, fish habitat and aquatic species at risk;
- Identifying mitigation measures to reduce or avoid potentially adverse effects to fish or fish habitat; and,
- Identifying residual adverse effects that may remain following implementation of recommended mitigation measures and determining whether these effects would result in the death of fish, the harmful alteration, disruption or destruction of fish habitat (HADD), or negative effects to aquatic species at risk.

3.0 METHODS

Observational assessment of accessible intertidal and surrounding backshore areas, and drop camera survey of lower intertidal and subtidal areas, were conducted on April 4th, 2019 during a low tide of 2.1 m above Chart Datum (CD) at 12:28 pm to classify biophysical characteristics at the Site. Transect methodology was adapted from Fisheries and Oceans Canada's (DFO) working draft *Marine Foreshore Environmental Assessment Procedure* document (DFO 2002). The geographic scope of the subtidal assessment encompassed the crown tenure (Figure 1). Marine life present was identified to the species level, where possible. Substrates were characterized visually based on size classes presented in DFO (2004):

- Boulder (> 256 mm)
- Cobble (64 mm to 256 mm)
- Gravel (2 mm to 64 mm)
- Sand (0.0625 mm to 2 mm)
- Silt/Mud/Clay (< 0.0625 mm)

Information related to the biophysical conditions at the Project Site was obtained from the following sources:

- Review of available ortho-imagery (Google Earth) to determine habitat types and quality;
- Review stream and salmon habitat through Habitat Wizard;
- Review of known Species at Risk occurrences through iMap BC (iMap BC 2016); and,
- On-line databases:
  - BC Conservation Data Centre (BC CDC 2002);
  - Committee on the Status of Endangered Wildlife in Canada (COSEWIC 2003);
  - Sensitive Habitat Inventory and Mapping database (SHIM 2013);
  - BC Species and Ecosystems Explorer database (BC Ministry of Environment 2013); and,
  - E-fauna BC database (eFauna 2016).

Note that this assessment was conducted to address portions of the *Fisheries Act* and the *Species at Risk Act*; we have also included a description of existing conditions for wildlife species with potential to occur at the Site.

4.0 HABITAT DESCRIPTION AND FISH SPECIES PRESENT

4.1 General Characteristics of the Project Site

Gabriola Island lies in Fisheries Management Area 17, subarea 10 and due to the risk of sanitary and biotoxin contamination, bivalve shellfish harvesting is closed to all species except for butter clam, littleneck clam, Manila clam, mussels and oysters; however, shellfish harvesting in Silva Bay is permanently closed throughout the year (DFO 2018).

The nearest Rockfish Conservation Area (RCA) to the Project Site is approximately 1.3 km toward the southeast, in the Gabriola Passage (Figure 3, Site not shown on figure). Harvesting rockfish within the RCA is prohibited, and recreational fishing is restricted to hand picking invertebrates, harvesting crab and shrimp by trap, and smelt by gillnet (DFO 2018). Commercial fishing within the RCA is restricted to harvesting crab and prawns by trap, salmon and herring by seine or gillnet, sardine and smelt by gillnet, and krill and groundfish by mid-water trawl (DFO 2018).

A search using Habitat Wizard indicated that there are no freshwater streams discharging within 1.2 km of the Project Area. The nearest salmon bearing streams to the Project Area are the Nanaimo River and Holden Creek, located approximately 14 km northwest and 11 km southwest respectively (HabWiz 2018). There are no salmon bearing streams documented on Gabriola Island.

Recreational fishing for Dungeness (*Metacarcinus magister*) and red rock (*Cancer productus*) crab occurs in the subtidal zone at Silva Bay.

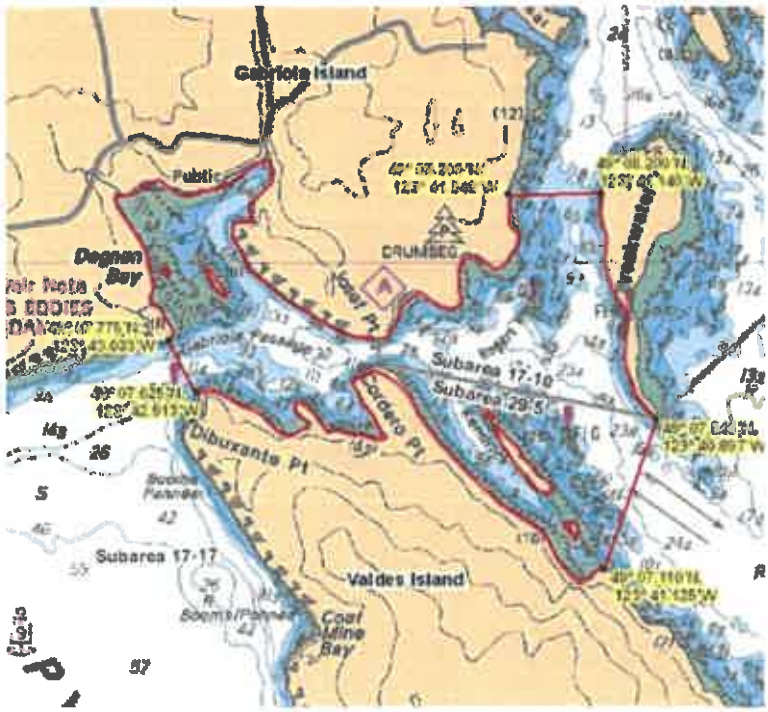


Figure 3 Rockfish Conservation Area 17 (RCA 17) nearest to the Project Site (to the north) (DFO 2018)

4.2 Physical Characteristics of the Project Site

The Project Site is in the Coastal Douglas Fir moist maritime (CDFmm) biogeoclimatic zone (CMN 2013). The CDFmm occurs at elevations <150 m above sea level and typically has warm, dry summers and mild, wet winters; mean annual temperature is 9.2 to 10.5°C and mean annual precipitation ranges from 647 to 1263 mm (Nuszorfer et al. 1991).

The Project is situated within the Pacific Maritime climate zone. The highest runoff occurs during the winter months, and lowest runoff generally occurs in late August through September (Ecological Framework of Canada 2016). Weather and climatic conditions for the area are summarized in Table 1.

Table 1 Climate Summary

Climate Zone	Pacific Maritime Ecozone
Average Temperature Range	5°C to 20°C
Average Total Annual Precipitation	958 mm
Weather Forecasts	www.weather.gc.ca; www.theweathernetwork.com
Weather Phone (Environment Canada)	604.885.4100
Weather Notices (Environment Canada)	https://weather.gc.ca/marine/region_e.html?mapID=02

(Environment Canada, 2016)

4.3 Biological Characteristics of the Project Site

4.3.1 Intertidal Environment

The narrow intertidal area at the Project Site is highly disturbed. At the southeast portion of the Site, the intertidal area comprises coarse substrates with mixed cobble and boulder (Photo 4A). Refuse and concrete is dispersed throughout the area. A low (<5%) cover of macroalgae colonizes the cobble and boulder substrate, including rockweed (*Fucus gardneri*) and *Acrosiphonia* sp. Invertebrate abundance is very low and limited to a few acorn barnacles (*Balanus glandula*). Shell debris from blue mussels (*Mytilus* sp.), Pacific oysters (*Crassostrea gigas*) and clams (various sp.) are dispersed throughout the intertidal area. The northeast intertidal area is armoured with rip rap, the lower extent being colonized by the same macroalgal species (Photo 4B).



Photo 4 Mid to high intertidal areas at the Project Site A) to the southwest, and B) to the northeast.

4.3.2 Subtidal Environment

The low intertidal and subtidal substrates at the Project Site were fairly homogenous, comprising predominantly sand with some scattered broken shell (clam and Pacific oyster) (**Photo 5A, Figure 2**). The abundance of shell debris increased in shallow water and decreased with increasing water depth (**Photo 5B**). Patches of diatoms coated the benthic substrates, indicating low water flow at the Site. One rock outcrop at the southeast of the Site provided hard substrate for Pacific oysters (**Figure 4**). Two small patches of eelgrass (*Zostera marina*) were observed at two distinct locations within the tenure area (**Figure 4**). Eelgrass is important because it provides a number of important ecosystem functions, including foraging areas and shelter to young fish and invertebrates, food for migratory waterfowl and spawning surfaces for species such as Pacific herring (*Clupea pallasii*). By trapping sediment, stabilizing the substrate, and reducing the force of wave energy, eelgrass beds also reduce coastal erosion (NOAA Fisheries 2014). Abundance was low (<1 per m^2 at the south and <1 per $3m^2$ at the north) (**Photo 6**). The different habitat types at the Site are shown in **Figure 4**.

The unconsolidated substrates at the Site are preferred habitat for crab species and invertebrate burrows were evident throughout the Site. A few (n=4) Dungeness crab (*Metacarcinus magister*) were observed during the assessment of the Project Site. Other invertebrate species were limited to a few (n=3) ochre sea stars (*Pistaster ochraceous*) on bottom substrates.

Macroalgal abundance was very low and limited to small patches of sea lettuce (*Ulva* sp.) attached to shell fragments dispersed throughout the Site. No kelp species were present, and the lack of hard substrate indicates that productivity at the Site would not increase significantly during the late spring or summer.

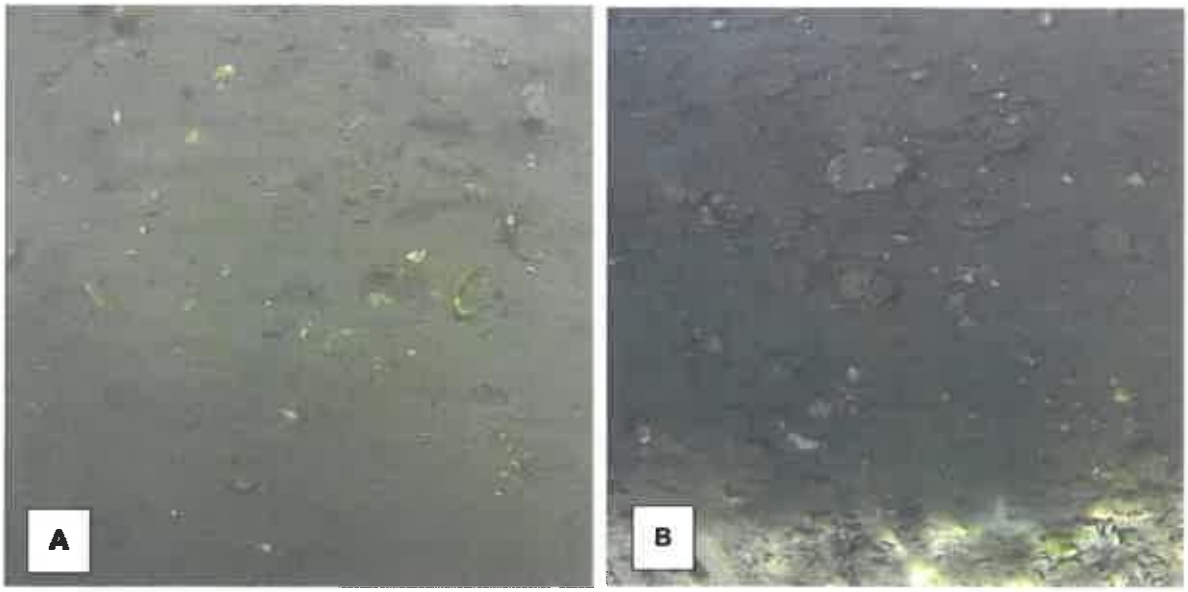


Photo 5 A) Predominant soft benthic substrates throughout the Site, and B) abundance of shell debris in shallow water at the southwest portion of the Site



Photo 6 Sparse eelgrass (*Zostera marina*) at the Project Site


Silva Bay Marine Resort
Silva Bay, Gabriola Island, BC
Habitat Map
Legend
Site Boundary
Parcel Boundary
Habitat Types
Soft Bend
Rock Outcrop
Eelgrass
Dense Shell
Notes
1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand alone" document, but a visual aid of the information contained within the enhancement Report. It is intended to be used in conjunction with the scope of services and limitations described therein.
Sources
- Cadastre Information licensed under the Open Government License - Regional District of Nanaimo & British Columbia
- Site Boundary: Survey Plan of District Lot 2048, 2108, & 2191, Texas Land Recording (2018).
- Aerial Image: ESRI World Imagery, 2017
N
1:1,000
Meters
NAD 1983 UTM Zone 10N
Page Size: 11" x 17"
183209-01
Production Date: May 9, 2019
Figure 2
Hemmera
Silva Bay Marine Resort

The dock and piling structures hosted typical fouling communities, blue mussel (*Mytilus* sp.), *Ulva* sp., non-native wire weed (*Sargassum muticum*), rock weed (*Fucus gardneri*), hydroids, ochre stars (*Pisaster ochraceous*), acorn barnacles and plumose anemones (*Metridium farcimen*).

No fish were observed during the assessment. Refuse was distributed on the bottom throughout the Site.

4.3.3 At-Risk Marine Species and Habitats

The Conservation Data Centre (CDC) assesses the level that B.C. species or ecological communities are at risk of being lost. Based on that, the CDC assigns a provincial Conservation Status Rank that can be used to set conservation priorities. Based on their conservation status rank, each species and ecosystem is assigned to the red, blue or yellow list to help set conservation priorities and provide a simplified view of the status of B.C.'s species and ecosystems.

The Red list includes species that have been legally designated as Endangered or Threatened under the Wildlife Act (see below), are extirpated, or are candidates for such designation. The Blue List includes species not immediately threatened, but of concern because of characteristics that make them particularly sensitive to human activities or natural events. The Yellow List includes uncommon, common, declining and increasing species (BC Conservation Data Centre 2002).

A search of the BC Conservation Data Centre (BC CDC 2018) identified 14 at-risk marine species with potential to occur at the Project Site, including six mammals, three fish, four birds and one invertebrate (Table 2). Of the species identified, 13 are federally listed under the SARA.

Table 2 At-Risk Marine Species that May Occur at or near the Project Site

Common Name	Scientific Name	SARA[1]	BC List[2]
Marine Mammals			
Harbour Porpoise	*Phocoena phocoena*	Threatened	Blue
Humpback Whale	*Megaptera novaeangliae*	Threatened	Blue
Killer Whale (southern resident population)	*Orcinus orca* pop. 5	Endangered	Red
Killer Whale (west coast transient population)	*Orcinus orca* pop. 3	Threatened	Red
Sea Otter	*Enhydra lutris*	Special Concern	Blue
Steller Sea Lion	*Eumetopias jubatus*	Special Concern	Blue
Birds			
Northern Goshawk	*Accipiter gentilis laingi*	Threatened	Red
Marbled Murrelet	*Brachyramphus marmoratus*	Threatened	Blue
Ancient Murrelet	*Synthliboramphus antiquus*	Special Concern	Blue
Double-crested Cormorant	*Phalacrocorax auritus*	None	Blue

Common Name	Scientific Name	SARA[1]	BC List[2]
Fish			
Green Sturgeon	*Acipenser medirostris*	Special Concern	Red
Rougheye Rockfish	*Sebastes aleutianus*	Special Concern	None
Yelloweye Rockfish	*Sebastes ruberrimus*	Special Concern	None
Invertebrates			
Olympia Oyster	*Ostrea conchaphila*	Special Concern	Blue

Note: [1] SARA listing: 1 = schedule 1, 3 = schedule 3, E = Endangered, T = Threatened, SC = Special Concern, — = no listing.
[2] BC List: Red = Species that are extirpated, endangered, or threatened; Blue = Species of special concern; Yellow = species and ecological communities that are secure.

The Project Site does not overlap with Critical Habitat that has been defined under SARA for the species identified. Gabriola Island waters currently do not comprise critical habitat for Southern Resident Killer Whales under the SARA but are within draft critical habitat for West Coast Transient Killer Whales and is pending formally designation by DFO (Government of Canada 2017). While killer whales are not known from the Site, both Southern Resident Killer Whales and West Coast Transient Killer Whales populations could both occur in the vicinity of the Project (i.e., within Fisheries Management Area 17). Olympia oyster (*Ostrea conchaphila*), listed as a species of Special Concern on Schedule 1 of SARA, has the potential to occur at the Site, but are not historically known from the Site (Stafford 1913b) and were not observed during the survey.

4.3.4 Terrestrial Vegetation

The upland portion of the Project Site adjacent to the water is paved. A narrow strip of ornamental vegetation approximately 5 m long is located at the top of the bank on the northeast portion of the Site.

4.3.5 Birds

Glaucous-winged gulls (*Larus glaucescens*) were observed during the site assessment. While not observed at the Site, Canada geese (*Branta canadensis*) and great blue heron (*Ardea herodias*) may occur at the Site. Great blue heron are listed under the *Species at Risk Act* as species of Special Concern (Table 3). The Site may provide roosting habitat for marine/intertidal foraging species, as well as foraging habitat for insectivorous birds. The general nesting period that covers most federally protected migratory bird species typically extended from early as mid-March and to late August (Environment and Climate Change Canada 2017).

4.3.6 Wildlife

No wildlife species were observed at the Project Site during the assessment. The riparian backshore may provide potential habitat for species that forage in intertidal areas. Possible species include mink (*Mustela vison*) and raccoon (*Procyon lotor*).

4.3.7 At-Risk Terrestrial Species and Habitats

A search of the BC Conservation Data Centre (CDC) (BC CDC 2016) identified a list of 32 at-risk terrestrial species with potential to occur in suitable sites in the vicinity of the Project, which was refined to a list of 29 species based on professional knowledge of the Project Site and species' habitat requirements: 19 birds, six mammals and four reptiles and amphibians. Of the species identified, 14 are federally listed under the *Species at Risk Act* (SARA).

Table 3 At-Risk Terrestrial Species that May Occur at or near the Project Site

Scientific Name	English Name	BC List[1]	SARA[2]
BIRDS			
Short-billed Dowitcher	Limnodromus griseus	Blue	--
Northern Goshawk	*Accipiter gentilis laingi*	Red	Threatened
Great Blue Heron	*Ardea herodias fannini*	Blue	Special Concern
Short-eared Owl	*Asio flammeus*	Blue	Special Concern
American Bittern	*Botaurus lentiginosus*	Blue	--
Rough-legged Hawk	*Buteo lagopus*	Blue	--
Red Knot	*Calidris canatus*	Red	1-E/T
Common nighthawk	*Chordeiles minor*	Yellow	Threatened
Olive-sided Flycatcher	*Contopus cooperi*	Blue	Threatened
Black Swift	*Cypseloides niger*	Blue	
Peregrine Falcon	*Falco peregrinus pealei*	Blue	Special Concern
Northern Pygmy-Owl	*Glaucidium gnoma swarthi*	Blue	--
Barn Swallow	*Hirundo rustica*	Blue	--
Western Screech-Owl	*Megascops kennicottii kennicottii*	Blue	Special Concern
Band-tailed Pigeon	*Patagioenas fasciata*	Blue	Special Concern
Vesper Sparrow	*Pooecetes gramineus affinis*	Red	Endangered
Purple Martin	*Progne subis*	Blue	--
Western Meadowlark (Georgia Depression population)	*Sturnella neglecta*	Red	--
Barn Owl	*Tyto alba*	Red	--
WILDLIFE			
Mammals			
Townsend's Big-eared Bat	*Corynorhinus townsendii*	Blue	--
Vancouver Island Marmot	*Marmota vancouverensis*	Red	--
Ermine	*Mustela erminea anguinae*	Blue	--
Keen's Myotis	*Myotis keenii*	Blue	--
Little Brown Myotis	*Myotis lucifugus*	Yellow	Endangered
American Water Shrew	*Sorex navigator brooksi*	Red	--

Scientific Name	English Name	BC List[1]	SARA[2]
Reptiles and Amphibians			
Western Toad	*Anaxyrus boreas*	Blue	Special Concern
Wandering Salamander	*Aneides vagrans*	Blue	--
Painted Turtle - Pacific Coast Population	*Chrysemys picta*	Red	Endangered
Northern Red-legged Frog	*Rana aurora*	Blue	Special Concern

Note: [1] BC List: Red = Species that are extirpated, endangered, or threatened; Blue = Species of special concern; Yellow = species and ecological communities that are secure.
[2] SARA listing: 1 = schedule 1, 3 = schedule 3, E = Endangered, T = Threatened, SC = Special Concern, -- = no listing.

The Project Site does not overlap with Critical Habitat as defined under SARA for the species identified. Based on data available from iMap BC and eFauna (2016), no known occurrences of vertebrate or invertebrate species at-risk are found within the search radius of 1 km of the Project Site. Given that the upland portion of the Site is paved and lacking natural vegetation, it is unlikely that any of the wildlife species identified in Table 3 would occur there. At-risk marine species (Table 2) that have potential to use riparian areas at the Project Site as perching or roosting habitat are Brandt's cormorant (*Phalacrocorax penicillatus*), double-crested cormorant (*Phalacrocorax auritus*) and Caspian tern (*Hydroprogne caspia*).

5.0 PROJECT COMPONENTS AND MECHANISMS WITH POTENTIAL TO AFFECT FISH AND FISH HABITAT

This section describes the potential effects identified from Project Activities that have the potential to affect fish or fish habitat and/or have the potential to affect listed at-risk species. Where applicable, mitigation measures are prescribed for those potential effects, and anticipated residual effects are summarized. Project components that may cause the harmful alteration, disruption or destruction (HADD) of fish and fish habitat, as defined under the *Fisheries Act*, are outlined in Table 4.

5.1 Potential Effects of the Proposed Project on Fish and Fish Habitat

The proposed Project has the potential to cause HADD to fish and fish habitat through:

- Direct HADD of benthic substrate through piling, addition of rip rap and concrete footings.
- Temporary disruption to intertidal fish and fish habitat, interstitial organisms, wildlife and birds by heavy equipment noise.
- Introduction of suspended sediment from pile driving and demolition activities.
- Introduction of contaminants entering the marine environment from Project-related activities such as piling, resuspension of sediments, concrete work and potential spills.

Table 4 Direct and Indirect potential impacts of the Project

Project Component	Project Activity	Habitat	Deconstruction		Construction	
			Direct effect (footprint)	Indirect effect (shading)	Direct effect (footprint)	Indirect effect (shading)
Shipyard building	Pile removal (60 deteriorated creosote treated timber piles of 30 cm diam.)	Intertidal mud/sand	4.24 m^2	N.A.	N.A.	N.A.
	Roof removal	Intertidal mud/sand	N.A.	356 m^2	N.A.	N.A.
Travel lift pier	Pile removal (31 vertical creosote treated timber piles of 30 cm diam.)	Intertidal mud/sand	2.2 m^2	N.A.	N.A.	N.A.
	Removal of top of travel lift pier	Intertidal mud/sand	N.A.	56 m^2	N.A.	N.A.
	Rip rap armouring	Intertidal mud/sand	N.A.	N.A.	197 m^2	N.A.

Project Component	Project Activity	Habitat	Deconstruction		Construction	
			Direct effect (footprint)	Indirect effect (shading)	Direct effect (footprint)	Indirect effect (shading)
Stores deck	Pile removal (15 vertical creosote treated timber piles of 30 cm diam.)	Intertidal rock	1.06 m^2	N.A.	N.A.	N.A.
	Pile removal (15 vertical creosote treated timber piles of 30 cm diam.)	Upland	1.06 m^2	N.A.	N.A.	N.A.
	Pile install (6 steel piles of 30 cm diam.)	Intertidal rock	N.A.	N.A.	0.42 m^2	N.A.
	Addition of nine (9) concrete footings (75 x 75 cm)	Upland	N.A.	N.A.	5.06 m^2	N.A.
	Decking area	Intertidal rock	N.A.	~73 m^2	N.A.	~73 m^2
		Upland	N.A.	~146 m^2	N.A.	~146 m^2
Total habitat gain/loss			+8.56 m^2	+632 m^2	-202.5 m^2	-220 m^2

The removal of creosote treated, deteriorated timber piles will result in a 6.44 m^2 decrease in direct piling footprint on intertidal sand/mud substrates and a 0.64 m^2 piling footprint decrease on intertidal rock (**Table 7**), providing a net benefit to the marine environment through the removal of a contaminant source and making altered habitat back to a natural state.

Any subsurface or interstitial organisms, and sessile organisms colonizing existing timber structures, will be subject to disturbance and mortality during removal of timber piles. Mobile species such as crabs, fish, and birds are expected to move away from the area of activity due to disturbance by construction equipment (e.g., noise, vibrations). No marine mammals are expected at the Project Site. Disturbance of mobile species is expected to be temporary and restricted to on-site Project Activities.

Disruption of shoreline/riparian vegetation (e.g., cutting/clearing) is not considered in the assessment due to the lack of vegetation within the Project Site.

The potential exists for contaminants (i.e., hydrocarbons, concrete) to enter the marine environment from Project-related equipment and vessel traffic on Site. Accidents and malfunctions during vessel and other marine operations further increase the potential for spills and leaks of deleterious substances into the marine environment. No effects of barotrauma or stranding of fish are anticipated as the Project Site comprises soft substrates. No permanent alteration of fish habitat is expected to occur from the proposed Project Activities.

Project related effects are expected to be temporary (short duration), localized, and of small scale. Effects will be mitigated by following recommended guidelines and Best Management Practices (BMPs) outlined in **Section 6.0**. and in the project CEMP.

6.0 MEASURES TO AVOID OR MITIGATE EFFECTS TO FISH, FISH HABITAT AND AT-RISK SPECIES

The recommended mitigation measures below are intended to address and mitigate potentially adverse effects of the proposed Project on the fish habitat at the Project Site identified in **Section 5.1**.

6.1 Timing Windows

Through consideration of the seasonal distribution and abundance of fish and the timing of their sensitive life stages and processes (e.g., reproductive periods, migration of Pacific salmon), DFO identifies periods of lower (least) risk for the timing of in-water and near-water works. Generally, in-water Project Activities should be timed to occur within DFO's least risk work windows, to avoid or limit possible adverse effects on fish and aquatic species during sensitive life history stages. The Project Site lies within DFO Fisheries Management Area 17-10. Timing windows of least risk for this area are:

- Summer Window: **June 1 - September 1**
- Winter Window: **December 1 - February 15**

6.2 Recommended Strategies for Minimizing Disturbance to Fish, Wildlife and Habitat

<u>For Pile Removal:</u>

- An exclusion device such as protective netting or geotextile material suspended in the water column around the pile may be required to prevent access to fish and other marine fauna.
- Appropriate erosion and sediment control measures, including use of silt curtains if necessary, should be in place during pile removal and install activities.

<u>For pouring concrete:</u>

As cement and concrete are toxic to aquatic organisms, especially fish, any concrete work should follow the "Guide to the Code of Practice for the BC Concrete and Concrete Products Industry – Version 6", particularly Chapter 7 – Authorized Discharge: Effluent and Surface and Marine Water Quality (Millennium EMS Solutions Ltd. 1993).

- All concrete work shall conform to the requirements of CSA A23.1 and A23.2 (Concrete Materials and Methods of Concrete Construction/Methods of Test for Concrete).
- To prevent release of deleterious substances, ensure that all works involving the use of concrete, cement, mortars, and/or other Portland cement or lime-containing construction materials will not deposit (directly or indirectly) sediments, debris, concrete, leachate concrete fines, wash or contact water into or about any watercourse.
- Isolate pour area and/or install caisson.
- Cast in place concrete must remain isolated from water inside clean, sealed formed structures until cured (approximately 48-72 hours), as concrete leachate is highly toxic to fish and other aquatic life.
- Pour concrete at low tide.
- pH testing of isolated water for changes in acidity.
- Ensure a carbon dioxide (CO_2) tank with regulator, hose and gas diffuser is readily available during concrete work to neutralize pH levels should a spill occur. Staff must be trained in its proper use.

- Dust control methods in place to prevent particulates entering the marine environment.
- No wastewater or wood discharged into the marine environment.
- All equipment will be cleaned offsite away from storm drains.

6.3 Recommended Strategies for Mitigation of Potential Adverse Effects on Water Quality

Monitor sediment generation resulting from piling. If piling results in the generation of excessive amounts of fine sediment, stop work, determine the cause, and adjust work procedures (i.e., through containment). Have surface protection measures available on Site (e.g., silt fence) to be used as required.

6.4 Recommended Mitigation for Avoiding/Managing Spills and Contaminants

Heavy equipment working in the marine environment should be clean, in good working order and, where practical, use biodegradable lubrication and hydraulic fluids. Store the drill rig above the HWM and put spill prevention materials in place (drip trays, absorbent booms, spill pads) to eliminate the potential for leaks to come in contact with the ground or water. Do not store any hazardous materials or fluids with the rig. The work Site and equipment (e.g., drill rig, bob cat) must have emergency spill kits (pads, sorbent booms, etc.) available. The kits shall be suitable for the quantities and types of material stored at the Site and shall contain sufficient materials to contain any leaks resulting from accidents or malfunctions. Site personnel will be trained in the proper use of the kits in case of a spill. All spills to ground and water, will be contained and reported to relevant environmental agencies. All debris and deleterious substances associated with the Project Activities shall be appropriately contained in the immediate work area, collected, and disposed of in accordance with all applicable legislations, guidelines and best management practices.

If the recommended mitigation measures are implemented, it is unlikely that residual adverse effects relating to fish and fish habitat will result from the Project.

If the death of fish, or the Harmful Alteration, Disruption or Destruction of fish habitat is observed, the proponent is required to report to DFO immediately through the DFO-Pacific Observe, Record and Report phone line (toll free) at 1.800.465.4336.

7.0 EFFECTS ASSESSMENT

7.1 Assessment Approach for Residual Effects

The *Fisheries Act* prohibits the death of fish by means other than fishing and sub-lethal effects to fish and aquatic species at risk. In managing the fish habitat resource, DFO interprets the harmful alteration, disruption or destruction of fish habitat as;

> *"Any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life history processes of fish."*

Temporary or permanent changes to fish habitat resulting from a project can directly or indirectly impair the capacity of habitat to support one or more life history processes of fish. Mitigation designed to reduce the potential risk of a project to fish habitat will ensure that fish and fish habitat are conserved and protected.

Residual effects to fish and habitat resulting from the interaction between Project Activities and fish and fish habitat, following the implementation of avoidance and mitigation measures, will be assessed using the criteria defined in **Table 5**. This assessment relies on available scientific literature and field studies, the experience of the assessment team, and follows the guidance provided by DFO's Fish and Fish Habitat Protection Policy Statement (DFO 2019).This assessment will consider effects to fish and the magnitude of effects to habitat by considering;

- The habitat components being affected;
- The spatial extent of the area affected by the project relative to the habitat components in the area;
- The sensitivity of the habitat being affected; and,
- The expected persistence of the effects.

The evaluation will be undertaken in the context of the aquatic ecosystem, considering the habitat components (e.g., substrate, aquatic vegetation, water depth, oxygen, etc.) that support habitat functions (i.e. spawning, rearing, nursing, feeding, migrating) of the relevant fish and will depend on the nature of the affected habitat, the fish species present, their life history and related habitat requirements. The following will be taken into consideration for this assessment of residual harm:

Identification of habitat components: the structural features that support the requisite habitat functions required to meet the life history processes of fish (e.g., spawning, rearing, etc.). Habitat components are used as a proxy for habitat functions. Habitat components (**Section 4.0**) affected by the project will be identified and the most significant species use will be considered. If multiple components are significant to a species, there may be a need to assess multiple habitat components.

Spatial extent: the overlap of the area affected by the project with the habitat component. The affected area is the areas within which all project related activities are likely to occur either directly or indirectly. Once the primary habitat component(s) is selected, a rough estimate of its geographical extent (i.e., area) will be made to approximate the percentage located within the affected area.

The scale considered will include site, local and widespread. They are described below in **Table 5**.

Table 5 Spatial Extent of Effects

Site	Local	Widespread
The affected area overlaps with the habitat component by up to 5% of the area occupied by the habitat component	The affected area overlaps with the habitat component between 5 and 50% of the area occupied by the habitat component.	The affected area overlaps with the habitat component by between 50 and 100% of the area occupied by the habitat component
The affected area overlaps a minor or negligible portion of the habitat component	The affected area overlaps a portion of the area occupied by the habitat component.	The affected area overlaps much of the area occupied by the habitat component.

Habitat sensitivity: habitat and species sensitivity are critical elements when assessing the risk of temporary or permanent change to fish habitat resulting from the project are likely to directly or indirectly impair a habitats capacity to support one or more life processes of fish. The assessment will determine whether affected habitat is of low, moderate or high sensitivity. A determination matrix is presented in Table 6.

Table 6 Habitat Sensitivity

	Low Sensitivity	Moderate Sensitivity	High Sensitivity
Species Resiliency	Species present are resilient to change and perturbation	Species present are moderately resilient to change and perturbation	Species present are highly sensitive to perturbations
Species Dependence on Habitat	Habitat not used by fish for any life stage except occasionally transiting through or feeding in the area	Habitat is suitable and may be used as migratory corridor, rearing or spawning habitat. Habitat characteristics used in a variable way by fish.	Habitat is limited and the fish are dependent on it for survival of the species (e.g., groundwater upwelling zone supporting spawning habitat or deep pools providing the only overwintering habitat). Habitat characteristics used in a specific way by fish.
Habitat Rarity	Habitat is prevalent and widespread with many areas that are similar in features	Habitat is neither widespread or unique, rare or distinct.	Habitat is unique, rare and distinct.
Habitat Resiliency	The habitat is robust, resistant to perturbation or rapidly recovers	The habitat is neither robust nor sensitive, is somewhat resistant to perturbation and recovers at a moderate rate.	The habitat is highly sensitive, easily perturbed, and slow to recover.
Aggregation	Habitat does not support a specific function; fish densities are typically low.	Habitat supports a minimum of one function; fish densities periodically high.	Habitat supports more than one function; fish densities frequently high.
Habitat contribution to Fisheries Productivity	Habitats contribution to fisheries productivity is low. Large amounts of change to the affected species or habitat is expected to have relatively low impacts on fisheries productivity	Habitats contribution to fisheries productivity is moderate. Amount of change to the affected species or habitat is proportional to impacts on fisheries productivity (small change/small impacts; large change/large impacts)	Habitats contribution to fisheries productivity is high. Small amounts of change to the species or habitat is expected to have relatively large impacts on fisheries productivity

	Low Sensitivity	Moderate Sensitivity	High Sensitivity
Abiotic and Biotic Suitability of Habitat	No key structure-providing species (abiotic) in area of WUA.	Key structure providing species is present in location of the WUA but is not a limiting component	Key structure providing species present in location of WUA and is a limiting component
Species at Risk	Not within distribution area of a listed aquatic species at risk.	Within distribution area of an aquatic species at risk, but not in critical habitat. Non-critical habitat of aquatic species at risk that supports their lifecycle functions within their distribution area.	Critical Habitat and/or residence of aquatic species at risk identified in the proposed or final Recovery Strategy or Action Plan. Habitat supporting species of special concern.

Persistence of effects: the length of time needed for an effect to disappear. Assessment is based on three categories:

- Low - weeks
- Moderate – months; and,
- High – more than 1 year.

7.2 Harmful Alteration, Disruption or Destruction of Fish Habitat

With the application of mitigation measures, 197 m² of intertidal sand/mud habitat will be altered to rip rap habitat (Table 7). Indirect impacts (through shading of berth infrastructure) will increase at the Project Site by 412 m². Residual effects to fish and habitat resulting from the interaction between Project Activities and fish and fish habitat are presented in Table 7.

Table 7 Summary of Affected Fish Habitats

Component	Habitat Type	Area of Directly Affected Habitat (footprint)	Area of Indirectly Affected Habitat
Existing infrastructure removal	Intertidal mud/sand	6.44 m²	412 m²
	Intertidal rock	1.06 m²	74 m²
	Upland	1.06 m²	146 m²
	Habitat gain	**8.56 m²**	**632 m²**
New pile installation	Intertidal rock	0.42 m²	74 m²
New footing installation	Upland	5.06 m²	146 m²
Rip rap armoring	Intertidal mud/sand	197 m²	–
	Habitat loss	**202.5 m²**	**220 m²**
	Net habitat loss	**-194 m²**	**+412 m²**

Table 8 Effects Matrix of Project Components with the Residual Effects

Habitat Zone	Description of Pre-Construction Habitat	Effect Type	Area of Habitat Affected (m^2)	Description of Post-Construction Habitat	Spatial extent of effects	Species Resiliency	Species Dependence on Habitat	Habitat rarity	Habitat Resilience	Aggregation	Habitat Contribution to Fish Productivity	Species at-Risk	Persistent Effects
Intertidal	Timber piles	Alteration	6.44	Intertidal soft sediments	Site	Low	Moderate	Low	Low	Low	Low	Low	High
Upland	Timber piles/upland	Alteration	4.0	Concrete footings	Site	Low	Moderate	Low	Low	Low	Low	Low	High
Intertidal	Timber piles/intertidal rock	Alteration	0.42	Steel piles/intertidal rock	Site	Low	Moderate	Low	Low	Low	Low	Low	High
Intertidal	Intertidal mud/sand	Alteration	197	Rip rap	Local	Low	Low	Low	Low	Low	Low	Low	High

* within defined Project Site (Figure 1,2).

7.3 Assessment Summary

Project Activities will result in 6.44 m^2 of intertidal habitat being converted back to a natural state and a contaminant source (creosote) being removed from the marine environment. The replacement steel piles will offset the loss of artificial hard substrate for colonization from the removal of the deteriorated timber piles. Further, shading impacts at the Project Site will be reduced by 412 m^2.

Extension of the rip rap area at the travel lift pier will alter 197 m^2 of sand/mud substrate into vertically complex habitat that will provide hard substrate for colonization and may provide refuge to organisms from predation, thereby increasing productivity at the Project Site. Soft mud/sand intertidal substrate is widespread both at the Site and in the surrounding area and will not be limiting in availability to marine organisms. Impacts of the proposed removal and partial replacement Project are expected to be small and local (confined to the Project Site). Permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish are not expected.

8.0 CLOSURE

This report was prepared by Hemmera for sole benefit and use by Silva Bay Marine Resort. In performing this work, Hemmera has relied in good faith on information provided by others and has assumed that the information provided by those individuals is complete and accurate. This work was performed to current industry standard practice for similar environmental work, in the jurisdiction. The findings presented herein should be considered within the context of the scope of work and Project terms of reference. The conclusions and recommendations contained in this report are based upon the applicable guidelines, regulations, and legislation existing at the time the report was produced; any changes in the regulatory regime may alter the conclusions and/or recommendations.

We sincerely appreciate the opportunity to have assisted you with this project and if there are any questions, please do not hesitate to contact the undersigned by phone at 604.669.0424.

Report prepared by:
Hemmera Envirochem Inc.

ORIGINAL SIGNED

Hilary Evans, B.Sc. (Hons), GIT
Senior Scientist
250.388.3584 (283)
hevans@hemmera.com

Senior reviewed by:
Hemmera Envirochem Inc.

ORIGINAL SIGNED

Laura White, PhD, R.P.Bio.
Project Manager
604.379.2251
lwhite@hemmera.com

9.0 LITERATURE CITED

BC CDC. 2014. BC Species and Ecosystem Explorer. http://a100.gov.bc.ca/pub/eswp/. Accessed 22 April 2019.

BC Conservation Data Centre. 2002. http://www.env.gov.bc.ca/wld/documents/ranking.pdf Accessed 22 April 2019.

BC Marine and Pile Driving Association Contractors. 2003. Best Management Practices for Pile Driving and Related Operations.

BC Ministry of Environment. 2013. BC Species and Ecosystems Explorer. Accessed 16th April 2019 from: http://a100.gov.bc.ca/pub/eswp/

COSEWIC. 2003. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 47 pp. (www.sararegistry.gc.ca/status/status_e.cfm).

DFO. 2019. https://www.dfo-mpo.gc.ca/pnw-ppe/policy-politique-eng.html. Accessed 20 September 2019.

DFO. 2018. http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/sani/a-s-17-eng.html. Accessed 22 April 2019.

DFO. 2013. http://www.pac.dfo-mpo.gc.ca/science/species-especes/shellfish-coquillages/clam-palourde/index-eng.html. Accessed 30 March 2019.

DFO. 2012. Fisheries Act. http://laws-lois.justice.gc.ca. Accessed 22 April 2019.

DFO. 2002. Marine Foreshore Environmental Assessment Procedure. Nanaimo, B.C.

eFauna. 2016. https://ibis.geog.ubc.ca/biodiversity/efauna/. Accessed 22 April 2019.

Environment Canada. 2016. http://climate.weather.gc.ca/climate_normals/results_1981_2010_e.html?searchType=stnProv&lstProvince=BC&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=172&dispBack=0. Accessed 22 April 2019.

Environment and Climate Change Canada. 2017. https://www.canada.ca/en/environment-climate-change/services/birds-canada/migratory-birds-overview.html. Access 22 April 2019.

Habitat Wizard BC (HabWiz). 2018. http://maps.gov.bc.ca/ess/hm/habwiz/ . Accessed January 28, 2019.

Hutton, K.E. and S.C. Samis. 2000. Guidelines to Protect Fish and Fish Habitat from Treated Wood Used in Aquatic Environments in the Pacific Region. Canadian Technical Report of Fisheries and Aquatic Sciences 2314.

iMap BC. 2016. On-line resource http://maps.gov.bc.ca/ess/sv/imapbc/. Accessed 16th March 2019.

Millennium EMS Solutions Ltd. 1993. Ready Mix Concrete Industry – Environmental Code of Practice. Prepared by Envirochem Special Projects Inc. on behalf of Conservation and Protection, Environment Canada, North Vancouver, BC.

NOAA Fisheries. 2014. https://www.westcoast.fisheries.noaa.gov/stories/2014/04_11072014_eelgrass_mitigation.html. Accessed April 21, 2019.

Nuszorfer, F.C., K. Klinka and D. Demarchi. 1991. Ecosystems of British Columbia: coastal Douglas Fir. BC Ministry of Forests, Victoria, BC.

Province of British Columbia. 2017. Wildlife Management Areas. http://www.env.gov.bc.ca/fw/habitat/conservation-lands/wma/

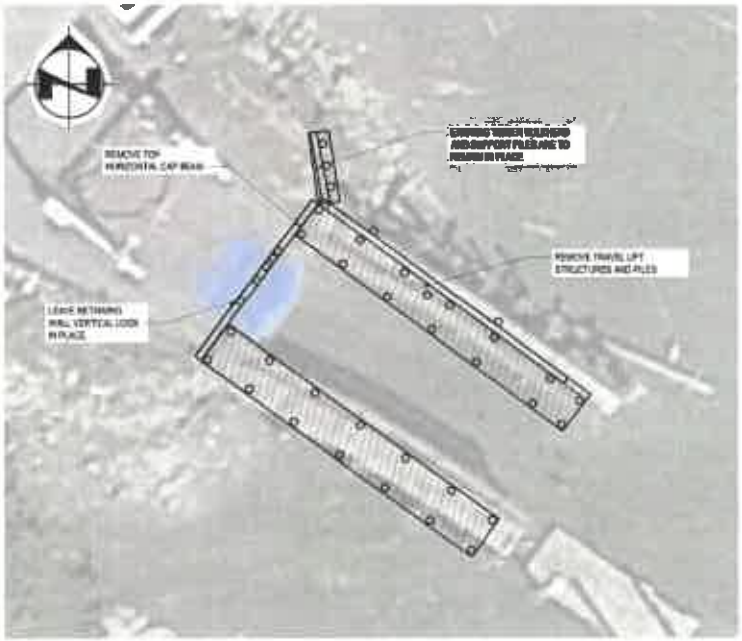
SHIM. 2013. https://www.cmnbc.ca/atlasgallery/shim-sensitive-habitat-inventory-and-mapping/. Accessed 22 April 2019.

Stafford, J. 1913. Canada Commission of Conservation. Committee of Fisheries, Games and Fur-bearing Animals. The Mortimer Co., Ltd. Ottawa ON.

APPENDIX A
Structural General Arrangement Plan



SHIPYARD BUILDING DEMOLITION PLAN



SHIPYARD TRAVEL LIFT DEMOLITION PLAN

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS IN METERS REFERENCE TO GEODETIC DATUM, CONVERTED TO CHART DATUM: 2.00 m, ACCORDING TO THE STICKING
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE [illegible]
5. CONTRACTOR TO REVIEW AND CONFIRM ECONOMY OF DEMOLITION WITH ASSESSED IN THE FIELD PRIOR TO THE START OF DEMOLITION.

LEGEND:

- AREA OF DEMOLITION
- APPROXIMATE EXISTING PILE LOCATION

SCALE = 1:500

SCALE = 1:200

PRELIMINARY

SILVA BAY
RESORT AND MARINA

NO.	REVISION	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	CHKD	ENG APPR
C								
B	BY	SPEED						
A	BY	[illegible]						

DRAWN	LFRANCO	23-07-2020
DES. CHECKED	L.BIRD	23-07-2020
DESIGNED	L.BIRD	23-07-2020
REG. APPR.	A.BURNHAM	23-07-2020
FINAL APPR.	T.DUNDALE	23-07-2020

Ausenco
[illegible], British Columbia, Canada
T +1 [illegible]
W www.ausenco.com

CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
DEMOLITION PLAN
SHEET 1 OF 2

COPYRIGHT © Ausenco

PROJECT No. 103069-01 | SCALE AS NOTED | SIZE A3

DRAWING No. 103069-0000-W-0006 | REV C

APPENDIX B
Stores Deck Demolition Plan



STORES DECK DEMOLITION PLAN
1:25

NOTES

1. DIMENSIONS IN MILLIMETERS, UNLESS NOTED OTHERWISE
2. ELEVATIONS SHOWN REFERENCED TO GEODETIC DATUM. CONVERSION TO CHART DATUM: -3.65 m. ACCORDING TO BM #1 SECTION
3. HORIZONTAL DATUM TO AN ASSUMED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES REF. 103069-000-W-0001 AND 103069-000-W-0002
5. CONTRACTOR TO REVIEW AND CONFIRM BOUNDARY OF DEMOLITION WORK ASSESSED IN THE FIELD PRIOR TO THE START OF DEMOLITION.

LEGEND:

AREA OF DEMOLITION

SCALE 1:100

PRELIMINARY

SILVA BAY
RESORT AND MARINA

REF.	REVISION No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	DWG	CHD	APPD
			2						
			1			REVISED PER CLIENT COMMENTS			
			A			ISSUED FOR CLIENT REVIEW			

DRAWN	A. MARCO	24-Feb-23
DES. CHECKED	L. DYCK	24-Feb-23
DESIGNED	L. DYCK	24-Feb-23
REVIEWED	A. SHERSTOBITOFF	24-Feb-23
FIELD APPR.	T. MUENDEL	24-Feb-23

Ausenco
Vancouver, British Columbia, Canada
T +1 604 684 8021
www.ausenco.com

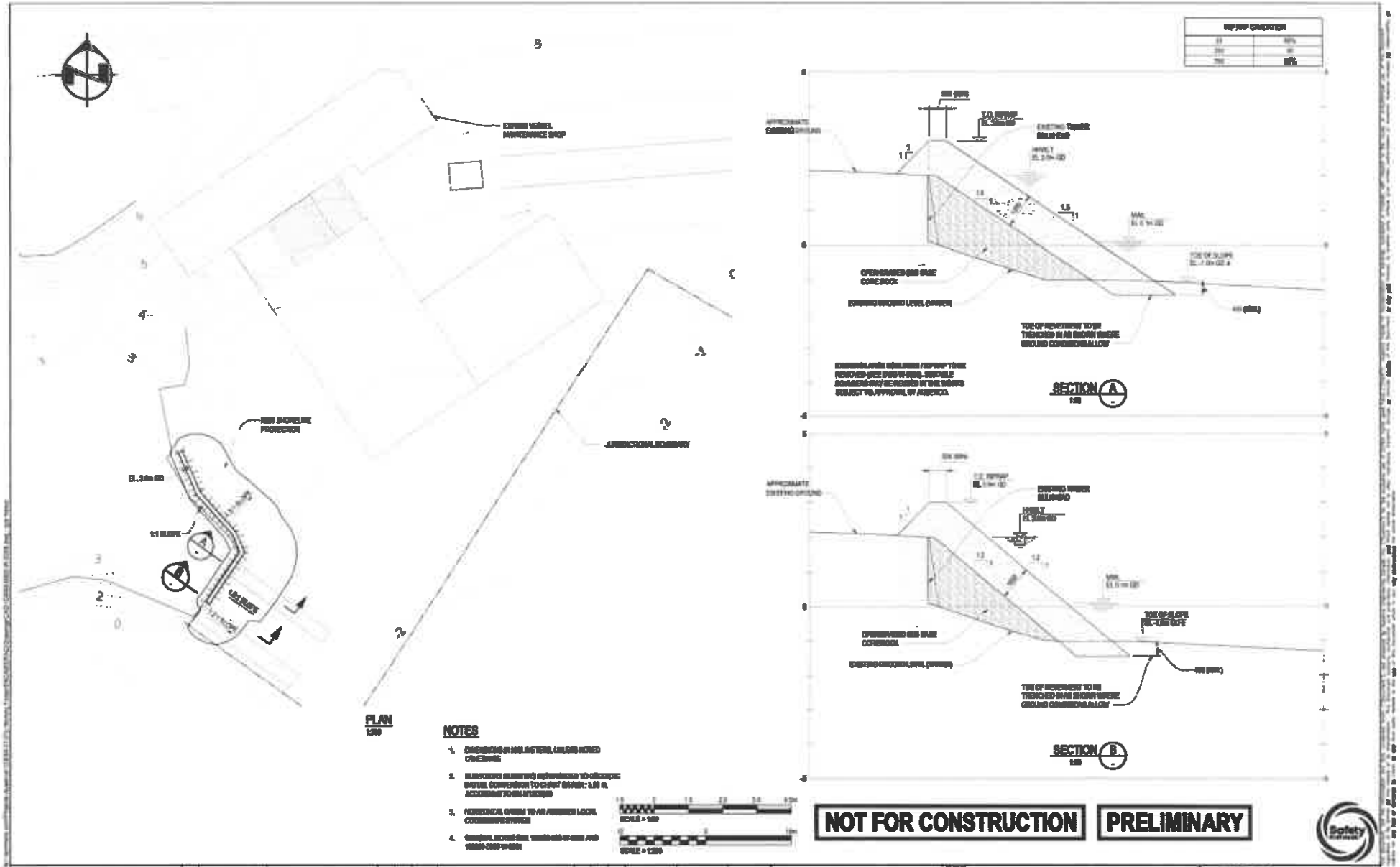
CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
DEMOLITION PLAN
SHEET 2 OF 2

COPYRIGHT © Ausenco

PROJECT No.	SCALE	SIZE
103069-01	AS NOTED	A1
DRAWING No.		REV.
103069-0000-W-0007		C

APPENDIX C
Travel Lift Rip Rap



REV.	DESCRIPTION	REFERENCE/REMARK	No.	BY	DATE	REMARKS/DETAILS	CHKD	APPD
			1	JF	21-04-23	ISSUED FOR REVIEW	JD	JS
			2	AL	21-05-17	ISSUED FOR REVIEW	JD	JS
			A	AL	21-06-04	ISSUED FOR REVIEW	JD	JS
			B	JH	21-06-23	ISSUED FOR REVIEW	JD	JS
			1	JH	21-07-21	ISSUED FOR REVIEW	JD	JS

DRAWN	S.LANCIES	21-07-2021
DWG. CHECKED	L.BIRD	21-07-2021
DESIGNED	L.BIRD	21-07-2021
DES./APPR.	A.SMITHSMAN	21-07-2021
PROJ./APPR.	T.SAUNDERS	21-07-2021

Ausenco

CLIENT: SILVA BAY MARINE RESORT

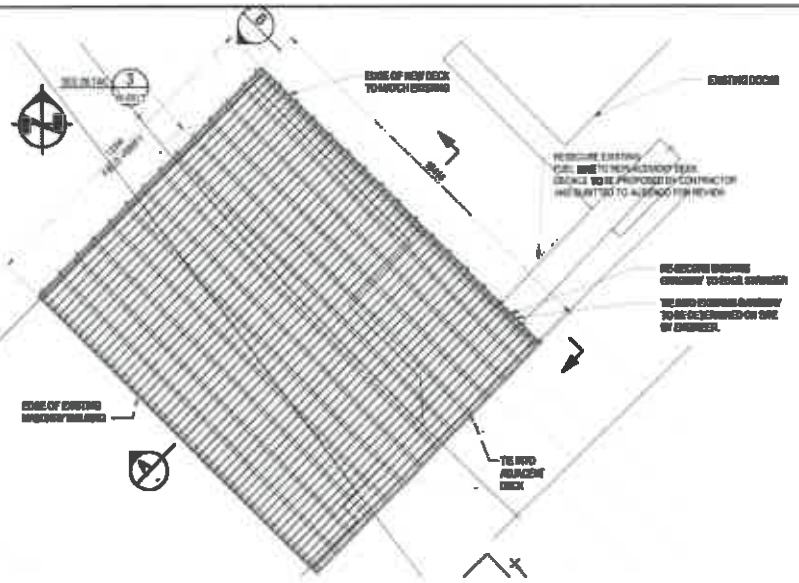
TITLE: SILVA BAY MARINE WORKS
TRAVEL LIFT PIER
RIPRAP SLOPE PROTECTION
LAYOUT

COPYRIGHT © Ausenco

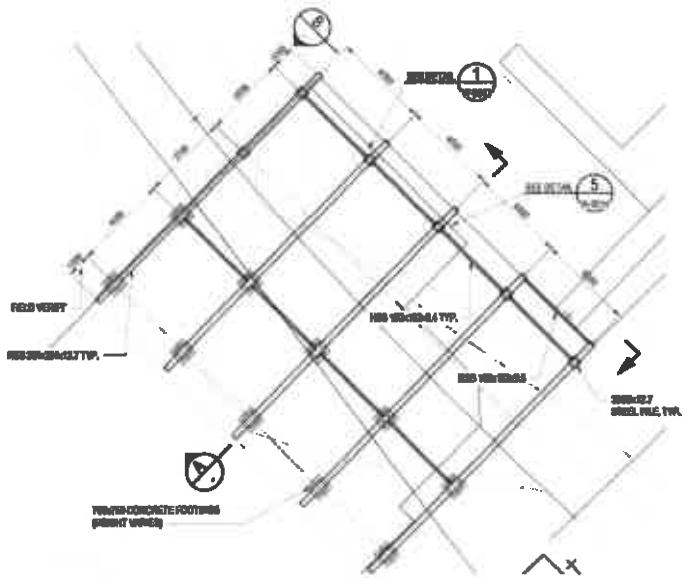
PROJECT No. 103069-01 | SCALE AS NOTED | SIZE A1

DRAWING No. 103069-0000-W-0008 | REV. D

APPENDIX D
Store Deck Construction Plan



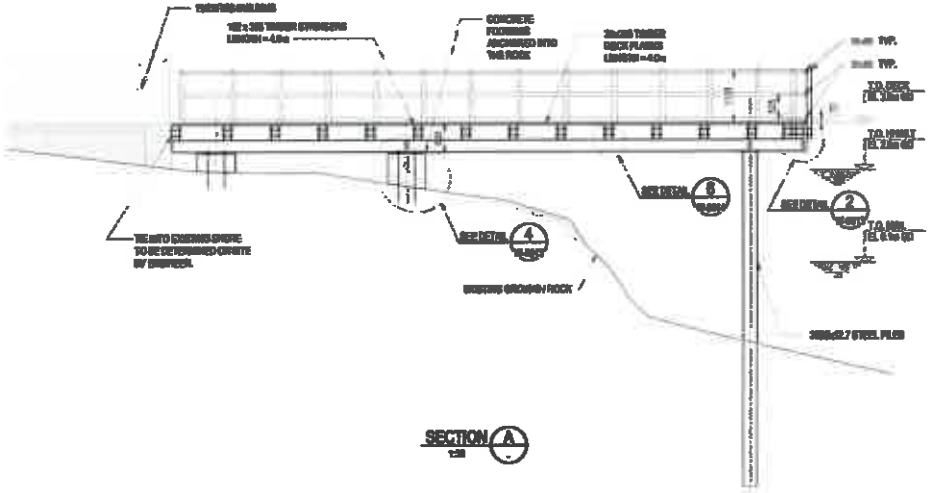
TIMBER DECK LAYOUT



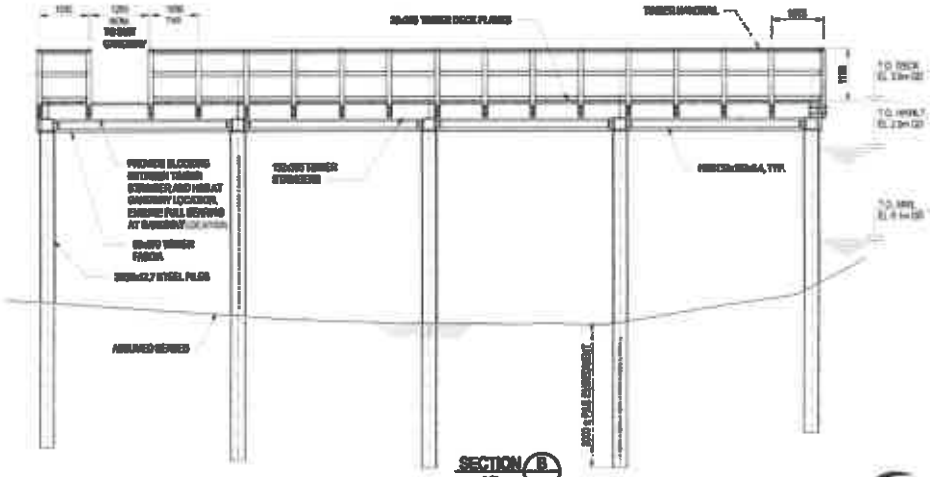
STEEL SUBSTRUCTURE LAYOUT

NOTES

1. DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE
2. ELEVATIONS SHOWN REFERENCED TO GEODETIC DATUM, CONVERSION TO CHART DATUM: 3.65m, ACCORDING TO BM 84/2004
3. HORIZONTAL DATUM TO BE REFERENCED LOCAL COORDINATE SYSTEM
4. GENERAL NOTES SEE
5. REFER TOOMBINS
FOR PILING SIZES AND PILE DETAILS



SECTION A



SECTION B

SCALE = 1:50

SCALE = 1:20

PRELIMINARY

SILVA BAY

REV	DRAWING No.	REFERENCE DRAWING	No.	BY	DATE	REVISION DETAILS	CHKD	ENG	APPD	DESIGN	S.JACKS	23-09-2020
										DWG. CHECKED	S.JACKS	23-09-2020
										DESIGNED	T.DYKES	23-09-2020
										SEAL APPR.	A.MATHESON	23-09-2020
										PROJ. APPR.	T.DUNDALE	23-09-2020

Ausenco

Ausenco
Vancouver, British Columbia, Canada
T +1 604 684 8711
TF www.ausenco.com

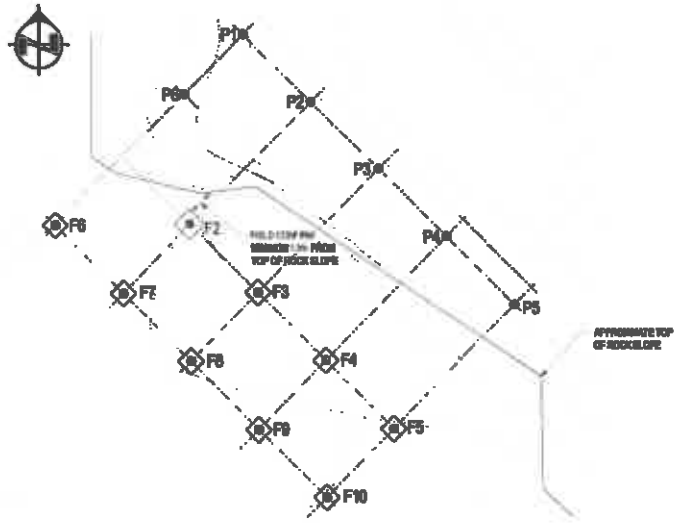
CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
STORES DECK REPLACEMENT
GENERAL ARRANGEMENT

COPYRIGHT © Ausenco

PROJECT No. 103069-01 | SCALE AS NOTED | SIZE A1

DRAWING No. 103069-0000-W-0011 | REV B



PILE AND PEDESTAL LAYOUT
1:200

NOTE: FOR COORDINATES OF PILES AND FOOTINGS, SEE TABLES

CONCRETE FOOTING SCHEDULE

FOOTING No.	EASTING	NORTHING	DIMENSIONS (mm)	ESTIMATED [illegible]	TOP OF FOOTING EL. (m)
F2	4[illegible]570	5[illegible]497	900	1.650	2.370m
F3					
F4					
F5					
F6					
F7					
F8					
F9					
F10					

PILE SCHEDULE

PILE No.	EASTING	NORTHING	PILE DIAMETER (mm)	PILE THICKNESS (mm)	PILE CUT OFF EL. (m)	ESTIMATED SEABED EL. (m)	ESTIMATED PILE TIP EL. (m)
P1							
P2							
P3							
P4							
P5							
P6							
P7							

NOTES

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]

SCALE 1:100

PRELIMINARY

REV	DESCRIPTION	BY	CHK	DATE

DRAWN	S. HUGHES	23.01.2026
DWG. CHECKED	D.BOWER	23.01.2026
DESIGNED	D.BOWER	23.01.2026
DES. APPR.	A.MAYBERRY	23.01.2026
PROJ. APPR.	T.BRENDALE	23.01.2026

Ausenco

CLIENT: SILVA BAY MARINE RESORT

TITLE: SILVA BAY MARINE WORKS
STORES DECK
PILE LAYOUT AND SCHEDULE

COPYRIGHT © Ausenco

PROJECT No. 103069-01 | SCALE AS NOTED | SIZE A1

DRAWING No. 103069-0000-W-0012 | REV B

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2020.1

Schedule "B" – Fisheries and Oceans Canada "Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat" dated September 24, 2020

(PDF document begins on next page)

I hereby certify this to be Schedule "B" which is attached to and forms part of Development Permit No. GB-DP-2020.2.

Signature of Islands Trust Official

August 20, 2021
Date of Issuance

Fisheries and Oceans Canada
Pêches et Océans Canada

Pacific Region
Ecosystem Management Branch
417 2nd Avenue W
Prince Rupert, BC
V8J 1G8

Région du Pacifique
Gestion des ecosystems
417, 2e Avenue Ouest
Prince Rupert, (C.-B.)
V8J 1G8

September 24, 2020

Our file *Notre référence*

Silva Bay Resort and Marina Ltd.
ATTENTION: Dean Chen
3383 South Road
Gabriola, BC, V0R 1X7

Via email:

Dear Dean Chen:

Subject: Marina Upgrades, Silva Bay, Gabriola Island – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on June 18, 2020. We understand that you propose to conduct marina upgrades in Silva Bay on Gabriola Island. Proposed works include:

- Removing 121 existing creosote timber piles (0.30 m diameter) in the intertidal area;
- Removing deteriorating marina infrastructure including the roof of the shipyard building, top of the travel lift pier and the decking area on the stores deck;
- Installing a new decking area for the stores deck over the same footprint as the existing stores deck;
- Installing six new steel piles (0.30 m diameter) and replacing six existing timber piles to support the new stores deck infrastructure; and
- Installing riprap on the travel pier shoreline to increase the stability of an exposed timber retaining wall.

We understand the following aquatic species listed under the *Species at Risk Act* may use the area in the vicinity of where your proposal is to be located:

- Basking Shark (Pacific population), Killer Whale (Northeast Pacific Southern Resident population), Northern Abalone and Leatherback Sea Turtle (Pacific population) listed as Endangered;
- Killer Whale (Northeast Pacific Transient population) listed as Threatened; and
- Bluntnose Sixgill Shark, Longspine Thornyhead, Rougheye Rockfish Type I and II, Tope, Yelloweye Rockfish (Pacific Ocean Inside and Outside Waters), Grey Whale (Eastern North Pacific population), Harbour Porpoise (Pacific Ocean

population), Humpback Whale (North Pacific population) and Steller Sea Lion listed as Special Concern.

Our review considered the following information:

- *Request for Review* form submitted by Laura White, Hemmera (Victoria), submitted June 18, 2020;
- *Aquatics Effects Assessment: Silva Bay Resort and Marina, 3383 South Road, Gabriola Island* prepared by Hemmera (Burnaby), dated June 18, 2020;
- *Silva Bay Resort and Marine Condition Assessment* report prepared by Ausenco Engineering Canada Inc. dated October 19, 2018;
- Silva Bay Resort and Marina Project Site Photographs submitted June 18, 2020; and
- Project Overview Map prepared by Hemmera, dated May 2, 2019.

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), we recommend implementing the measures listed below:

- Conduct in-water works within the least risk timing window for the project area (Area 17 – Summer: June 1 – September 1; Winter: December 1 – February 15).
- Conduct in-water works (e.g., pile removal and installation activities, infrastructure removal and installation, riprap installation, etc.) during daylight hours and when weather conditions permit visual observations for marine mammals. Avoid conducting in-water work during periods of adverse weather.
- Retain a qualified environmental professional(s) to be on-site full time to conduct environmental monitoring and marine mammal monitoring during all project activities that may result in potential adverse effects to fish and fish habitat.
- Conduct works, undertakings and activities that are required in the intertidal zone (e.g., pile removal and installation activities) in the dry (e.g., when the site is dewatered during a low or falling tide) whenever feasible.
- Minimize movements/ repositioning of barge(s) and subsequent spudding to minimize direct, physical disturbance to the seabed.
- A debris management plan (containment and removal) should be developed for removal activities to address construction materials and debris (treated wood

fragments, sawdust, cuttings, etc.) entering aquatic habitats. Infrastructure removed from the marine environment should be contained immediately after removal to prevent any adhering sediment from re-entering the water.

- Pile removal should be conducted slowly. If piles cannot be removed via vibratory hammer and require cutting, they should be cut off at or near the level of existing substrate with any debris cleaned up and removed from the marine environment.
- Keep a sediment curtain readily available on-site in sufficient quantities for local conditions and deploy around the in-water works as required.
- Manage sediment that may be associated with extracted piles by disposing of the sediment off-site at a facility approved for the material rather than depositing in fish habitat.
- The Environmental Monitor should conduct water quality sampling during in-water works to confirm turbidity levels in the water column outside the immediate vicinity of the site are below the approved *BC Approved Water Quality Guidelines: Aquatic Life, Wildlife and Agriculture*. If water quality guideline exceedances are detected, stop work and implement additional mitigation measures (e.g., slow work, install silt curtain, etc.) to minimize sedimentation.
- If there is a risk of harm to a marine mammal from direct contact, temporarily suspend construction until there is no longer risk of harm from direct contact.
- All stabilization riprap materials are to be non-acid generating, clean and free of debris and fine sediment. If necessary, the material should be washed in a location where the wash cannot enter fish habitat prior to installing in the marine environment.
- Place riprap slowly and carefully as opposed to dumping into the intertidal. If the work area is wetted, material should be released underwater or as close to the water surface as possible.
- For impact pile driving:
    - Conduct hydroacoustic monitoring during impact pile driving to monitor underwater sound thresholds;
    - Install and use an effective sound attenuation device (e.g., bubble curtain) to reduce peak sound pressure levels to below 206 dB re:1uPa and a SEL_{CUM} of 180 dB re uPa^2s outside of the sound attenuation device;
    - Establish a marine mammal exclusion zone (e.g., perimeter around the source) prior to impact pile driving where sound levels are not to exceed 160 dB_{RMS} re: 1uPa at the edge of the marine mammal exclusion zone during impact pile driving;
    - Monitor for marine mammals within the marine mammal exclusion zone for at least 30 minutes prior to the start of impact pile driving. If a marine mammal enters the marine mammal exclusion zone, temporarily suspend impact pile driving until the individual has left the exclusion zone or has not been sighted for 30 minutes; and
    - If hydroacoustic monitoring indicates sound levels in excess of the above-mentioned thresholds, impact pile driving should cease and only resume after additional mitigation measures are implemented to effectively reduce sound levels to below the above-mentioned thresholds.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal is not likely to result in the contravention of the above mentioned prohibitions and requirements.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations*.

It is also your Duty to Notify DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to the DFO-Pacific Observe, Record and Report phone line at 1-800-465-4336 or by email at DFO.ORR-ONS.MPO@dfo-mpo.gc.ca.

We recommend that you notify this office at least 10 days before starting your project and that a copy of this letter be kept on site while the work is in progress. It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

Please note that this Letter of Advice does not provide relief from the obligations set out in the government of British Columbia's Riparian Areas Protection Regulations (RAPR), and cannot be construed to provide authorization pursuant to section 3(2) of the RAPR, for any work, undertaking or activity within the Riparian Assessment Area. For more information on the RAPR, including contacts, please visit: https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/fish/riparian-areas-regulation.

If you have any questions with the content of this letter, please contact the undersigned at our Nanaimo office [redacted] Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

Ian Bergsma
A/Senior Biologist
Fish & Fish Habitat Protection Program

cc: Laura White, Hemmera (Victoria), [redacted]

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2020.2

Schedule "C" – Snuneymuxw Response Letter with conditions dated May 20, 2021

(PDF document begins on next page)

I hereby certify this to be Schedule "C" which is attached to and forms part of Development Permit No. GB-DP-2020.2.

Signature of Islands Trust Official — August 20, 2021 Date of Issuance

Snuneymuxw
First Nation
www.snuneymuxw.ca

May 20, 2021

Laura White
Hemmera Envirochem
18th Floor- 4730 Kingsway
Burnaby BC
V5H 0C6

RE: Gabriola Island Local Trust Committee Development Permit Application GB-DP-2020.2 (Silva Bay Resort LTD)

Snuneymuxw First nation would like to thank you for your cooperation in the Snuneymuxw Referral Process, a consent-based framework advancing the recognition of rights. As articulated in our previous correspondence, SFN has a constitutionally protected Treaty of 1854 with the Crown which are solemn promises to protect Snuneymuxw Villages, enclosed fields, harvesting and gathering sites, waterways and resources, and the right to carry on hunting and fisheries as formally.

After carefully reviewing the file, Snuneymuxw has no objection to the proposed project but are requesting that certain conditions are met, such as:

- A site visit with SFN Site monitor. SFN expects that the applicant cover the costs associated with the Site Monitor.
- Implementation of DFO's recommendations to avoid and mitigate adverse effects to fish and fish habitat.
- Have the qualified environmental professional engage with SFN fisheries department.

Any additional requests, questions or concerns related to this file can be directed to the SFN lands Clerk, Desiree Thomas, at landsclerk@snuneymuxw.ca or 250-824-1351 from Monday to Friday, 8:00 AM- 4:00 PM

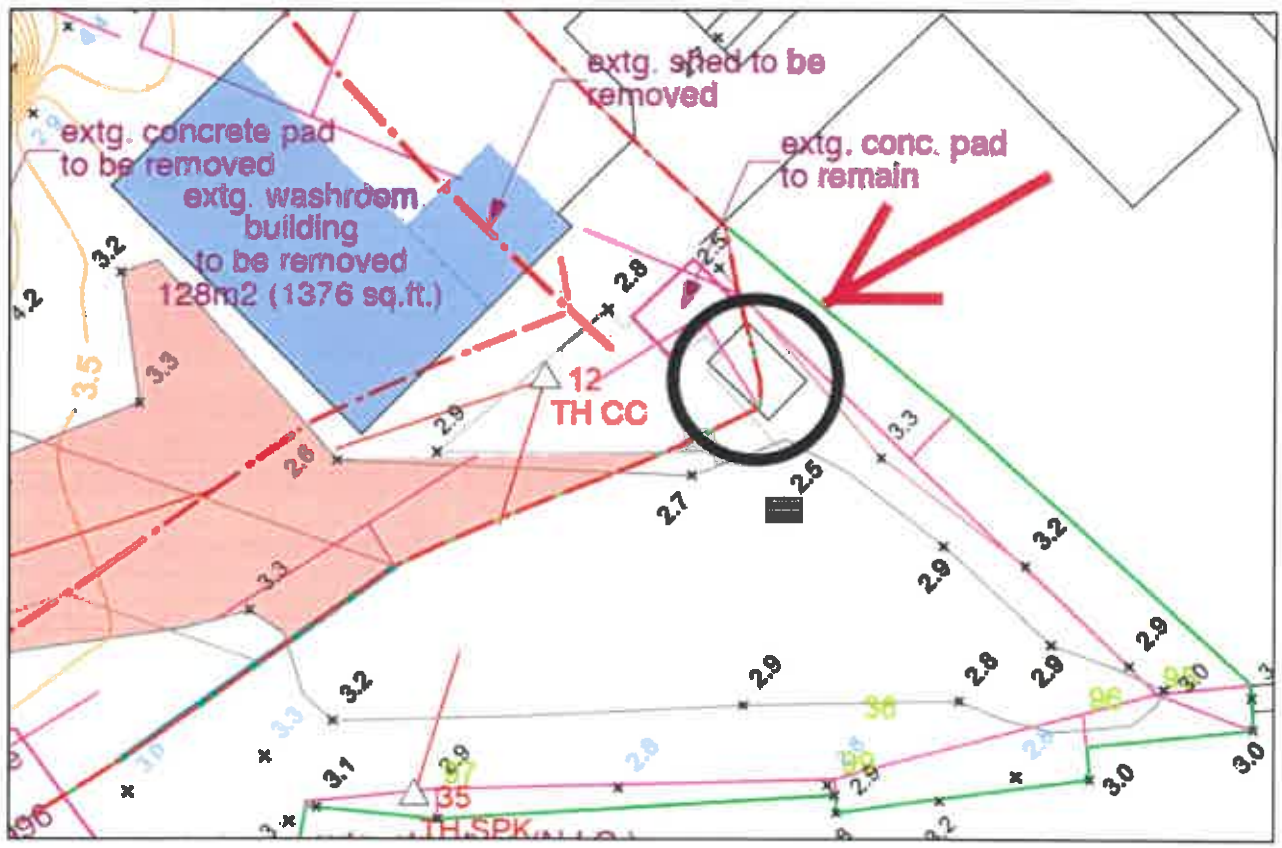
Thank you,

Chief Mike Wyse

Snuneymuxw First Nation, 668 Centre St., Nanaimo, B.C. V9R 4Z4
Tel: 250-740-2300 / 1-888-036-8789 Fax: 250-753-3102 info@snuneymuxw.ca

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
DEVELOPMENT PERMIT GB-DP-2020.2

Schedule "D" – Electrical Shed Location



I hereby certify this to be Schedule "D" which is attached to and forms part of Development Permit No. GB-DP-2020.2.

Signature of Islands Trust Official

August 20, 2021
Date of Issuance

LOCATION

Legal Description	LOT 1 SECTION 5 GABRIOLA ISLAND NANAIMO DISTRICT PLAN EPP90534
PID	030-792-606
Civic Address	3383 South Road, Gabriola

LAND USE

Current Land Use	Marina and moorage, sea plane dock including gasoline, shipyard, gallery.
Surrounding Land Use	Residential, institutional (church), Tourist Commercial (Page's Resort)

HISTORICAL ACTIVITY

File No.	**Purpose**
GB-BP-2018.1	Closed – never constructed
GB-BP-2021.16	Open – demolition of stores deck and shipyard building (DP application)
GB-BP-2021.24	Open – upland resort development
GB-BP-2021.33	Open - upland resort development
GB-DP-2020.2	Open - demolition of stores deck and shipyard building
GB-RZ-2003.1	Closed
UN-RZ-1985.1	Closed

POLICY/REGULATORY

Official Community Plan Designations	Commercial (Tourist)
Land Use Bylaw	Tourist Commercial 1 (TC1)
Other Regulations	DPA 4 – Flat Top Islands Area
Covenants	391165G 391166G 90132G DF43106 FB403173
Bylaw Enforcement	None on file

SITE INFLUENCES

Islands Trust Conservancy	No referral to the Islands Trust Conservancy is required for the DP.
Regional Conservation Strategy	The proposal is not contrary to or at variance with the ITC RCP. Conservation of the Gabriola LTA is a high priority within the context of the RCP.
Species at Risk	Masked/secure occurrence
Sensitive Ecosystems	Young Forest primarily, with occurrences of Douglas-fir - Shore Pine – Arbutus. No SEI occurrence within DP works area.
Hazard Areas	Moderate/High risk steep slope along foreshore bank at natural boundary.
Archaeological Sites	See staff report

Climate Change Adaptation and Mitigation	Potential includes sea level rise impacts to all marine and nearshore structures and possible increased emissions from vehicular traffic when the resort is in operation.
Shoreline Classification	Sediment Shoreline - Boulder/Cobble
Shoreline Data in TAPIS	“Altered”

MEMORANDUM

File No.: Biocultural and Housing Diversity Program Business Case

DATE OF MEETING:	November 25, 2021
TO:	Gabriola Island Local Trust Committee
FROM:	Sonja Zupanec, Island Planner Northern Team
SUBJECT:	Business Case for a new Local Trust Area "Biocultural and Housing Diversity Program"

PURPOSE

The Islands Trust Financial Planning Committee (FPC) reviewed the attached business case (Attachment 1) and supporting analysis report and documents (Attachment 2) on November 10, 2021. The proposed business case is for a multi-year biocultural and housing diversity program to be funded by a special tax requisition across the Gabriola Local Trust Area.

Staff will provide a verbal update to the Gabriola Local Trust Committee at the November 25, 2021 regular business meeting, on outcomes from the FPC decisions and potential next steps.

Submitted By:	Sonja Zupanec, RPP, MCIP, Island Planner	November 8, 2021
Concurrence:	Heather Kauer, RPP, MCIP, Regional Planning Manager	November 8, 2021

ATTACHMENTS

1. Business Case reviewed by Financial Planning Committee Nov 10, 2021
2. Analysis Report and attachments to Financial Planning Committee Nov 10, 2021

Budget Funding Request
Short-Form Business Case

Completion of this form initiates a request to the management team for allocation of budget funds. The form is to be completed and submitted at the start of the decision making process. The business case forms part of the Annual Budget Process (refer to Islands Trust Council Budget Process Policy 6.3.i).

TO BE COMPLETED BY INITIATOR

Initiated by:
Gabriola Island Local Trust Committee

Business Area:
Gabriola Island Local Trust Area

Name of Request:

Biocultural and Housing Diversity Program

Budget Source (select all that apply):

☐ **Specific Project Funding** (select all that apply)
- ☐ Third Party Contractors
- ☐ Staff Travel Expense
- ☐ Staff Overtime Expense
- ☐ New Staff Member – Temporary for project
- ☐ Computer Hardware/Software

☐ **Furniture & Equipment**

☐ **Computer Hardware/Software/Supplies**

☐ **New Staff Resources** (see Staff Costing Tool)
- ☐ **Permanent**
- ☐ **Temporary**

Temp Duration: _____

X Other – please describe:

A special property tax requisition to cover:
1. The salary of a new, on-going coordinator position;
2. Formation of a joint task force; and
3. On-going costs for meetings of a joint task force.

Date of Funding Request: November 5, 2021

Funding Required for (date range): April 1 2022-March 31, 2032

ISSUE/OPPORTUNITY:

The LTC passed the following resolution on July 29, 2021:

That the Gabriola Island Local Trust Committee request Staff to prepare a DRAFT business case for Local Trust Committee consideration, for submission to the Islands Trust Financial Planning Committee by October 2021 for a new multi-year land use planning program based on the June 7, 2021 outline by the Housing Advisory Planning Commission, to replace the 'Housing Options and Impacts Review Project' with "Biocultural and Housing Diversity Program" specifically designed to increase the island's biodiversity, housing diversity and freshwater protection over the next 10 years with the following elements:

a) A lead planning consultant supported by the establishment of a temporary roundtable to co-design the framework and objectives of the program with input and/or membership from the Housing Advisory Planning Commission members, Snuneymuxw First Nation, Regional District of Nanaimo and Islands Trust Conservancy;

b) Eventual replacement of the Housing Advisory Planning Commission with a Joint Task Force with membership from key partners and agencies to advise the Local Trust Committee and lead planning consultant on prioritizing project work, securing grants and collaborating on intergovernmental initiatives and opportunities.

This business case outlines the unique program designed by the volunteer group 'Gabriola Housing Matters' and endorsed by the Gabriola Housing Advisory Planning Commission, to bridge the historical divide between the community's housing needs and the urgent need to preserve and protect the sensitive ecology of the Gabriola Island Local Trust Area. The "Biocultural and Housing Diversity Program" proposes a suite of actions to manage growth, achieve biodiversity and freshwater conservation objectives, and ensure an adequate supply of affordable housing" for the entire Gabriola Local Trust Area. This business case describes how a new multi-year, inter-governmental program might work in order to meet the following objectives:

- **To ensure that growth in the Local Trust Area is managed and gradual, balancing human and environmental needs to ensure long-term sustainability.**
- **To ensure the recovery and long-term sustainability of our endangered Coastal Douglas fir ecosystem.**
- **To ensure the protection and sustainable management of freshwater resources.**
- **To ensure a timely supply of affordable, appropriate housing that meets the needs of residents in a way that minimizes impacts on biodiversity and freshwater sustainability.**
- **To meaningfully engage with Snuneymuxw First Nation at every stage of program design, from strategic goal-setting and implementation, to monitoring and reporting, to the level that the Nation is willing to engage, and in a manner that honours the Nation's priorities, and that the Trust leverages sufficient budget to create capacity for a sustained engagement.**

The term "biocultural diversity" is an emerging approach coming from the fields of anthropology and biology (typically describing the relationships between indigenous culture and biology) and addresses the intersection of cultures, communities and biologically-diverse spaces through a systems lens. "Housing diversity" means the types and forms of housing that suits the diverse needs of the island population, without being limited to strictly affordable housing.

Through this program, the LTC would receive advice, resourcing, capacity and/or guidance from Sustaining Partners such as: Snuneymuxw First Nation (SFN), Island Trust Conservancy (ITC), and the Regional District of Nanaimo (RDN) - Area B. As well, the program would be supported by a Joint Task Force on Increasing Gabriola's Biocultural and Housing Diversity. Seats on the task force would include specific sectors reserved for ~2yr terms. There could be 8-12 voting members (reps from all Partners and key community groups) and 2 - 3 nonvoting members (paid program consultant, Trust planner, minute taker) that support the overall program and provide advice to the LTC. The "joint" nature of the Task force is crucial in ensuring

that the program can be **focussed on the three fundamental issues that no single agency or government has been able to address effectively: housing options, biodiversity and freshwater protection, and meaningful engagement with First Nations**.

The RDN, SFN, LTC and ITC would work collaboratively to execute the program objectives over multiple terms, through several smaller short-term projects that also address each agencies' own strategic goals. Sustaining Partners would collaborate to set strategic goals for action, secure funding, supply staff/resourcing, guidance and some capacity components. For example, the program might access the ITC's tools for quantifying biodiversity retention and loss, use its mapping, data and monitoring technology, and in return, the Project could make actionable their top priority projects in their regional conservation strategy to preserve biodiversity, turning a wish list into reality. Other agencies, such as Gabriola Community Economic Development (Chamber of Commerce) may also play a part, both in securing funding and providing input, research and assisting to implement the program's goals.

The program would be initiated by the Gabriola LTC with a request to have Trust Council consider a delegation bylaw, a special property tax requisition, staff time in the short term to process the delegation bylaw and special property tax requisition, and on-going staff time in the long term to support the program.

The coordinator would be responsible for supporting the task force, identifying deliverables, and executing the work plan, in cooperation with IT planning staff who report back to the LTC. The ITC may wish to participate on the task force to ensure its Regional Conservation Strategy goals for Gabriola are incorporated or dovetailed into the program's work plan. The RDN and SFN could either designate staff to participate on the Task Force or assist in leveraging access to grants to support the program's smaller projects. Capacity funding to SFN is included in the program budget breakdown.

PROJECTED RESULTS/DELIVERABLES:

Funding request for Each Fiscal Year	Target Duration	Cost	Notes
RFP Process to hire coordinator	3 months – April – June 2022	$ 1,000	Advertising
Program Coordinator salary	July, 2022 – March, 2023	$ 45,000 -	Pro-rated; $60,000 per year going forward
9 Task Force meetings (virtual or COVID-proof meetings	August, 2022 – March, 2023	$ 5,000 + staff time	Advertising, venue rental, meeting materials; administration and minutes
Technology, research and analysis and stakeholder, agency meetings	August, 2022 – March, 2023	$ 5,000 + staff time	Mapping, data analysis, meeting logistics
Development of communication and educational info, printouts, mail-outs, brochures, posting of meetings and legal notifications	August, 2022 – March, 2023	$ 5,000	
First Nation Consultation early and ongoing Coordination with First Nations' staff Collaborations with First Nations in their preferred methods	August, 2022 – March, 2023	$ 10,000	Participation in task force meetings and engagement activities

1-2 virtual and/or in-person COVID-safe open houses and community engagement meetings	August, 2022 – March, 2023	$ 1,000	Technology support, facility rental, and open houses material
	Total	**$72,000**	

RISK ASSESSMENT:

Gabriola Island, the second most populated island in the Trust Area, is facing immense development pressures exasperating the housing crisis issue. The development pressure is affecting all issues relating to housing: diversity of type, tenure, affect to the environment, affordability and so on. The GB LTC is of the opinion that addressing housing issues cannot occur without consideration of protection and enhancement of biodiversity and freshwater across the entire local trust area.

With continued piecemeal amendments to the OCPs in the local Trust Area, the Islands will continue to grow in direct contrast to in the Trust Council Strategic Plan, specifically on "ensuring human activity and the scale, rate and type of development in the Trust Area are compatible with maintenance of the integrity of Trust Area ecosystems, and to sustain island character and healthy communities," and last, but not least, the Trust Council's commitment to First Nations Reconciliations, and their declaration on Climate Change Emergency.

Salt Spring Island already uses a special tax requisition to fund SSIWPA which assists other water sustainability projects throughout the Trust area. The impact of funding this project via special tax requisition is to save the overall proposed Trust Council budget, and have costs and benefits shared by all the Local Trust Area taxpayers.

ALTERNATIVES CONSIDERED:

Option 1: Break up the project into smaller, targeted, minor reviews of the Gabriola, Mudge, Decourcey OCP and LUBs, assign to the Local Planning Team, and request $5,000 from Trust Council's budget for fiscal year 2022/23.

Option 2: Request that the Director of Local Planning Services assign a Major project to the Regional Planning Team to develop and process a major update of the Gabriola OCP and LUB related to housing and biodiversity, and that Trust Council dedicate $10,000 to the project for fiscal 2022/23.

Option 3: Request that the Director of Local Planning Services assign an Extraordinary project to the Regional Planning Team to manage a consultant contract related to a full review of the Gabriola OCP and LUB related to housing and biodiversity and that Trust Council dedicate $20,000 to the project for fiscal 2022/23.

CRITICAL SUCCESS FACTORS:

Consider innovative approaches, invest in the public engagement as well as partnership with agencies and stakeholders, as well as on-going consultation with First Nations.

A model of growth management specific to the Gabriola Local Trust Area but that may be replicable to other Trust Areas experiencing growth.

RECOMMENDED OPTION:

COST/BENEFIT ANALYSIS:

Quantitative Analysis:

- $4,000 needed in 2021/22 Fiscal for public engagement related to a special property tax requisition (not currently requested or approved)
- $72,000 for fiscal 2022/23 to hire a coordinator and develop the program
- $77,500 per year starting in 2023/24 to pay the salary of the coordinator, support on-going meetings and First Nation capacity funding.
- Approximately 500 staff hours to develop the delegation bylaw, special property tax requisition, hiring and training of the coordinator, development of the task force, and on-going support;
- Approximately 5-7 hours per week of on-going staff support starting in fiscal 2023/24 equating to approximately $17,000 a year in in-kind contribution.

Qualitative Analysis:

The protection of the Gabriola Local Trust Area forests and waters are as highly valued and prioritized as is the need to protect the diversity and wellbeing of the communities that live here. Gabriola Island specifically is in a housing crisis, and the entire local trust area is also in a period of eco-crisis exacerbated by rapid climate change. This business case is the first step in developing a scientific and culturally-responsive approach with a strong, non-partisan intergovernmental biocultural and housing diversity program, in order to address the challenges and opportunities of these long term planning issues.

PURCHASING PROCEDURE:

See: Trust Council Special Property Tax Requisition Policy, Procurement Policy, RFP procedures, Purchase Order procedures, etc.

PROPOSED IMPLEMENTATION STRATEGY:

The duration of the program is expected to be 10 years. See the attached briefing developed by the Northern Islands Trust Regional Planning Manager for the November 10, 2021 Financial Planning Committee meeting for an estimated breakdown of work related to developing the program.

CHANGE MANAGEMENT/COMMUNICATIONS/COLLABORATION:

Similar to the Drinking water and watershed protection program at the Regional District of Nanaimo, this program would create significant benefits for each partner body by leveraging existing research, resources, opportunities for public engagement and collaboration on monitoring progress.

Gabriola Island Local Trust Committee	November 4, 2021
Initiator	Date

Heather Kauer, RPM	November 5, 2021
Reviewed by: Regional Planning Manager	Date

REVIEWED BY MANAGEMENT TEAM:	
Date received:	**Approved:** ☐ **YES** ☐ **NO**

Next steps:

- If approved by management:
  - the business case will be forwarded to FPC for review in NOVEMBER.
  - the funding for the request will be included in Draft 1, Version 1 of the budget which is reviewed by FPC in October of each year
- If not approved by management:
  - the business case will be forwarded to FPC for information in NOVEMBER of each year, but not included in the budget draft.

BRIEFING

To:	Financial Planning Committee	**For the Meeting of:**	November 10, 2021
From:	Heather Kauer, Regional Planning Manager	**Date Prepared:**	October 29, 2021

SUBJECT: **Analysis of Special Property Tax Requisition for the proposed Gabriola Biocultural and Housing Diversity Program**

PURPOSE: The purpose of this briefing is to provide an analysis of a Special Property Tax Requisition process as it would apply to a Gabriola Biocultural and Housing Diversity Program as proposed by the Gabriola Housing Matters Working Group.

BACKGROUND:

At its regular business meeting on October 20, 2021, the Financial Planning Committee passed the following resolution:

> ***FPC-2021-040***
> ***It was MOVED and SECONDED,***
> *that Financial Planning Committee request an analysis of funding the Gabriola Housing Project via a special tax requisition.*

In 2016, the Gabriola Local Trust Committee (LTC) initiated the Gabriola Housing Options and Impacts Review Project by adding it to its Top Priorities list. In June of 2018, the LTC completed Phase 1 and initiated Phase 2 of that project. There are currently two endorsed project charters associated with Phase 2 which are Attachments 1 and 2 of this report. Staff are currently doing the work associated with the project charter reflected in Attachment 2. The LTC has not yet endorsed a project charter that reflects the work associated with a Biocultural and Housing Diversity Program as outlined in this report.

In 2020, a group of volunteers calling themselves the Gabriola Housing Matters Working Group developed a proposal (Attachment 3) that was submitted as a recommendation to the Gabriola LTC through their Housing Advisory Planning Commission.

From the June, 2021 Gabriola Housing Matters report, the description of the project is:

> Formation of a Joint Task Force on Increasing Gabriola's Biocultural and Housing Diversity that includes partnerships with the Regional District of Nanaimo, Snuneymuxw First Nation, and the Islands Trust Conservancy. Seats on the task force would include specific sectors reserved for ~2yr terms with 8-12 voting members (reps from all Partners and key community groups) and 2 - 3 non-voting members (paid program consultant, Island Planner, minute-taker) that support the overall program and provide advice to the LTC.

In response to this recommendation, the Gabriola LTC passed the following resolution on July 29, 2021:

> *That the Gabriola Island Local Trust Committee request Staff to prepare a DRAFT business case for Local Trust Committee consideration, for submission to the Islands Trust Financial Planning Committee by October 2021 for a new multi-year land use planning program based on the June*

7, 2021 outline by the Housing Advisory Planning Commission, to replace the 'Housing Options and Impacts Review Project' with "Biocultural and Housing Diversity Program" specifically designed to increase the island's biodiversity, housing diversity and freshwater protection over the next 10 years with the following elements:

a) A lead planning consultant supported by the establishment of a temporary roundtable to co-design the framework and objectives of the program with input and/or membership from the Housing Advisory Planning Commission members, Snuneymuxw First Nation, Regional District of Nanaimo and Islands Trust Conservancy;

b) Eventual replacement of the Housing Advisory Planning Commission with a Joint Task Force with membership from key partners and agencies to advise the Local Trust Committee and lead planning consultant on prioritizing project work, securing grants and collaborating on intergovernmental initiatives and opportunities.

As of the writing of this report, a draft business case has not been presented to the LTC for review due to competing demands on staff time. It is estimated that a draft business case will be available at the LTCs November 25, 2021 LTC meeting.

Due to budget cycle deadlines, a dollar figure for this program was included in the budget assumption report for the October 20, 2021 Financial Planning Committee (FPC) meeting. At that meeting, the FPC passed a resolution requesting staff analyse the possibility of applying a Special Property Tax Requisition to the Gabriola Island project.

Islands Trust Policy 6.3.2, Special Property Tax Requisition, outlines a process by which an LTC can access funds for projects that constitute "…additional operations that are not included within the general operations of all LTCs." A copy of that policy is Attachment 4 of this report.

Attachment 5 of this report is Trust Council Policy 6.5.3, Procurement, and Attachment 6 of this report is a summary of the estimated resources needed to develop a special property tax requisition related to this project as well as the on-going resources needed to support a program of this sort.

Analysis contained in this report is limited due to the short turnaround time for a report to be available for the November 10th FPC agenda.

SPECIAL PROPERTY TAX REQUISITION

A project to form a Gabriola Joint Task Force program is estimated to include the following milestones:

- Delegation Bylaw
- Special Property Tax Requisition (SPTR)
- RFP / hiring / training Coordinator
- Formation of Joint Task Force
- Assignment of on-going staff support

A visual summary of this project and related milestones is included as Attachment 6 of this report. A more detailed work breakdown is contained in Table 2 below.

Section 3.1 of the SPTR policy states the following:

> 3.1 The Islands Trust Council will evaluate and include a LTC's local initiative or program in the preliminary Islands Trust's general budget if any of the following criteria apply:
>
> 3.1.1 the program is considered to be a base service of the LTC;
>
> 3.1.2 the program is a scheduled official community plan review or land use bylaw update; and
>
> 3.1.3 the program has Trust-wide implications and benefits.

The proposed program is not a base service of the LTC. OCP and LUB updates have not been clearly identified as deliverables for this project, nor is it clear that the deliverables of this project would have Trust-wide implications or benefits.

Section 3.2 of the SPTR states that:

> If none of the above criteria apply or if Trust Council does not approve a LTC funding request, then the LTC can propose a special requisition for its local trust area as a means of funding the proposed program.

Section 3.3 of Trust Council Policy 6.3.2, Special Property Tax Requisition, states the following:

> 3.3 Despite section 3.1 and 3.2 of this policy, where a delegation bylaw adopted by Trust Council pursuant to S.10 of the Islands Trust Act specifies that all or part of a LTC's operations related to delegated powers are to be funded by a special tax requisition within a local trust area, related requests from a LTC that are included in the preliminary Islands Trust budget must be in accordance with the requirements of the ***delegation bylaw***. [Emphasis added]

In order to clearly determine whether or not a delegation bylaw is required, staff recommend that a legal opinion be sought. However, Trust Council Policy 6.5.3, Procurement (Attachment 5), indicates the following regarding financial assistance to community organizations or other groups:

> **5. Financial Assistance to Community Organizations and Other Groups or Individuals**
>
> Financial assistance to community organizations or other groups or individuals is only permitted if made by the Islands Trust Council, its delegate, or the Executive Committee acting on its behalf, pursuant to Section 8(2)(h) of the Islands Trust Act which states that Trust Council may:
>
> > (f) engage in activities to gain knowledge about the history and heritage of the trust area and to increase public awareness, understanding and appreciation of its unique amenities and environment,
> >
> > (g) conserve heritage property."
>
> Local Trust Committees may not provide financial assistance to community organizations or other groups or individuals unless Trust Council has, by bylaw, delegated its authority under Section 8(2)(h) of the Islands Trust Act.

Staff interpret this to mean that in order for the Gabriola Island Local Trust Committee to provide staff support and financial assistance to a Gabriola Island Joint Task Force, a bylaw would need to be adopted by Trust Council delegating its authority.

Section 10 of the *Island Trust Act* indicates that delegation of Trust Council's powers can only take place by bylaw adopted by at least 2/3 vote of Trust Council members.

Also to consider: the Islands Trust Act may be narrowly read to mean that Trust Council may only designate it's authority to LTCs to "support and give financial assistance" to a community group, if the group being given assistance demonstrates that its objective is described in Sections (f) and (g) listed above. The objective of the proposed program and the activities to be undertaken could be interpreted to be wider in scope than the Act allows. Staff recommend obtaining a legal opinion regarding this matter.

Section 4, Public Consultation, of the SPTR states the following:

> 4.1 The LTC must solicit feedback from the public in the local trust area, minimally through a mechanism of advertising and otherwise advising the public of the purpose and cost of the proposed special requisition.
>
> 4.2 The feedback received, if any, must be considered by the Islands Trust Council prior to the final adoption of any bylaw that incorporates the special property tax requisition.

Section 5. Approval, states:

5.1 The proposed special property tax requisition must be formally requested by resolution of the LTC before being considered by the Islands Trust Council. *[this request has not been made by the LTC thus far]*

5.2 The proposed special requisition will be presented for approval to Trust Council in March of each year.

5.3 When presented to Trust Council, the special requisition proposal must be accompanied by a completed Special Property Tax Requisition Checklist in section 7 below**.**

Checklist 7 is as follows:

Description of Task	**Deadline**	**Date Completed**
Local Planning Services staff assigned to LTCs develop "additional operations" budget proposal on behalf of LTCs prior to December Trust Council meeting and submit them to FPC for review.	November FPC meeting	
Director of Local Planning Services presents "additional operations" budget proposals to Financial Planning Committee, with input from LTCs, indicating whether any of the proposed 'additional operations' are related to delegated powers and must be funded through a special property tax requisition.	December Trust Council meeting	
Financial Planning Committee makes recommendations to Trust Council regarding budget proposals made by LTCs, identifying • Any that must be funded through a special property tax requisition pursuant to a Trust Council delegation bylaw (e.g. Bylaw 154). • Any other LTC proposals that it recommends be funded through a special property tax requisition, rather than through inclusion in the general Islands Trust budget. Director of Local Planning Services provides additional information to Trust Council about LTC proposals, as needed.	December Trust Council meeting	
If December Trust Council does not approve the LTC "additional operations" budget proposal for inclusion in the general Islands Trust budget, or if the LTC additional operations are related to delegated powers that must be funded through a special property tax requisition: • LTC passes resolution to pursue special property tax requisition to fund the "additional operations" budget proposal: - copy of resolution attached	January	

• LTC requests staff to conduct public consultation on the special tax requisition proposal: - copy of advertisement attached - if public meeting held, minutes of the discussion attached o written summary of public feedback attached	Mid-February	
• Staff prepare Request for Decision (RFD) proposed by LTC for March Trust Council binder, requesting a bylaw to authorize a special property tax requisition. The RFD will include an assessment of organizational and other implications, a completed copy of this checklist along with any attached documentation.	February FPC meeting	

PROGRAM ANALYSIS

Objectives & Measures of Success

The following table outlines the proposed program objectives defined by the Gabriola Housing Matters community group. The objectives listed are not measureable as presented, therefore, it is difficult to determine whether the expenditure of the resources being requested would result in benefits of equal or greater value.

Table 1. Gabriola Housing Matters identified Program Objectives

Objective	Measure of Success
• To ensure that growth on Gabriola is managed and gradual, balancing human and environmental needs to ensure long-term sustainability	TBD
• To ensure the recovery and long-term sustainability of our endangered Coastal Douglas-fir ecosystem	TBD
• To ensure the protection and sustainable management of freshwater resources, and,	TBD
• To ensure a timely supply of affordable, appropriate housing that meets the needs of Gabriolans in a way that minimizes impacts on biodiversity and freshwater sustainability.	TBD
To meaningfully engage with Snuneymuxw First Nation at every stage of program design, from strategic goal-setting and implementation, to monitoring and reporting, to the level that the Nation is willing to engage, and in a manner that honours the Nation's priorities, and that the Trust leverages sufficient budget to create capacity for a sustained engagement.	TBD

Estimated Program Duration

On-going, renewed annually.

Work Breakdown

Partnerships of the type proposed would depend on the interest and capacity of other organizations to participate. Support of the program by Islands Trust staff would depend upon the capacity of the organization overall to devote short-term staff effort to developing and processing a delegation bylaw,

implementing a special property tax requisition, hiring a coordinator, and forming a task force as well as the long-term, on-going staff time that would be needed to support this program.

Table 2 below is a rough estimate of the tasks and staffing that would be associated with initiation of a program of the type being proposed. It should be noted that all of the staff listed below have an existing, full workload planned through the end of the current fiscal year. It should also be noted that assumptions about the formation and on-going staff support of a new joint task force have not been included in the analysis and reporting related to the restructuring of LPS planning staff via the LPS Renewal project. Staff recommend that if a program of this nature is considered that a more thorough short-term and long-term staffing analysis be conducted prior to initiation.

The estimated staffing resource figures are based on the one existing Islands Trust program currently funded by a Special Property Tax Requisition that also operates as an advisory group: the Salt Spring Island Watershed Protection Alliance (SSIWPA). As of 2021, the special property tax requisition associated with SSIWPA has funded a coordinator position with a base salary of approximately $60,000 a year as well as costs associated with meetings. This has amounted to a cost of approximately $800,000 over the course of the 8 years that SSIWPA has been in existence. In addition, Islands Trust has contributed approximately $140,000 out of the general fund in the form of staff time in support of the program.

Contribution of staff time for on-going support of SSIWPA is roughly estimated to be an average of five to seven hours a week. The primary staff person leading this work currently is an Island Planner on the Regional Planning Team. It has been assumed that SSIWPA duties would shift to a different staff person, yet to be determined, once the duties of the Island Planner assigned to the Regional Planning Team are shifted entirely to work on that team starting in November, 2022.

Table 2. Work Breakdown

Sub-project	Tasks	Responsibility	Est. Staff Hours
Delegation bylaw	Drafting bylaw and associated RFDs; publishing in agenda packages	- CAO - Director of LPS - Legislative Services Manager - Leg Clerk	60
	Presenting to LTC, EC, and TC	- CAO - Director of LPS - Island Planner	40
	Legal Review	- CAO - Director of LPS - Legislative Services Manager - Legal Consultant	50
Special Property Tax Requisition Execution (SPTR)	Draft and present RFDs to LTC, EC, and TC	- CAO - Director of LPS - Island Planner - Leg Clerk - Administrative Office Assistant	60
	Include SPTR in budget assumptions and reports to FPC and TC	- Director of Administrative Services - Finance Officer	20

Sub-project	Tasks	Responsibility	Est. Staff Hours
	Reporting / Liaise with Ministries	- Director of Administrative Services - Finance Officer	20
	Public Engagement on Gabriola	- Director of Trust Area Services - Director of LPS - Island Planner - Regional Planning Manager - Leg Clerk - Administrative Office Assistant	120
Hire and Train Coordinator	Draft and process RFP	- RPM - Island Planner - Finance Officer - PSA staff	30
	Train and Orient Coordinator in Islands Trust governance and procedures	- Director of LPS - Director of TAS - Legislative Services Manager - HR Officer - RPM - Island Planner - Administrative Office Assistant	75
Form and support Task Force	Advertising for task force members	- Island Planner - Leg Clerk - Administrative Office Assistant	10
	Book venues and advertise meetings	- Island Planner - Administrative Office Assistant	20
	-Develop training and orientation materials; - Train and Orient	- Island Planner - PTA - Administrative Office Assistant	30
	Attend and support meetings	- Island Planner	On-going
On-going Islands Trust support of Coordinator and Task Force	Manage / supervise coordinator and contract	- RPM - Island Planner	On-going; 5 – 7 hours a week
	Annual budget renewal	- RPM - Island Planner - Director of Administrative Services - Finance Officer	40

Estimated Cost:

- $7,000 in fiscal year 2021-22 from the LTC Projects line-item for public engagement on Gabriola Island related to a special property tax requisition and legal services review of delegation bylaw;
- $77,500 annually paid by special tax requisition revenue to pay for coordinator position, First Nation capacity funding, task force venue rental, and meeting materials;
- $17,000 annually paid "in-kind" from Islands Trust general fund for on-going Islands Trust staff support of program (unless otherwise indicated in the delegation bylaw).

Summary of Staff Recommendations:

1. Identify current, on-going staff work that can be eliminated or postponed to accommodate deeper analysis of the described program;
2. Following identification of staff work that can be postponed, initiate the request for a legal opinion regarding:
    a. Whether the proposed program is within the authorities eligible for delegation described in Section 8(2) of the Islands Trust Act;
    b. The requirement for and timing of a delegation bylaw in relation to a special property tax requisition process.

ATTACHMENT(S):

1. Endorsed Project Charter for Gabriola Housing Options and Impacts Project, Phase 2 (HOIRP);
2. Endorsed Project Charter for Density transfer sub-project of HOIRP;
3. Gabriola Island Biocultural and Housing Diversity Project Proposal, dated June 7, 2021;
4. Islands Trust Policy 6.3.2, Special Property Tax Requisition;
5. Islands Trust Policy 6.5.3, Procurement;
6. Estimated work breakdown structure to initiate Joint Task Force through Special Property Tax Requisition.

FOLLOW-UP:

Prepared By: **Heather Kauer, Regional Planning Manager, Northern Region**

Reviewed By/Date: **David Marlor, Director, Local Planning Services/November 5, 2021**

Housing Options and Impacts Review Project - **Charter** v 5.0

Gabriola Island Local Trust Committee Date: October 2020

Purpose: To increase housing options on Gabriola Island through Official Community Plan (OCP) policies and Land Use Bylaw (LUB) regulations, in a manner which supports the Object of the Islands Trust, strengthens relations with Snuneymuxw First Nation and builds on the findings of the 2018 Northern Region Housing Needs Assessment

Background: This project builds on the Housing Options Review Project PHASE 1 completed in June 2018, which focused on secondary suites on lots 2 hectares or larger. The second phase of the project will consider a broader range of housing issues, and the potential for increased density on the island to accommodate increased housing options. Support for the Islands Trust's "preserve and protect" mandate, including a focus on indigenous housing needs and protecting the island's groundwater supply/water conservation, is an overarching consideration.

Objectives

- Develop an Engagement Strategy to prioritize consultation methodology and topics.
- Strengthen relations with Snuneymuxw First Nation and incorporate First Nation perspectives into policy/regulatory options.
- Explore opportunities to foster affordable, rental, special needs and seniors housing and associated services on Gabriola Island in collaboration with Snuneymuxw First Nation, the RDN, health and housing service providers and community groups.
- Develop a strategy to address all housing continuum gaps identified in the 2018 Northern Region Housing Needs Assessment Report.
- Ensure proposed policy/regulatory changes are consistent with the Object of the Islands Trust and Islands Trust Policy Statement; Coastal Douglas fir and associated ecosystems protection toolkit and with focus on water protection/conservation and ecological footprint analysis.

In Scope

First Nations Relations and Perspectives

- Establish opportunities to incorporate First Nations perspectives on indigenous housing needs and inter-governmental collaboration for effective decision making.

Affordable/Attainable/Seniors/Special Needs Housing:

- Review definitions of "affordable" and "attainable" housing.
- Review OCP policies respecting affordable, rental, seniors, special needs housing, social needs, social well-being and social development; develop a new 'housing first' policy.
- Review amenity zoning and housing agreements; density bank policies; opportunities for rental zoning.

Secondary Suites:

- Consider secondary suites on lots smaller than 2 hectares.

Multi-dwelling and Mixed Use:

- Consider OCP designations, density provisions, LUB regulations, and Development Permit guidelines for multi-dwelling housing and mixed use buildings.

Build Out Map:

- Review and update the Gabriola Island Build-Out Map.

Out of Scope

- Review of minimum lot sizes for subdivisions.
- Secondary suite provisions for lots 2 hectares or larger (*completed during Phase 1 Project*).
- Review of home occupation regulations.
- Review of marina/live-aboard regulations.
- Review of DP Areas 1 (Tunnel), 2 (Lock Bay Area), 3 (Riparian Areas), 5 (Gabriola Pass Area), 6 (Escarpment Areas), 9 (Light Industrial Use).

Workplan Overview

Deliverable/Milestone	Date
LTC endorses project charter and Terms of Reference for a Housing APC.	Spring 2019 (*COMPLETED*)
HAPC and Planning staff finalize engagement strategy and HAPC workplan for LTC endorsement.	Winter 2019-20 (*COMPLETED*)
Assist in the community consultation on the engagement on review topics and review and update the Gabriola Island Build Out Map.	2020 – Spring, 2021
Draft bylaw(s) developed; early referrals and consultation.	Spring, 2021
Legislative process for proposed bylaw(s); adoption.	2021-2022

Project Team	
Island Planner	Project Manager/Planner
Regional Planning Manager	Project Sponsor
Legislative Clerk	Legislative Process/Bylaw Review
Communications /Planner 2	Communications / Planning Support
Housing APC	Community/First Nations Reps
RPM Approval Date: 12/7/18; 22/11/18; 31/01/19; 11/07/19; 27/02/20; 09/10/20; Oct 22, 2020	**LTC Endorsement:** Resolution # GB-2018-115; GB-2019-013; GB-2019-74; GB-2020-022; GB-2020-092

Budget:

Gabriola Housing Options and Impacts Review Project

Budget Sources:

Fiscal	Item	Cost
2019-2020	Engagement Strategy development; HAPC facilitation/engagement activity	$5,000 (Completed)
2020-2021	Public Engagement	$5,000
2021-2022	Drafting bylaws, Legislative Process (community information meetings; public hearing; advertising);	Spring, 2021-2022 $3,500
	Total	$13,500

	PROJECT CHARTER WORK PLAN OVERVIEW		
Meeting	**Deliverable/Milestone**	**Target Date**	**Cost**
	Engagement activities; Build-Out Map	March, 2021	$5,000
April, 2021	Engagement activities report; recommendations for topic prioritization and bylaw amendments	April, 2021	
May, 2021	Draft bylaws intro staff report	May, 2021	
	Early referral to RDN	June, 2021	
July, 2021	1st Reading of bylaws/ initiation of 60 day referral period/legal review/CIM	July, 2021	$500
October, 2021	Staff report in re: referrals / legal review	October, 2021	$2,000
November, 2021	2nd Reading	November, 2021	
January, 2022	Public Hearing	January, 2022	$1,000
February, 2022	3rd Reading / Referral to EC	February, 2022	
	EC	March, 2022	
	Ministry Approval	June, 2022	
July, 2022	Approval	July, 2022	
TOTAL			**$8,500**

Housing Options and Impacts Review - Gabriola Island Density Donation Outreach Project
DRAFT **Charter** v1

Gabriola Island Local Trust Committee Date: June 17, 2021

Purpose: *To identify and work with Gabriola Island land owners who wish to voluntarily donate un-used density from vacant land or parcels with subdivision potential and deposit the density potential into the Gabriola Island Density Bank, for future use in relocating density for affordable housing elsewhere on the island.*

Background: *The 2021 Gabriola Housing Matters Report and Housing Advisory Planning Commission recommend the Local Trust Committee initiate a streamlined outreach and donation program for Gabriola Island and Flat Top islands property owners to voluntarily reduce their density potential under the condition that the density potential would be deposited in the Density Bank for creating affordable housing elsewhere on Gabriola Island. Over 50 respondents to the 2021 housing survey expressed interest in this type of initiative.*

Objectives

- *Identify and connect with landowners with vacant land or parcels with subdivision potential;*
- *Solicit donations of density potential into the Gabriola Density Bank for affordable housing;*
- *Update density bank with total donations identified.*

In Scope

- *Community outreach and education in partnership with the ITC/GaLTT 'Nature Stewards' Program and NAPTEP;*
- *Review of legal tools available for LTC funded processing of donations;*
- *Update density bank with 707 Park expansion density;*
- *Update density bank with voluntary donations including from un-developed secondary suites and coordinate all legal options to formalize the donation and review associated costs to be borne by LTC.*

Out of Scope

- Expanding the program to Mudge or DeCourcey Islands;

Workplan Overview

Deliverable/Milestone	Date
Mapping analysis of vacant parcels and parcels with subdivision potential. Coordinate mapping needs with Gabriola Lands and Trails Trust – Nature Stewards Program for cost and information sharing opportunities for public outreach summer 2021	June 2021
Design and develop outreach materials, presentation for land owner contact	Summer 2021
Research and compile all process options, legal requirements and costs for the LTC to fund the density donation process on behalf of land owners	Summer 2021
Host an online "density donor clinic" information sharing event and include Nature Stewards Program information	Fall 2021
Prepare necessary legal documents and/or bylaw amendments for LTC consideration	Fall/Winter 2021
Adoption of any covenants or amending bylaws being considered and registration of all necessary documents.	Spring 2022.

Project Team

Island Planner	Project Manager
GIS Technician	Mapping Support
HAPC	Advisory Team
Regional Planning Manager	Supervisor
RPM Approval: *Heather Kauer* **Date:** June 17, 2021	**LTC Endorsement:** Resolution #: 2021-061 **Date:** June 17, 2021

Budget

Budget Sources:

Fiscal	Item	Cost
2021-22	Outreach materials, notices and online clinic presentation and Q+A event	$1,000
	Mapping support	$500
	Legal review – covenants and/or bylaws	$2,500
2022-23	Legal fees for registration of covenants pending total # of participants	TBD
	Total	**$8,000**

Gabriola Island Biocultural and

Housing Diversity Project Proposal

by: Dyan Dunsmoor-Farley & Tobi Elliott
on behalf of the Housing Advisory Planning Commission
June 7, 2021

Background

The Gabriola LTC passed a resolution in April 2021 requesting further clarification on the Gabriola Housing Matters Working Group's (HMG) proposed recommendation for the establishment of a governing body that would "oversee the implementation of a suite of actions to manage growth, achieve biodiversity and freshwater conservation objectives, and ensure an adequate supply of affordable housing" for Gabriola Island. This paper offers a broad overview of how a new multi-year, inter-governmental program might work in order to meet the following objectives:

- To ensure that growth on Gabriola is managed and gradual, balancing human and environmental needs to ensure long-term sustainability
- To ensure the recovery and long-term sustainability of our endangered Coastal Douglas-fir ecosystem
- To ensure the protection and sustainable management of freshwater resources, and,
- To ensure a timely supply of affordable, appropriate housing that meets the needs of Gabriolans in a way that minimizes impacts on biodiversity and freshwater sustainability

In addition, mindful of the Islands Trusts' protocol agreement with First Nations, the high priority the Trust has placed on reconciliation, and that reciprocal relationships must be embedded in work within unceded Indigenous territories, the HAPC suggests the program outlined below should also have the following objective:

- To meaningfully engage with Snuneymuxw First Nation at every stage of program design, from strategic goal-setting and implementation, to monitoring and reporting, to the level that the Nation is willing to engage, and in a manner that honours the Nation's priorities, and that the Trust leverages sufficient budget to create capacity for a sustained engagement.

Gabriola Island Biocultural and Housing Diversity Program (BHDP) - An Overview

The Gabriola Island BHDP would be a unique program designed to bridge the historical divide between the community's housing needs and the urgent need to preserve and protect the sensitive ecology of Gabriola Island. The suggested program name builds upon the LTC's

objectives stated in the Housing Options and Impacts Review Project Charter. The term "biocultural diversity" is an emerging approach coming from the fields of anthropology and biology (typically describing the relationships between indigenous culture and biology) and addresses the intersection of cultures, communities and biologically-diverse spaces through a systems lens. A more detailed description of this term is provided on pg. 4 of this paper, but literature suggests this concept application to non-Indigenous communities and lands should be extended, and that it can be a powerful policy-making tool. "Housing diversity" means the types and forms of housing that suits the diverse needs of the island population, without being limited to strictly affordable housing.

Through this program, the LTC would receive advice, resourcing, capacity and/or guidance from Sustaining Partners such as: Snuneymuxw First Nation (SFN), Island Trust Conservancy (ITC), and the Regional District of Nanaimo (RDN) - Area B. As well, the program would be supported by a Joint Task Force on Increasing Gabriola's Biocultural and Housing Diversity. Seats on the task force would include specific sectors reserved for ~2yr terms. There could be 8-12 voting members (reps from all Partners and key community groups) and 2 - 3 non-voting members (paid program consultant, Island planner, minute taker) that support the overall program and provide advice to the LTC. The "joint" nature of the Task force is key, ensuring that the program can be focussed on the three fundamental issues that no single agency or government has been able to address holistically: housing options, biodiversity and freshwater protection, and meaningful engagement with First Nations.

Collaborative and Strategic Action between Four Partners

The RDN, SFN, LTC and ITC would work collaboratively to execute the program objectives over multiple terms, through several smaller short-term projects that also address each agencies' own strategic goals. Sustaining Partners would collaborate to set strategic goals for action, secure funding, supply staff/resourcing, guidance and some capacity components. For example, the program might access the ITC's tools for quantifying biodiversity retention and loss, use its mapping, data and monitoring technology, and in return, the Project could make actionable their top priority projects in their regional conservation strategy to preserve biodiversity, turning a wish list into reality. Other agencies, such as Gabriola Community Economic Development (Chamber of Commerce) may also play a part, both in securing funding and providing input, research and assisting to implement the program's goals.

The program would be mandated by the Gabriola LTC, financed through budget request to Trust Council, with support from grants through the RDN and the Province and other sources. The Trust could dedicate a percentage of staff time for this program - Island Planner, Communication Specialist, Regional Planning Manager, admin staff (minute taker, team assistant) - and an annual program budget for the consultant, task force meetings, SFN capacity funding, etc. The Consultant would be responsible for supporting the task force and executing

the workplan deliverables, in cooperation with the Island Planner. The ITC may wish to dedicate some staff time to ensure its Regional Conservation Strategy goals for Gabriola are incorporated or dovetailed into the program's workplan, and possibly participate in the task force. The RDN and SFN could either designate staff to participate on the Task Force or assist in leveraging access to grants to support the program's smaller projects. The LTC could provide capacity funding to SFN. The program would create significant benefits for each body by leveraging existing research, resources, opportunities for public engagement and collaborating on monitoring progress.

Project Design & Potential Initiatives

The HAPC strongly urges that the Gabriola LTC invite the Sustaining Partners to contribute their ideas at the design and development stage, to scope out the program objectives and opportunities as early in the process as possible, to inform the business case to be presented to Trust Council. This would also assure partners who wish to remain non-partisan that their mandates – particularly respecting the Indigenous perspectives and traditional knowledges about land – will be embedded into the project's values and core from the start.

The program could address a range of initiatives, including, for example:

- working with the RDN to research building codes for tiny or small moveable homes, and green and STEP code building regulations, and implementing recommendations from the RDN's alternative forms of rural development project from the Regional Growth Strategy,
- collaborating with the Islands Trust and Conservancy to set targets for voluntary initiatives to protect the environment on private lands, monitoring island biodiversity and freshwater protection,
- working with SFN on community priorities that could be addressed through a land-based learning initiative, and promote Snuneymuxw traditional knowledges and cultural heritage in specific areas.

These initiatives could be adopted by Trustees and resourced by either the regional planning team for the Islands Trust or the current planning team, or the projects could run concurrently and independently under the Joint Task Force's pre-determined mandate to address housing and biodiversity targets at the local, community and regional level. The program's primary directive would be strategic and collaborative action on all the inter-related and complex issues that require a high degree of collaboration, joint effort and strategic resourcing.

Biocultural Lens

The key learning the HAPC has taken away from the Gabriola Housing Working Group's (HWG) consultation with the community is that the protection of Gabriola Island forests and waters is as highly valued and prioritized as is the need to protect the diversity and wellbeing of

the communities that live here. Highly diverse biological realms are known as healthy spaces, and a diverse population is no less integral to a healthy community. These dual priorities speak directly to the findings of the community research undertaken by HWG, but also have been clear from the decades of unsatisfying tug of war attempting to balance the needs of the community and the ecosystems, a global struggle that is not at all unique to Gabriola. And so we believe this Joint Task Force must use a holistic scientific lens that honours both these priorities, as well as enabling meaningful engagement and collaboration with SFN, allowing us to promote values that are responsive to Snuneymuxw and Coast Salish nations' priorities.

Currently, biologists and social scientists who work at the intersection of biological and human sustainability are trending toward a scientific approach called "biocultural diversity". This denotes the "inextricable link" between biological diversity and the indigenous and traditional peoples that inhabit them (Cocks, 2006). Coming from the field of biological anthropology, the concept has shifted "towards an emphasis on the tight interlinkages between human societies, particularly their cultural sphere, and the natural and biophysical environment in which they exist" (Hanspac et. al, 2020). Biocultural diversity marries the complex interconnected worlds of social, spiritual, ecology, resource-use, knowledges and cultural aspects of land use. "By acknowledging the inseparable link between nature and culture, the concept has a deeply ingrained systems perspective at its core, thus making it an inherently social–ecological systems view (Liu et al., 2007, as cited in Hanspach et al., 2020).

Cocks (2006) argues that "culturally-conscious programs for conservation of biodiversity" should be extended to rural, urban and non-indigenous communities to "ensure an increased understanding of the role of wild resources in the lives of all users, as well as to identify new approaches to link the continuation of multifaceted cultural practices relating to the use of wild resources with biodiversity conservation." We believe the Program must be designed through this lens of biocultural diversity. And it could be a very powerful tool in the pursuit for sustainability, "precisely because of its ability to bridge diverse knowledge systems and policy" (Merçon et al., 2019; Sterling et al., 2017, as cited by Hanspach et. al. 2020).

These findings are supported by recent research on Gabriolans' attachment to place in the face of the encroachments of globalization (Dunsmoor-Farley, 2020). These attachments extend beyond an attraction to the physical space to encompass visceral attributes associated with a sense of "sanctuary", a "bounded space" in which one is "in nature" and understanding the community as a "protective enclave".

We are not only in a housing crisis, but we are also in a period of eco-crisis exacerbated by rapid climate change. We urge the LTC to take the lead in developing a scientific and culturally-responsive approach with a strong, non-partisan intergovernmental biocultural and housing diversity program, in order to address the challenges and opportunities of both.

References

Cocks, M. 2006. Biocultural Diversity: Moving Beyond the Realm of 'Indigenous' and 'Local' People. *Hum Ecol* 34, 185–200. https://doi-org.ezproxy.royalroads.ca/10.1007/s10745-006-9013-5.

Dunsmoor-Farley, D. 2020. *Globalization's Ruptures and Responses: Lessons from Three BC Communities.* 136-138. https://dspace.library.uvic.ca:8443/handle/1828/12104

Hanspach, J., Hader, L.J., Oteros-Rosas, E., et. al. 2020. Biocultural approaches to sustainability: a systematic review of the scientific literature. *People and Nature* 2. 643-658. https://besjournals-onlinelibrary-wiley-com.ezproxy.royalroads.ca/share/46ZXUYDA39FSCMYD5WAG?target=10.1002/pan3.10120

Policy:	6.3.2
Approved By:	Trust Council
Approval Date:	December 10, 2004
Amendment Date(s):	June 16, 2005; September 11, 2013
Policy Holder:	Director of Administrative Services

SPECIAL PROPERTY TAX REQUISITION

Purpose

To permit an individual local trust committee (LTC) to request a special property tax requisition for additional operations that are not included within the general operations of all LTCs. Special property tax requisitions are approved by the Islands Trust Council.

A. Definitions

n/a

B. Policy

1. General

1.1 The *Islands Trust Act* provides the Islands Trust Council with the necessary authority to implement a special property tax requisition in respect of a local trust area;

1.2 Section 10 of the *Islands Trust Act* enables the Islands Trust Council to delegate additional powers to a LTC and to require that related operations be funded by a special property tax requisition in respect of the relevant local trust area;

1.3 A proposed special requisition related to a local trust area must be incorporated into the annual Islands Trust budget bylaw and approved by the Islands Trust Council.

2. Budget Submission

2.1 "Additional operations" of a LTC are those activities and programs that are deemed by the Islands Trust Council to be:

2.1.1 Programs or services not offered in all local trust areas;

2.1.2 Enhanced service levels that reflect unique demands or additional powers that Trust Council has delegated to a LTC by bylaw; and

2.1.3 Beyond the capacity of the base budget.

2.2 LTCs wishing to propose a specific "additional operation" must ascertain and develop a budget program request, to be presented for preliminary consideration by Trust Council in December of each year.

2.3 The proposed program or activity must be within the LTC's jurisdiction pursuant to the *Islands Trust Act* or be within powers delegated to it by Trust Council. Legal advice on that matter may be obtained in accordance with the Islands Trust Legal Advice Policy.

3. Evaluation Criteria

3.1 The Islands Trust Council will evaluate and include a LTC's local initiative or program in the preliminary Islands Trust's general budget if any of the following criteria apply:

3.1.1 the program is considered to be a base service of the LTC;

3.1.2 the program is a scheduled official community plan review or land use bylaw update; and

3.1.3 the program has Trust-wide implications and benefits.

3.2 If none of the above criteria apply or if Trust Council does not approve a LTC funding request, then the LTC can propose a special requisition for its local trust area as a means of funding the proposed program.

3.3 Despite section 3.1 and 3.2 of this policy, where a delegation bylaw adopted by Trust Council pursuant to S.10 of the *Islands Trust Act* specifies that all or part of a LTC's operations related to delegated powers are to be funded by a special tax requisition within a local trust area, related requests from a LTC that are included in the preliminary Islands Trust budget must be in accordance with the requirements of the delegation bylaw.

3.4 A special property tax requisition will not be considered by Trust Council for an amount totaling less than $5,000 per LTC.

3.5 The process for development and approval of special property tax requisitions is subject to the provisions of Trust Council Policy 6.3.1 – *Budget Process Policy*.

4. Public Consultation

4.1 The LTC must solicit feedback from the public in the local trust area, minimally through a mechanism of advertising and otherwise advising the public of the purpose and cost of the proposed special requisition.

4.2 The feedback received, if any, must be considered by the Islands Trust Council prior to the final adoption of any bylaw that incorporates the special property tax requisition.

5. Approval

5.1 The proposed special property tax requisition must be formally requested by resolution of the LTC before being considered by the Islands Trust Council.

5.2 The proposed special requisition will be presented for approval to Trust Council in March of each year.

5.3 When presented to Trust Council, the special requisition proposal must be accompanied by a completed Special Property Tax Requisition Checklist in section 7 below.

5.4 The special requisition(s) will be included in the Islands Trust budget bylaw and forwarded by the Islands Trust Council to the minister responsible for the *Islands Trust Act* for approval. If the minister approves, the minister will subsequently forward the requisitions to the Minister of Finance, for collection within the relevant jurisdictions.

5.5 The Minister of Finance adds a collection fee to the requisition in calculating the amount of the levy to be assessed to property owners.

6. Funds Allocation

6.1 Once approved by Islands Trust Council within the annual budget bylaw, the LTC is authorized to undertake the approved initiative at its discretion.

6.2 The LTC must not authorize the expenditure of funds, generated through the special property tax requisition, for any purpose other than that for which the requisition was approved.

6.3 Any funds, generated through the special requisition, which are unspent at the conclusion of the fiscal year, will be held in reserve for the LTCs use in the subsequent fiscal year to:

6.3.1 complete the previously approved initiative or program; or

6.3.2 undertake a new program, subject to a further resolution of the LTC to do so.

6.4 Unspent funds cannot be used to offset a general property tax requisition.

7. Special Property Tax Requisition Checklist

Budget Submission

Description of Task	**Deadline**	**Date Completed**
Local Planning Services staff assigned to LTCs develop "additional operations" budget proposal on behalf of LTCs prior to December Trust Council meeting and submit them to FPC for review.	November FPC meeting	
Director of Local Planning Services presents "additional operations" budget proposals to Financial Planning Committee, with input from LTCs, indicating whether any of the proposed 'additional operations' are related to delegated powers and must be funded through a special property tax requisition.	December Trust Council meeting	
Financial Planning Committee makes recommendations to Trust Council regarding budget proposals made by LTCs, identifying	December Trust Council	

• Any that must be funded through a special property tax requisition pursuant to a Trust Council delegation bylaw (e.g. Bylaw 154). • Any other LTC proposals that it recommends be funded through a special property tax requisition, rather than through inclusion in the general Islands Trust budget. Director of Local Planning Services provides additional information to Trust Council about LTC proposals, as needed.	meeting	
If December Trust Council does not approve the LTC "additional operations" budget proposal for inclusion in the general Islands Trust budget, or if the LTC additional operations are related to delegated powers that must be funded through a special property tax requisition:		
• LTC passes resolution to pursue special property tax requisition to fund the "additional operations" budget proposal:	January	
- copy of resolution attached		
• LTC requests staff to conduct public consultation on the special tax requisition proposal:	Mid-February	
- copy of advertisement attached		
- if public meeting held, minutes of the discussion attached		
o written summary of public feedback attached		
• Staff prepare Request for Decision (RFD) proposed by LTC for March Trust Council binder, requesting a bylaw to authorize a special property tax requisition. The RFD will include an assessment of organizational and other implications, a completed copy of this checklist along with any attached documentation.	February FPC meeting	

C. Legislated References

Islands Trust Act, S.10, S.14(3)(c)(iii), and S.47(5)

Islands Trust Council Delegation Bylaw 154, 2013

Islands Trust Council Policy *6.3.2 – Special Property Tax Requisition*

Islands Trust Council Policy *6.5.1 – Reserves and Surplus*

Islands Trust Council Policy *7.2.6 – Municipal Tax Requisition Calculation*

D. Links to Supporting Forms, Documents, Websites, Related Policies and Procedures n/a

Policy:	6.5.3
Approved By:	Trust Council
Approval Date:	March 25, 1996
Amendment Date(s):	March 29, 2007; December 9, 2009; September 16, 2010; September 11, 2013; March 5, 2014; December 5, 2017
Policy Holder:	Director of Administrative Services

PROCUREMENT

Purpose

In accordance with the *Islands Trust Act*:

1. To set out purchasing procedures that support the costs of operations which the Islands Trust is authorized to recover through property tax requisition under *Section 47(2)* of the *Islands Trust Act*;

2. To set out the responsibilities and accountability associated with the efficient, economical and transparent acquisition of goods and services;

3. To ensure that the most appropriate method of procurement is used to acquire goods and services at the best value including consideration of environment and local economy;

4. To ensure properly delegated purchasing authority is maintained; and

5. To ensure consistency with relevant financial policies, procedures and controls, and to provide linkage to the current operating and capital budgets.

A. Definitions

n/a

B. Policy

1. Delegation of Authority

The Treasurer is accountable for the management of the acquisition of goods and services for the Islands Trust and the implementation of the day-to-day administration of the purchasing policies. To meet this objective, the Treasurer will establish such processes and procedures as are determined appropriate to the efficient and effective operation of purchasing services.

It is the intention of the policy to provide internal control measures through the separation of duties and responsibilities relating to the acquisition of goods and/or services. The tables in Appendix A establishes the signing authority delegation for procurement processes.

Trustees do not have authority to make commitments or indications of preference to a supplier of goods or services, to avoid any real or perceived perception that trustees are improperly influencing a decision of staff to select contractors in accordance with this policy.

Staff with purchasing authority have the following responsibilities:

- Ensure that appropriate approvals have been obtained and are adequately documented.
- Communicate with Administrative Services on anticipated purchasing commitments and creation of service contracts.
- Ensure that no expenditure exceeds approved budgets.
- Ensure that no expenditure is made that is not included in the annual budget.
- Ensure that expenditures are consistent with the required or permitted operations of Islands Trust bodies, as identified in the *Islands Trust Act*.
- Be familiar with the provisions of the Government of British Columbia's Standards of Conduct for Public Service Employees in Government Procurement Processes.

2. Creation of Purchase Orders and Service Contracts

Purchase orders can be created by any employee authorized by the Director, Administrative Services.

Service contracts will be created by the Finance Clerk based on information provided by staff.

3. Regular Disbursements

Expenditures occurring on a monthly or recurring basis and disbursed in the same, or similar, amounts do not require an approved purchase order or service contract. These expenditures will be approved by the Director, Administrative Services, as required. Example expenditures of this type would be rent, telephone charges and BC Mail.

4. Legal Services

The Chief Administrative Officer (or designate) will manage all legal matters through an organizational process. The process involves on-going monitoring of legal costs, monitoring of legal services quality, and regular reporting to Trust Council.

The Chief Administrative Officer will determine if expenditures require review or approval by the Executive Committee or Trust Council.

5. Financial Assistance to Community Organizations and Other Groups or Individuals

Financial assistance to community organizations or other groups or individuals is only permitted if made by the Islands Trust Council, its delegate, or the Executive Committee acting on its behalf, pursuant to Section 8(2)(h) of the *Islands Trust Act* which states that Trust Council may:

> *"(f) engage in activities to gain knowledge about the history and heritage of the trust area and to increase public awareness, understanding and appreciation of its unique amenities and environment,*
>
> *(g) conserve heritage property."*

Local Trust Committees may not provide financial assistance to community organizations or other groups or individuals unless Trust Council has, by bylaw, delegated its authority under Section 8(2)(h) of the *Islands Trust Act*.

6. Disclosure of Contracts

If a trustee (or a person who has been a trustee in the previous six months) has a direct or indirect pecuniary interest in a contract with the Islands Trust, their conduct is governed by Section 107 of the *Community Charter*.

If a staff member has a direct or indirect pecuniary interest in a contract with the Islands Trust, their conduct is governed by the Code of Conduct of the Public Service Agency of BC.

7. Local Trust Committee Expenses

7.1 Disbursements must only be made as authorized by Part 4 of the *Islands Trust Act* and typically include the following:

7.1.1 Advisory Planning Commission expenses (meeting and secretarial costs)

7.1.2 LTC meeting costs including advertising, hall rental, external facilitation costs, and secretarial costs

7.1.3 Local mail-outs and/or trustee newsletters

7.1.4 Open house costs

7.1.5 Purchases of goods or services that support the land use planning and regulatory operations of the LTC.

7.2 Disbursements must be made in accordance with the budget allocation, be processed via the Trust's financial system, and comply with all financial policies and procedures; including use of purchase orders or service contracts where required, and appropriate approvals by the Treasurer and/or designate;

7.3 Any disbursement over $500 which is to be charged against the local trust committee expense budget, with the exception of those items noted in Section 7.1.1 through 7.1.4 above, should be approved by resolution of the LTC;

7.4 Expenditures cannot exceed the annual budget allocation provided to each local trust committee by Trust Council. However, if a local trust committee anticipates extraordinary costs they should approach the Executive Committee to request a budget adjustment;

7.5 Trustee travel and other expenditures must comply with Islands Trust Policy 7.2.3, Trustee Travel Policy and Procedures; and

7.6 Trustee expenses related to attendance at training and/or conferences must comply with Islands Trust Policy 6.12.1, Trustee Training/Conference Attendance.

8. Competitive Process

The table in Appendix A establishes the dollar limits for different types of competitive processes.

An individual project with a total value greater than $25,000 that will be completed over more than one fiscal year will require a formal competitive process with a Request for Proposal.

A competitive process can be held at the discretion of the Manager with budget authority, even if the estimated value of the goods or services falls below the dollar thresholds in Appendix A.

All competitive processes must be coordinated by the Finance Officer to ensure that best competitive practices are followed.

When a direct award is made, staff are still expected to obtain goods and services at the best available price, while taking into consideration the quality and followup service available (if applicable) for the goods and services. To expedite routine or regular purchases, a qualified vendors' list may be established. Vendors on the qualified vendors' list will be selected in accordance with established procedures.

9. Direct Awards

If one or more of the following circumstances exist, the Chief Administrative Officer, in conjunction with the Director of Administrative Services, determines whether to approve a purchase by direct award:

- The requirement is valued at less than $25,000.
- An emergency exists and requirements cannot be satisfied in time by means of a competitive process.
- A process delay would interfere with Islands Trust's ability to maintain security or order, or to protect human, animal, or plant life or health.
- The required service is confidential.
- There is a single supplier that clearly provides the best value in the circumstances of a particular purchase.
- Where the competitive process is impractical because of the need to obtain unique third party skills, there is a requirement for contractor continuity, or there is a strong case for the cost effectiveness of maintaining a current contractor for a specific task.
- For work to be performed on or about a leased building that may be performed only by the lessor or the lessor's approved suppliers.
- The Islands Trust receives grant funding on behalf of a third party who initiated the project or funding request, and is named in the funding proposal. In this circumstance, the

Director of Administrative Services may, at his or her discretion, directly award a contract to the third party, a contractor, or community group, after confirming the chosen contractor or community group demonstrates the capability and qualifications to complete the work funded by the grant. If the work is being conducted on behalf of a local trust committee, the proposed work must be within the legislated role of the local trust committee *(Islands Trust Act, Section 24)*.

- For projects covered under a partnership agreement, where the Islands Trust is not the only source of funds and the other funding source(s) has already selected the contractor. In this circumstance, the Director of Administrative Services may, at his or her discretion, directly award a contract to the selected contractor after confirming the contractor demonstrates the capability and qualifications to complete the work.

10. Selection Criteria

In a competitive process, selection criteria shall be established before a competitive process is posted. The selection criteria should consider all the relevant factors in a purchasing decision including, price, quality, qualifications, delivery time, quality of the response, environmental and social policy considerations, local purchasing and any other factors as determined by the Manager with budget authority for the purchase.

A local trust committee may request that the Regional Planning Manager provide the selection criteria for their review prior to posting the competition.

All details of the selection process shall be retained by the Finance Clerk.

11. Consultant Evaluations

A firm's performance is assessed for services based on the quality of the project in terms of how successfully it fulfils the stated objectives for the project. In the case of studies and briefs, where there is no built work involved, the product refers to the actual work produced by a consultant. Quality of 'services' assesses the firm's ability to manage and deliver professional services in a comprehensive, effective, reliable and timely manner throughout each stage of the project.

12. Contract Renewals

Once a competitive process is held (where required) and a vendor selected, contracts may be signed with the selected vendor to allow for renewal periods of up to five years, provided that satisfactory service continues to be received. At the completion of the renewal period, a new competitive process should be held, if required by the Purchasing Policy in place at the time.

A competitive process for a particular business service can be delayed for up to one year at the discretion of the Chief Administrative Officer if high quality service is being provided at a reasonable price by the current service provider.

13. Fiscal Year

Contracts should not extend beyond the end of the current fiscal year-end to provide for budget approvals. Should the situation arise where this is required, approval by the Chief Administrative Officer is required.

14. Environmental Considerations

When making purchases every effort will be made to select suppliers whose environmental practices are consistent with those of the Islands Trust.

Environmental considerations include such things as the suppliers' efforts towards recycling; use of environmentally friendly products; and manufacturing goods from recycled or recyclable materials.

In addition, purchases of equipment and supplies should have Canadian content wherever possible, practical and economical.

15. Social Policy Considerations

When making purchases every effort will be made to select suppliers whose products or services align with the attributes of social procurement policy.

Social procurement considerations include contributions towards a stronger local economy; enhancing the number of local jobs; and enhancing community arts and culture infrastructure.

16. Local Purchasing Considerations

When making purchases every effort will be made to purchase local goods and services including:

- Local food procurement – Islands Trust staff engaged in the purchase of food for operational needs will ensure that when practical, both operationally and economically, at least 40% of purchases will be local. Suppliers will be made aware of this policy and will be encouraged, again where practical, to increase the availability and variety of local foods. "Local" is defined as food that is produced within British Columbia, with preference given to items produced in the Islands Trust Area or on Vancouver Island.

- Community Stewardship Awards – Islands Trust staff engaged in procuring Community Stewardship Awards, or other awards that from time to time may be required, will ensure that awards represent the unique nature of the Islands Trust Area and, where practical, are constituted from products distinct to the Islands Trust Area.

- Contractors and service providers with a presence in the Islands Trust Area, and/or whose employees reside in the Islands Trust Area.

17. Staff Travel and Training

Travel expenses are submitted via Islands Trust Expense Claim. All those claiming expenses are expected to ensure that the most cost effective method of travel is provided. Approved Expense Claims are considered equivalent to an approved purchase order or service contract.

Training requests are approved via an authorized "Training/Conference Request Form" (see Policy 8.2.1, Staff Training and Conference Attendance). All staff travel and training requests must be approved by the appropriate Manager.

Managers have the responsibility to ensure all Employee Expense Claims are in accordance with established processes (i.e., BCGEU travel allowance chart).

C. Legislated References

Islands Trust Act

BC Government Purchasing Handbook

Ministry of Finance Core Policy 6.0 Purchasing

Islands Trust Policy 8.2.1, Staff Training and Conference Attendance

Islands Trust Policy 6.12.1, Trustee Training/Conference Attendance

Islands Trust Policy 7.2.3, Trustee Travel Policy and Procedures

D. Links to Supporting Forms, Documents, Websites, Related Policies and Procedures

Appendix A – Method of Procurement and Approval Authority

APPENDIX A – METHOD OF PROCUREMENT AND APPROVAL AUTHORITY

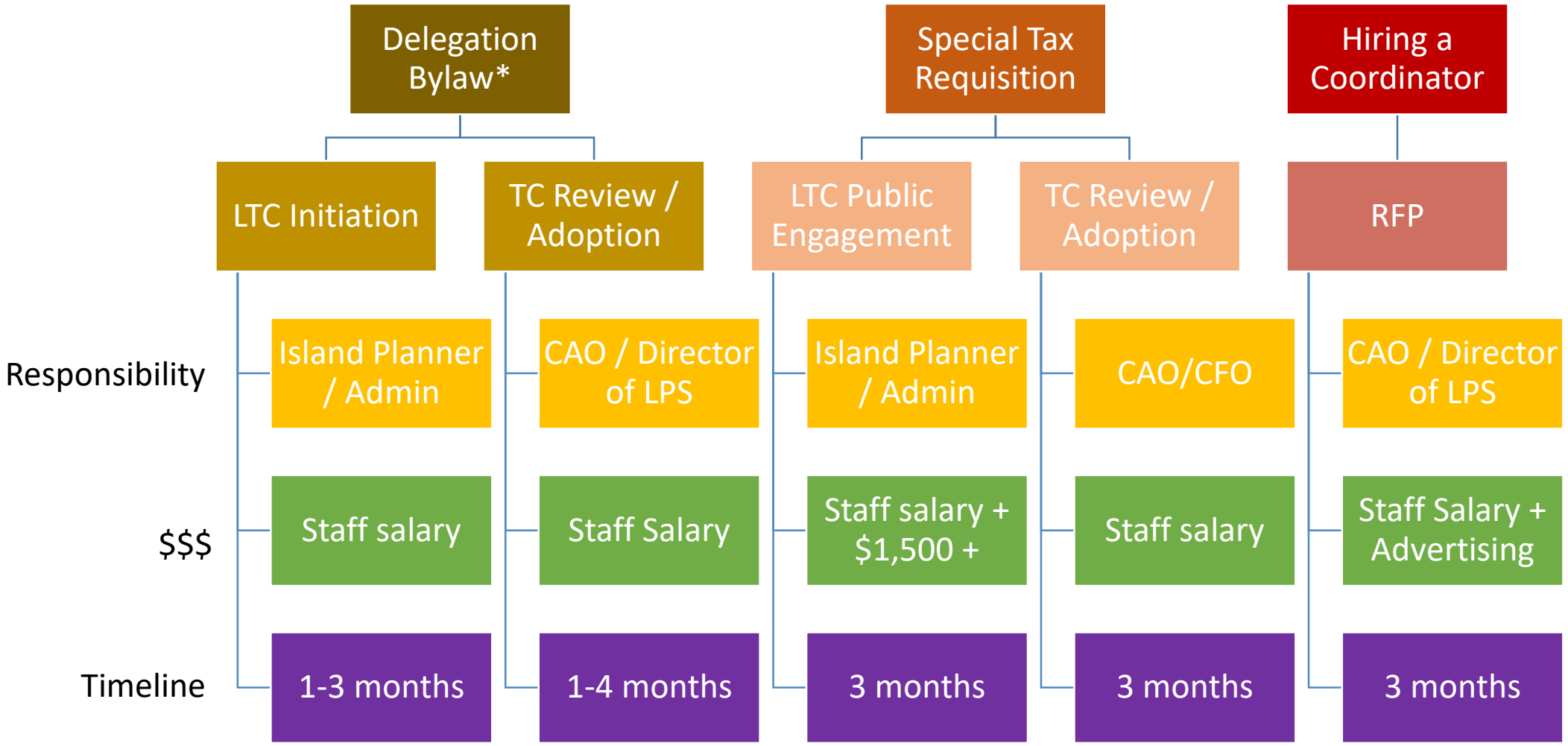
COMMITTMENT MATRIX
October 10, 2017

	Commitment/ Spending $ Level	Commitment Type	Number of Quotes	Method of Purchase	Document Submitted to Finance	Special Conditions
1	<$100	Petty Cash	One	Verbal, in person	Petty Cash Reconciliation	Receipt Required with payment claim - record purpose of purchace on receipt
2	<$500	Petty Cash, Corporate Credit Card	One	Verbal, in person	Petty Cash or Corporate Credit Card Reconciliation	Receipt Required with payment claim - record purpose of purchace on reconciliation
3	<5,000 per item or aggregate	Service Contact or Purchase Order	One	Verbal or written quote from one or more known vendors	Invoice	Approval of Invoice with indication of Project Code if any including indication that services/goods were received as ordered
4	$5001to $25,000 per item or aggregate		Request at least Three	Verbal or written quote from at least Three known vendors. If no "known" vendors then formal competitive process ITQ or RFP	Invoice	
5	>$25,001per item or aggregate		Public Process	Appropriate Competitive process - RFP/ITQ	Invoice	
	All Direct Award Service Contracts or Purchase Orders over $10,000 must be approved by the Chief Administrative Officer					

SIGNING AUTHORITY MATRIX
October 10, 2017

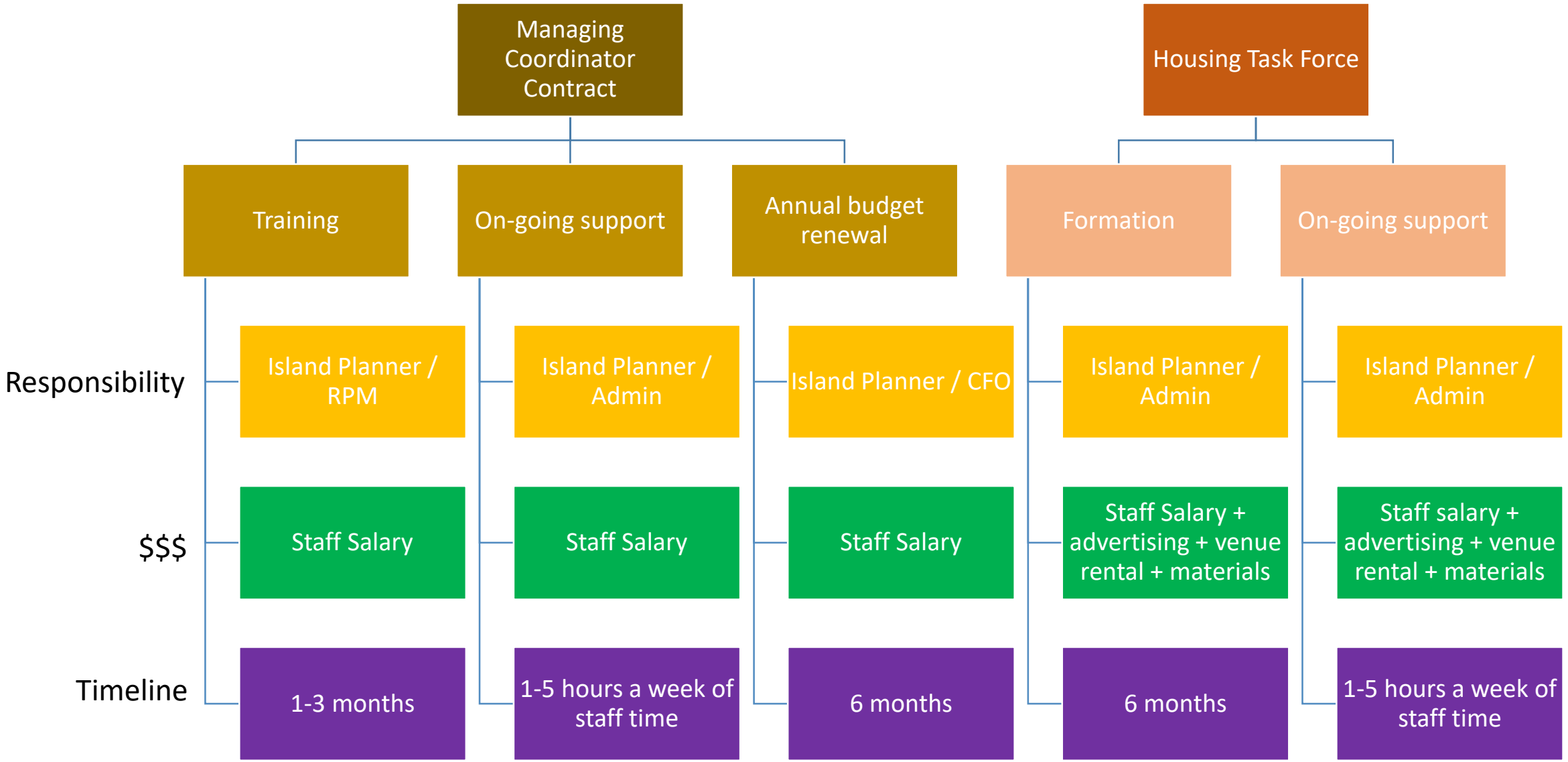
	Position / Type of Decision	Commitment Type	Executive Committee	Chief Administrative Officer	Treasurer (Director of Administrative Service)	Director (Local Planning Serivces and Trust Area Services)	Corporate Secretary (Manager of Legislative Services)	Regional Planning Manager	Manager - (Manager of Islands Trust Fund, Manager of Information Systems, Executive Coordinator)	Supervisor (Finance Officer and Emp[loyee Services Coordinator)
1	Authorization of **Purchase of Services or Goods**	Petty Cash, Corporate Credit Card Charge, Purchase Order or Service Contract to be done when required by policy	N/A	Greater than $100,000 or direct award greater than $10,000	Up to $100,000	Up to $25,000	Up to $10,000	Up to $10,000	Up to $5,000	Up to $500
2	Authorization of new **Positions**	Email approval prior to initiation of hiring process	N/A	Yes	Yes	N/A	N/A	N/A	N/A	N/A
3	Authorization to **fill** vacant positions or changes to existing Positions	Offer Letter	N/A	Yes	Yes	N/A	N/A	N/A	N/A	N/A
4	Authorization of **Training Request** prior to registration or travel bookings	Training Request Form	N/A	Greater than $50,000 or for any amount for training outside of the Province of BC	Up to $50,000 - Training within Province of BC	Up to $10,000 - Training in the Province of BC	Up to $10,000 - Training in the Province of BC	Up to $10,000 - Training in the Province of BC	Up to $10,000 - Training within the Province of BC	
5	Authorization of **Travel and Expense** reimbursements	Expense Form	N/A	Greater than $50,000 or for any amount for travel outside of the Province of BC	Up to $50,000 - Travel within Province of BC	Up to $10,000 - Travel within Province of BC	Up to $10,000 - Travel within Province of BC	Up to $10,000 - Travel within Province of BC	Up to $10,000 - Travel within Province of BC	N/A
6	Authority to sign **Grant Agreements** or **Memorandum of Understanding** with external parties	Contract	N/A	Greater than $100,000	Up to $100,000	Up to $25,000	N/A	N/A	N/A	N/A
7	Authority to sign **Contracts** with external parties with no monetary implications	Contract	N/A	Within area of accountability	Within area of accountability	Within area of accountability	Within area of accountability	Within area of accountability	Within area of accountability	N/A
8	Authority to sign **Project Charter**	Contract	N/A	Greater than $100,000	Up to $10,000	Up to $10,000	Up to $5,000	Up to $5,000	N/A	N/A
9	Authority to sign **Legal Services requests**	Legal Services Request	N/A	Greater than $100,000	Up to $100,000	Up to $25,000	Up to $10,000	Up to $10,000	Up to $5,000	N/A
10	Authority to sign **Lease/Rental Agreements**	Agreement	N/A	Greater than $100,000	Up to $100,000	N/A	N/A	N/A	N/A	N/A
11	Authority to **release LTC project funds from the LTC Project Reserve Fund**	Agreement	Greater than $20,000	Up to $20,000	Up to $20,000	N/A	N/A	N/A	N/A	N/A

Gabriola Housing Task Force Program Setup



*SSIWPA delegation bylaw 154 took 1 year to process from initiation to adoption

Program Implementation: on-going / renewed annually



ISLANDS TRUST CONSERVANCY

the Heron

A newsletter from the Islands Trust Conservancy, protecting islands in the Salish Sea | islandstrustconservancy.ca AUTUMN 2021



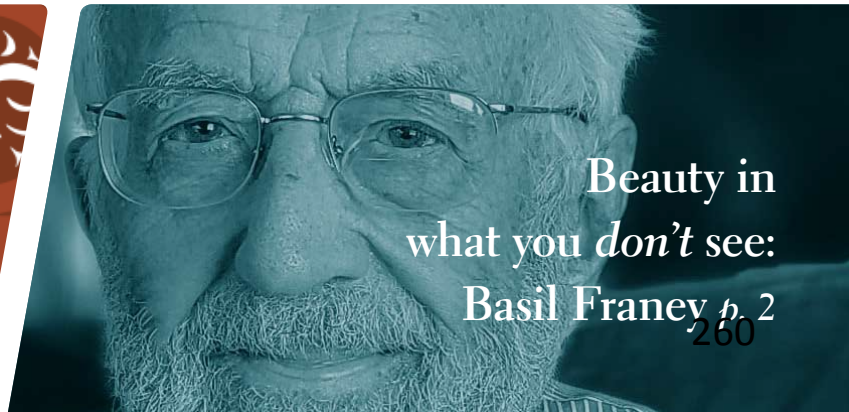
Leaving her mark

the "powerhouse" who inspired us all *p.3*

ALSO IN THIS ISSUE



Reconciliation: Reflecting and learning *p. 2*



Beauty in what you *don't* see: Basil Franey *p. 2*

Conservation Superhero Focus: Basil Franey

As we sit on a bench on Isabella Point, Fulford Harbour, Basil Franey remarks "I'll bet 30 ferries go past here every day, and the people on it aren't aware of the reason they are looking at a natural space rather than buildings and a driveway". Basil and his late wife Margaret bought land on Salt Spring Island in 1980 to build and retire to from Vancouver. When, five years later, there was a plan for a "gigantic fish farm" on Isabella Point they decided to purchase more land in order to ensure that never happened. Basil placed a conservation covenant on five acres of the land, on a high point. "There is a fantastic view all around, and it's just beautiful."

At 97, Basil says, "I feel good about it. I have never had any regrets. It gives me peace of mind to think of it being always unspoiled."

We all have much to thank those that place conservation covenants on their land, whether we are aware of it or not. As Basil well knows, there is so much beauty in what we're *not* seeing.



Basil Franey has never regretted placing a conservation covenant on land on Isabella Point, Salt Spring Island.
COVER AND ABOVE PHOTOS: CARLA FUNK

Are you interested in placing conservation covenants on your land?
Call Kathryn Martell, Ecosystem Protection Specialist 250-405-5176 kmartell@islandstrust.bc.ca



Secrets of the Sharp-tailed Snake are coming to light using eDNA methods.
PHOTO: CHRISTIAN ENGELSTOFT

Finding fossorial snakes on Salt Spring Island

The Sharp-tailed Snake is secretive and semi-fossorial (burrowing) which makes it hard to find and study. Species-at-risk funding has enabled the Islands Trust Conservancy to use breakthrough methods more typically used for crime scenes: the use of mapping environmental DNA, to survey these elusive snakes.

Read the scientific article, co-authored by Salt Spring and Pender Island scientists Carrina Maslovat, Laura Matthias and Jared Hobbs.
www.sciencedirect.com/science/article/pii/S147016oX21008529

This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :
Environment and Climate Change Canada | Environnement et Changement climatique Canada

Reconciliation progress at Islands Trust Conservancy

Since adopting a Reconciliation Declaration in July, 2019, Islands Trust Conservancy Board and staff have received training on identity, place, acknowledgement, history of oppressive legislation, and the role that we all have in reconciliation work. In 2021, Islands Trust Conservancy began conversations with First Nations through property management planning processes. We plan to work with First Nations in a meaningful way to protect significant sites, sacred sites, and culturally significant species and to explore co-management and co-decision making.

Learning, reflecting, and understanding is a focus of the Islands Trust Conservancy in the coming year. To read more about our Reconciliation Declaration visit www.islandstrust.bc.ca/about-us/reconciliation/



On-site staff cultural training with Harold Joe PHOTO: CARLA FUNK
COVER IMAGE: Elliot White-Hill graphic design



Drum detail. PHOTO: LISA WILCOX

Acknowledgement

Islands Trust Conservancy acknowledges that we work within the treaty lands and territories of the BOḰEĆEN, K'ómoks, Lək̓ʷəŋən, Lyackson, MÁLEXEŁ, Qualicum, Quw'utsun Tribes, sc̓əẃaθən məsteyəxʷ, Scia'new, sə̓lilwətaʔɬ, SEMYOME, shíshálh, Sḵwx̱wú7mesh, Snaw-naw-as, Snuneymuxw, Spune'luxutth, ST̓ÁUTW̱, Stz'uminus, ɬəʔamɛn, toq qaymɪxʷ, Ts'uubaa-asatx, Wei Wai Kum, We Wai Kai, W̱JOŁEŁP, W̱SIḴEM, Xeláltxw, Xwémalhkwu/ʔop qaymɪxʷ, and xʷməθkʷəy̓əm.

Louise Bell:
Actions speak volumes

The words "intentional citizen" leap into mind when contemplating the life of Louise Bell.

Late spring I called Louise Bell to request an interview for the Heron Newsletter. She paused, thoughtful. She'd learned about the passing of her valued friend, Sara Steil from Pender Island, in a previous edition of the newsletter (www.islandstrust.bc.ca/document/the-heron-newsletter-spring-2021). She spoke with sadness about friends and kindred spirits that were dying with an alarming frequency, and she felt there was a "changing of the guard".

Louise put my interview off until fall. She was working on a book about her thoughts on logging and didn't want to be distracted from that task. I was tempted to push a little; to ask her for an early phone interview which wouldn't take up too much of her time. Yet I didn't want to distract her, so I didn't push. I regret that now.

Sadly she passed away suddenly, June 17, 2021.

She is described by friends as *a Powerhouse. A Go-Getter. A Dynamo.*

In today's tumultuous world we could all use a positive role model – someone that persists, and pushes past the paralysis created when the world seems chaotic. Louise inspired so many, giving generously of her time, talent, and treasure.

She served as an Islands Trust Conservancy board member for 10 years, helping to shape the future of land conservation on the islands. When she retired from her role as a Denman Island trustee, trustees throughout the Islands Trust Area honoured her 15-year career as a local politician with donations to a cause close to her heart—the Islands Trust Conservancy's Opportunity Fund which helps to kick-start land acquisition campaigns throughout the Islands Trust Area.

Louise played a pivotal role in creating Canada's first "green burial only" cemetery on Denman Island in 2015. She envisioned the natural regeneration of the forest through this cemetery, a forest in 100 years, and was committed to helping create a model for others to follow.

We are honoured that Louise personally made annual donations to Islands Trust Conservancy from 1999 until her passing in 2021. She chose to give where she lived because she knew and trusted Islands Trust Conservancy, and saw the impact every donation made on her beloved islands of the Salish Sea.

She almost finished her book on logging on Denman Island. Her daughter Barb Legg tells me that, unlike her mother, she is no writer, but that she intends to complete the task. Louise had drafted 3 titles – the one Barb loves is "Buy it. Log it. Flog it."

Louise Bell was the kind of person for whom 'business as usual' did not wash: she made clear statements through her actions, and inspired others to do the same. She was an "intentional citizen" of the very best kind.

The guard is indeed changing. Who will fill these forward-thinking shoes?

Carla Funk, Strategic Fund Development.
cfunk@islandstrust.bc.ca



ABOVE: Louise, McFarlane Beach, Denman Island. PHOTO: KATE KROEGER
COVER: Denman Island Memorial Society Board members, from left to right, Jane Lighthall, Louise Bell and Angela Robinson, stand before The Ancestors, wooden sculptures at the Denman Island Natural Burial Cemetery.

Coop Student Devin Hentschel



A 4th-year UVic student majoring in Biology, I was hired as a summer co-op Conservation Technician. I monitored the nature reserves and conservation covenants around the Trust Area. In only a few months I visited 47 properties on 14 islands – a dream job!

It wasn't all fun and games. Imagine the ferry lineups! Monitoring involves walking around the boundaries of each property and along any potential trails using GPS.
An avid hiker, this was an enjoyable experience. I took photos of corner pins, points of interest, and invasive species found, and stayed on the lookout for trespasses or infractions to make sure each property maintained its pristine habitat.

Some of my most rewarding days and my fondest memories from the summer were spent pulling invasive species on the properties. You name the invasive, I likely pulled it!

Welcome to the Board!



Galiano Islander and founding board member of the Galiano Conservancy Association, **Dr. Risa Smith**, Ecologist, brings 25 years of experience developing biodiversity policy, and expertise in Nature-based Climate Solutions. She is a leader of the Climate Change Specialist Group/World Commission on Protected Areas, and advisor to both the Canadian Government and IUCN.

ABOVE: Dr. Risa Smith, LEFT: Devin Hentschel, BELOW: Kate-Louise Stamford, Islands Trust Conservancy Board Chair. PHOTOS: CARLA FUNK

It's the giving season! Please consider making a holiday gift to someone you love, and help kick-start conservation. We'll send a card to let them know of your gift.

Gifts of securities are the most tax savvy way to donate. Call Carla Funk, Strategic Fund Development, for a confidential conversation on giving. 250-405-5171.



Like us on Facebook facebook.com/IslTrustConservancy/

Online islandstrust.bc.ca/conservancy

Newsletter Production Juniper English | rippledesign.info

Printed on 100% post consumer recycled paper. Please recycle.

YES! I want to preserve and protect the islands!

100% of your donation goes directly to protecting endangered habitat on the islands you love.

Your donations of $20 or more will receive an official donation receipt for income tax purposes.*

To donate online visit:
islandstrust.bc.ca/donate-to-conservancy

Or mail to: 200–1627 Fort Street, Victoria, BC V8R 1H8

Name

Address

City

Prov/State | Postal/Zip code

Phone

Email

Questions? Contact us!

250-405-5186

itcmail@islandstrust.bc.ca

☐ Yes, I am okay with public recognition of my donation.

My donation amount: ☐ $50 ☐ $100 ☐ $200 ☐ $_____

I wish to donate by:

☐ Cheque (made payable to the Islands Trust Conservancy)

☐ Visa ☐ MasterCard

Card Number

Expiry Date mm/yy | Security Code (back of card)

Signature

Share your vision with future generations — please consider remembering Islands Trust Conservancy in your will.

*Islands Trust Conservancy is a qualified donee as a Crown agent under the *Islands Trust Act*. Islands Trust business # 122013576 RT0001

Applications

Development Permit

File Number	Applicant Name	Date Received	Purpose
GB-DP-2017.2	Fenton, Rob	03-Aug-2017	PID: 009-796-045 To bring property into bylaw compliance Civic: Acorn Island

Planner: Stephen Baugh

Planning Status

Status Date: 25-Oct-2021

File transferred from Ian Cox to Stephen Baugh.

Status Date: 12-Oct-2021

No change in status.

Status Date: 26-Aug-2021

No change in status.

File Number	Applicant Name	Date Received	Purpose
GB-DP-2021.1	Centre Stage Holdings (J.E. Anderson & Associates)	20-May-2021	PID: 003-134-806 DP application for protection of development from hazardous conditions DPA6, relating to subdivision application.

Planner: Sonja Zupanec

Planning Status

Status Date:

File Number	Applicant Name	Date Received	Purpose
GB-DP-2021.2	Silva Bay Resort & Marina - 1167433 BC Ltd. (Hemmer Envirochem Inc.)	02-Nov-2021	PID: 030-792-606 Amendment to GB-DP-2020.2 Civic address: 3383 South Road, Gabriola Island, BC.

Planner: Teresa Mahikwa

Planning Status

Status Date: 02-Nov-2021

File opened & assigned, waiting for Etransfer.

Applications

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
GB-DVP-2016.3	Van Herwaarden, Lynn	24-Aug-2016	PID: 003-422-852 539 Wildwood Crescent, Gabriola Island. DVP to bring property into compliance.

Planner: Jaime Dubyna

Planning Status

Status Date: 26-Oct-2021

File transferred to RPM. Staff to provide status update for November 25, 2021 LTC meeting as requested at October regular business meeting.

Status Date: 12-Oct-2021

No change in status.

Status Date: 26-Aug-2021

No change in status.

File Number	Applicant Name	Date Received	Purpose
GB-DVP-2017.1	Fenton, Rob	03-Aug-2017	PID: 009-796-045 To bring property into bylaw compliance. Civic address: Acorn Island

Planner: Stephen Baugh

Planning Status

Status Date: 25-Oct-2021

File transferred from Ian Cox to Stephen Baugh.

Status Date: 12-Oct-2021

No change in status.

Status Date: 26-Aug-2021

No change in status.

Applications

Liquor Control Branch

File Number	Applicant Name	Date Received	Purpose
GB-LCB-2021.2	Ravenskill Orchards Cidery & Tasking Room - Referral from Liquor & Cannabis Licensing **Planner:** Stephen Baugh	05-Nov-2021	Provide confirmation of zoning for change to approved picnic area. Civic address: 1240 Coats Drive, Gabriola Island, BC.

Planning Status

Status Date: 09-Nov-2021

File opened & assigned.

Rezoning

File Number	Applicant Name	Date Received	Purpose
GB-RZ-2020.1	Gabriola Housing Society (Nancy Hetherington Peirce) **Planner:** Jaime Dubyna	15-Jan-2020	PIDs: 028-580-095 and 028-580-109 Affordable housing project. Civic address: Lots 1 & 2 Paisley Place, Gabriola Island, BC.

Planning Status

Status Date: 08-Jul-2021

Bylaw 306 (OCP) received Statutory Approval (Minister of Municipal Affairs), dated May 10, 2021.

Status Date: 06-May-2021

Copy of provincial water license received.

Status Date: 04-Mar-2021

LTC amendments to Housing Agreement made. LTC resolution to not proceed with further readings of Bylaw 308 (Housing Agreement) until comments are received from Snuneymuxw First Nation.

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2012.2	Powell, Don	24-Oct-2012	725 Church Street - subdivision to create one new lot and a remainder lot

Planner: Heather Kauer

Planning Status

Status Date: 26-Oct-2021

Inactive file closing letter sent - applicant deceased. File transferred to RPM Kauer.

Status Date: 12-Oct-2021

No change in status.

Status Date: 26-Aug-2021

No change in status.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2013.3	Smythies & Associates	28-Oct-2013	411 Daniel Way subdivision to create 2 parcels

Planner: Heather Kauer

Planning Status

Status Date: 26-Oct-2021

Inactive file closing letter sent - MOTI states applicant still working with ALC. File transferred to RPM Kauer.

Status Date: 12-Oct-2021

No change in status.

Status Date: 26-Aug-2021

No change in status.

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2016.2	MACKAY, IKE	23-Feb-2016	PIDs: 004-857-119 and 004-614-771 Lot Boundary Adjustment

Planner: Heather Kauer

Planning Status

Status Date: 26-Oct-2021

Inactive file closing letter sent. File transferred to RPM Kauer.

Status Date: 12-Oct-2021

No change in status.

Status Date: 26-Aug-2021

No change in status.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2017.2	Williamson & Associates	19-Jan-2017	PIDs: 009-739-602 and 000-105-287. Lot line adjustment. Civic 831 Chelwood Road, Gabriola Island, BC

Planner: Marnie Eggen

Planning Status

Status Date: 21-Jan-2021

LTC accepts covenant.

Status Date: 20-Oct-2020

Applicant signs cost recovery agreement. Legal counsel, planner and applicant reviewing covenant.

Status Date: 10-Sep-2020

LTC approves cost recovery agreement for legal review of covenant.

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2019.1	Williamson & Associates (B&K Shopping Centre)	11-Jun-2019	PID: 004-549-023 Subdivision at 369 Berry Point Road, Gabriola Island, BC

Planner: Teresa Mahikwa

Planning Status

Status Date: 29-Oct-2021
File transferred to Teresa Mahikwa

Status Date: 25-Oct-2021
File transferred from Planner Cox to Planner Zupanec.

Status Date: 09-Sep-2021
MOTI PLR extension granted for one year from September 9, 2021.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2020.3	Centre Stage Holdings Ltd. c/o J.E. Anderson	31-Jul-2020	PID: 003-134-806 17 lot subdivision Civic address: North East 1/4 of Section 3

Planner: Sonja Zupanec

Planning Status

Status Date: 02-Feb-2021
Referral response submitted to MOTI

Status Date: 31-Jul-2020
File opened and assigned

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2021.2	Centre Stage Holdings Ltd. c/o J.E. Anderson	16-Sep-2021	PID: 027-086-500 6 lot subdivision. Civic address: Lot 20 Section 8 (Addition of 3 panhandle lots to original plan in GB-SUB-2020.2)

Planner: Sonja Zupanec

Planning Status

Status Date:

Applications

Temporary and Industrial Use Permit

File Number	Applicant Name	Date Received	Purpose
GB-TUP-2020.1	West, Paul & Karen	13-Nov-2020	PID: 003-666-131 STVR Civic address: 2900 Rowan Way, Gabriola Island, BC.

Planner: Heather Kauer

Planning Status

Status Date: 26-Oct-2021

Inactive file closing letter sent. Applicant requests refund. File transferred to RPM Kauer.

Status Date: 20-Oct-2021

Inactive application letter sent by staff. File to be closed and refund issued by October 27, 2021 if no information received.

Status Date: 12-Oct-2021

No change in status.

File Number	Applicant Name	Date Received	Purpose
GB-TUP-2020.2	MacKay, Ike	25-Nov-2020	PID: 000-334-715 TUP for STVR. Civic address: 1016 Berry Point Road, Gabriola Island, BC.

Planner: Teresa Mahikwa

Planning Status

Status Date: 18-Nov-2021

File transferred to Planner Mahikwa.

Status Date: 26-Oct-2021

Applicant intends to proceed with application, provide required information. Interim file transfer to RPM Kauer.

Status Date: 20-Oct-2021

Inactive application letter sent by staff. File to be closed and refund issued by October 27, 2021 if no information received.

Islands Trust

LTC EXP SUMMARY REPORT F2022

Invoices posted to Month ending September 2021

620 Gabriola	Invoices posted to Month ending September 2021	Budget	Spent	Balance
65000-620	LTC "Trustee Expenses"	693.00	0.00	693.00
LTC Local				
65200-620	LTC - Local Exp - LTC Meeting Expenses	4,120.00	2,396.60	1,723.40
65210-620	LTC - Local Exp - APC Meeting Expenses	444.00	0.00	444.00
65220-620	LTC - Local Exp - Communications	1,000.00	369.00	631.00
65230-620	LTC - Local Exp - Special Projects	588.00	0.00	588.00
TOTAL LTC Local Expense		6,152.00	2,765.60	3,386.40
Projects				
73001-620-2001	Gabriola OCP/LUB	1,600.00	0.00	1,600.00
73001-620-4097	Gabriola Housing Options & Impacts	5,000.00	332.10	4,667.90
73001-620-4104	Gabriola Cannabis Regulations	1,500.00	0.00	1,500.00
TOTAL Project Expenses		8,100.00	332.10	7,767.90

Gabriola Island Local Trust Committee Policies & Standing Resolutions

No	Meeting Date	Resolution No.	Issue	Policy and Description

1.	June 14, 2018	GB-2018-040	Processing non-medical cannabis retail license applications	**It was MOVED and SECONDED**
				that the Gabriola Island Local Trust Committee adopt the following standing resolution with respect to the processing of non-medical cannabis retail license applications:
				• Proposed or amended licenses for non-medical 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; and
				• 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:
				  • Name of the applicant and a description of the proposal in general terms;
				  • The location of the proposed establishment and the subject site;
				  • The place where, and date and time when, both a public meeting will be held and a resolution of the local trust committee considered;
				  • The name and contact information of the Islands Trust planning staff member who can provide copies of the proposed or amended license application; and
				  • How public comments may be submitted to the Local Trust Committee.

2.	November 22, 2018	GB-2018-122	Applications for Federal Cannabis License	**It was MOVED and SECONDED** that the Gabriola Island Local Trust Committee requests that Notices of Intention to Apply for a Federal Cannabis License be forwarded to the Local Trust Committee upon receipt by the Islands Trust.
3.	February 28, 2019	GB-2019-031	First Nations - Community Reconciliation	**It was MOVED and SECONDED** that the Gabriola Island Local Trust Committee adopt the following standing resolution: Whereas the Local Trust Committee seeks to engage in Reconciliation with local

				First Nations, governments and the island community by honouring the Truth and Reconciliation Commission Calls to Action, United Nations Declaration on the Rights of Indigenous Peoples, 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 elders from local First Nations to attend and provide a traditional welcome to the territory; 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; and 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.
4.	April 11, 2019	GB-2019-038	Limited Public Markets Enforcement	**It was MOVED and SECONDED** that the Gabriola Island Local Trust Committee adopt the following standing resolution with respect to limited public markets: a) Islands Trust Bylaw Enforcement Staff are directed to not enforce Section B.6.2 of Gabriola Island Land Use Bylaw No. 177, 1999 when limited public markets are operated indoors, but rather to inform the operators of the applicable land use regulations; b) This enforcement policy does not permit violation of the Land Use Bylaw and the Gabriola Island Local Trust Committee may at any time, by resolution, modify or rescind this policy or give direction to expand enforcement activities.
5.	April 11, 2019	GB-2019-040	S219 Covenant	**It was MOVED and SECONDED**

			Signatories	that the Gabriola Island Local Trust Committee adopt the following standing resolution: that the Gabriola Island Local Trust Committee is authorized to enter into section 219 covenants, in the form of the 'Model Covenant for Secondary Suites' attached and in satisfaction of subsection B.6.6.8 of the Gabriola Island Land Use Bylaw No. 177, provided that such covenants must be executed on behalf of the Local Trust Committee by two members of the Local Trust Committee.
6.	July 30, 2020	GB-2020-053	Proactive unlawful STVR enforcement	**It was MOVED and SECONDED** that the Gabriola Island Local Trust Committee adopt as a standing resolution to authorize proactive enforcement of unlawful Short Term Vacation Rentals.

Islands Trust

Print Date: November 18, 2021

Top Priorities Report

Gabriola Island

Develop Ecological Protection Zone	Responsible	Dates
Research and develop a new ecological protection zone as part of the Parks (P) OCP designation. Update zoning of Coats Marsh and Burren's Acres Nature Reserve properties.		

1. *Housing Options and Impacts Review Project*	Responsible	Dates
Develop an Engagement and Communication Strategy; Strengthen relationships with Snuneymuxw First Nation and incorporate First Nation perspectives into policy/regulatory options; Explore opportunities to foster affordable, rental, special needs and seniors housing and associated services; Develop a strategy to address all housing continuum gaps; Ensure policy/regulatory changes are consistent with the Object of the Islands Trust, the ITPS, with focus on water protection/conservation and ecological footprints.	Sonja Zupanec	Rec'd: 22-Nov-2018

2. *UBCM Active Transportation Grant Application*	Responsible	Dates
Grant application completed and submitted (October 29, 2020). Consultant preparing final report recommendations for Nov 25 2021 LTC. Final report to UBCM early 2022.	Mike Richards Sonja Zupanec	

Projects Report

Gabriola Island

1. *DeCourcy Island OCP and Bylaw Review*	Responsible	Date Received
Review DeCourcy Island Official Community Plan and Regulatory bylaws; establish an Advisory Planning Commission. Topics include: park areas without park zoning, DAI Bylaw, subdivision polices and regulations (added March 2017).		21-Apr-2011

2. *Hazardous areas/Steep Slopes DPA*	Responsible	Date Received
Consider hazardous areas and steep slopes development permit area designation; consider how to address areas of potentially problematic soils, shoreline erosion, and localized areas of steep terrain		21-Feb-2013

3. *Coastal areas protection*	Responsible	Date Received
Review OCP and LUB to improve protection of coastal areas; development of a comprehensive DPA for shorelines in the Gabriola Island Local Trust Area		19-Jan-2012

4. *First Nations cultural references*	Responsible	Date Received
Consider First Nations cultural references in land use planning; Work with Snuneymuxw First Nation (SFN) to seek funding for archaeological mapping.	Lisa Wilcox	27-Jan-2011

5. *Eelgrass protection*	Responsible	Date Received
Consider implementing Eelgrass protection regulations (see February 19, 2014 memorandum).		14-May-2014

Projects Report

Gabriola Island

6. *Snuneymuxw Protocol Agreement*	Responsible	Date Received
Implementation of Snuneymuxw First Nation Protocol Agreement		22-Jan-2015

7. *Gabriola Village Plan*	Responsible	Date Received
Undertake a comprehensive review of policies and regulations with respect to the Gabriola Village Core		02-Apr-2015

8. *Snuneymuxw Relationship Building*	Responsible	Date Received
Strengthen relationship with Snuneymuxw First Nation		02-Apr-2015

9. *Green Energy*	Responsible	Date Received
Consider policy and regulatory mechanisms to encourage green and renewable energy		02-Apr-2015

10. *Commercial Vacation Rental Review*	Responsible	Date Received
Review bylaws with respect to temporary use permits for commercial vacation rentals		07-May-2015

11. *LUB Amendments*	Responsible	Date Received

Projects Report

Gabriola Island

- Review of temporary sawmill regulations
- Definition of personal use of animals for SRR zoned lots
- Review of how cisterns, solar panels and parking are regulated as structures subject to lot coverage calculations
-Review of section B.2.1.1 for variances within DP3
-Review minimum average parcel size calculations in LUB and OCP to ensure consistent and supportive of more than 5% dedication of parkland
-IN1 zoning to ensure consistent with existing Arts Council use.
-definition and regulations for limited public market, and INI zone uses pertaining to market sales
-correction to WC3 mapped location to coincide with Green Wharf

08-Sep-2016

---

12. *Water Resource Planning*	Responsible	Date Received
Review of water requirements at the time of subdivision		14-Jun-2018

---

13. *Water Taxi Feasibility*	Responsible	Date Received
Follow up items emerging out of water taxi feasibility (completed fall 2018)		22-Nov-2018

---

14. *Protection of the Coastal Douglas-fir and Associated Ecosystems: An Islands Trust Tool Kit (2018)*	Responsible	Date Received
Implementation of the report recommendations into OCP policy and LUB regulations.		24-Jan-2019

Projects Report

Gabriola Island

15. *GB LUB Accessory Buildings*	Responsible	Date Received
Review of regulations pertaining to the order of construction of accessory buildings on lots.		12-Sep-2019

16. *Review of model antenna strategy*	Responsible	Date Received
		27-Feb-2020

17. *Develop a new Ecological Protection Zone*	Responsible	Date Received
Research and develop a new ecological protection zone as part of the Parks (P) OCP designation. Update zoning of Coats Marsh and Burren's Acres Nature Reserve properties. LTC resolution October 2021 to put this project on Top Priority List once IN1 zone amendments are completed.		21-Jan-2021

18. *Cannabis Production Regulations*	Responsible	Date Received
Review options to allow cannabis production in zones other than 'agriculture' and possible ways to regulate odour, noise, water use and light pollution related to agricultural activities when permitted in a zone.		15-Apr-2021

19. *Update the IN1 zone to reflect community resource and recycling centre range of uses.*	Responsible	Date Received
		13-May-2021

Projects Report

Gabriola Island

20. *Review and update DAI bylaw*	Responsible	Date Received
		13-May-2021