



STAFF REPORT

DATE: September 22, 2023

FILE: 0550-04 Board

TO: Chair and Directors,
Regional Board

FROM: Dave Leitch
Chief Administrative Officer

RE: TRANSPORT CANADA DIVESTED WHARVES - OPTIONS

PURPOSE/PROBLEM

To consider a number of recommendations from the Electoral Areas Services Committee concerning the future of the Surge Narrows, Port Neville, and Owen Bay Wharves.

EXECUTIVE SUMMARY

At its September 13, 2023 meeting the Electoral Areas Services Committee considered the attached report and passed the following resolutions:

Mawhinney/Vonesch: EASC 243/23

THAT staff begin working towards moving Surge Narrows, Port Neville, and Owen Bay wharves into the Area C parks service.

Mawhinney/Vonesch: EASC 244/23

THAT staff begin investigating divestiture of Port Neville with any interested parties and

THAT a report of the results be returned to the Electoral Areas Services Committee for consideration before the commencement of any work.

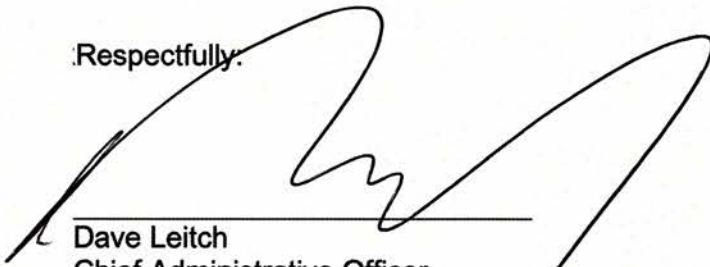
Accordingly, the following actions are offered in support of the Committee's recommendations.

RECOMMENDATIONS

1. THAT the report from the Chief Administrative Officer be received.
2. THAT the Regional District begin the process of moving the responsibility for the Surge Narrows, Port Neville and Owen Bay wharves into the Electoral Area C parks service.
3. THAT the Regional District investigate the divestiture of the Port Neville wharf with potential interested parties, and

THAT a report on the results of the investigation be returned to the Electoral Areas Services Committee for consideration.

Respectfully:



Dave Leitch
Chief Administrative Officer

Prepared by: *E. Watson, Manager, Corporate Operations*

Attachments: Copy of September 7, 2023 report to the Electoral Area Services Committee

COPY



STAFF REPORT

DATE: September 7, 2023

FILE: 0540-04 EASC

TO: Chair and Directors,
Electoral Areas Services Committee

FROM: David Leitch
Chief Administrative Officer

RE: TRANSPORT CANADA DIVESTED WHARVES - OPTIONS

PURPOSE/PROBLEM

To consider the options for the future of the Surge Narrows, Port Neville, and Owen Bay Wharves and whether the Regional District should play a role in those scenarios.

EXECUTIVE SUMMARY

At its August 16, 2023, meeting, the Board considered the attached report and passed the following resolution:

Mawhinney/Whalley: SRD 718/23

THAT a report on next steps and possibilities be brought to the Electoral Areas Services Committee.

The resolution was passed following confirmation that the AAP did not receive the necessary support to establish the proposed wharves service. The option to gauge electoral support for the service via a voting process was also declined.

The absence of an established service has left the Regional District unable to effectively operate and maintain the Transport Canada divested wharves at Owen Bay (Sonora Island), Surge Narrows (Read Island), and Port Neville (situated in Johnstone Strait). Transport Canada has explicitly indicated that the return of these wharves is not a viable option. The funding allocated by Transport Canada for the necessary renovations in 2014 as part of the divestment process expires in November 2024.

Given these constraints, the following options are presented for the further consideration.

Option A - Place the wharves in the Area C Parks Service

- Provides the necessary service function needed to operate and maintain the wharves. (Note that without a service to house the operation of wharves, any costs exceeding currently available funding must be requisitioned from all electoral areas).
- Three wharves currently in Parks Service— Granite Bay, Hoskin Landing and Evans Bay.
- Enables use of Transport Canada Funding to complete the upgrades.
- The cost to operate and maintain the wharves will not be reduced; tax requisition for Parks Service would need to increase to prevent a reduction in funding to existing Park amenities and operations.
- Confirmation from the Province may be required to confirm legal authority for this option.

TRANSPORT CANADA DIVESTED WHARVES - OPTIONS

Option B – Wharf Divestment (some or all)

- Explore wharf divestment to community groups, First Nations, and private entities.
- Could be done in conjunction with other Options in this report.
- Permissible under terms of current agreement with Transport Canada.
- Bylaws to authorize divestment of these assets may be required.
- The Transport Canada funding cannot be transferred to a new owner.
- New owners must acquire a Water License from the Province, subject to Provincial approval.

Option C - Demolish the wharves

- Eligible expense under the Transport Canada Contribution Agreement.
- Little or no impact to tax requisition.
- Loss of critical community transportation infrastructure.

Option D - Explore creation of a regional wharves service

- Region-wide cost-sharing for wharf maintenance (including wharves in Electoral Area C).
- Regional service cost unknown at this time.
- Proposal would also be subject to elector support.

In the event the Committee wishes to pursue any of the above options it will be necessary to pass a resolution of support which will then be considered by the full Board.

RECOMMENDATION

THAT the report from the Chief Administrative Officer be received.

Respectfully:



David Leitch
Chief Administrative Officer

TRANSPORT CANADA DIVESTED WHARVES - OPTIONS

BACKGROUND/HISTORY

For several years, the Regional District has managed various wharves within Electoral Area C (Discovery Islands-Mainland Inlets), including Hoskyn Channel Landing, Evan Bay, and Granite Bay, funded through the electoral parks budget. In 2014, the Regional District assumed responsibility for upgrading, operating, and maintaining additional wharf facilities at Owen Bay, Port Neville, and Surge Narrows, thanks to an agreement with Transport Canada and \$2,894,500 in federal capital funding. However, this transfer of ownership didn't provide sufficient resources for ongoing operational and maintenance costs, necessitating the inclusion of these wharves in a service for funding.

Efforts to establish a Wharves Service through two Alternative Approval Processes (AAP) have failed, as both received more than the minimum required elector responses, preventing the adoption of Bylaw No. 487. Following the latest AAP, the Board considered a referendum but ultimately didn't pursue it, and the timeframe for doing so has expired.

The urgency arises from the impending need for upgrades and repairs to the wharves and the deadline of November 2024 to utilize the capital funding from Transport Canada. Failure to use these funds for eligible expenses by the deadline may require returning the funds to Transport Canada, adding complexity to the situation.

ALTERNATIVES

Different options can be pursued for each of the divested wharves. If all three wharves were placed in the Parks function, attempts could be made to divest one or more of the wharves while leveraging the improvement that can be delivered using the Transport Canada funding. Improving the wharves would increase their appeal and support for any future owners by reducing short-term maintenance.

During the February 14, 2023 Public Engagement session and in local newspaper editorials published during the 2023 Alternative Approval Process (AAP), several Area C residents expressed the opinion that compared to Owen Bay and Surge Narrows, the Port Neville Wharf provides value to the mariner community well beyond the residents of Area C.

FINANCIAL IMPLICATIONS

Transport Canada provided specific funding for each divested wharf through a transfer agreement for each wharf. The Transfer Agreement also stipulates what is an eligible expense and what is ineligible. The funds cannot be transferred to new owners or other wharves.

Placing the wharves in the Area C parks function will financially impact that service. Increasing the number of assets in any function typically corresponds with an increase in the funding needed to operate and maintain those assets.

The same budgetary principles used to develop the tax requisition in Bylaw No. 487, being a bylaw to establish a wharves service within Electoral Area C (Discovery Islands-Mainland Inlets), will apply.

LEGAL IMPLICATIONS

The wharves are aging and in need of upgrades. Continued deterioration may result in safety hazards and expose the Regional District to liability if action is not taken to bring them up to minimum safety standards.

INTERGOVERNMENTAL/REGIONAL IMPLICATIONS

Divesting the wharves to another party is eligible, but the water licence the SRD holds for the area encumbered by the wharves cannot be transferred. A potential new owner would need to apply for their own license. However, the Province is not obligated to grant a water licence. The

TRANSPORT CANADA DIVESTED WHARVES - OPTIONS

province's support for the asset transfer is critical to any potential divestment. Confirmation from Transport Canada may be needed for any options not presented in this report or use of the funding not expressly stated in the Transfer and Operating Agreements signed as part of the divestment.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS

The impacts of each option will vary for each Area C resident and visitors depending on their utilization levels of the wharves. Feedback received during the AAP showed that there is no consensus among Area C residents' regarding the desired outcome.

Perhaps the most consequential option would be demolishing the wharves as they are critical infrastructure for many residents of Electoral Area C to access their properties, receive their mail or find safe harbour during storms.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS

Community Services will be involved if one or more of the wharves are placed in the Parks Service. Corporate Services will be involved with any legal agreements or asset transfers.

Prepared by: S. Fisher, Engineering Services Coordinator

Attachments: Copy of August 9, 2023 report to the Board

COPY



STAFF REPORT

DATE: August 9, 2023 **FILE:** 0550-04 Board

TO: Chair and Directors,
Regional Board

FROM: Dave Leitch
Chief Administrative Officer

RE: BYLAW NO. 487 – ELECTORAL AREA C WHARVES SERVICE

PURPOSE/PROBLEM

To consider the results of the alternative approval process (AAP) for Bylaw No. 487 which proposes to establish a service for funding the operation and maintenance of wharves infrastructure in Electoral Area C (Discovery Islands-Mainland Inlets).

EXECUTIVE SUMMARY

At its June 29, 2023 meeting the Board considered the attached report regarding a proposed wharves service for Electoral Area C and approved the elector response form, the elector response deadline and the total number of electors eligible to participate in an alternative approval process (AAP) for Bylaw No. 487. Following the meeting, public notices about the AAP were displayed prominently on the Regional District's website and public notice posting board, and in local media publications in accordance with the requirements of the *Community Charter*.

The elector response period ran for 35 days in total and closed on August 3, 2023. It had been previously calculated that a minimum of 242 elector responses would be required to prevent adoption of Bylaw No. 487 without first obtaining approval of the electors by voting. At the conclusion of the AAP response period 418 elector response forms had been received by the corporate officer, of which 385 were confirmed as validly submitted by qualified electors. The results confirm that the Board cannot proceed with the adoption of Bylaw No. 487 at this time. The attached Certificate provides additional information about the process of seeking approval via AAP and the results of that process.

ALTERNATIVES

Given the results of the AAP, the Board has the following options for dealing with Bylaw No. 487:

Option A – THAT Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023, be scheduled for assent voting on Saturday, October 21, 2023.

[NOTE: if the Board chooses this option the assent voting process must be concluded within 80 days of the AAP response deadline (ie. not later than October 22). This would require that the Board take certain actions (such as appointing the election officials and approving the ballot question) at the August 16 meeting. See attached Schedule 'A']

Option B – THAT further consideration of Bylaw No. 487 be postponed indefinitely.

RECOMMENDATION

THAT the report from the Chief Administrative Officer be received.

Respectfully:



Dave Leitch
Chief Administrative Officer

Prepared by: T. Yates, Corporate Services Manager

Attachments: Bylaw No. 487
August 9, 2023 Corporate Officer certification of AAP results
Copy of June 9, 2023 report to the Regional Board

COPY

SCHEDULE 'A'

The following actions must be taken by the Board at the August 16, 2023 meeting if it wishes to provide an assent voting opportunity for Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023:

Motion No. 1

THAT approval of the electors for Bylaw No. 487 be authorized to be obtained by assent voting and that general voting day be scheduled for Saturday, October 21, 2023.

Motion No. 2

THAT Thomas Lloyd Yates and Edith Elizabeth Watson be appointed as the Chief Election Officer and Deputy Chief Election Officer respectively, for assent voting on Bylaw No. 487.

Motion No. 3

THAT the following ballot question be used for assent voting on Bylaw No. 487:

“Are you in favour of Bylaw No. 487 which would establish a wharves service for all of Electoral Area C with the net cost of the service to be recovered by property value taxes and the annual requisition not to exceed the greater of \$137,187 or \$0.0935 per 1,000 of net taxable assessments within the service area?”

YES

NO

Proposed Electoral Area C Wharves Service Initiative

Assent Voting Schedule

<u>Date</u>	<u>Action</u>
Wednesday, August 16, 2023	<ul style="list-style-type: none"> • Regional Board reviews results of AAP for Electoral Area C Wharves Service Establishing Bylaw No. 487 and authorizes assent voting process. • Chief Election Officer and Deputy Chief Election Officer appointed. • Regional Board approves ballot question to be asked of electors.
Monday, August 28, 2023	Ballots for assent voting delivered to Chief Election Officer.
Wednesday, August 30, 2023	First publication of notice of opportunity to volunteer as voting scrutineer.
Tuesday, September 5, 2023	Start of 10-day period for submission of scrutineer applications.
Wednesday, September 6, 2023	Second publication of notice of opportunity to volunteer as voting scrutineer.
Thursday, September 14, 2023	Close of 10-day period for submission of scrutineer applications.
Tuesday, September 19, 2023	Selection and appointment of voting scrutineers (if lot draw not required).
Tuesday, September 26, 2023	Selection and appointment of voting scrutineers (if lot draw required).
Wednesday, September 27, 2023	First publication of notice of assent voting for Bylaw No. 487.
Monday, October 2, 2023	First day for providing mail ballot packages to qualified electors.
Wednesday, October 4, 2023	Second publication of notice of assent voting for Bylaw No. 487.
Wednesday, October 11, 2023	Advance voting opportunity for Bylaw No. 487.
Saturday, October 21, 2023	<ul style="list-style-type: none"> • General voting day for Bylaw No. 487. • Deadline for receipt of mail ballots. • Preliminary voting results released by Chief Election Officer.
Tuesday, October 24, 2023	<ul style="list-style-type: none"> • Chief Election Officer declares official voting results. • Voting books and other voting records made available for public inspection.
Monday, October 30, 2023	Deadline for application for judicial recount of voting results.
Friday, November 3, 2023	Deadline for conducting judicial recount (if required).
Wednesday, November 8, 2023	If assent of the electors received, Regional Board adopts Bylaw No. 487.
Monday, December 18, 2023	Public access to voting books and other voting records closed.



BYLAW NO. 487

A BYLAW TO ESTABLISH A WHARVES SERVICE WITHIN ELECTORAL AREA C (DISCOVERY ISLANDS-MAINLAND INLETS)

WHEREAS the Regional District may, pursuant to the *Local Government Act*, operate any service that it considers necessary or desirable for all or part of the Regional District;

AND WHEREAS the Regional Board wishes to establish a wharves service for the benefit of Electoral Area C (Discovery Islands-Mainland Inlets);

AND WHEREAS the approval of the electors has been obtained in accordance with s.345 of the *Local Government Act*,

NOW THEREFORE the Board of Directors of the Strathcona Regional District, in open meeting assembled, enacts as follows:

Service Established

1. There is hereby established a service to be known as the Electoral Area C wharves service.

Participating Area

2. The participating area for the service is Electoral Area C (Discovery Islands-Mainland Inlets).

Service Area Boundaries

3. The boundaries of the service area encompass all of Electoral Area C (Discovery Islands-Mainland Inlets).

Service Described

4. The service hereby established includes the construction, operation, maintenance and improvement of wharf facilities and related infrastructure located at Owen Bay, Port Neville and Surge Narrows.

Cost Recovery

- 5. The costs of the service may be recovered by one or more of the following methods:
 - (a) property value taxes imposed in accordance with s.378 of the *Local Government Act*;
 - (b) fees and charges imposed under s.397 of the *Local Government Act*;
 - (c) revenues received by way of agreement, enterprise, gift, grant or otherwise; and
 - (d) revenues raised by other means authorized under the *Local Government Act* or another Act.

Maximum Annual Requisition

- 6. The maximum amount that may be requisitioned annually for the service is the greater of \$137,187 or the equivalent of \$0.0935 per \$1,000 of net taxable assessments within the service area.

Citation

- 7. This bylaw may be cited for all purposes as Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023.

READ A FIRST TIME ON THE 15TH DAY OF MARCH, 2023

READ A SECOND TIME ON THE 15TH DAY OF MARCH, 2023

READ A THIRD TIME ON THE 15TH DAY OF MARCH, 2023

APPROVED BY THE INSPECTOR OF MUNICIPALITIES ON THE DAY OF , 2023

APPROVED BY THE ELECTORS ON THE DAY OF . 2023

RECONSIDERED, FINALLY PASSED AND ADOPTED ON THE DAY OF , 2023

Chair

Corporate Officer



BYLAW NO. 487

CORPORATE OFFICER'S CERTIFICATION

I, Thomas Lloyd Yates, Corporate Officer for the Strathcona Regional District, hereby certify as follows with respect to Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023:

1. THAT Bylaw No. 487 was given third reading at a regular scheduled meeting of the Board of Directors of the Regional District held on March 15, 2023;
2. THAT the Board of Directors has, by Res. SRD 239/23, authorized the approval of the electors for Bylaw No. 487 to be obtained by an alternative approval process;
3. THAT the total number of electors within the area affected by Bylaw No. 487 was fairly determined to be 2,419;
4. THAT notice of the alternative approval process was published on July 5, 2023 and July 12, 2023 in accordance with the requirements of the *Community Charter*;
5. THAT elector response forms were made available to the public via the Regional District's website and at the Regional District corporate office from June 30, 2023 until August 3, 2023;
6. THAT 418 elector response forms were received prior to the August 3, 2023 deadline for receiving elector response forms;
7. THAT 385 of the elector response forms received prior to the deadline have been verified as validly completed by qualified electors; and
8. THAT more than 10% of the estimated number of eligible electors affected by Bylaw No. 487 have submitted elector response forms prior to the above noted deadline.

In accordance with s.86 of the *Community Charter*, I hereby declare that the approval of the electors with respect to Bylaw No. 487 has not been obtained.

DATED this 9th day of August, 2023.

A handwritten signature in black ink, appearing to read "Thomas Yates", written over a horizontal line.

Corporate Officer



STAFF REPORT

DATE: June 9, 2023 **FILE:** 0550-04 Board

TO: Chair and Directors,
Regional Board

FROM: Dave Leitch
Chief Administrative Officer

RE: BYLAW NO. 487 – ELECTORAL AREA C WHARVES SERVICE

PURPOSE/PROBLEM

To consider proceeding at this time with an alternative approval process (AAP) for Bylaw No. 487 which proposes to establish a service for funding the operation and maintenance of wharves infrastructure in Electoral Area C (Discovery Islands-Mainland Inlets).

EXECUTIVE SUMMARY

At its March 15, 2023 meeting the Board gave first 3 readings to Bylaw No. 487 and authorized approval of the electors to be obtained through an alternative approval process (AAP). Bylaw No. 487 has now received approval from the Inspector of Municipalities and the Board may proceed at this time to seek elector approval.

Before proceeding with public notification for the AAP, the Board will need to establish the elector response form to be used, the deadline for elector responses and the total number of electors eligible to participate in the AAP. All of that information will be available to the public as part of the approval process. At the conclusion of the elector response period a further report will be presented to the Board confirming the number of responses and the results of the AAP.

In the event that less than 10% of the electors submit responses to the Regional District prior to the deadline the Board may proceed with adoption of Bylaw No. 487 without further approvals. On the other hand, if at least 10% of the total electors respond in the negative, the Board will only be able to adopt Bylaw No. 487 if an assent voting opportunity is provided and a majority of electors who vote at that opportunity are in favour of the bylaw.

RECOMMENDATIONS

1. THAT the report from the Chief Administrative Officer be received.
2. THAT the total number of electors within the area affected by Bylaw No. 487 be fairly determined to be 2,419 for purposes of the alternative approval process.
3. THAT the deadline for submission of elector responses in respect of the alternative approval process for Bylaw No. 487 be established as 4:30 p.m. on Thursday, August 3, 2023.
4. THAT the elector response form attached to the June 9, 2023 report from the Chief Administrative Officer be approved for use with the alternative approval process for Bylaw No. 487.

Respectfully:



Dave Leitch
Chief Administrative Officer

Prepared by: T. Yates, Corporate Services Manager

Attachments: Bylaw No. 487
Elector Response Form for Bylaw No. 487 AAP
Estimate of Eligible Electors within proposed Electoral Area C wharves service area
Copy of March 8, 2023 report to the Regional Board

COPY



BYLAW NO. 487

A BYLAW TO ESTABLISH A WHARVES SERVICE WITHIN ELECTORAL AREA C (DISCOVERY ISLANDS-MAINLAND INLETS)

WHEREAS the Regional District may, pursuant to the *Local Government Act*, operate any service that it considers necessary or desirable for all or part of the Regional District;

AND WHEREAS the Regional Board wishes to establish a wharves service for the benefit of Electoral Area C (Discovery Islands-Mainland Inlets);

AND WHEREAS the approval of the electors has been obtained in accordance with s.345 of the *Local Government Act*,

NOW THEREFORE the Board of Directors of the Strathcona Regional District, in open meeting assembled, enacts as follows:

Service Established

1. There is hereby established a service to be known as the Electoral Area C wharves service.

Participating Area

2. The participating area for the service is Electoral Area C (Discovery Islands-Mainland Inlets).

Service Area Boundaries

3. The boundaries of the service area encompass all of Electoral Area C (Discovery Islands-Mainland Inlets).

Service Described

4. The service hereby established includes the construction, operation, maintenance and improvement of wharf facilities and related infrastructure located at Owen Bay, Port Neville and Surge Narrows.

Cost Recovery

- 5. The costs of the service may be recovered by one or more of the following methods:
 - (a) property value taxes imposed in accordance with s.378 of the *Local Government Act*;
 - (b) fees and charges imposed under s.397 of the *Local Government Act*;
 - (c) revenues received by way of agreement, enterprise, gift, grant or otherwise; and
 - (d) revenues raised by other means authorized under the *Local Government Act* or another Act.

Maximum Annual Requisition

- 6. The maximum amount that may be requisitioned annually for the service is the greater of \$137,187 or the equivalent of \$0.0935 per \$1,000 of net taxable assessments within the service area.

Citation

- 7. This bylaw may be cited for all purposes as Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023.

READ A FIRST TIME ON THE 15TH DAY OF MARCH, 2023

READ A SECOND TIME ON THE 15TH DAY OF MARCH, 2023

READ A THIRD TIME ON THE 15TH DAY OF MARCH, 2023

APPROVED BY THE INSPECTOR OF MUNICIPALITIES ON THE 17TH DAY OF MAY, 2023

APPROVED BY THE ELECTORS ON THE DAY OF . 2023

RECONSIDERED, FINALLY PASSED AND ADOPTED ON THE DAY OF , 2023

Chair

Corporate Officer



ELECTOR RESPONSE FORM
**Bylaw No. 487 (Electoral Area C Wharves
Service Establishing Bylaw 2023)**

I, the undersigned, being a duly qualified elector of Electoral Area C, am **opposed to** the adoption of Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023, by the Board of Directors for the Strathcona Regional District without first obtaining the assent of the electors by voting, and

By affixing my signature below, I hereby certify that:

- I am eighteen years of age or older;
- I am a Canadian citizen;
- I have resided in British Columbia for at least the last six months;
- I am a resident of Electoral Area C of the Strathcona Regional District,

OR

I have been a registered owner of real property within Electoral Area C of the Strathcona Regional District for at least the last 30 days;

- I am not disqualified by law from voting in local elections; and
- I am entitled to sign this elector response form and **have not** previously signed an elector response form in relation to Bylaw No. 487.

ELECTOR'S FULL NAME (please print legibly including first, last and middle names)
RESIDENTIAL ADDRESS
MAILING ADDRESS (if different than residential address)
CHOOSE ONE:
<input type="checkbox"/> I am a resident elector within Electoral Area C of the Strathcona Regional District.
<input type="checkbox"/> I am not a resident elector within Electoral Area C of the Strathcona Regional District but own real property within Electoral Area C that is legally described as follows: _____ _____ _____
SIGNATURE OF ELECTOR

See the reverse side of this form for further information regarding the alternative approval process.



ELECTOR RESPONSE FORM
Bylaw No. 487 (Electoral Area C Wharves Service Establishing Bylaw 2023)

The Board of directors for the Strathcona Regional District is seeking the approval of the electors by alternative approval process for Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023. If adopted, Bylaw No. 487 would authorize the Regional District to establish a service for funding the operation and maintenance of specified wharves and related infrastructure within Electoral Area C of the Strathcona Regional District.

The maximum amount that could be requisitioned annually under Bylaw No. 487 is the greater of \$137,187 or the equivalent of \$0.0935 per 1,000 of the net taxable value of land and improvements in the proposed service area.

INSTRUCTIONS

1. If you qualify as an elector for the proposed Electoral Area C wharves service area and are opposed to the adoption of Bylaw No. 487 without seeking assent of the electors by voting, you can sign and submit an elector response form.
2. If you are **NOT opposed** to the adoption of Bylaw No. 487 you need not do anything.
3. To submit an elector response form you **must** qualify as a resident elector or a non-resident property elector within Electoral Area C of the Strathcona Regional District.

[Note: Only one non-resident property elector may submit an elector response form per property regardless of the number of owners for that property. If a property is owned by more than one person, the elector appointed by a majority of the owners is the only person able to complete and submit a response form on behalf of the property. See Page 3 of this form.]

4. Only one elector per elector response form is permitted.
-

1.

Elector response forms must be received by the Regional District not later than 4:30 p.m. on Thursday, August 3, 2023.

Emailed or faxed elector response forms cannot be accepted; forms **must** contain original signatures.

2.

The total number of electors in the proposed Electoral Area C wharves service area has been fairly determined to be 2,419. Unless at least 10% of those electors submit an elector response form to oppose the adoption of Bylaw No. 487, the Regional District may adopt the bylaw without first obtaining the assent of the electors by voting.

3.

For further information please contact:

Thomas Yates
Corporate Officer
Strathcona Regional District
990 Cedar Street
Campbell River, BC
V9W 7Z8

250-830-6700 _
corporate@srd.ca

**NON-RESIDENT PROPERTY ELECTOR
AUTHORIZATION TO SUBMIT A RESPONSE FORM*
Bylaw No. 487, Electoral Area C Wharves Service**

*To be used only for property having multiple owners.

APPOINTMENT AND CONSENT	
We the undersigned persons, together with the person named as our appointee, constitute a majority of registered owners of the real property described below and we hereby appoint that person and give consent for them to act as the designated non-resident property elector for the purposes of this alternative approval process.	

NAME AND ADDRESS OF APPOINTEE	
LAST NAME	FIRST NAME(S)
RESIDENTIAL ADDRESS	
CITY/TOWN	POSTAL CODE
B.C.	

PROPERTY DESCRIPTION	
LEGAL DESCRIPTION	CIVIC ADDRESS (if applicable)
or	

OWNER SIGNATURES		
1. _____ (PRINT NAME)	_____ (SIGNATURE)	_____ (DATE)
2. _____ (PRINT NAME)	_____ (SIGNATURE)	_____ (DATE)
3. _____ (PRINT NAME)	_____ (SIGNATURE)	_____ (DATE)
4. _____ (PRINT NAME)	_____ (SIGNATURE)	_____ (DATE)
5. _____ (PRINT NAME)	_____ (SIGNATURE)	_____ (DATE)
6. _____ (PRINT NAME)	_____ (SIGNATURE)	_____ (DATE)

- Note:
- If more than one person owns the above property the person wishing to submit a response form for that property must provide, at the time of submission, written consent from a majority of the property owners.
 - The person appointed as the non-resident property elector must be one of the registered owners of the property.
 - The only persons who are registered owners of the real property, either as joint tenants or tenants in common, are individuals who are not holding the property in trust for a corporation or another trust.
 - A non-resident property elector may not submit more than one response form regardless of the number of properties owned.

Electoral Area C Wharves Service Bylaw No. 487

Determination of Total Number of Electors for Purposes of an Alternate Approval Process

- Purpose:** To make a fair determination of the total number of electors within the area affected by Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023. An elector is defined as a person who would qualify to vote on the question of approving Bylaw No. 487 if such a vote was to be held on the date this report was prepared.
- Area Affected:** The area affected by Bylaw No. 487 is the entirety of Electoral Area C which includes a large number of islands situated between Vancouver Island and the British Columbia mainland, as well as that part of the British Columbia mainland located between Desolation Sound and Havannah Channel.
- Approval Process:** The Regional District intends to proceed with an alternative approval process to determine whether Bylaw No. 487 may be adopted without first obtaining the assent of the electors by voting. Should it be determined that less than ten percent of the eligible electors within the affected area file a written objection to Bylaw No. 487 prior to the deadline for responses, the Regional Board may proceed to adoption without the requirement to obtain elector assent by voting, in accordance with the provisions¹ of the *Local Government Act*. In the event that ten percent or more of the eligible electors object to adoption of Bylaw No. 487 prior to the response deadline, the bylaw may only be adopted if approved through an assent voting process.
- Authority:** The use of an alternative approval process for obtaining the approval of the electors for Bylaw No. 487 is authorized by section 345 of the *Local Government Act*.
- Elector Eligibility:** For the purposes of this report the criteria used for determining the eligibility of persons to vote as electors is based on Part 4 [Assent Voting] of the *Local Government Act* of British Columbia. That statute defines electors to include persons who meet the following criteria:
- Canadian citizen
 - 18 years of age or older
 - resident of British Columbia for the last 6 months
 - resident of Electoral Area C (or owner of real property within Electoral Area C for the last 30 days)
 - not otherwise disqualified from voting

Corporate entities are not permitted to qualify as electors in British Columbia.

Methodology:

This report will attempt to make a fair determination of the total number of electors within the area affected by Bylaw No. 487. The number of electors will be the total of those persons who qualify to vote as resident electors and those who qualify to vote as non-resident property electors. Since the methodologies for determining the number of each type of elector differ significantly, they will need to be determined separately with the results of those calculations aggregated for the purposes of this report.

Resident Electors

Both the Federal and Provincial election authorities maintain lists of registered voters but the databases are not aligned with local government jurisdictional boundaries and are therefore not particularly useful for purposes of this report. Since there is no reliable information available using existing voter enumeration data, it is necessary to consider the use of other data for the purpose of preparing an estimate of eligible electors.

BC Stats, Elections BC and the Ministry of Municipal Affairs are public agencies that maintain comprehensive databases of population, population distribution, voter eligibility, voter participation rates and other demographics. The following data are supplied by those agencies:

Demographic	Estimate	Source
Population of British Columbia	5,071,336	BC Stats (July 1, 2019)
Population of Strathcona Regional District	44,671	Municipal Affairs (November 1, 2017)
Population of Electoral Area C	2,578	Municipal Affairs (November 1, 2017)
Provincial electors in British Columbia	3,564,307	Elections BC (July 1, 2019)

Using the above data, it can be determined that approximately 70.3% of the population of British Columbia would likely qualify as provincial electors. Notwithstanding minor variations in regional demographics it is believed that this ratio would be sufficiently accurate for estimating the number of provincial electors within Electoral Area C. Since the majority of qualifications required for voting in provincial elections are the same as those required for voting as a resident in local elections, the application of this ratio should provide a reasonable estimate of the number of resident electors within Electoral Area C. Therefore, multiplying the above percentage against the 2,578 population estimate provided by the Ministry of Municipal Affairs yields a total of 1,812 eligible resident electors in Electoral Area C.

The calculations for resident electors within Electoral Area C may therefore be summarized as follows:

$$\begin{aligned}
 \text{Step 1: } & 3,564,307 \text{ (eligible provincial electors)} \\
 & \div 5,071,336 \text{ (total population of B.C.)} \\
 & = 70.28\% \text{ (B.C. average \% of electors)}
 \end{aligned}$$

$$\begin{aligned}
 \text{Step 2:} & \quad 2,578 \text{ (Electoral Area C population)} \\
 & \quad \times 70.28\% \text{ (B.C. average \% of electors)} \\
 & \quad = 1,812 \text{ (Potential Electoral Area C resident electors)}
 \end{aligned}$$

It is concluded that a fair estimate of the number of resident electors within the area affected by Bylaw No. 487, based on the above noted data is 1,812.

Non-Resident Property Electors

Unlike Provincial elections in British Columbia, persons who do not reside within the local voting jurisdiction may qualify to vote in local elections solely on the basis of property ownership³. These non-resident property electors (NRPE's) must be qualified in all other respects (ie. Canadian citizen, 18 years of age or older, resident of BC, etc.) before they may be considered eligible electors. It is important to reiterate that persons who qualify as resident electors within a voting jurisdiction cannot also qualify as non-resident property electors for the same voting jurisdiction.

Demographic	Count	Source
Total properties within Electoral Area C	3,573	BC Assessment Authority (June 8, 2022)
Total registered owners within Electoral Area C	2,656	
Registered owners resident within Electoral Area C	1,514	
Registered owners resident outside of British Columbia	278	
Registered owners being corporate entities	170	
Registered owners being public entities	87	

In order to estimate the number of NRPE's within the boundaries of the proposed wharves service area, the database of the BC Assessment Authority was queried, and it was determined that there are 3,573 separate properties within Electoral Area C and 2,656 unique registered owners of those properties.

From this total of 2,656 potential electors the following were eliminated in order:

- 1,514 owners of property resident within the proposed service area;
- 278 owners of property being non-residents of British Columbia;
- 170 owners being corporate entities; and

- 87 properties owned by the Crown (Federal or Provincial).

It was therefore concluded that a reasonable estimate of the number of persons who could qualify to vote as non-resident property electors within the proposed Electoral Area C wharves service area, based on the most recently available data, is 607. In arriving at this estimate it is worth noting that voting requirements related to age, citizenship or length of ownership for property owners have not been addressed since there is no data available to the Regional District upon which to evaluate this demographic.

Summary:

The total number of eligible electors within Electoral Area C has been fairly determined to include 1,812 resident electors and 607 non-resident property electors for a total of 2,419.

Conclusion:

For the purpose of the alternative approval process for Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023, the total number of eligible electors has been fairly determined to be 2,419. The number of valid elector responses that are required to withhold approval for the adoption of Bylaw No. 487 without first obtaining elector assent by voting is therefore 242.

- References:
1. S.86 *Community Charter* and s.342 *Local Government Act*
 2. S.65(1)(d) *Local Government Act*
 3. S.66 *Local Government Act*



STAFF REPORT

DATE: March 8, 2023 **FILE:** 0550-04 Board

TO: Chair and Directors,
Regional Board

FROM: Dave Leitch
Chief Administrative Officer

RE: BYLAW NO. 487- ELECTORAL AREA C WHARVES SERVICE

PURPOSE/PROBLEM

To consider first 3 readings of Bylaw No. 487 which would establish a service to fund the operation and maintenance of wharves within Electoral Area C (Discovery Islands and Mainland Inlets).

EXECUTIVE SUMMARY

At its January 11, 2023, meeting, the Board considered the attached report regarding an unsuccessful attempt to establish a wharves service for Electoral Area C and passed the following resolution:

Mawhinney/Whalley: SRD 21/23

THAT Option C be selected as the preferred alternative as outlined in the January 6, 2023 report from the Chief Administrative Officer.

[Option C — develop a new service establishing bylaw that will be seen more favourably by ratepayers in Electoral Area C. This may require that additional consultation with users and other interested parties be conducted from the outset to ensure that identified objectives of the service can be met by the Regional District.]

Based on the direction provided above, Regional District representatives attended two public open houses with residents of Electoral Area C in February 2023 and responded to several questions about the AAP including clarification of the steps and intention of using that approach. The feedback received and expressed during the sessions resulted in a better understanding and reduced apprehension about the process and proposed service, and confirmed that the 3 existing wharves that are managed under the parks service (Evans Bay, Granite Bay and Hoskyn Channel) were not intended to be transitioned to the wharves service. Therefore, the updated feasibility study reflects only the anticipated costs of maintaining the wharves at Owen Bay, Port Neville and Surge Narrows which were divested in 2014 by Transport Canada. The study has also been updated to reflect 2023 statistics for Electoral Area C and the revised service costs.

With the deadline for spending the \$2.9 million of divestiture funding provided by Transport Canada in 2014 coming to an end, and other environmental constraints restricting the timing of the necessary capital upgrades to all three wharves, time is becoming more critical for establishing a wharves service. While the feasibility study details the options for obtaining elector approval, it is believed that an AAP remains the most cost-efficient and expedient option.

In the event a separate service is not established to operate and maintain wharf infrastructure in Electoral Area C, any costs associated with the management of that infrastructure (including legal costs) would be cost-shared by all electoral areas through the Electoral Area administration service.

RECOMMENDATIONS

1. THAT the report from the Chief Administrative Officer be received.
2. THAT Bylaw No. 487, being a bylaw to establish a wharves service within Electoral Area C (Discovery Islands-Mainland Inlets), be now introduced and read a first time.
3. THAT the rules be suspended and Bylaw No. 487 be given second and third readings.
4. THAT approval of the electors for Bylaw No. 487 be authorized to be obtained using an alternative approval process.

Respectfully:

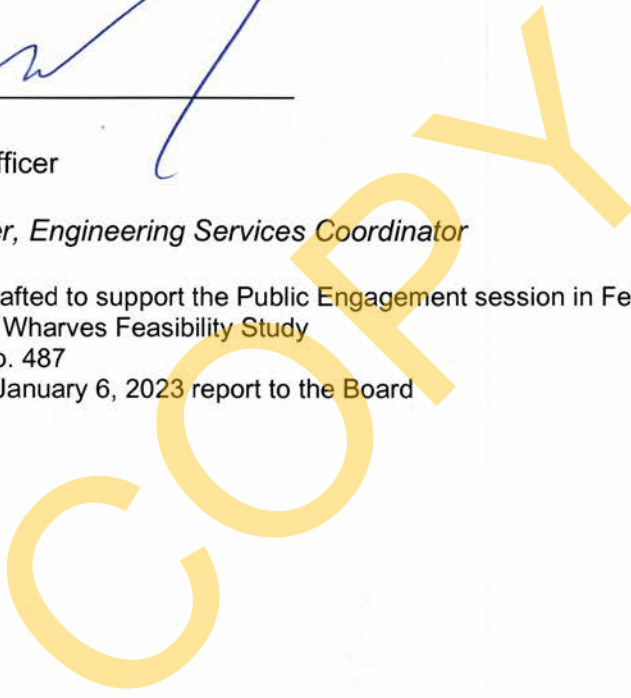


A handwritten signature in blue ink, appearing to read 'Dave Leitch', is written over a horizontal line. The signature is stylized and cursive.

Dave Leitch
Chief Administrative Officer

Prepared by: *S. Fisher, Engineering Services Coordinator*

Attachments: FAQ's drafted to support the Public Engagement session in February 2023
Updated Wharves Feasibility Study
Bylaw No. 487
Copy of January 6, 2023 report to the Board





The Strathcona Regional District (SRD) has been provided funding from Transport Canada for wharves upgrades to Owen Bay (on Sonora Island), Surge Narrows (on Read Island) and Port Neville (in Johnstone Strait). Transport Canada divested these three wharves to the SRD in 2014 and has provided funding to operate and maintain the wharves for ten years. The deadline to complete necessary wharf upgrades using the Transport Canada funding is approaching.

To comply with municipal governance, the SRD must establish a wharves service before spending funds and completing upgrades. This service will fund future operations and maintenance of these assets. If the SRD wharves service cannot be established, the wharves and funding will be returned to Transport Canada, and the SRD will not complete any wharf upgrades. Transport Canada is under no obligation to upgrade or continue operating the wharves if they are returned by the SRD.

On January 8th, 2023 the SRD Board of Directors passed a resolution to develop a new service establishing bylaw for the SRD-owned wharves that may be seen more favourably by ratepayers in Electoral Area C.

The SRD currently owns six wharves in Area C. Three of which are the Transport Canada divested wharves and three that are currently operated under the SRD Parks function – Granite Bay, Hoskyn Channel and Evans Bay. In order for the SRD to continue to operate and maintain all six wharves, the SRD would like to gauge the level of community support for this wharves service through an Alternate Approval Process.

FAQs to help inform you about the process and clarify expectations.

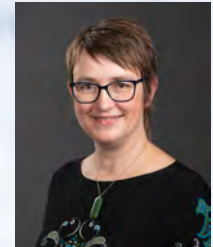
1. What is an Alternative Approval Process?

An Alternative Approval Process (AAP) is used to gauge the degree of acceptance by ratepayers of a particular service initiative. Generally speaking, the Regional Board will advertise its intent to proceed with the service. If at least 10% of ratepayers object to the creation of the service, the service must be approved through a voting process before it can be initiated.

The cost of an AAP is significantly less than seeking approval via voting and is often preferred for that reason. If the AAP process isn't successful and in favour of such a service the wharves will be returned to Transport Canada, together with any funds spent to date.

2. Why is this happening now?

The deadline for the use of capital funding provided by Transport Canada will occur in November 2024. The Regional District must determine whether ratepayers support exists for the service as soon as possible to ensure there is enough time to complete the upgrades with the Transport Canada Funding.



Robyn Mawhinney,
Electoral Area C Director
Discovery Islands & Mainland Inlets
RMawhinney@srd.ca

Why is the Wharves Service being revisited?

"Area C needs a Wharves Service of some sort. Transport Canada (TC) has been divesting itself of wharves, along with chunks of funding for necessary large-scale upgrades, on condition that a Service is established to manage the ongoing functionality of the wharves.

The SRD has this TC funding waiting to be spent but cannot move on the upgrades until a Service is established. As the SRD revisits this, my hope is increased communication can answer concerns and create a Service which ratepayers across Quadra and the Outer Discovery Islands will be satisfied with."

3. How is the Transport Canada funding related to establishing this Service?

When the Regional District accepted ownership of these wharves, it was on the condition that Transport Canada would provide capital funding to cover the maintenance and operations and necessary upgrading until 2024. However, the Regional District must bear the costs of ongoing operations and maintenance.

If the Regional District cannot commit to covering the wharves' ongoing operational and maintenance costs, the wharves must be returned to Transport Canada. The Transport Canada wharves funding can only be used for maintenance, operations, and improvements to *"bring the Ports up to a minimum safety Standard or rendering the Ports in compliance with regulatory or insurance requirements."* Transport Canada funding expires in November of 2024 and any unused funds must be returned. Transport Canada makes no undertaking that it will continue to operate the wharves if they are returned by the SRD.

4. How much will this service cost?

The projected costs for the revised wharves service are still being reviewed by the Regional District. The proposed costs will be finalized before a bylaw is presented for the Regional Board's consideration.

Projected annual costs for the service, tax rate estimates for properties within Electoral Area C and anticipated costs for individual properties based on assessed values will be shared publicly when presented to the board.

5. Why aren't the wharves being funded as a regional service?

Generally speaking, services offered by the Regional District must be supported by the area that would benefit from the service. The wharves in question are all located within Electoral Area C. To offer operations and maintenance to wharves as a regional service, it would first be necessary to inventory all the public wharves located throughout the region, evaluate the cost of operating those facilities, and then seek ratepayer approval across the entire region.

6. Will this Bylaw allow the SRD to build unlimited wharves?

No, it will not. The maximum annual requisition for the wharves service contained in the establishing service bylaw is only sufficient to operate and maintain existing wharf facilities. If a new wharf is proposed and the cost for its construction requires funding from property taxes, a separate bylaw would need to be approved by ratepayers before construction.

7. What wharves will be included in this service?

There are six wharves included in this proposed service: Surge Narrows, Port Neville, Owen Bay, Granite Bay, Hoskyn Channel and Evans Bay.

The proposed service will not affect the cost of operating and maintaining the wharves located adjacent to Regional District parks - Granite Bay, Hoskyn Channel and Evans Bay as these park wharves have an existing annual budget.

8. What are the timelines to upgrade the wharves with Transport Canada funding?

The SRD has completed the detailed designs for Surge Narrows, Evans Bay and Owen Bay. All three wharves require new piles and pile driving must be done during specific times of the year due to environmental regulations.

Transport Canada funding expires on November 14th, 2024, which limits the pile driving to two construction windows – Fall 2023 and Summer 2024. Should the AAP be successful and the wharves service is established, the construction contract will be awarded in September 2023. Project upgrades to all three wharves will need to be completed by October 2024.

9. How does this service benefit the community?

Providing a reliable funding stream is essential for maintaining these facilities over the long term. While it is recognized that not all residents are likely to use the wharves, these facilities are part of the marine infrastructure and heritage of Electoral Area C and contribute to the quality of life for all residents in the same manner as schools, roads, and other general assets of the community.

Questions?

Please contact the SRD Engineering Department at engineering@srd.ca | 250-830-6719 | www.srd.ca



FEASIBILITY STUDY

ELECTORAL AREA C WHARVES SERVICE



March 2023

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(Cover photo: Owen Bay wharf - May 2022)

Executive Summary

In 2014, Transport Canada Divested three wharves to the Strathcona Regional District (SRD). These facilities are located at Owen Bay, Port Neville and Surge Narrows within Electoral Area C. The other locally owned wharf facilities in Electoral Area C are located at Evans Bay, Granite Bay and Hoskyn Channel but are considered park assets and outside the scope of this study.

Under Transport Canada's port divestiture program, approximately \$2.9 million was provided to the Regional Board for much-needed capital upgrades and maintenance. Those upgrades must be completed by November 2024, and any divestiture funds remaining after that deadline must be returned to Transport Canada.

To fund the ongoing maintenance and operation of the wharves a service must be established, which includes the adoption of a bylaw and financial plan to support the service. This requirement was known in 2014 when the SRD accepted the wharves and associated funding. Establishing the service was delayed by the elected officials for several years, and the SRD's ability to complete the upgrades before the funding expiry date is now in jeopardy.

Significant milestones in creating a wharves service for Electoral Area C:

- On November 14, 2014 the SRD entered into an Agreement to Transfer, a Contribution Agreement and an Operation Agreement with Transport Canada for the divestment of the Owen Bay, Port Neville and Surge Narrows wharves.
- On May 8, 2017 the Strathcona Regional Board passed a resolution directing the preparation of a bylaw to establish a wharves service for Electoral Area C for consideration by the Board.
- On April 27, 2022 the Board reviewed the original feasibility study, gave first 3 readings to Bylaw 461, and passed a resolution that approval of the electors be obtained using an Alternative Approval Process (AAP).
- On July 6, 2022 the AAP commenced and was closed on August 11th, 2022 with more than 10% of the eligible electors expressing their objection to service establishing Bylaw No. 461.
- On September 21, 2022 the Regional Board voted to defer further consideration of the issue until after the 2023 local elections. A review of the AAP results suggested that misinformation, a lack of understanding of the AAP process, and statements made by the elected director at the time questioning the proposal and the Regional District's motivations for creating the service, fueled the public's opposition.
- On January 11, 2023 the Regional Board resolved that a new service establishing bylaw should be developed that would be seen more favourably by ratepayers in Electoral Area C and that additional consultation with users and other interested parties be conducted.
- On February 14, 2023 the Regional District held two open houses in Electoral Area C to clarify the process and receive feedback from the public. A wharves service webpage was developed to answer questions and comments received during the 2022 AAP process and to provide additional information on the divestiture process and funding-related requirements.

As a result of the foregoing research, a number of recommendations are herewith presented for the consideration of the Regional Board, including:

- THAT a service be established to ensure that capital and operating costs can be met in accordance with the Transport Canada divestiture agreement and good engineering practice;
- THAT the entirety of Electoral Area C (Discovery Islands-Mainland Inlets) be designated as the area benefiting from the wharves service;
- THAT the costs of operating the service that cannot be recovered by other means should be secured through taxation of real property within the area benefiting from the wharves service;
- THAT property taxes for the wharves service would most appropriately be levied against both land and improvement assessments within the benefiting area.

The transfer of ownership did not provide sufficient resources for long-term or ongoing operational or maintenance costs, which is the reason for this initiative. Having a service in place will ensure that regular and appropriate maintenance of the wharf infrastructure can be undertaken as required. If the Regional District fails to establish a service, all costs related to maintenance or non-maintenance of the wharf infrastructure (including legal costs and damage awards) would need to be charged to the electoral area administration service.

For the reasons outlined above, it is recommended that the Regional Board give serious consideration to the establishment of a wharves service for Electoral Area C.

Introduction

The intent of this study is to examine the feasibility of establishing a service to cover the costs of operating and maintaining wharf infrastructure for Electoral Area C. The wharves in question represent important and vital infrastructure for local residents, businesses and recreational users throughout the area. Historically, the maintenance and upgrading of the wharves in question was the responsibility of the Government of Canada. However, in 2014 the decision was made by Canada to divest itself of these facilities and turn them over to local authorities that had an interest in ensuring their continued operation.

At that time the Strathcona Regional District made a decision to accept responsibility for the wharves and an agreement was entered into that provided \$2.9 million in funding to ensure that major upgrades and repairs to these facilities would be done. Under the terms of the agreement, the Regional District was given until 2024 to effect the necessary upgrades following which any funds remaining would have to be returned to Transport Canada.

There is still much work required to be done at these facilities, including maintenance, repair or replacement of the following within the next 2-10 years:

Wharves

- piers and approaches
- topsides
- decking
- stringers
- pile caps
- piles
- fender piles

Floats

- gangways
- floats
- mooring dolphins
- seaplane floats

The wharves in question are predominantly wood construction and, to withstand the harsh marine environment, the various components must be inspected, maintained, and repaired or replaced as necessary to ensure their long-term viability and the safety of the boating public.



Figure 1 – Port Neville wharf
(McElhanney Ltd., 2021)

Background

There are several public wharf facilities within the boundaries of Electoral Area C. Some of these wharves have been divested to the Regional District from Transport Canada on the condition that they will be upgraded and maintained to proper safety standards. These include wharves located at Port Neville, Owen Bay and Surge Narrows. Other wharves owned by the Regional District in Electoral Area C are currently operated in connection with community parks and are not included in this study.



Figure 2 – Typical configuration of wharf piles and cross-bracing.

(McElhanney Engineering Ltd. 2021)

The three wharves that are the subject of this study are believed to have sufficient funds set aside for capital improvements that will meet applicable engineering standards. However, since they are not associated with any Regional District service there is no reliable source of funding to cover operating and maintenance costs over the long term. Therefore, the purpose of this study is to identify the amount of revenue that would be required in a typical year to ensure that proper maintenance of this infrastructure can be done. Based on estimates from consulting engineers that were retained to investigate such costs, it is estimated that between \$40,000 and \$49,000 per wharf would be required in an average year to perform such maintenance. It has also been estimated that in years when storm damage has occurred that the cost of maintenance could be higher. These costs would need to be met by the Regional District using whatever funding is available through local channels such as property taxation.



Figure 3 – Owen Bay wharf
(McElhanney Engineering Ltd. 2019)

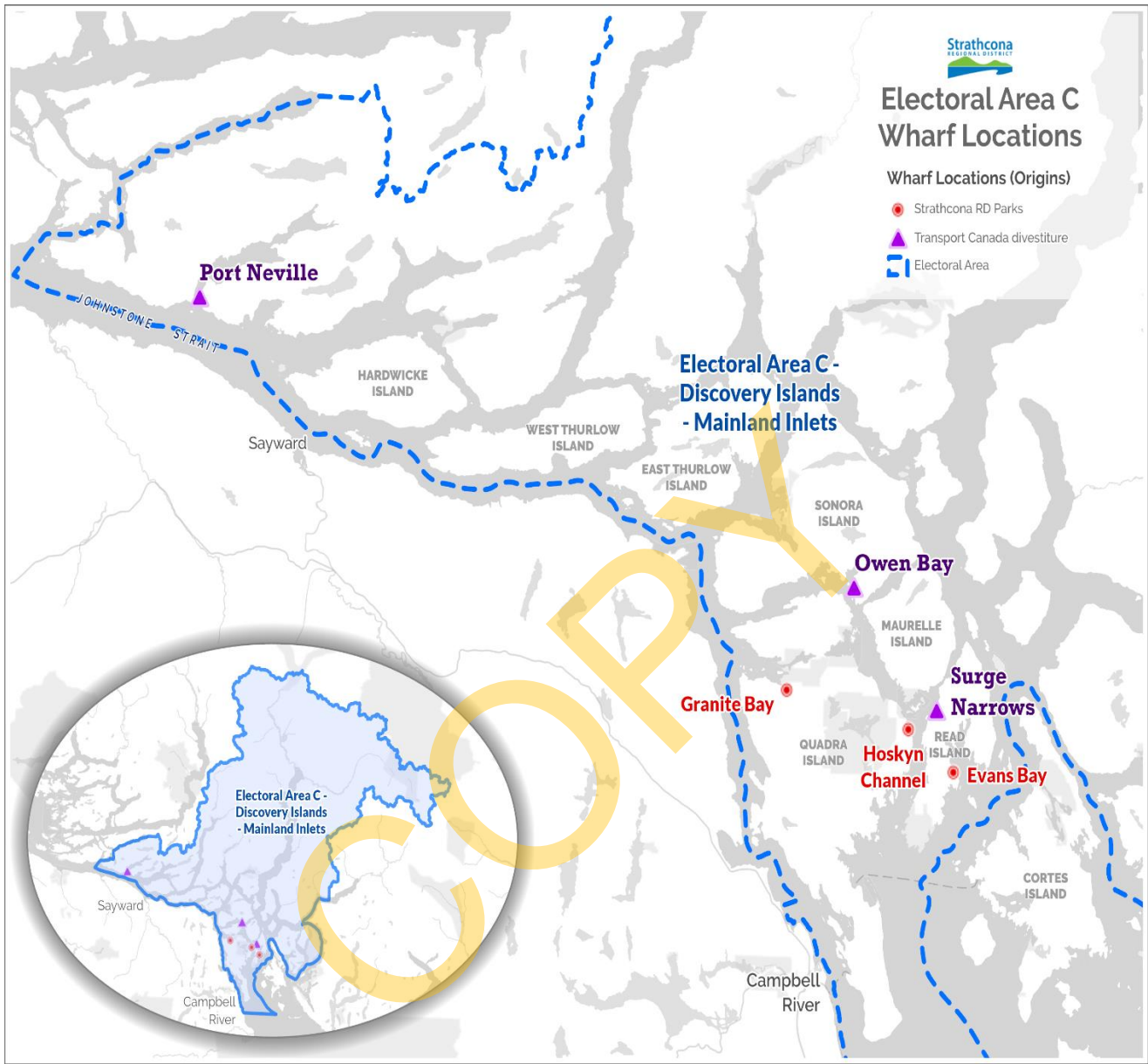


Figure 4 – Location map of SRD wharves in Electoral Area C

Capital and Operating Costs

As a result of the upgrades and improvements that have been or will be funded through the Transport Canada divestiture agreement, there is little in the way of capital expenditure that must be funded through local contributions in the short term. However, to ensure that the area receives full benefit of the work already undertaken, it is necessary to have a program that ensures regular maintenance and repairs are done to this important infrastructure.

A breakdown of the anticipated costs associated with the proposed wharves service is shown in the following table. The maintenance tasks shown are based on the recommendations from McElhanney Engineering Ltd. which conducted condition assessment studies of the wharf facilities in late 2021 and early 2022. The totals below are the projected ongoing maintenance and operating costs after the capital upgrades have been completed using the Transport Canada contributions.

Table 1: Annual Maintenance Cost Estimates for Wharves Infrastructure, post capital upgrades

Item	Annual Cost Estimate
Wharf Inspection and Reporting	\$7,500
Routine Maintenance & Repairs	\$32,500
Engineering Costs	\$15,000
Insurance	\$19,975
Administration and Overhead	\$23,213
Reserve Contributions	\$39,000
Total	\$137,187

Based on the preceding information, annual operational costs will vary between \$40,000 and \$49,000 per wharf in a given year and possibly higher in years when additional inspection, maintenance or repair tasks must be performed. It is also noted that insurance costs constitute a major portion of the annual cost of wharf operations due to the specialty nature of such insurance and the high premiums associated with marine liability policies. Reserve contributions are funds set aside specifically for the purpose of covering future major repairs, replacement costs or upgrades to an asset. Reserve contributions are essential for proper asset management, as they allow for the infrastructure's life cycle replacement needs, including the cost increases associated with inflation, to be accounted for and funded.

Service Area Boundaries

With respect to the proposed Electoral Area C wharves service, it was necessary to determine the geographic area which would receive a benefit from having existing and future infrastructure in place. Accordingly, four distinct benefiting area scenarios were considered for this study:

Option A - properties immediately adjacent to the wharf facilities.

Option B – all properties within Electoral Area C.

Option C – all properties within Electoral Area C (except those on the mainland of BC).

Option D - all properties within the Strathcona Regional District.

Not unlike roads, schools, libraries and other public infrastructure, the connection between infrastructure and the beneficiaries of that infrastructure may not be immediately apparent. Different ways in which the benefits of infrastructure may be determined include the desirability of living in an area (ie. market value of real estate) or the popularity of an area with tourists. The concept may be subtle and is distinct from the concept of ‘users’ of the infrastructure.

Additional information on the different service areas that were considered and the issues relevant to each is shown in the table below.

Table 2: Comparison of Possible Service Area Alternatives for Electoral Area C Wharves Service

Benefiting Area Scenario	Comments
A. Properties adjacent to wharf facilities	A large number of properties receiving benefit from the wharves service would not pay towards infrastructure upkeep or maintenance.
B. Properties located within the boundaries of Electoral Area C.	-Reflects the unique marine culture and heritage of Electoral Area C. -Acknowledges the historical significance of wharf facilities in the area.
C. Properties located within the boundaries of Electoral Area C (except properties on BC Mainland).	Arbitrarily excludes properties that share Electoral Area C’s marine heritage.
D. All properties within the Strathcona Regional District	Properties located outside of Electoral Area C would receive little or no direct benefit from the wharves service.

After careful consideration of the pros and cons associated with each of these alternatives and, respecting the principle that those properties receiving benefit from a Regional District service should contribute to its funding, it was concluded that a benefiting area boundary that included all properties within Electoral Area C would be the most appropriate.

Potential Revenue Sources

Having considered the issue of an appropriate boundary for the wharves service and the annual budgetary requirements to maintain the related infrastructure, it was necessary to consider possible sources of revenue that could be used to ensure annual maintenance and repair needs would be met. The following list includes the various sources of funding that are typically relied upon for covering the costs of local infrastructure operations and maintenance.

User Fees - As with all local government services, the incorporation of user fees is always attractive as it can help to minimize reliance on property taxes. Currently the only revenues being generated from operation of these wharf facilities is a license fee of approximately \$250 annually for the Post Office at the Surge Narrows location. It is not known how long this source of revenue will be available in the future. In the event other fees are implemented in relation to the use of wharf infrastructure, these would be available to offset the amount of taxes required from the service area.

Grants - Revenue received by way of grants is another possible source of funding, however such funding is usually reserved for capital works rather than ongoing maintenance costs. Since the proposed budget for the service is based on annual maintenance and upkeep (rather than major capital improvements) it is suggested that reliance on grant funding to cover these costs would probably lead to the wharves being maintained at a lower standard that does not meet proper engineering guidelines or public expectations.

Donations – Although the Regional District is able to accept voluntary donations to cover operating costs for any service (and to issue tax receipts for such donations), the Regional District is not aware of any donations being received in the past to support public wharves infrastructure. Should such contributions be received in the future they could be used to offset reliance on other revenue sources.

Property Taxation - The use of property taxation in such circumstances is often the only reliable method for ensuring that sufficient financial resources are available when needed to attend to scheduled and unscheduled maintenance requirements. As with all Regional District services, the use of property taxes to operate a service must be limited to the area deemed to benefit from the existence of the service.

Based on the foregoing, it is suggested that accessing the local property tax base (while not the only source of funding) is probably the most reliable method for ensuring that sufficient funding is available to meet the annual requirements associated with wharf operations and maintenance.

Property Taxation Options

If the annual costs of maintaining wharf infrastructure are to be shared collectively within the service area through a system of property taxation, it will be necessary to consider the various types of taxation that are available and to select the method deemed most appropriate. Following are the most common types of property taxes that are used, depending on the nature of the service and the relationship of the service to the properties benefiting from the service:

- taxation of land only (based on the value of the land)
- taxation of improvements only (based on the value of the improvements)
- taxation of land and improvements (based on the value of the land and improvements)
- taxation of each property at a uniform rate (parcel tax)
- taxation of each property based on road frontage or parcel area (frontage tax or area tax)

While no perfect taxation system exists, it is generally accepted that the most appropriate system would be one that has the strongest relationship between the benefit received by properties and the amount of tax paid by those properties. In the present case, it is believed that the benefit received is strongly correlated to the value of assets which is the default system for Regional District requisitions. This philosophy would tend to discourage the use of parcel taxes, frontage taxes or area taxes as preferred methods for sharing costs since these systems are typically related to utility infrastructure such as water distribution or community sewer systems.

The table below illustrates the relative costs projected for the wharves service using a variety of property taxation methods. As may be seen, the sharing of costs based on land and improvement assessments not only yields a lower tax rate in comparison to other methods but also recognizes the broad constituency that would benefit from a proper maintenance program. For the reasons outlined above, it is suggested that the fairest and most appropriate method of sharing annual service costs would be through a tax on land and improvements with the amount of taxation for each property based on the value of that property.

Table 3: Analysis of Residential Rates Using Various Property Taxation Formulas

Taxation Method	Occurrences	Assessment Values (2023)	Annual Residential Rate
Land only	2,006	\$813,842,800	\$0.1432 per 1,000 of taxable land assessments
Improvements only	1,909	\$546,800,762	\$0.2076 per 1,000 of taxable improvement assessments
Land and improvements	2,128	\$1,360,643,562	\$0.0848 per 1,000 of taxable land and improvement assessments
Uniform parcel tax	2,625	n/a	\$52.26 per separate parcel of land
Frontage or area tax	Data not available		

Tax Rate Calculations

Using land and improvement assessments as the basis for allocating annual costs it is possible to estimate the tax rates that would likely result if the maximum annual requisition was levied within the proposed service boundary. The calculations in the table below are based on 2022 property valuations supplied by the Assessment Authority of BC and, while property values may change over time, the calculations are believed to be accurate enough for purposes of this study.

Table 4: Calculation of Annual Tax Rates for Electoral Area C Wharves Service

Assessment Class	Occurrences	2023 Net Taxable Values	Conversion Factor	Converted Assessments	% Share	Requisition Share	Tax Rate* (per \$1,000)
1. Residential	2128	\$1,360,643,562	0.100	\$136,064,356	84.1	\$115,328	0.0848
2. Utility	20	1,923,800	0.350	673,330	0.4	571	0.2967
3. Supportive Housing	-	-	0.100	-	-	-	-
4. Major Industry	-	-	0.340	-	-	-	-
5. Light Industry	138	7,009,700	0.340	2,383,298	1.5	2,020	0.2882
6. Business/Other	188	81,453,000	0.245	19,955,985	12.3	16,915	0.2077
7. Managed Forest Land	51	6,353,600	0.300	1,906,080	1.2	1,616	0.2543
8. Rec./Non-Profit	28	7,848,400	0.100	784,840	0.5	665	0.0848
9. Farm	72	863,136	0.100	86,314	0.1	73	0.0848
Total	2,625	\$1,466,095,198		\$161,854,203	100.0	\$137,187	0.0935

*Note: the various tax rates shown for different property classes is a result of the Province of BC rural property taxation system which uses converted (weighted) assessments when calculating tax rates.

Whether or not the maximum requisition will be required in any given year would be determined when that specific year's budget is being considered. Generally speaking, property taxation would only be relied upon when other sources of revenue are not sufficient to cover the anticipated operational and maintenance costs for that year.

Annual Property Owner Costs

On the assumption that the annual costs of maintaining the wharves infrastructure are to be supported by all properties located within Electoral Area C, it is possible to estimate the annual costs to be borne by the owners of homes, businesses and other types of property within the area. The table below provides an estimate of those costs for each type of property found within the service area based on the value of that property. Property owners can easily determine the estimated annual costs for their specific property by using the rates shown in the table below or by multiplying the applicable tax rate shown in Table 4 against their assessed values as specified in their most recent property assessment notice.

Table 5: Annual Wharves Service Cost* by Property Class and Valuation

Taxable Value	Class 1 (Residential)	Class 2 (Utilities)	Class 5 (Light Industry)	Class 6 (Business & Other)	Class 7 (Managed Forest)	Class 8 (Rec/Non-Profit)	Class 9 (Farm)
50,000	\$4.24	\$14.83	\$14.41	\$10.38	\$12.71	\$4.24	\$4.24
100,000	8.48	29.67	28.82	20.77	25.43	8.48	8.48
200,000	16.95	59.33	57.64	41.53	50.86	16.95	16.95
300,000	25.43	89.00	86.45	62.30	76.28	25.43	25.43
400,000	33.90	118.66	115.27	83.06	101.71	33.90	33.90
500,000	42.38	148.33	144.09	103.83	127.14	42.38	42.38
600,000	50.86	178.00	172.91	124.60	152.57	50.86	50.86
700,000	59.33	207.66	201.73	145.36	178.00	59.33	59.33
800,000	67.81	237.33	230.55	166.13	203.42	67.81	67.81
900,000	76.28	266.99	259.36	186.89	228.85	76.28	76.28
1,000,000	84.76	296.66	288.18	207.66	254.28	84.76	84.76

*It should be noted that some of the costs of maintaining these wharf facilities is currently being covered out of the Transport Canada divestiture funding which will not be available over the long term.

The decision to establish a wharves service is subject to the collective approval of the electors for Electoral Area C by assent voting or alternative approval process.

The options available for seeking the approval of the electors are described in more detail in the following sections of this report.

Approval Process

In the event it is decided to proceed with establishment of a wharves service, there are several steps that must be undertaken by the Regional Board including the presentation of the initiative to the electors for approval:

Step 1 - A service establishing bylaw must be introduced and given first 3 readings by the Regional Board. The bylaw must set out the nature of the service to be provided, the geographic area that would benefit from the service, the method of taxation to be employed for recovering annual costs, and the maximum amount that can be requisitioned each year from property owners for the service.

Step 2 - The Regional Board must decide whether it will seek approval of the electors for the establishing bylaw through an assent voting process or alternative approval process (AAP).

Step 3 - The service establishing bylaw must be submitted to the Inspector of Municipalities for approval.

Step 4 - Once approved by the Inspector of Municipalities the service establishing bylaw may then be submitted for approval by the electors. If assent voting is to be used, the approval threshold is a simple majority of the votes actually cast by qualified electors. If using an alternative approval process, the threshold for approval is less than 10% of the electors objecting in writing to passage of the bylaw. An assent voting process is relatively expensive (especially when used for a small geographic area) while an AAP is much more cost effective while still allowing elector opposition to an initiative to be accurately gauged.

Step 5 – If elector approval is received the Regional District may proceed to adopt the service establishing bylaw.

Given the relatively high cost associated with the assent voting option, it is recommended that serious consideration be given to using an AAP for obtaining elector assent. Should the bylaw fail to receive elector approval using that method, the ability to use an assent voting process would still be an option and, depending on the number of electors who objected via AAP, there may be a rationale for continuing with that process.

A proposed schedule with milestones for establishing the proposed Electoral Area C wharves service is outlined below.

Implementation Schedule

The following table provides more detailed information on the various steps that would need to be undertaken to implement a wharves service assuming that the initiative is to be established using an alternative approval process (AAP). The dates shown are approximate only and are the earliest dates for which the corresponding action could be taken.

Table 6: Schedule of Milestones for Creation of Electoral Area C Wharves Service

Schedule	Action
March 15, 2023	Regional Board gives first 3 readings to Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023, and authorizes approval of the electors to be obtained by alternative approval process (AAP).
March 17, 2023	Bylaw No. 487 submitted to Inspector of Municipalities for approval under s.342 of <i>Local Government Act</i> .
May 3, 2022	Inspector of Municipalities approval received for Bylaw No. 487.
May 10, 2023	Regional Board establishes elector response form, elector response deadline and determines total number of eligible electors for AAP.
May 17, 2023	First publication of AAP notice for Bylaw No. 487.
May 24, 2023	Second publication of AAP notice for Bylaw No. 487.
June 23, 2023	Deadline for filing AAP responses with Regional District.
June 28, 2023	If elector approval received, Regional Board adopts Bylaw No. 487.
July 12, 2023	Certified copy of Bylaw No. 487 filed with Inspector of Municipalities.
September 14, 2023	Regional Board awards contract for capital upgrades to wharves.
November 1, 2023 to February 15, 2024	Fisheries Window No. 1 open for works below high-water mark (eg. pile driving for piers and floats).
March 20, 2024	Board adopts 2024 operating budget for Electoral Area C wharves service.
July 2, 2024	Deadline for payment of property taxes for wharves service.
July 1, 2024 to September 1, 2024	Fisheries Window No. 2 open for works below high-water mark (eg. pile driving for piers and floats).
October 15, 2024	Deadline for completion of wharves upgrades with Transport Canada capital funding.
November 14, 2024	Deadline for payment of wharves upgrades using Transport Canada capital funding.



Marine Facility Condition Assessment of the Surge Narrows Wharf

August 24th, 2022 | Revision 0

Submitted to: Strathcona Regional District (SRD)
Prepared by McElhanney Ltd.

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1. Introduction

1.1. PROJECT BACKGROUND

McElhanney Ltd. (McElhanney) has been retained by the Strathcona Regional District (SRD) to complete a condition assessment of the public wharf located at Surge Narrows located on Read Island, BC. Figure 1 shows the site location of the wharf.

The marine facilities are generally in fair condition. Repairs were completed in 2013, according to the reference drawings, and it has been assumed that limited maintenance and repairs were completed in the years following. McElhanney's assessment will be used to determine the need for repairs and/or replacements.

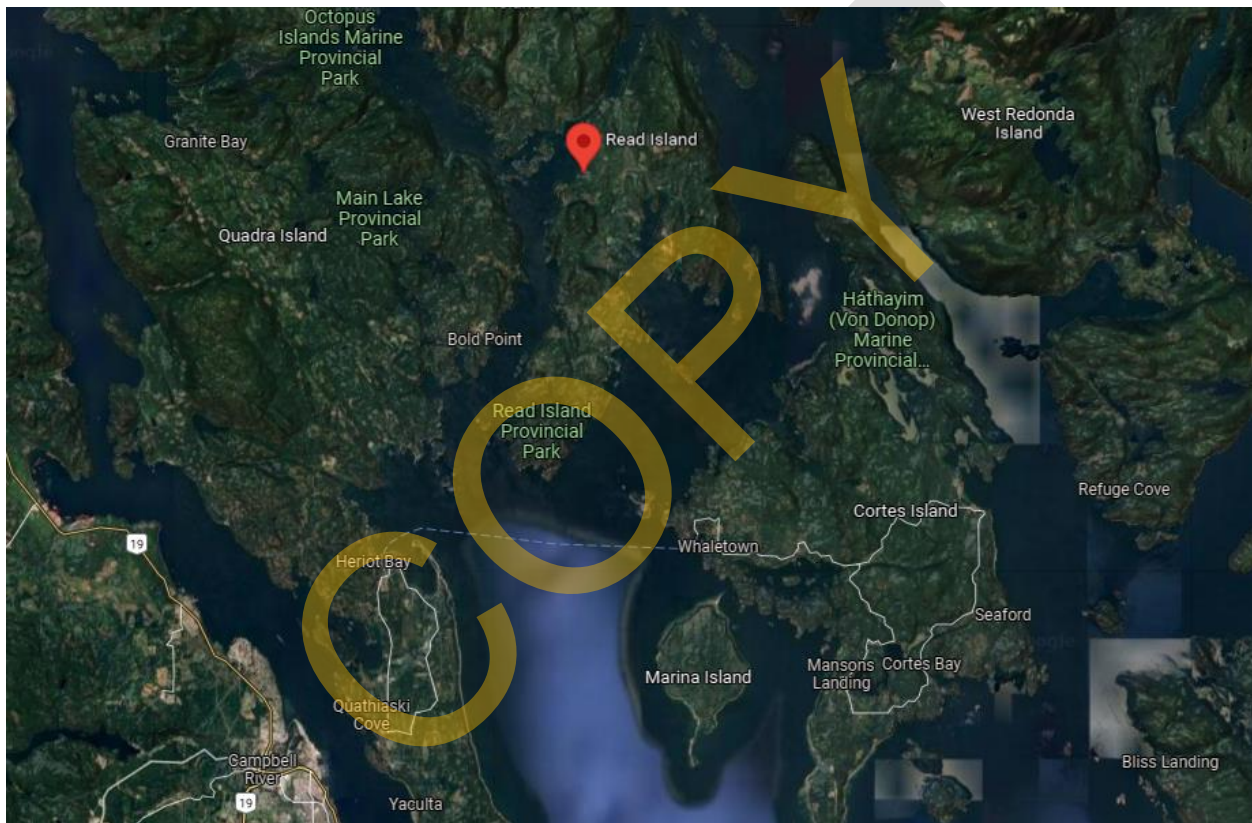


Figure 1 – Site Location

The above water site inspection was completed on September 22nd, 2021, and the underwater inspection was completed January 21st, 2022 by the following McElhanney personnel:

- Hannah Hladkovicz, EIT, Marine Structural Engineer
- Zach Tillapaugh, EIT, Structural Engineer

1.2. REFERENCE DRAWINGS

The following reference drawings and documents are available and have been reviewed by McElhanney:

- Sub-Tidal Dock and Piling Review – McElhanney, October 2013
- Surge Narrows Location Map
- Derrick Inspection and Servicing Report – Arrowsmith Engineering Services Ltd., June 2017
- Wharf and Float Repairs, Surge Narrows, BC – Herold Engineering Ltd., March 2013
- Surge Narrows Port Divestiture Program Final Report – McElhanney, January 2014
- Structure Condition Inspection and Report – Herold Engineering, February 2014
- Surge Narrows Wharf License Area

1.3. REFERENCE SYSTEM

The reference system used in the inspection is consistent with Figure 2 below.

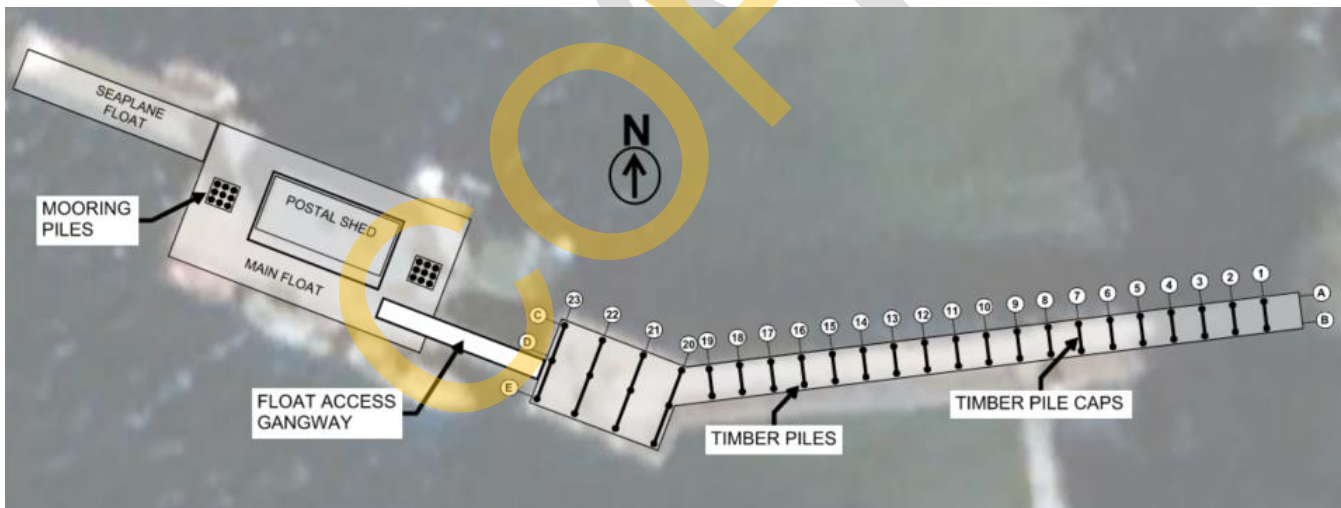


Figure 2 – Inspection Reference System

2. Description of Facilities

The wharf structure is a conventional treated timber wharf, approximately 170 feet long, and consists of the following:

- Painted timber handrails including a top rail, (2) mid-rails, and bull rail curb secured to handrail posts bolted to the edge stringer and bull rail
- Treated timber deck planks, typically 2" x 10"
- 6" x 12" stringers, typically at 12" centers
- Either 10" x 12" or 12" x 12" pile caps, typically at 8' centers
- 12" nominally sized creosoted treated piles typically at 6' centers along the bent, however varying in some locations. Bent Nos. 20, 21, 22 and 23 have (3) piles along the bent at the wharf head.
- 40 ft long aluminum truss gangway
- 30' x 60' main float consisting of timber framing, topsides and decking, and buoyancy billets.
- 9' x 45' seaplane float consisting of timber framing, topsides and decking, and buoyancy billets.
- (18) treated timber mooring piles, (9) at both the west and the east end of the main float, secured in mooring wells.

Inspection photographs can be found in Appendix A.

3. Inspection Methodology and Limitations

An above water inspection of the marine assets was completed using visual inspections. The inspection methodology was completed in accordance with the procedures and recommendations provided in “Procedures for Inspection and Assessment of Fixed Timber Docks”, by RG Sexsmith Ltd. and dated September 1994, 4th Edition. This reference has been widely adopted by the Canadian Coast Guard, Department of Fisheries and Oceans Small Craft Harbours Branch, and Transport Canada in the evaluation and assessment of timber docks, piers, and wharves along the BC Coast.

The inspection methodology used is summarized as follows:

- Visual inspection of the timber elements from the lower intertidal zone to underside of deck was completed during a low tide window.
- An underwater inspection was completed to assess the condition of the piles and the floats. The inspection was completed using an underwater ROV mobilized from the floats.

The following inspection limitations should be considered when evaluating the results of the inspection findings:

- Both bankia and limnoria marine borers species are actively present on the BC Coast and can damage the timber pilings from the seabed to the intertidal zone. This should be identified during underwater inspections.
- The findings and recommendations are for the use of the SRD only.
- A detailed coring inspection of the timber members was not completed as part of the condition assessment.
- Users of the facility should always report any unusual conditions so that they can be evaluated by a Professional Engineer registered in British Columbia.
- Inspection is limited to what was observed on site, with the possibility that hidden defects and damage may not have been visible.

In accordance with the Ministry of Transportation and Infrastructure, Asset Performance Measures, for each structural element type, the overall condition state is provided based on a site inspection of each structure component.

- Excellent Condition – as-built condition, no observed defects.
- Good Condition – normal wear and deterioration
- Fair Condition – minor loss in condition or minor observed defects.
- Poor Condition – advanced loss in condition or significant defects.
- Very Poor Condition – serious loss in condition or serious defects.

4. Inspection Findings

4.1. WHARF STRUCTURE

4.1.1. Approach

The approach is in generally good condition (Photo 1). There are no signs of settlement in this area, and the slope around the abutment appears stable. The load rating sign specifies a maximum gross vehicle weight of 5,300kg (Photo 2).

Repairs are not considered necessary at this time; however ongoing monitoring of the approach is recommended. Consideration should be given to extending the safety barriers to the approach area.

4.1.2. Topsides and Decking

The topsides are generally in good condition with minor widespread weathering (Photo 3). Inspection findings are as follows:

- The timber handrails are well secured and in good condition (Photo 4). These were replaced in 2013 according to the repair drawings by Herold Engineering. One section of the handrails on the south end is missing the lower mid-rail (Photo 5).
- The timber deck planks are in good condition with widespread minor weathering (Photo 6). All deck planks appear generally well secured. The decking was also replaced in 2013.
- There is one section along the wharf structure which leads to private property. This area is closed off to the general public (Photo 7).

The lower mid rail of the handrails should be installed where it is missing. Consideration should be given to removing access to the private property. Ongoing monitoring of the condition of the topsides is recommended.

4.1.3. Stringers

The timber stringers are generally in good condition (Photo 8). The stringers appear well secured between the decking and the pile caps, and there are no signs of significant splitting or structural distress.

Repairs are not considered necessary at this time; however ongoing monitoring of the stringers is recommended.

4.1.4. Pile Caps

The treated timber pile caps are generally in fair condition, with widespread weathering and green algae growth, and damage to isolated members (Photo 9 to Photo 10). The pile caps appear well secured, and are typically aligned well over the piles, with no signs of shifting. Inspection findings are as follows in Table 1 below:

Table 1 – Pile Cap Inspection Findings

Location	Description of Findings	Photo
Bent No. 1	The pile cap is split on the north end.	Photo 11
Bent No. 2	The pile cap has a minor split at the south end grain.	Photo 12
Bent No. 4	The pile cap is fractured at the base in the center, and the end of one of the through bolts is exposed.	Photo 13
Bent No. 6	The pile cap is above 2 corbels on each pile. The corbels are in fair condition and secured vertically with a steel angle on one side. The top corbel at the north end is showing signs of splitting.	Photo 14 to Photo 15
Bent No. 7	The pile cap is above 2 corbels on the south pile. The corbels are in fair condition and stabilized vertically with a steel angle on one side. The bottom corbel is showing minor signs of splitting at the end grain.	Photo 16 to Photo 17
Bent No. 10	The pile cap is fractured at the base in the center, and the end of one of the through bolts is exposed.	Photo 18
Bent No. 11	The pile cap is splitting at the north end grain.	Photo 19
Bent No. 12	The pile cap is fractured at the base in the center, and the end of one of the through bolts is exposed.	Photo 20
Bent No. 13	The pile cap is above 2 corbels on the south pile. The corbels are in fair condition and stabilized vertically with a steel angle on one side. The corbel is showing minor signs of splitting at the end grain.	Photo 21
Bent No. 14	The pile cap has some damage at the end grain on the north end.	Photo 22
Bents Nos. 2, 4, 6, 8, 10, 12 and 14	The pile caps do not extend the full length of the deck. The pile caps end approximated one foot before the end stringer on the south end. The end stringers therefore span 2 bents at these locations.	

Replacements of piles caps at Bent Nos. 1, 2, 4, 6, 7, 8, 10, 11, 12, 13 and 14 is strongly recommended. It is recommended that the corbels at bent 6 are laterally braced with sister channels, and all the corbels at Bent Nos. 6, 7, and 13 are braced vertically on both sides of the pile with either strapping or steel angles. Ongoing monitoring of the remaining pile caps is recommended.

4.1.5. Piles

The timber piles are generally in fair condition, with widespread fungal decay. Inspection findings are as follows:

- Pile No. 2B has a minor split at the top of the pile (Photo 23)
- Pile No. 4B has a split at the top of the pile. It has previously been banded to prevent further splitting (Photo 24).
- Pile No. 10B has multiple minor bolt holes in the intertidal zone (Photo 25).
- Pile No. 11B has a severe marine borer cavity in the intertidal zone (Photo 26).
- Pile 19A has a minor split in the intertidal zone (Photo 27).
- Pile 22A has some damage in the intertidal zone (Photo 28).
- The majority of the existing capping over the piles is deteriorated or missing.

The missing and deteriorated capping should be replaced to prevent further damage to the tops of the piles. Ongoing monitoring of the piles and areas of damage is recommended. It is recommended that any holes be plugged with a treated timber dowel if possible. It is anticipated that the piles identified with holes and splitting will have established internal fungal decay in the next 5-10 years and should be considered for replacement.

4.1.6. Fendering System

The timber fender piles are generally in fair condition, with no signs of significant deterioration or mechanical damage (Photo 29 to Photo 30).

McElhanney understands that the fender piles are not longer used for vessel moorage and repairs are not considered necessary at this time. Continued monitoring of the fender piles is recommended.

4.1.7. Cross Bracing

The timber cross bracing is generally in fair to good condition (Photo 31 to Photo 32). Inspection findings are as follows:

- There is widespread weathering, and minor fungal decay to the end grains of the members, however all cross braces appear well secured to the piles.
- There are two locations where timber log debris is trapped under the wharf structure and is resting on the cross-bracing. (Photo 33 to Photo 34).
- It appears a timber member was added as a side brace from the deck to pile 11B, however it is no longer secured to the pile and is hanging from the deck (Photo 35).

It is recommended that the timber log debris and the hanging side brace at pile 11B are removed. Ongoing monitoring of the cross bracing is recommended.

4.1.8. Derrick Loading Crane

The Derrick Loading Crane appears to be in fair condition with signs of corrosion (Photo 36 to Photo 38). The crane appears to still be in use. The hanging tackle is being secured to the timber handrails with a rope.

Consideration should be given to removing the crane if usage cannot be monitored.

4.2. FLOATS

4.2.1. Access Gangway

The access gangway is in good condition with no significant corrosion or deterioration of the welded connections (Photo 39). According to the repairs drawings it was replaced in 2013. The inspection findings are as follows:

- The gangway slider plate is in good condition and is well aligned with the gangway rollers (Photo 40).
- The upper hinge connections are well aligned, and the bolted connections are in good condition (Photo 41).

Repairs are not considered necessary at this time; however ongoing monitoring of the gangway is recommended.

4.2.2. Main Float

The main float is in fair condition (Photo 42). Inspection findings are as follows:

- The timber deck planks were replaced in 2013 and are in good condition with minor weathering (Photo 43 to Photo 45).
- The bull rails and fascia board are in fair to good condition, with minor weathering (Photo 46).
- The floating dock does not appear to have consistent floatation, with flotation loss of 6 inches noted at the middle east side of the float. It appears there are no floatation elements in this area, which is directly surrounding the mooring well (Photo 47 to Photo 49). Additionally, the freeboard at the north end of the dock is about 6 inches less than the south end. This could be due to the weight of the postal shed, which is further on the north end of the dock.
- The mooring piles and mooring dolphins have moderate abrasion with the dock structures (Photo 50 to Photo 57).

Consideration should be given to adding and/or replacing some of the flotation elements to improve the consistency of the freeboard of the main dock. Ongoing monitoring of the main float is recommended.

4.2.3. Seaplane Float

The seaplane float is in fair condition (Photo 58). Inspection findings are as follows:

- The timber deck planks, bull rails and fascia boards have widespread weathering and fungal decay (Photo 59 to Photo 60).
- On the north end of the seaplane float, rubber tires have been bolted to the fascia boards as fenders (Photo 60).
- There is some floatation loss at the west side of the seaplane float end, with the freeboard approx. 5 inches less than the east side. Additionally, the seaplane float freeboard is about 5 inches less than the main float, resulting in a step down between the docks which may pose a tripping hazard. A rubber mat has been installed as a transition mat (Photo 61).
- The seaplane float is secured by mooring anchor chains, on concrete anchors.

Consideration should be given to replacing the seaplane float along with the mooring system rather than continue regular minor maintenance/repairs. Consideration should also be given to the addition of a security gate to prevent access to the seaplane float.

5. Residual Life Estimates

The marine facility is typically in fair condition. For the purpose of this evaluation, the residual life represents the estimated period of time between the inspection date and the time when the component will typically require repair or replacement.

For timber docks in a saltwater/marine environment, the residual life estimate is based on the follow:

- Where no established deterioration (marine borer cavities / fungal decay / mechanical abrasion) is noted in creosote treated timber, the remaining residual life is estimated to be 10+ years. As deterioration can progress rapidly in timber members once established, residual life estimates greater than 10 years are typically not given.
- Where deterioration has been established, the remaining residual life is estimated to be 2-7 years, depending on the extent of deterioration and likelihood to progress rapidly.
- Where there is deterioration which has significantly affected the structural capacity of the member the residual life is assumed to be minimal.

Based on McElhanney’s understanding of the environment, usage, and familiarity with similar structures, Table 2 provides the estimates of the remaining service life of the wharf elements:

Table 2 - Summary of Recommendations

Location / Structure	Residual Life Estimate
Wharf Structure	
Approach	+10 years
Topsides	8-10 years
Decking	8-10 years
Stringers	8-10 years
Pile Caps	1-2 years
Piles	2-4 years
Fender Piles	5-7 years
Floats	
Gangway	+10 years
Main Float	2-4 years
Seaplane Float	4-6 years

6. Facility Recommendations and Cost Estimates

The Surge Narrows Wharf facility is generally in fair condition and is expected to continue servicing public access for small craft vessels. Based on the inspection findings, there are multiple maintenance items recommended. Table 2 provides recommendations and cost estimates based on McElhanney's understanding that the SRD intends to invest significant maintenance effort in the facility before 2024.

The cost estimates for the repairs are shown in Table 3.

Table 3 – Cost Estimates

Item	Priority	Description	Units	Quantity	Unit Cost	Subtotal
1	High	Repair and replace the handrails where needed.	m	10	\$200	\$2,000
2	High	Miscellaneous pile cap repairs / replacements	Ea.	11	\$5,000	\$55,000
3	High	Miscellaneous pile repairs/replacements	Ea.	3	\$12,000	\$36,000
4	Medium	Install new flotation billets on Main Float	Ea.	6	\$5,000	\$30,000
5	Medium	Full replacement of Seaplane Float	m ²	37	\$1,200	\$44,400
High Priority Subtotal						\$93,000
Contingency (25%)						\$23,250.0
High Priority Total						\$116,250
Medium Priority Subtotal						\$74,400
Contingency (25%)						\$18,600.0
Medium Priority Total						\$93,000
Total Capital Cost Estimate						\$209,250

In reviewing the cost estimates above, please note the following:

- The current vessel moorage capacity is sufficient for future use. No expansion or increase in vessel moorage capacity is anticipated.
- Estimated is based on available cost estimate material and labour rate data from recent projects between 2019 to 2021 and assumes competitive contractor pricing.
- Estimate is considered accurate to $\pm 50\%$. A contingency of 25% has been provided to account for cost items which have not been considered due to the extent of engineering work completed to date.
- McElhanney recommends that a coring inspection be completed within 12 months of significant timber repairs to the stringers, pile caps, or piles to identify locations with internal fungal decay which are not identifiable from a visual inspection.

7. Closure

Please do not hesitate to contact the undersigned with any questions or comments.

Sincerely,
McElhanney Ltd.

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Reviewed by:



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Date	Status	Revision	Author
Nov. 29, 2021	Draft Issue	A	HH
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August 24, 2022	For Use	0	HH

Statement of Limitations

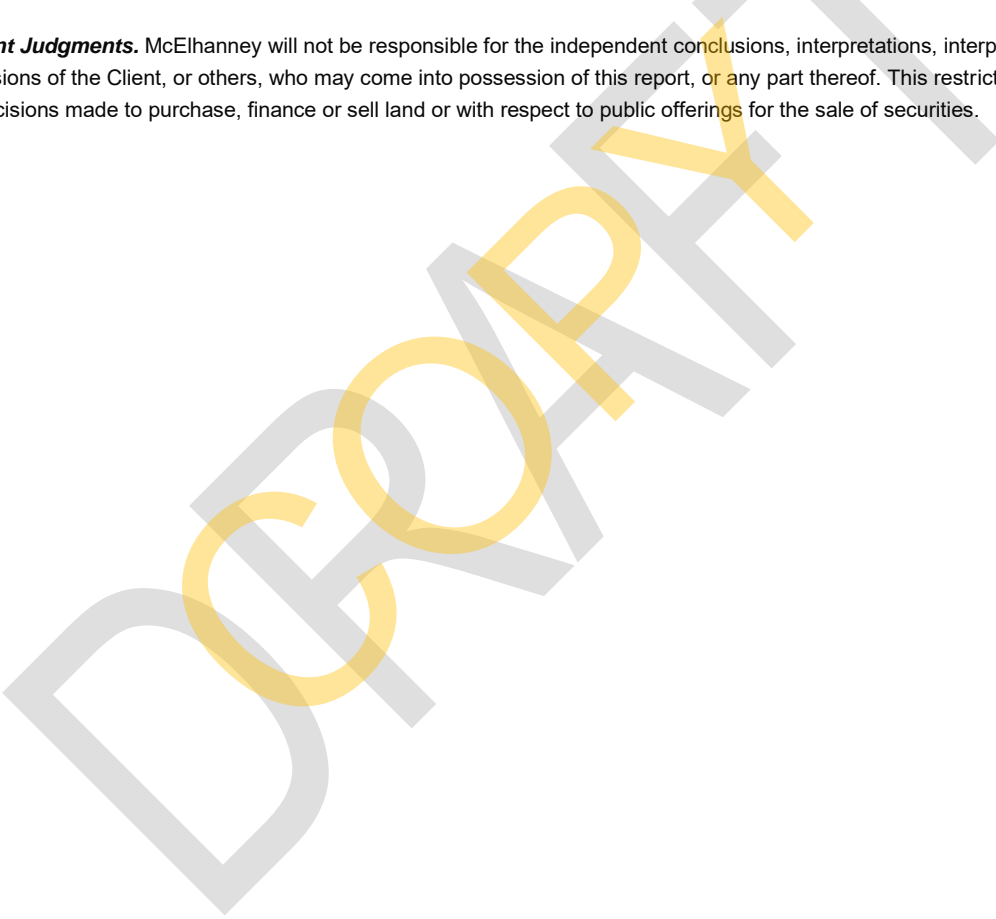
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APPENDIX A – INSPECTION PHOTOS

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Photo 1 - Approach area



Photo 2 - Load rating sign



Photo 3 - Wharf Structure Topsides



Photo 4 - Wharf Structure Handrails



Photo 5 - Missing lower mid-rail



Photo 6 - Wharf Structure Decking



Photo 7 - Access to private property



Photo 8 - Typical View of Timber Stringers



Photo 9 - General View facing south of the timber pile caps



Photo 10 - Weathering and green algae growth on pile caps



Photo 11 - Split at the north end of the pile cap at Bent 1



Photo 12 - Minor splitting of the pile cap at Bent 2



Photo 13 - Pile cap at Bent 4



Photo 14 - Pile cap at Bent 6 and corbels



Photo 15 - Split in corbel at Bent 6



Photo 16 - Pile cap at Bent 7 and corbels



Photo 17 - Split in corbel at Bent 7



Photo 18 - Pile cap at Bent 10



Photo 19 - Pile cap at Bent 11



Photo 20 - Pile cap at Bent 12



Photo 21 - Pile cap at Bent 13 with corbels



Photo 22 - Pile cap at Bent 14



Photo 23 - Pile 2B



Photo 24 - Pile 4B



Photo 25 - Pile 10B



Photo 26 - Pile 11B



Photo 27 - Pile 19A



Photo 28 - Pile 22A



Photo 29 - North end fender piles



Photo 30 - North end fender piles and log debris



Photo 31 - General condition of the Cross Bracing



Photo 32 - General view of Cross Bracing



Photo 33 - Log resting on the Cross Bracing



Photo 34 - Log resting on the Cross Bracing



Photo 35 - Hanging side brace at pile 11B



Photo 36 - Derrick Loading Crane



Photo 37 - Derrick Loading Crane

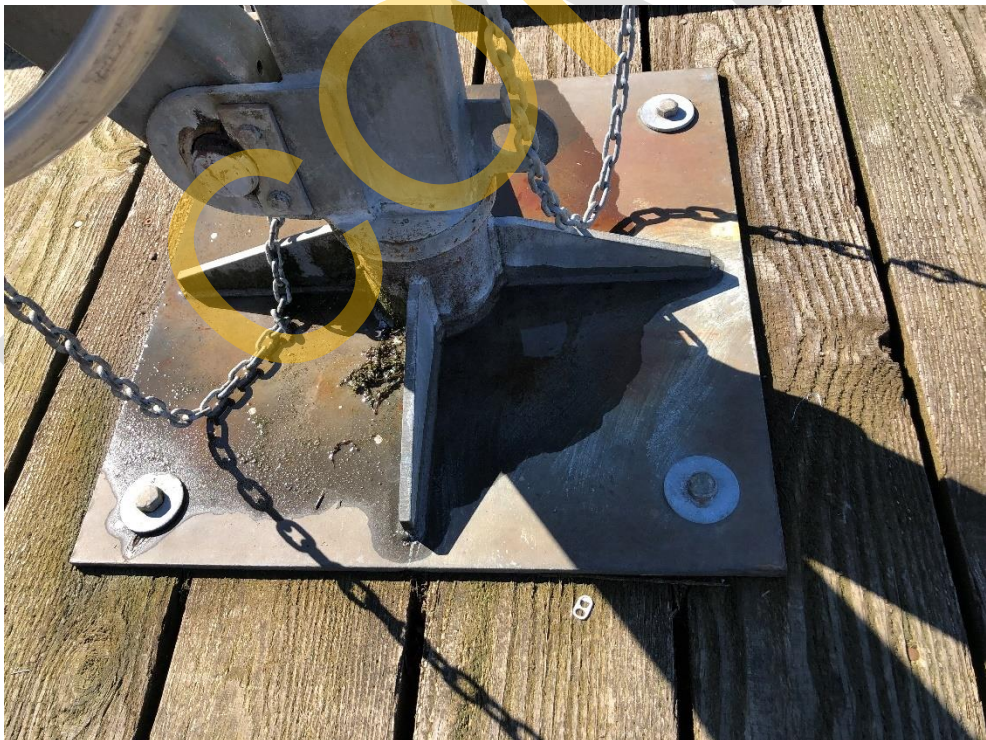


Photo 38 - Derrick Loading Crane



Photo 39 - General View of Aluminum Gangway



Photo 40 - Gangway slider plate and rollers



Photo 41 - Gangway Upper Hinge Connection



Photo 42 - General View of the Main Float



Photo 43 - Typical condition of the Main Float deck

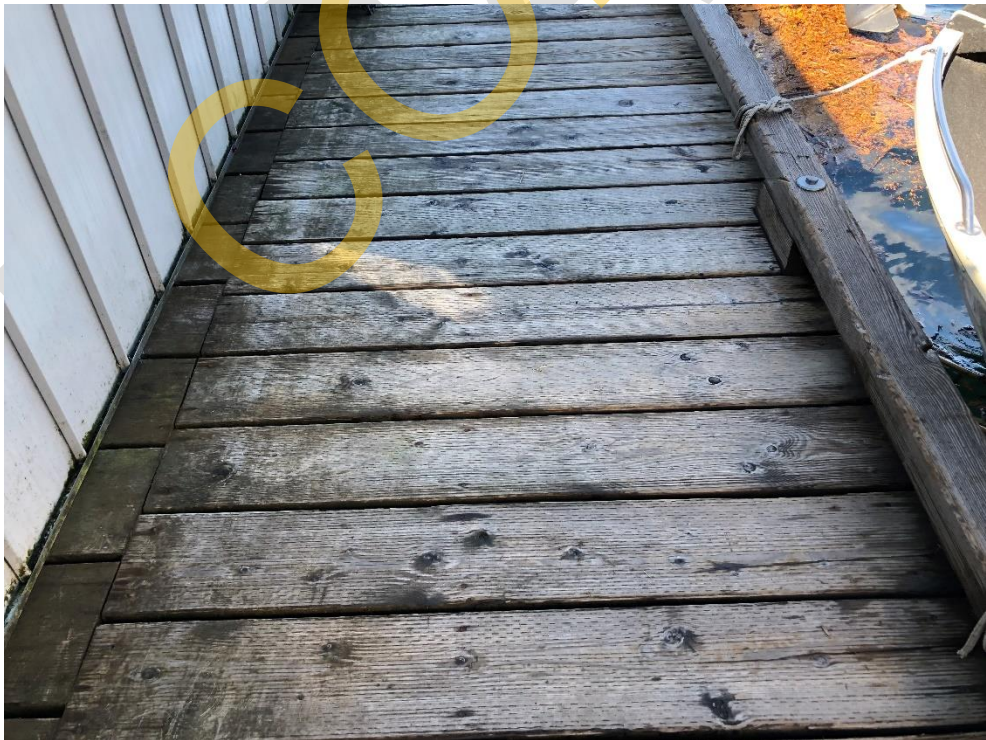


Photo 44 - Typical condition of the Main Float deck



Photo 45 - Typical condition of the deck beneath the postal shed



Photo 46 - Typical condition of the timber bull rails and fascia board on the Main Float



Photo 47 - Flotation loss at centre of the Main Float on the east end



Photo 48 - Main Float on the east end

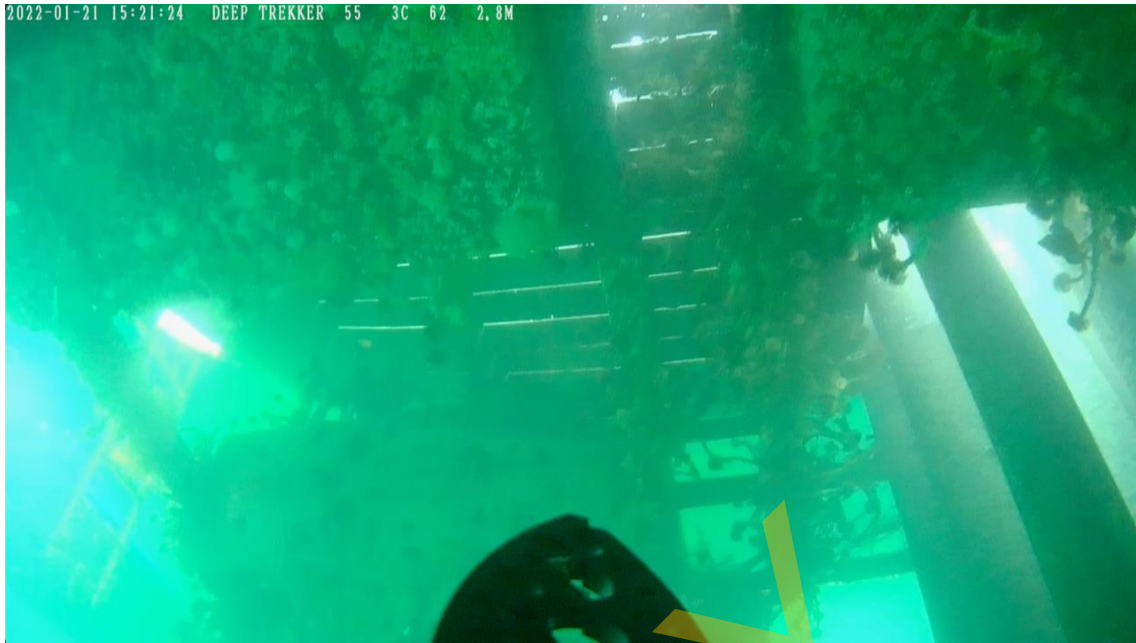


Photo 49 - Main Float on the east end



Photo 50 - East end Mooring Piles



Photo 51 - East end Mooring Piles



Photo 52 - East end Mooring Piles



Photo 53 - West end Mooring Piles



Photo 54 - West end Mooring Piles



Photo 55 - West end Mooring Piles – up to 10% CSL



Photo 56 - West end Mooring Piles



Photo 57 - West end Mooring Piles



Photo 58 - General view of the Seaplane Float



Photo 59 - Typical condition of the Seaplane Float deck



Photo 60 - Typical condition of the timber bull rails, fascia board and rubber tire fendering on the Seaplane Float



Photo 61 - Transition from the Main Float to the Seaplane Float

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Marine Facility Condition Assessment of the Port Neville Wharf

January 20, 2022 | Revision A

Submitted to: Strathcona Regional District (SRD)
Prepared by McElhanney Ltd.

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1. Introduction

1.1. PROJECT BACKGROUND

McElhanney Ltd. (McElhanney) has been retained by the Strathcona Regional District (SRD) to complete a condition assessment of the marine facilities at the public wharf located in Port Neville, BC. Figure 1 shows the site location of the wharf.

The marine facilities are generally in moderate condition with assumed limited maintenance and inspection having been completed over the last 10 years. McElhanney's assessment will be used to determine the need for repairs and/or replacements.

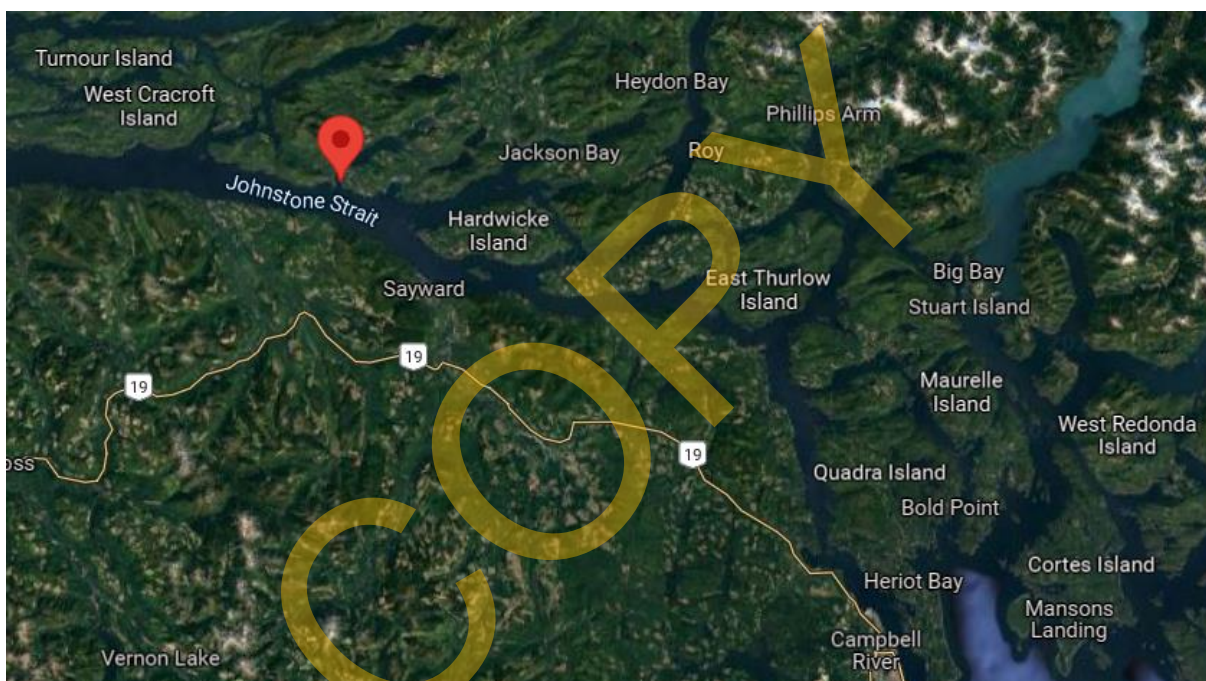


Figure 1 – Site Location

The visual site inspection, completed on September 1, 2021, and the coring inspection, completed on December 7th, 2021, was by the following McElhanney personnel:

- Hannah Hladkovicz, EIT, Marine Structural Engineer
- Zach Tillapaugh, EIT, Structural Engineer

1.2. REFERENCE DRAWINGS

The following reference drawings and documents are available and have been reviewed by McElhanney:

- Drawings 1-3: Port Neville, BC – Wharf and Float Repairs
- Port Divestiture Program – Final Report, January 2014
- Port Neville Location Map
- Transport Canada: Approach & Floats, Plan & Description Drawing
- Structure Condition Inspection and Report, Herold Engineering Ltd, February 2014.

1.3. REFERENCE SYSTEM

The reference system used in the inspection is consistent with Figure 2 below.

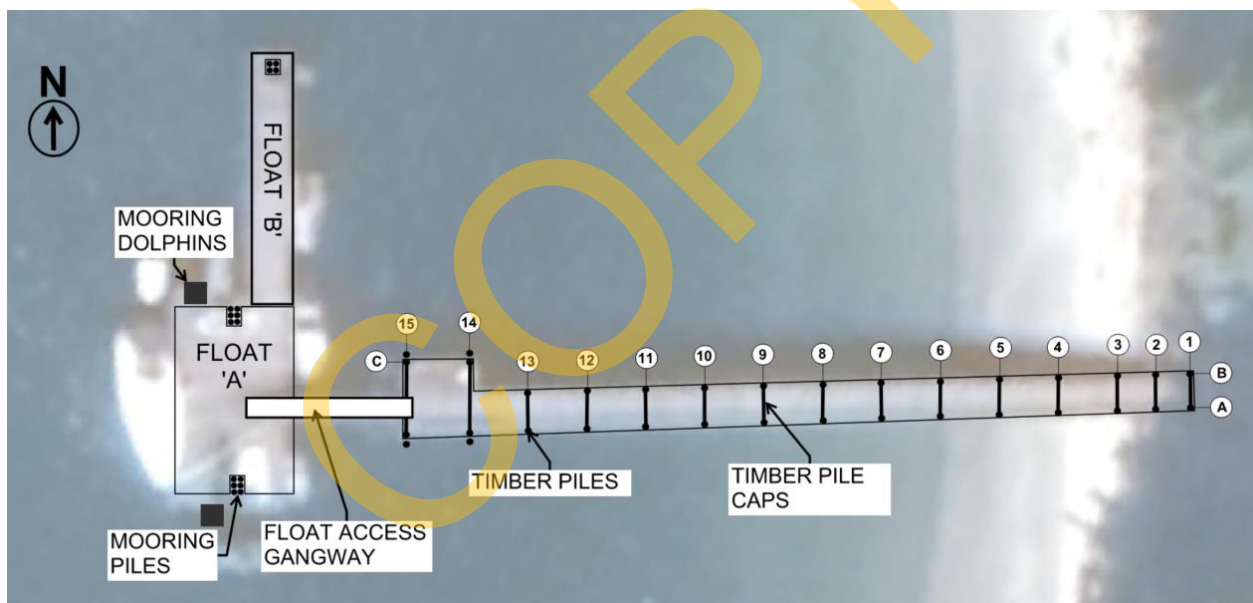


Figure 2 – Inspection Reference System

2. Description of Facilities

The wharf structure is a conventional treated timber wharf, approximately 60 meters long, and consisting of the following:

- Painted timber handrails including a top rail, mid-rail, and bull rail curb secured to handrail posts bolted to the edge stringer and bull rail
- Treated timber deck planks, typically 3" x 12"
- 6" x 12" stringers, typically at 30" centers
- 10" x 12" pile caps, typically at 15' centers
- 12" nominally sized creosoted treated piles at 8' centers along the bent. Bent Nos. 14 and 15 have (3) piles along the bent at the pierhead
- 12" fender piles at bents 14 and 15
- 12m long steel truss gangway
- The floating docks consist of treated timber decking and framing, and buoyancy billets.
- Float A has (12) mooring piles, (6) at the north end and (6) at the south end. There are two timber mooring dolphins, one at the north side of Float A, and one at the south side. Float B has 4 mooring piles at the north end.
- The North dolphin consists of 15 vertical timber piles and 4 batter piles, the South dolphin consists of 16 vertical piles. The mooring piles and dolphins are creosote coated timber piles.

Figures 3 and 4 provide reference sketches of the timber wharf approach trestle. Inspection photographs are provided in Appendix A.

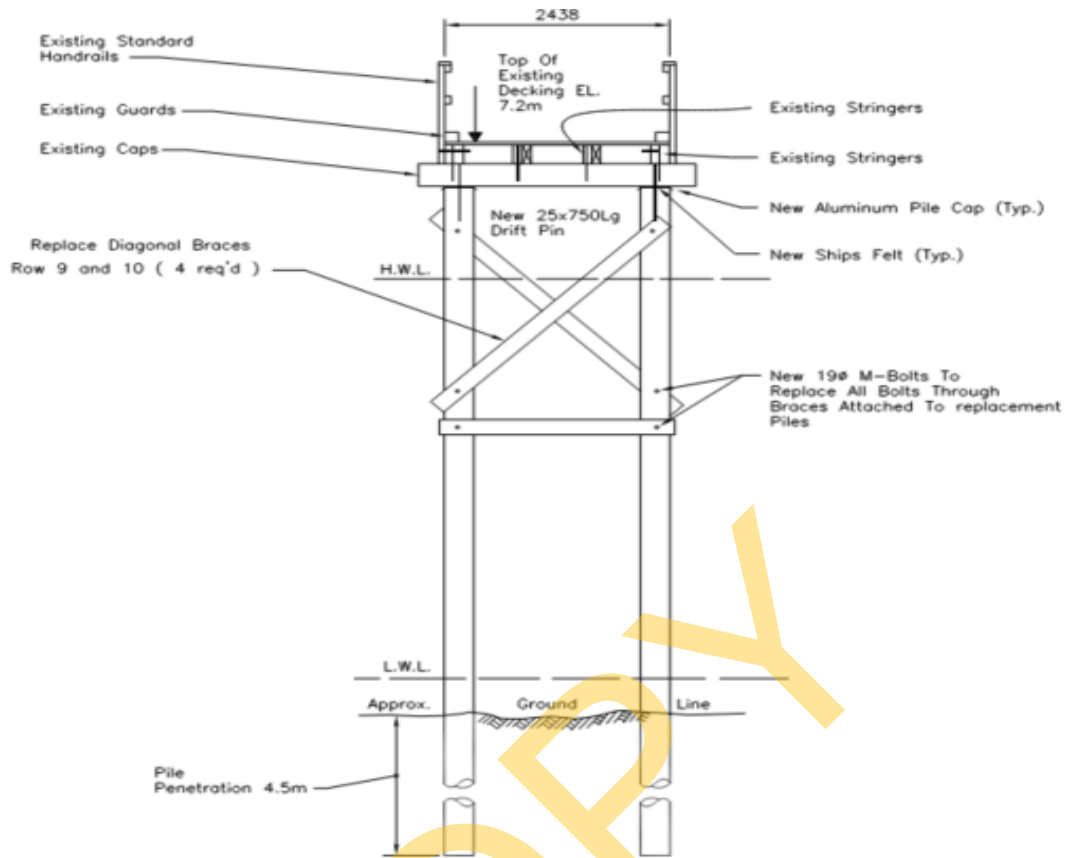


Figure 3 – Typical Structure Cross Section (Abutment to Bent No. 13)

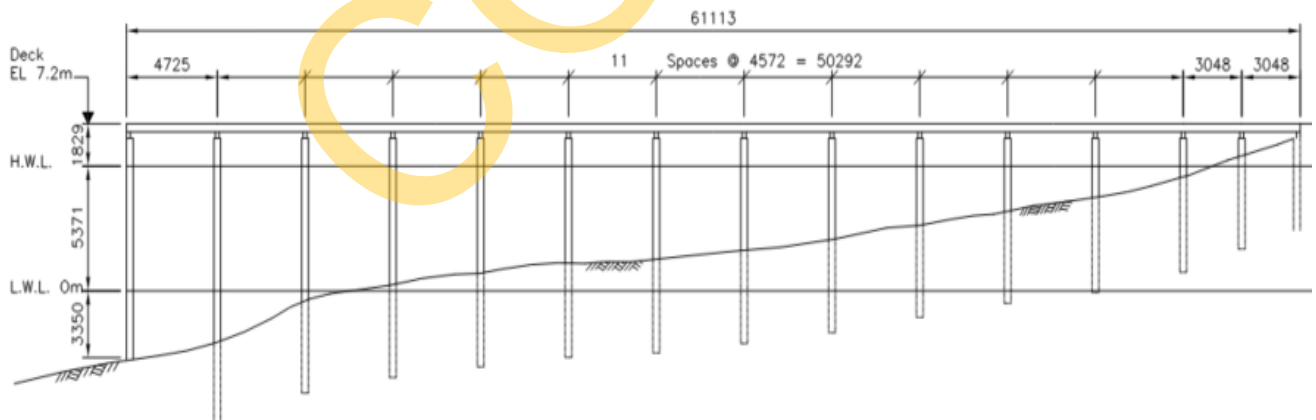


Figure 4 – Typical Structure Elevation

3. Inspection Methodology and Limitations

3.1. INSPECTION METHODOLOGY

An above water inspection of the marine assets was completed using visual inspections on September 1st, 2021, and timber coring on December 7th, 2021. The inspection methodology was completed in accordance with the procedures and recommendations provided in “Procedures for Inspection and Assessment of Fixed Timber Docks”, by RG Sexsmith Ltd. and dated September 1994, 4th Edition. This reference has been widely adopted by the Canadian Coast Guard, Department of Fisheries and Oceans Small Craft Harbours Branch, and Transport Canada in the evaluation and assessment of timber docks, piers, and wharves along the BC Coast.

The inspection methodology used is summarized as follows:

- Visual inspection of the timber elements from the lower intertidal zone to underside of deck was completed from land and from a small boat during a low tide window.
- An underwater inspection was completed to assess the condition of the piles. The inspection was completed using an underwater ROV mobilized from a small boat underneath the wharf structure.
- Timber coring was completed at the tops of the piles, pile caps, and stringers where steel drift pins are present, from bents 1-8. The timber coring is completed using a 13mm diameter drill which extends approximately 50% to 75% through the timber member. Fungal decay has significantly less resistance for the drill and so the resultant torque and drill cuttings from fungal decay are obvious to the inspector. From timber coring, the extent of fungal decay and cross-sectional loss (CSL) is expressed in intervals of 10%, 25%, 50%, 75%, and 90% CSL.

3.2. INSPECTION LIMITATIONS

The following inspection limitations should be considered when evaluating the results of the inspection findings:

- Both bankia and limnoria marine borers species are actively present on the BC Coast and can damage the timber pilings from the seabed to the intertidal zone. This should be identified during underwater inspections.
- The findings and recommendations are for the use of the SRD only.
- Users of the facility should always report any unusual conditions so that they can be evaluated by a Professional Engineer registered in British Columbia.

3.3. CONDITION

In accordance with the Ministry of Transportation and Infrastructure, Asset Performance Measures, for each structural element type, the overall condition state is provided based on a site inspection of each structure component.

- Excellent Condition – as-built condition, no observed defects.
- Good Condition – normal wear and deterioration
- Fair Condition – minor loss in condition or minor observed defects.
- Poor Condition – advanced loss in condition or significant defects.
- Very Poor Condition – serious loss in condition or serious defects.

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4. Inspection Findings

4.1. PIER STRUCTURE

4.1.1. Approach

The pier approach is in generally good condition (Photos 1). There are no signs of settlement in this area, and the slope around the pier abutment appears stable. No load rating sign has been posted.

Repairs are not considered necessary at this time; however ongoing monitoring of the pier approach is recommended. Consideration should also be given to posting a load rating sign and extending safety barriers to the approach area.

4.1.2. Topsides and Decking

The pier topsides are generally in poor to fair condition with widespread weathering and fungal decay (Photos 2 & 3). Inspection findings are as follows:

- The handrails appear generally well secured. The handrail posts are connected to the pier structure with two bolts, one through the outer stringer, and one through the bull rail. In some locations, the bull rails are deteriorated or not fully secured, and the handrail posts can shift, however they are still well secured to the stringer. There is significant deterioration to multiple other top rail connections, the approximate locations are directly above the following piles:
 - Between piles 4B and 5B (Photo 4)
 - Between piles 7A and 8A (Photo 5)
 - Between piles 8B and 9B (Photo 6)
 - Between piles 9A and 10A (Photo 7)
 - Between piles 11A and 12A (Photo 8)
 - Between piles 12A and 13A (Photo 9)
- Identified during the second inspection on December 7th, 2021, the top rail connection directly above pile 14B has deteriorated and is only connected on one end (Photo 10). *It is recommended that the bull rails and handrail posts be fully replaced and secured in places with deterioration and/or missing bolts. Consideration should be given to painting the handrails to extend the service life of the existing timber. Consideration should also be given to a full phased replacement of the topsides over the next 2-4 years.*
- The timber deck planks have widespread minor weathering, however, are generally in good condition. All deck planks appear well secured. *Installation of an anti-slip grating to improve the safety during wet weather conditions is recommended. Continued monitoring of the condition of the topsides should be regularly completed.*

4.1.3.Stringers

The treated timber stringers are generally in good condition (Photo 11). The stringers appear well secured between the decking and the pile caps, and there are no signs of significant splitting or structural deterioration. The ends of the stringers, where the end grain is present, does not show significant evidence of moisture or fungal decay. No cross-sectional loss was found in the stringers during the timber coring inspection.

Repairs are not considered necessary at this time; however ongoing monitoring of the stringers is recommended.

4.1.4.Pile Caps

The treated timber pile caps are generally in fair to good condition (Photo 12 & 13). The pile caps appear well secured, and there are no signs of significant splitting or structural deterioration. The pile caps are typically aligned well over the piles, with no evidence of shifting or displacement. There is minor weathering and deterioration to the end grains of the pile caps, notably at Bent 12 (Photo 14). No cross-sectional loss was found in the pile caps during the timber coring inspection.

Repairs are not considered necessary at this time, however ongoing monitoring of the pile caps and of the deterioration at the end grains is recommended.

4.1.5.Piles

The structural timber piles are generally in fair to good condition, with some damage to isolated piles. Table 1 provides a location of specific timber pile findings.

Table 1 – Pile Inspection Findings

Location	Description	Recommendation
Pile 2A	Large split at the top of the pile. (Photo 15) 50% CSL due to internal fungal decay in the top 0.6m.	Replace timber pile.
Pile 2B	25% CSL due to internal fungal decay in the top 0.3m.	Monitor.
Pile 3A	25% CSL due to internal fungal decay in the top 0.3m.	Monitor.
Pile 3B	Moderate splitting at the top of the pile. (Photo 16) 25% to 75% CSL due to internal fungal decay in the top 0.9 m.	Replace timber pile.
Pile 4B	25% CSL due to internal fungal decay in the top 0.3m with wet fibres. Concrete footing is exposed, with signs of undermining and spalling of the concrete. (Photo 17)	Monitor.
Pile 5A	Moderate splitting at the base of the pile. (Photo 18)	Monitor.
Pile 5B	25-50% CSL due to internal fungal decay in the top 0.3m with wet fibres.	Replace timber pile.
Pile 7A	Pile is slightly misaligned. (Photo 19)	Monitor.

Pile 8A	Moderate splitting at the top of the pile. (Photo 20)	Monitor.
Pile 9A	Large open bolt hole at the top of the pile, likely from a previous cross-brace bolted connection. (Photo 21)	Monitor.
Pile 10A	Moderate splitting at the top of the pile. (Photo 22)	Monitor.
Pile 12A	Large open bolt hole at the top of the pile, likely from a previous cross-brace bolted connection. (Photo 23)	Monitor.
Pile 15B	Moss growing out of the top, indicating that there is fungal decay in the interior of the pile in this location. (Photo 24)	Monitor.

Repairs are not considered necessary at this time; however ongoing monitoring of the piles and areas of damage is recommended. It is anticipated that the piles identified with splitting and open holes will have established internal fungal decay in the next 5-10 years and should be considered for replacement.

4.1.6. Fendering System

The timber fender piles are generally in poor to fair condition, with one fender pile with severe fungal decay/marine borer cavities. Inspection findings are as follows:

- Fender Pile 10B has a marine borer cavity in the lower intertidal zone with 25% cross-sectional loss (CSL) (Photo 25).
- Fender pile 14A has a large marine borer cavity with 50% CSL, and likely severe cross section loss due to fungal decay (Photos 26 & 27). Marine growth appears to be coming out of the pile.
- Fender pile 15C has a large marine borer cavity with 50% CSL, and likely severe cross section loss due to fungal decay (Photo 28).

McElhanney understands that the fender piles are not longer used for vessel moorage and repairs are not considered necessary at this time as the fender piles are not structurally important to the pier.

4.1.7. Cross Bracing

The timber cross bracing is generally in fair to good condition (Photo 29 to 30). Inspection findings are as follows:

- There is widespread weathering, and minor fungal decay to the end grains of the members, however all cross braces appear well secured to the piles, apart from two locations.
- The cross bracing at Bent 8 appears to not be connected to pile 8A and is only resting on a timber block secured to the pile. (Photo 29)
- The cross bracing at Bent 15 is connected to the fender pile 15C, which has signs of significant cross-section loss. (Photo 30)

It is recommended that the cross braces at Bents 8 and 15 are re-secured. Ongoing monitoring of the cross bracing is recommended.

4.2. FLOATS

4.2.1. Access Gangway

The access gangway is in fair condition. The inspection findings are as follows:

- The upper hinge connection is slightly misaligned (Photos 31 and 32) which is likely to result in advanced wearing of the pinned connection.
- The timber gangway slider plate is in good condition with minor wearing and is well aligned with the gangway roller (Photo 33)
- The deck planks and anti-slip surface have moderate wearing (Photo 34).
- The steel truss members have typical minor to moderate coating failures and corrosion. No significant deterioration of the welded connections was noted (Photo 35).

McElhanney recommends that the access gangway be replaced in conjunction with future replacement of the floating docks.

4.2.2. Floats A and B

Float A is in poor to fair condition with minor deterioration to the topsides (Photo 36). Inspection findings are as follows:

- The timber deck planks have widespread moderate weathering and fungal decay, with localized deterioration. There is one location on Float B with plywood repair to the decking which is a tripping hazard (Photo 37)
- The floatation elements appear in fair condition.
- The west connection between Float A and Float B is rope (Photo 38). This is currently functioning properly, however this may be subject to rapid wearing and should be replaced with a steel chain in the future.
- The bull rails and fascia boards have widespread mechanical damage (Photo 39). The bull rail is missing in two locations.
- The east connection between Float A and Float B is chain which is causing moderate wearing to the floats (Photo 40).
- The mooring piles and mooring dolphins have moderate abrasion with the dock structures (Photo 41 to 33).

Consideration should be given to replacing Floats A and B along with the mooring system rather than continue regular minor maintenance/repairs.

4.2.3. Timber Mooring Dolphins

The timber mooring dolphins are in very poor condition. There is severe cross section loss due to internal fungal decay and marine borer cavity, as well as mechanical damage due to wearing of the floats.

Inspection findings are as follows:

- The north dolphin has vegetation growth near the tops of some of the piles. The timber blocking near the tops of the piles is deteriorating, and the cable wraps are loose (Photo 44)
- The south dolphin has significant vegetation growth near the tops of the piles. There is also severe cross section loss due to internal fungal decay and marine borer cavity in the intertidal zone, specifically on the front facing piles. The timber blocking is in poor condition, and the cable wraps are loose, but remain in place (Photo 45).

McElhanney understands that the mooring dolphins are no longer in service. To mitigate the risk of timber members contacting the dock, it is recommended that the timber dolphins be entirely removed and disposed of.

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5. Residual Life Estimates

The marine facility is typically in fair condition. For the purpose of this evaluation, the residual life represents the estimated period of time between the inspection date and the time when the component will typically require repair or replacement.

For timber docks in a saltwater/marine environment, the residual life estimate is based on the follow:

- Where no established deterioration (marine borer cavities / fungal decay / mechanical abrasion) is noted in creosote treated timber, the remaining residual life is estimated to be 10+ years. As deterioration can progress rapidly in timber members once established, residual life estimates greater than 10 years are typically not given.
- Where deterioration has been established, the remaining residual life is estimated to be 2-7 years, depending on the extent of deterioration and likelihood to progress rapidly.
- Where there is deterioration which has significantly affected the structural capacity of the member the residual life is assumed to be minimal.

Based on McElhanney’s understanding of the environment, usage, and familiarity with similar structures, Table 2 provides the estimates of the remaining service life of the wharf elements:

Table 2 - Summary of Recommendations

Location / Structure	Residual Life Estimate
Pier Structure	
Approach	+10 years
Topsides	1-2 years
Decking	5-7 years
Stringers	8-10 years
Pile Caps	5-7 years
Piles	5-7 years
Fender Piles	1-2 years
Floats	
Gangway	2-4 years
Float A	2-4 years
Float B	2-4 years
Mooring Dolphins	1< years

6. Facility Recommendations and Cost Estimates

The Port Neville Wharf facility is generally in fair condition and is expected to continue servicing public access for small craft vessels. Based on the inspection findings, there are a number of small maintenance items recommended. Table 2 provides recommendations and cost estimates based on McElhanney's understanding that the SRD intends to invest significant maintenance effort in the facility before 2024.

The cost estimates for the repairs are shown in Table 3.

Table 3 – Cost Estimates

Item	Priority	Description	Units	Quantity	Unit Cost	Subtotal
1	High	Install a load rating sign and approach barriers	LS	1	\$1,000	\$1,000
2	High	Repair and replace the handrails and bull rails where needed.	m	120	\$200	\$24,000
3	High	Phased replacement of the timber decking	m ²	150	\$250	\$37,500
6	High	Miscellaneous pile repairs/replacements (allowance)	Ea.	8	\$12,000	\$96,000
7	Medium	Replacement of the existing gangway.	m	15	\$2,000	\$30,000
8	Medium	Full Replacement of Float A and Float B	m ²	191	\$1,200	\$229,200
9	Medium	New steel mooring piles for Float A and B	Ea.	6	\$10,000	\$60,000
10	Medium	Remove and dispose of timber mooring dolphins.	LS	2	\$10,000	\$20,000
High Priority Subtotal						\$158,500
Contingency (25%)						\$39,625.0
High Priority Total						\$198,125
Medium Priority Subtotal						\$339,200
Contingency (25%)						\$84,800.0
Medium Priority Total						\$424,000
Total Capital Cost Estimate						\$622,125

In reviewing the cost estimates above, please note the following:

- The current vessel moorage capacity is sufficient for future use. No expansion or increase in vessel moorage capacity is anticipated.
- Estimated is based on available cost estimate material and labour rate data from recent projects between 2019 to 2021 and assumes competitive contractor pricing.
- Estimate is considered accurate to $\pm 50\%$. A contingency of 25% has been provided to account for cost items which have not been considered due to the extent of engineering work completed to date.

7. Closure

Please do not hesitate to contact the undersigned with any questions or comments.

Sincerely,
 McElhanney Ltd.
 Permit to Practice No. 1003299

Prepared by:

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Revision History

Date	Status	Revision	Author
October 6, 2021	Draft Issue	A	M.Friderichs
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APPENDIX A – INSPECTION PHOTOS

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Photo 1 – Pier Approach Area



Photo 2 – Pier Structure Topsides



Photo 3 – Pier Structure Handrails



Photo 4 – Handrail deterioration between piles 4B and 5B



Photo 5 – Handrail deterioration between piles 7A and 8A



Photo 6 – Handrail deterioration between piles 8B and 9B



Photo 7 – Handrail deterioration between piles 9A and 10A



Photo 8 – Handrail deterioration between piles 11A and 12A



Photo 9 – Handrail deterioration between piles 12A and 13A



Photo 10 – Handrail deterioration between piles 14B and 14C



Photo 11 – Typical View of Timber Stringers



Photo 12 – General View of Timber Pile Cap Bents



Photo 13 – Typical Timber Pile Cap End Grain



Photo 14 – Timber Pile Cap at Bent 12



Photo 15 – Split in Pile 2A



Photo 16 – Split in Pile 3B



Photo 17 – Pile 4B concrete footing



Photo 18 – Split in Pile 5A



Photo 19 – Pile 7A



Photo 20 – Split in Pile 8A



Photo 21 – Hole in Pile 9A



Photo 22 – Small split in Pile 10A



Photo 23 – Hole in Pile 12A



Photo 24 – Moss growth in Pile 15B



Photo 25 – Underwater image of damage to fender Pile 10B



Photo 26 – Fender Pile 14A



Photo 27 – Underwater image of marine borer cavity of fender pile 14A



Photo 28 – Fender Pile 15C



Photo 29 – Cross Bracing at Bent 8



Photo 30 – Cross Bracing at Bent 15



Photo 31 – Gangway Upper Hinge Connection



Photo 32 – Gangway Upper Hinge Connection



Photo 33 – Gangway Timber Slider Plate and Roller

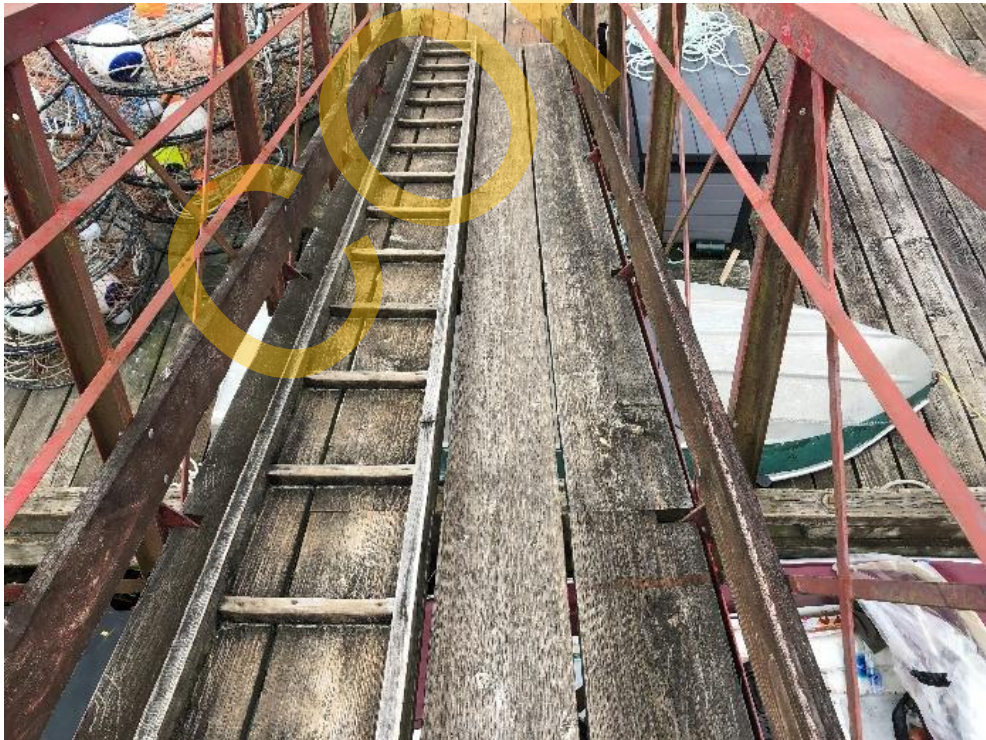


Photo 34 – Gangway Timber Deck Planks



Photo 35 – Steel Gangway



Photo 36 – General view of Float A



Photo 37 – General view of Float B



Photo 38 – Rope connection to Float B



Photo 39 – Missing Bull rail on Float A



Photo 40 – Chain Connection to Float B



Photo 41 – Wearing to Float A from North Mooring Dolphin



Photo 42 – Wearing to Float A from South Mooring Piles



Photo 43 – Float A North Mooring Piles



Photo 44 – North Mooring Dolphin



Photo 45 – South Mooring Dolphin

COPY

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Marine Facility Condition Assessment of the Owen Bay Wharf

August 24th, 2022 | Revision 0

Submitted to: Strathcona Regional District (SRD)
Prepared by McElhanney Ltd.

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1. Introduction

1.1. PROJECT BACKGROUND

McElhanney Ltd. (McElhanney) has been retained by the Strathcona Regional District (SRD) to complete a condition assessment of the public wharf at Owen Bay, located on Sonora Island, BC. Figure 1 shows the site location of the wharf.

The marine facilities are generally in moderate condition with assumed limited maintenance and inspection having been completed over the last 10 years. McElhanney's assessment will be used to determine the need for repairs and/or replacements.

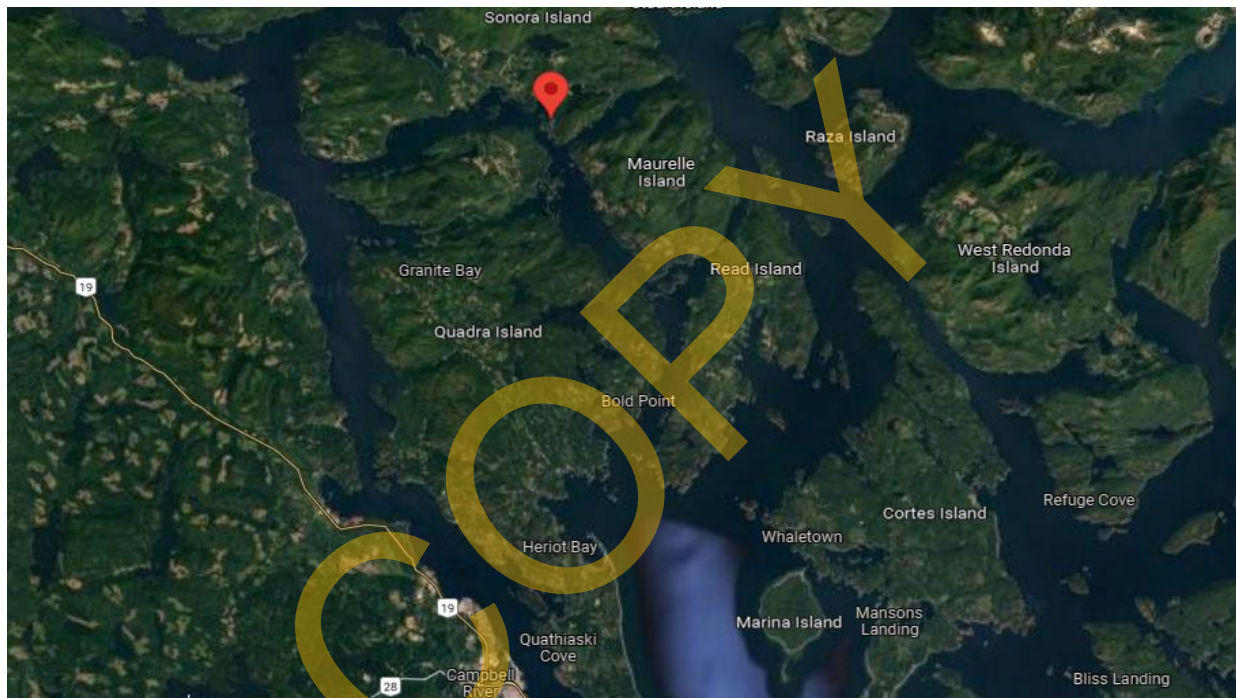


Figure 1 – Site Location

The above water site inspection was completed on September 22nd, 2021, and the underwater inspection was completed January 21st, 2022 by the following McElhanney personnel:

- Hannah Hladkowicz, EIT, Marine Structural Engineer
- Zach Tillapaugh, EIT, Structural Engineer

1.2. REFERENCE DRAWINGS

The following reference drawings and documents are available and have been reviewed by McElhanney:

- Drawings 1-3: Wharf Repairs, Owen Bay B.C., Transport Canada Harbours and Ports – Herold Engineering, March 2011
- Owen Bay Port Divestiture Program Final Report – McElhanney, January 2014
- Owen Bay Location Map

1.3. REFERENCE SYSTEM

The reference system used in the inspection is consistent with Figure 2 below.

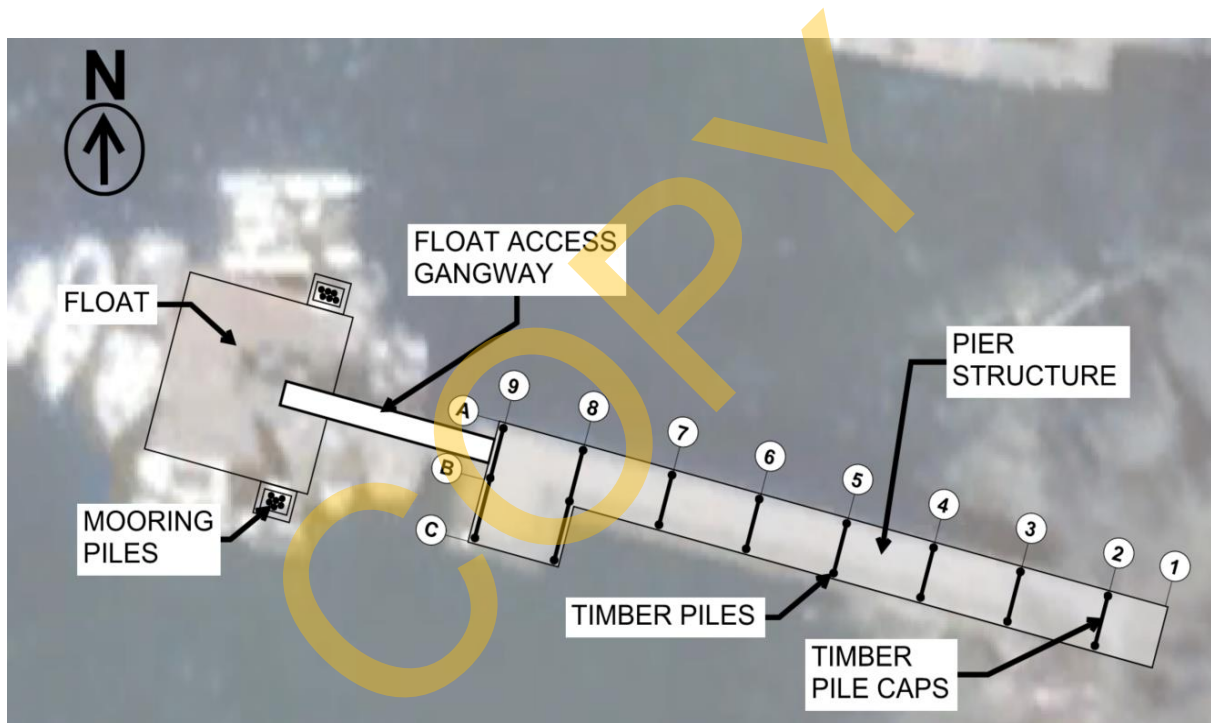


Figure 2 – Inspection Reference System

2. Description of Facilities

The wharf structure is a conventional treated timber wharf, approximately 105 feet long, and consists of the following:

- Conventional painted timber handrails including a top rail, mid-rail, and bull rail curb secured to handrail posts bolted to the edge stringer and bull rail
- Deck planks, typically 2" x 12"
- 6" x 12" stringers, typically at 30" centers
- 10" x 12" pile caps, typically at 15' centers
- 12" nominally sized creosoted treated piles at 10' centers along the bent. Bent Nos. 8 and 9 have (3) piles along the bent at the wharf head.
- 40 ft long aluminum truss gangway.
- 27' x 29' floating dock consisting of timber framing, topsides and decking, and buoyancy billets.
- (14) treated timber mooring piles, (6) at the south end and (8) at the north end, secured in mooring wells.

Figure 3 provides a reference sketch of the timber wharf structure. Inspection photographs can be found in Appendix A.

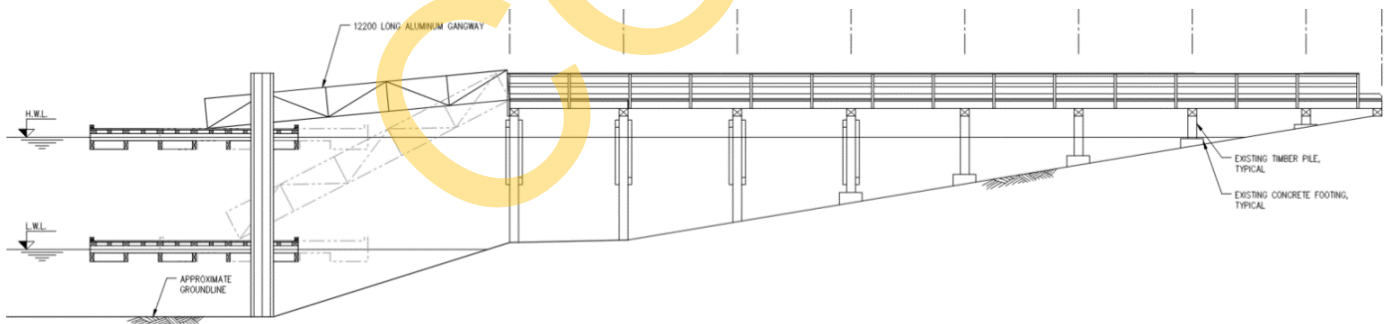


Figure 3 – Wharf Structure Elevation

3. Inspection Methodology and Limitations

An above water inspection of the marine assets was completed using visual inspections. The inspection methodology was completed in accordance with the procedures and recommendations provided in “Procedures for Inspection and Assessment of Fixed Timber Docks”, by RG Sexsmith Ltd. and dated September 1994, 4th Edition. This reference has been widely adopted by the Canadian Coast Guard, Department of Fisheries and Oceans Small Craft Harbours Branch, and Transport Canada in the evaluation and assessment of timber docks, piers, and wharves along the BC Coast.

The inspection methodology used is summarized as follows:

- Visual inspection of the timber elements from the lower intertidal zone to underside of deck was completed during a low tide window.
- An underwater inspection was completed to assess the condition of the piles and float using an underwater ROV mobilized from the floating dock.

The following inspection limitations should be considered when evaluating the results of the inspection findings:

- Both bankia and limnoria marine borers species are actively present on the BC Coast and can damage the timber pilings from the seabed to the intertidal zone. This should be identified during underwater inspections.
- The findings and recommendations are for the use of the SRD only.
- A detailed coring inspection of the timber members was not completed as part of the condition assessment.
- Users of the facility should always report any unusual conditions so that they can be evaluated by a Professional Engineer registered in British Columbia.
- Inspection is limited to what was observed on site, with the possibility that hidden defects and damage may not have been visible.

In accordance with the Ministry of Transportation and Infrastructure, Asset Performance Measures, for each structural element type, the overall condition state is provided based on a site inspection of each structure component.

- Excellent Condition – as-built condition, no observed defects.
- Good Condition – normal wear and deterioration
- Fair Condition – minor loss in condition or minor observed defects.
- Poor Condition – advanced loss in condition or significant defects.
- Very Poor Condition – serious loss in condition or serious defects.

4. Inspection Findings

4.1. WHARF STRUCTURE

4.1.1. Approach

The approach is in generally good condition (Photo 2). There are no signs of settlement in this area, and the slope around the abutment appears stable. No load rating sign has been posted.

Repairs are not considered necessary at this time; however ongoing monitoring of the approach is recommended. Consideration should also be given to posting a load rating sign and extending safety barriers to the approach area.

4.1.2. Topsides and Decking

The topsides are generally in fair to good condition with moderate widespread weathering and fungal decay (Photo 3 and Photo 4). Inspection findings are as follows:

- The timber handrails are well secured and in good condition. They were replaced approx. 10 years ago according to previous reference drawings provided by the SRD.
- The timber deck planks have widespread minor weathering and fungal decay, however, are in fair to good condition. The deck planks appear generally well secured, with some missing/loose nails.

Installation of an anti-slip grating to improve the safety during wet weather conditions is recommended. Consideration can be given to replacing and adding more nails to the decking. Ongoing monitoring of the condition of the topsides is recommended.

4.1.3. Stringers

The treated timber stringers are generally in good condition, with green algae growth (Photo 5). The stringers appear well secured between the decking and the pile caps, and there is no evidence of significant splitting or structural deterioration. The ends of the stringers, where the end grain is present, does not show significant evidence of moisture or fungal decay.

Repairs are not considered necessary at this time; however ongoing monitoring of the stringers is recommended.

4.1.4. Pile Caps

The treated timber pile caps are generally in fair to good condition with minor widespread weathering and green algae growth (Photo 6 and Photo 7). The pile caps appear well secured, and are typically aligned well over the piles, with no obvious evidence of shifting or displacement. Inspection findings are as follows:

- The pile cap at Bent No. 3 is in good condition and was replaced about 10 years ago according to the Wharf Repair drawings.

- The pile cap at Bent No. 4 has minor splitting at the end grain and top of the member on the south end (Photo 8).
- The pile cap at Bent No. 5 has severe splitting at the south end of the member (Photo 9).
- The pile cap at Bent No. 6 shows signs of deterioration at the end grain at the north end, as well as moderate to severe splitting at the south end (Photo 10 and Photo 11).
- The pile cap at Bent No. 8 has minor to moderate splitting at the north end (Photo 12).
- The through bolts from the bull rails directly above the pile caps at bents 8 and 9 connect to the pile caps (Photo 13).

Pile caps at Bent Nos. 8 and 9 should be monitored for potential fungal decay where the through-bolts are. Replacements of the pile caps at Bent Nos. 5 and 6 should be considered. Ongoing monitoring of the remaining pile caps is recommended.

4.1.5. Piles

The timber piles are generally in fair condition, with some minor damage to isolated piles, and widespread minor weathering and green algae growth (Photo 14 and Photo 15 **Error! Reference source not found.**). Inspection findings are as follows:

- The existing capping over all piles (excluding piles 3A, 3B, 7A, 7B, 8B, 8C, 9A, 9B, and 9C) is deteriorated or missing, with some biological growth where this occurs (Photo 16).
- The piles are supported on concrete footings which are in fair to good condition. There are minor signs of scouring, and minor signs of undermining at bents 2 and 3.
- Pile No. 4B has a minor split down the length of the pile (Photo 17).
- Pile No. 5A has split at the top of the pile. It has been banded in 2 locations to prevent further splitting (Photo 18).
- Pile No. 6B has split at the top of the pile. It has been banded in 2 locations to prevent further splitting.

The missing and deteriorated capping should be replaced to prevent further damage to the tops of the piles. Pile 4B should be continually monitored and banded to prevent further splitting. Ongoing monitoring of the piles and footings and areas of damage is recommended. It is anticipated that the piles identified with splitting will have established internal fungal decay in the next 5-10 years and may be considered for replacement.

4.1.6. Cross Bracing

The timber cross bracing is generally in good condition (Photo 19 and Photo 20). There is widespread weathering, however the cross braces show no obvious sign of deterioration and are well secured to the piles.

Repairs are not considered necessary at this time; however ongoing monitoring of the cross bracing is recommended.

4.2. FLOATS

4.2.1. Access Gangway

The access gangway is in good condition with no significant corrosion or deterioration noted (Photo 21). According to the reference drawings it was replaced approximately 10 years ago. The inspection findings are as follows:

- The timber gangway slider plate is in fair condition with wearing and fungal decay and is well aligned with the gangway rollers (Photo 22).
- The structural members and welded connections appear to be in good condition.
- The upper hinge connections are well aligned, and the bolt connections are in good condition. The lower bolt on the south end connection has loosened slightly (Photo 23).

Repairs are not considered necessary at this time; however ongoing monitoring of the gangway is recommended.

4.2.2. Float

The float is in poor to fair condition (Photo 24). Inspection findings are as follows:

- The timber deck planks, bull rails and fascia boards have widespread weathering and fungal decay, (Photo 25 and Photo 26).
- The mooring wells are in good condition with repairs assumed to have been completed in the past 10 years. Wear strips have been installed on the inside of the wells.
- The timber mooring piles are in fair to good condition, with widespread minor fungal decay and weathering. There are no significant signs of abrasion from the floats to the pile faces. The connections at the top of the mooring piles are in good condition, and the wire rope lashing is secure (Photo 27 to Photo 31).
- One of the north mooring piles has some minor damage in the lower intertidal zone (Photo 32).
- The flotation elements are uncoated styrofoam billets (Photo 33).
- There is significant flotation loss at the southeast corner of the float; the freeboard is approx. 300mm less than at the northwest corner. The mooring well is cantilevered off this end of the float and is partially submerged in the water (Photo 34 and Photo 35).

The float capacity is a significant concern for the community. At the time of the inspection, the float was at full capacity, and multiple pleasure craft vessels had to be tied up to other vessels to access the float. In addition, other vessels must tie up at the mooring point to the southwest of the facility when spots have not been available. Consideration should be given to expanding the floating dock footprint for increased need. Consideration should be given to replacing the float along with the mooring system rather than continue regular minor maintenance/repairs.

5. Residual Life Estimates

The marine facility is typically in fair condition. For the purpose of this evaluation, the residual life represents the estimated period of time between the inspection date and the time when the component will typically require repair or replacement.

For timber docks in a saltwater/marine environment, the residual life estimate is based on the following:

- Where no established deterioration (marine borer cavities / fungal decay / mechanical abrasion) is noted in creosote treated timber, the remaining residual life is estimated to be 10+ years. As deterioration can progress rapidly in timber members once established, residual life estimates greater than 10 years are typically not given.
- Where deterioration has been established, the remaining residual life is estimated to be 2-7 years, depending on the extent of deterioration and likelihood to progress rapidly.
- Where there is deterioration which has significantly affected the structural capacity of the member the residual life is assumed to be minimal.

Based on McElhanney's understanding of the environment, usage, and familiarity with similar structures, Table 1 provides the estimates of the remaining service life of the wharf elements:

Table 1 – Summary of Recommendations

Location / Structure	Residual Life Estimate
Wharf Structure	
Approach	+10 years
Topsides	5-7 years
Decking	2-4 years
Stringers	8-10 years
Pile Caps	5-7 years
Piles	5-7 years
Floats	
Gangway	8-10 years
Float	2-4 years

6. Facility Recommendations and Cost Estimates

The Owen Bay Wharf facility is generally in fair condition and is expected to continue servicing public access for small craft vessels. Based on the inspection findings, there are several small maintenance items recommended in addition to replacement of the floating dock elements. Table 2 provides recommendations and cost estimates based on McElhanney's understanding that the SRD intends to invest significant maintenance effort in the facility as required.

The cost estimates for the repairs are show in Table 2.

Table 2 – Cost Estimates

Item	Priority	Description	Units	Quantity	Unit Cost	Subtotal
1	High	Install a load rating sign and approach barriers	LS	1	\$3,000	\$3,000
2	High	Miscellaneous pile cap repairs / replacements	Ea.	4	\$5,000	\$20,000
3	High	Replacement of deteriorated capping on piles	Ea.	9	\$500	\$4,500
4	High	New float with increased capacity (approx. quantity, to change with new design)	m ²	100	\$1,200	\$120,000
5	High	New steel mooring piles for the float	Ea.	6	\$10,000	\$60,000
6	Medium	Phased replacement of the timber decking	m ²	112	\$250	\$28,000
7	Medium	Miscellaneous pile repairs/replacements	Ea.	3	\$12,000	\$36,000
High Priority Subtotal						\$207,500
Contingency (25%)						\$51,875.00
High Priority Total						\$259,375
Medium Priority Subtotal						\$64,000
Contingency (25%)						\$16,000.00
Medium Priority Total						\$80,000
Total Capital Cost Estimate						\$ 339,375

In reviewing the cost estimates above, please note the following:

- Estimated is based on available cost estimate material and labour rate data from recent projects between 2019 to 2021 and assumes competitive contractor pricing.
- Estimate is considered accurate to $\pm 50\%$. A contingency of 25% has been provided to account for cost items which have not been considered due to the extent of engineering work completed to date.
- McElhanney recommends that a coring inspection be completed within 12 months of significant timber repairs to the stringers, pile caps, or piles to identify locations with internal fungal decay which are not identifiable from a visual inspection.

7. Closure

Please do not hesitate to contact the undersigned with any questions or comments.

Sincerely,
McElhanney Ltd.

Prepared by:

Reviewed by:



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Revision History

Date	Status	Revision	Author
Nov. 29, 2021	Draft Issue	A	HH
Mar. 04, 2022	Draft Issue	B	HH
Aug. 24, 2022	For Use	0	HH

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Effect of Changes. All evaluations and conclusions stated in this report are based on facts, observations, site-specific details, legislation and regulations as they existed at the time of the site assessment/report preparation. Some conditions are subject to change over time and the Client recognizes that the passage of time, natural occurrences, and direct or indirect human intervention at or near the site may substantially alter such evaluations and conclusions. Construction activities can significantly alter soil, rock and other geologic conditions on the site. McElhanney should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein upon any of the following events: a) any changes (or possible changes) as to the site, purpose, or development plans upon which this report was based, b) any changes to applicable laws subsequent to the issuance of the report, c) new information is discovered in the future during site excavations, construction, building demolition or other activities, or d) additional subsurface assessments or testing conducted by others.

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COPY

APPENDIX A – INSPECTION PHOTOS

COPY



Photo 1 - General View facing West



Photo 2 - Approach area



Photo 3 - Topsides of the Wharf Structure



Photo 4 - General View of the Handrails



Photo 5 - General view of the Stringers



Photo 6 - General view of the Pile Cap Bents



Photo 7 - Weathering and green algae growth on Pile Caps



Photo 8 - Minor splitting of the Pile cap at Bent 4



Photo 9 - Severe splitting of the Pile cap at Bent 5



Photo 10 - Deterioration of the Pile Cap at Bent 6



Photo 11 - Moderate to Severe splitting of the Pile cap at Bent 6



Photo 12 - Minor to moderate splitting of the Pile cap at Bent 8



Photo 13 - Through bolts in the Pile Cap at Bent 9



Photo 14 - Typical weathering and green algae growth on piles



Photo 15 - Typical condition of underwater piles



Photo 16 - Typical deteriorated capping on piles



Photo 17 - Minor splitting on Pile 4B



Photo 18 - Pile 5A with typical existing banded repair



Photo 19 - General view of Cross Bracing

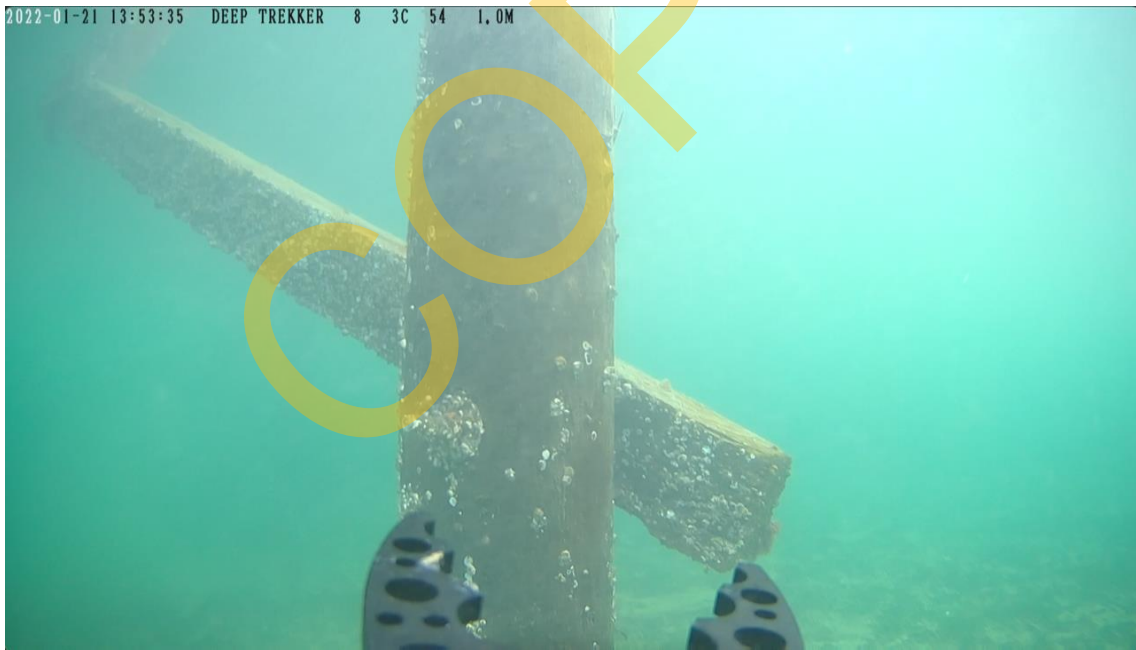


Photo 20 - Typical condition of underwater cross-bracing



Photo 21 - General View of Aluminum Gangway



Photo 22 - Gangway slider plate and rollers



Photo 23 - Gangway Upper Hinge Connection with loose bolt

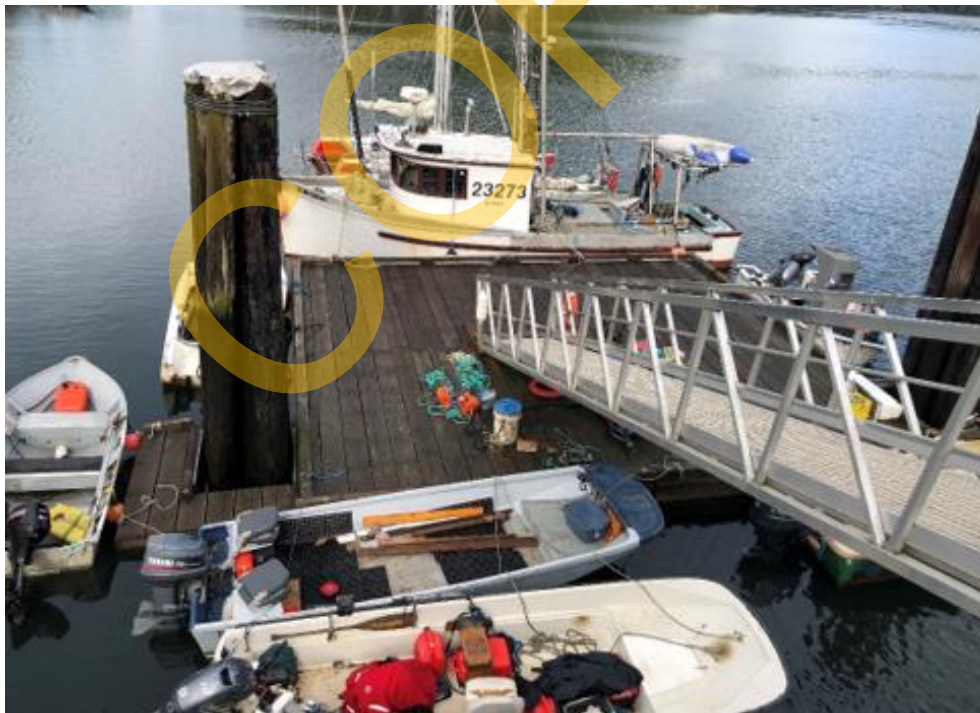


Photo 24 - General View of the float



Photo 25 - Typical condition of the timber decking

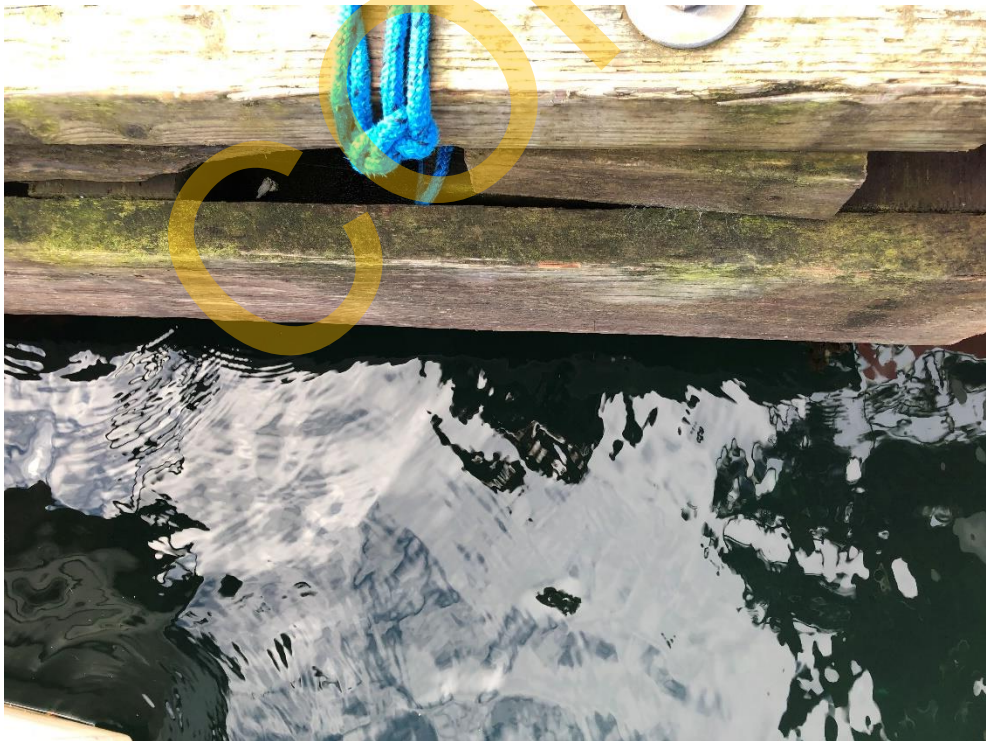


Photo 26 - Typical condition of the timber bull rails and fascia board



Photo 27 - South Mooring Piles



Photo 28 - North Mooring Piles



Photo 29 - South Mooring Piles



Photo 30 - South Mooring Piles



Photo 31 - North Mooring Piles



Photo 32 - North Mooring Piles



Photo 33 - Condition of exposed uncoated styrofoam billets



Photo 34 - South Mooring Well with significant flotation loss

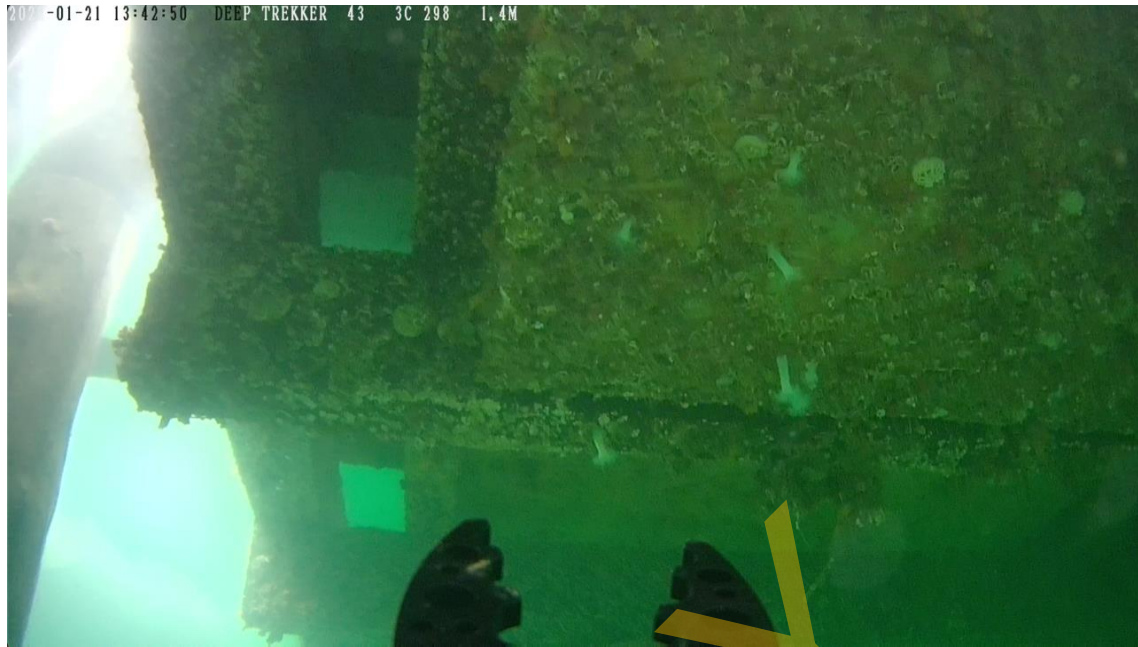


Photo 35 - Typical condition under the south end of the float

COPY

COPY

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McElhanney



Schedule 'D'

STRATHCONA REGIONAL DISTRICT



CLIENT

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PROJECT NAME

2023 MARINE FACILITY REPAIRS

DESCRIPTION

REHABILITATION AND REPAIRS TO THE TIMBER TRESTLES AND FLOATS AT OWEN BAY, PORT NEVILLE AND SURGE NARROWS

McELHANNEY PROJECT

2211-71343-00

STATUS

ISSUED FOR 100% REVIEW



OWEN BAY



PORT NEVILLE



SURGE NARROWS



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DRAWING LIST		REVISIONS						
		PA	PB	PC	0	1	2	3
S000	COVER SHEET							
S001	GENERAL NOTES & DESIGN CRITERIA							
S100	PORT NEVILLE GENERAL ARRANGEMENT AND PIER PLAN							
S101	PORT NEVILLE NEW FLOAT DESIGN							
S200	OWEN BAY GENERAL ARRANGEMENT AND PIER PLAN							
S201	OWEN BAY NEW FLOAT DESIGN							
S300	SURGE NARROWS GENERAL ARRANGEMENT AND PIER PLAN							
S301	SURGE NARROWS NEW FLOAT DESIGN							
S400	TYPICAL PIER SECTION AND REPAIR DETAILS							
S500	STRUCTURAL GANGWAY DETAILS							

GENERAL NOTES

1.0 GENERAL

- 1.1 VERIFY ALL DIMENSIONS PRIOR TO COMMENCING WORK.
- 1.2 ALL DIMENSIONS ARE METRIC UNLESS NOTED OTHERWISE.
- 1.3 ALL WORK SHALL CONFORM TO THE BC BUILDING CODE AND INDUSTRIAL HEALTH AND SAFETY REGULATIONS OF THE WORKERS COMPENSATION BOARD OF BRITISH COLUMBIA.
- 1.4 CLIMATIC DESIGN DATA (FROM BC BUILDING CODE)

LOCATION	SNOW LOAD (kPa)		WIND PRESSURES (kPa)	
	Ss	Sr	1/10	1/50
CAMPBELL RIVER	2.8	0.4	0.40	0.52
POWELL RIVER	1.7	0.4	0.39	0.51

- 1.5 THE INTENT OF THE TIMBER TRESTLE REPAIR WORK IS TO REINSTATEMENT THE CAPACITY OF THE ORIGINAL DESIGN MEMBERS. NO INCREASE IN STRUCTURAL CAPACITY HAS BEEN CONSIDERED.
- 1.6 WHERE CODES AND STANDARDS ARE REFERENCED, THE LATEST EDITION APPLIES.
- 1.7 SUBMIT DETAILS OF PROPOSED SCHEDULE AND WORK METHODS TO THE CONSULTANT PRIOR TO PROCEEDING WITH THE WORK.
- 1.8 DETAILED REQUIREMENTS FOR MATERIALS AND FABRICATION ARE DESCRIBED IN THE SPECIFICATIONS. FOR CONVENIENCE, CERTAIN EXTRACTS ARE REPRODUCED BELOW. IN THE EVENT OF CONFLICT, THE SPECIFICATIONS SHALL GOVERN.
- 1.9 MATERIALS AND TESTING HAVE BEEN SPECIFIED TO CONFORM TO THE CURRENT EDITIONS OF RELEVANT STANDARDS PUBLISHED BY THE FOLLOWING ORGANIZATIONS:
 - CANADIAN STANDARDS ASSOCIATION (CSA)
 - AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
- 1.10 UPON COMPLETION OF THE WORK REMOVE ALL DEBRIS AND SURPLUS MATERIALS FROM SITE. LEAVE THE WORK AREA IN A CLEAN AND NEAT CONDITION TO THE SATISFACTION OF THE ENGINEER.
- 1.11 CONTRACTOR TO NOTIFY ENGINEER AND ESTABLISH INSPECTION SCHEDULE PRIOR TO INSTALLATION OF PILES.
- 1.12 NO GEOTECHNICAL ASSESSMENT HAS BEEN COMPLETED FOR THE SITES SHOWN. CONTRACTOR TO INSTALL ALL PILES USING A SUITABLE SIZED VIBRATORY HAMMER AND CONFIRMING PILE REFUSAL USING A DROP HAMMER WITH A MINIMUM 25,000 FOOT POUNDS OF ENERGY WITH A MAXIMUM OF (5) BLOWS PER INCH OF PILE PENETRATION. MINIMUM PILE EMBEDMENT TO BE 12m UNLESS APPROVED BY THE ENGINEER.
- 1.13 SRD HAS NO OWNERSHIP OR LEASE OF LANDS AROUND THE WHARVES OR PIERS AT OWEN BAY AND SURGE NARROWS. SRD HAS A SMALL RIGHT OF WAY AROUND THE ABUTMENT AT PORT NEVILLE. IF THE CONTRACTOR INTENDS TO USE THE LAND FOR A LAY DOWN AREA OR OTHERWISE DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMISSION FROM THE LAND OWNER'S.
- 1.14 CONTRACTOR MUST ADHERE TO THE ENVIRONMENTAL MANAGEMENT PLAN.

2.0 DEMOLITION

- 2.1 TAKE ALL NECESSARY PRECAUTIONS TO CONTAIN THE DEMOLITION WITHIN THE LIMITS DESIGNATED. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE TO EXISTING STRUCTURES.
- 2.2 ANY DAMAGE INCURRED IN THE EXECUTION OF THIS CONTRACT TO ANY PART OF THE PROPERTY OR STRUCTURE NOT SPECIFICALLY DESIGNATED FOR DEMOLITION SHALL BE REPAIRED, REPLACED, AND/OR RECONSTRUCTED BY THE CONTRACTOR AT THEIR EXPENSE TO ITS ORIGINAL CONDITION.
- 2.3 REMOVE AND DISPOSE OF ALL DEMOLITION MATERIAL OFF SITE IN ACCORDANCE WITH ALL MUNICIPAL, PROVINCIAL, AND FEDERAL REQUIREMENTS.

3.0 STEEL WORK

- 3.1 ROLLED STEEL SECTIONS, STEEL BARS AND PLATES TO CAN/CSA G40.21, GRADE 300W UNLESS NOTED OTHERWISE.
- 3.2 STEEL PILES SHALL BE ASTM A252 GRADE 2 PIPES. PILES ARE NOT TO BE SPLICED WITHOUT PRIOR APPROVAL BY THE ENGINEER.
- 3.3 SHOP PAINT ALL STEEL COMPONENTS USING COATING SYSTEM APPROVED BY THE ENGINEER.
- 3.4 BOLTS, NUTS, AND WASHERS SHALL CONFORM TO ASTM F3125 GRADE A307.
- 3.5 ALL MISCELLANEOUS METAL AND FASTENERS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH CSA STANDARD G164 UNLESS NOTED OTHERWISE.
- 3.6 WELDING SHALL BE IN ACCORDANCE WITH CSA W59 AND W47.1.
- 3.7 ALL RE-USED HARDWARE SHALL BE INSPECTED AND APPROVED BY THE CONSULTANT.

4.0 TIMBER

- 4.1 ALL TIMBER WORK SHALL CONFORM TO CSA STANDARD 086.
- 4.2 ALL SAWN TIMBER SHALL BE COAST DOUGLAS FIR, NO. 1 STRUCTURAL GRADE OR BETTER, AND UNLESS SPECIFIED OTHERWISE, SHALL BE PROPERLY AIR-DRIED AND SEASONED, CONTAINING NOT MORE THAN 20% MOISTURE.
- 4.3 DECKING AND GUARDRAIL TIMBERS SHALL BE GIVEN AN ACZA SALT PRESERVATIVE TREATMENT TO A NET RETENTION OF 6.4 kg PER CUBIC METER IN ACCORDANCE WITH CSA 080.
- 4.4 TIMBER SIZE AND DRESSINGS SHALL BE IDENTICAL TO EXISTING, UNLESS NOTED OTHERWISE. VERIFY PRIOR TO PROCURING.
- 4.5 THE EXACT LENGTH OF EACH TIMBER TO BE REPLACED SHALL BE MEASURED BY THE CONTRACTOR AND SUBMITTED TO THE CONSULTANT FOR APPROVAL PRIOR TO PROCURING.
- 4.6 LENGTH OF CORBELS SHOWN ON THE DRAWINGS ARE NOMINAL. CONTRACTOR SHALL VERIFY THAT THE LENGTH SHOWN CAN BE INSTALLED OR ADJUST THE LENGTH REQUIRED TO SUIT ADJACENT PILES. SUBMIT FINAL LENGTHS TO THE CONSULTANT FOR REVIEW PRIOR TO PROCURING.
- 4.7 FIELD CUTS TO NEW TIMBERS WILL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER.
- 4.8 AFTER CUT-OFF, THE TOPS OF ALL TIMBER PILES SHALL BE TREATED WITH 2 COATS OF COPPER II NAPHTHENATE AT 6mm THICK. IN ADDITION, THE TOPS OF ALL PILES SHALL BE COVERED WITH A SHEET OF 22 GAUGE ANNEALED CORROSION RESISTANT ALUMINUM CUT 6" LARGER THAN THE DIAMETER OF THE PILE TOP. THE OVERHANGING EDGES SHALL BE CRIMPED AND TURNED DOWN AND SECURED TO THE PILE WITH 8 ALUMINUM ROOFING NAILS. THE SHEET SHALL NOT BE CUT TO FACILITATE FITTING.

5.0 GANGWAY

- 5.1 TYPICAL DFO-STYLE STEEL GANGWAY SHOWN IN DWG S500 FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR DETAILED DESIGN (LIVE LOAD 2.4 kPa PER DFO SCH GUIDELINES), SUPPLY AND CONSTRUCTION. SUBMIT SEALED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO PROCUREMENT OF MATERIALS FOR FABRICATION.
- 5.2 CONTRACTOR IS TO PROVIDE WEARING PROVISIONS AND ATTACHMENTS TO PIER DESIGN FOR ENGINEERS APPROVAL PRIOR TO PROCUREMENT OF MATERIALS FOR FABRICATION.

GENERAL NOTES (CONT.)

6.0 FLOAT DESIGN REQUIREMENTS

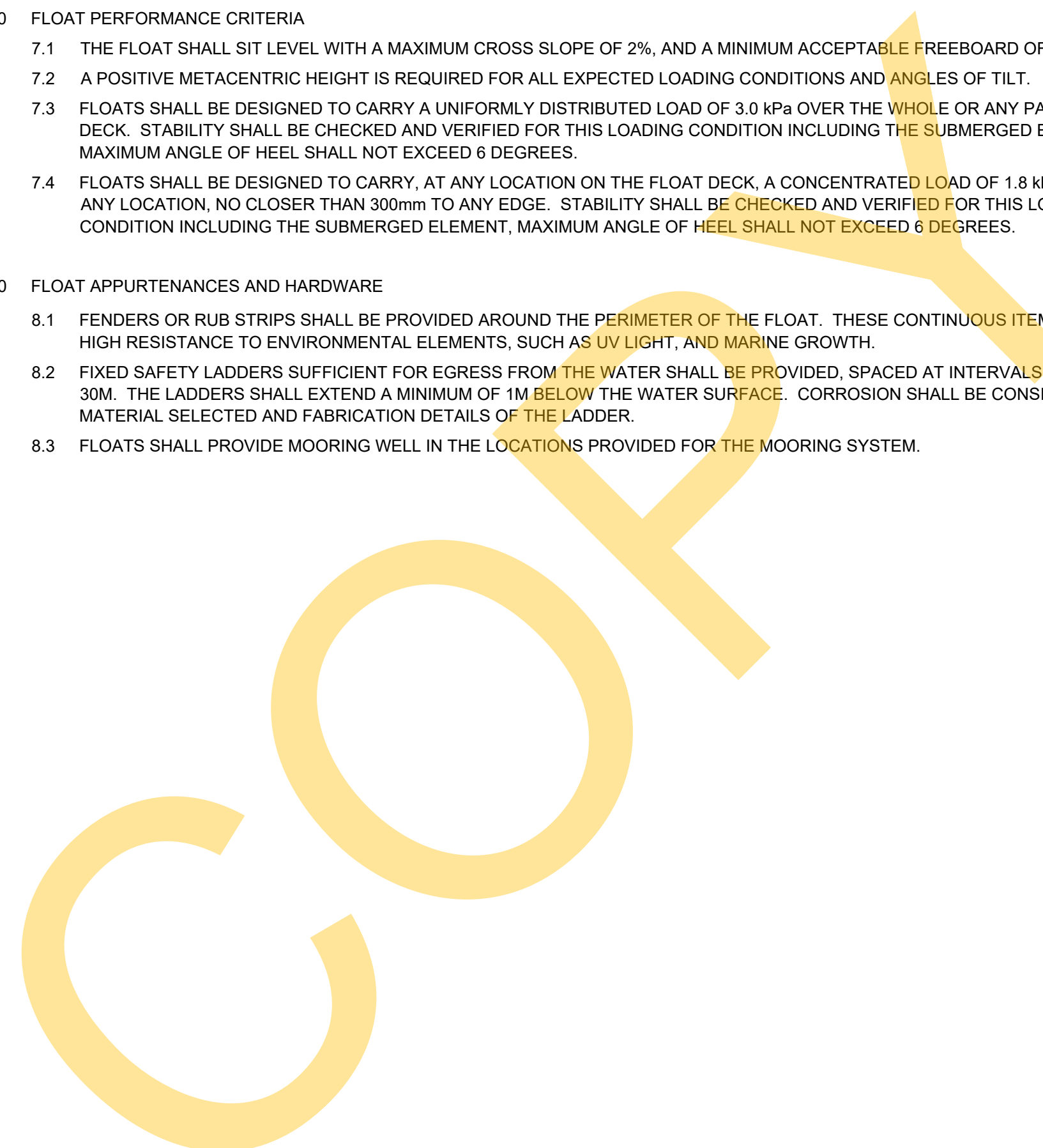
- 6.1 THE FLOAT SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF CANADIAN CODES FOR THE APPLICABLE MATERIAL, AS WELL AS THE REQUIREMENTS SHOWN ON THE DRAWINGS AND OTHER CONTRACT DOCUMENTS. THESE CODES MAY INCLUDE:
 - a. CSA A23.3 DESIGN OF CONCRETE STRUCTURES
 - b. CSA O86 ENGINEERING DESIGN IN WOOD
 - c. CSA S16 DESIGN OF STEEL STRUCTURES
 - d. CSA S157 STRENGTH DESIGN IN ALUMINUM
- 6.2 THE BRITISH STANDARD (BS 6349) MAY BE USED AS A MARINE CODE, AS APPLICABLE WHERE THE CANADIAN CODES DO NOT PROVIDE MARINE GUIDANCE. ALTERNATIVELY, REFERENCE CAN BE MADE TO OTHER INTERNATIONAL CODES, STANDARDS OR GUIDELINES, SUBJECT TO THE ENGINEERS APPROVAL.
- 6.3 THE DRAWINGS INDICATE THE GENERAL INTENT OF THE FLOAT. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE DETAILED DESIGN, CONSTRUCTION, INSTALLATION AND QUALITY CONTROL.
- 6.4 THE SURFACE OF THE FLOATS SHALL BE NON-SLIP FRP MINI MESH GRATING OR EQUIVALENT, APPROVED IN WRITING BY THE ENGINEER.
- 6.5 THE MINIMUM SERVICE LIFE OF THESE FLOATS SHALL BE 25 YEARS.
- 6.6 THE CONTRACTOR SHALL SUBMIT DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN BRITISH COLUMBIA. THESE DRAWINGS SHALL IDENTIFY DESIGN REQUIREMENTS, DESIGN CODES USED, LAYOUT, MEMBER SIZES, CONNECTIONS, DIMENSIONS, MATERIALS AND FINISHES.

7.0 FLOAT PERFORMANCE CRITERIA

- 7.1 THE FLOAT SHALL SIT LEVEL WITH A MAXIMUM CROSS SLOPE OF 2%, AND A MINIMUM ACCEPTABLE FREEBOARD OF 400mm.
- 7.2 A POSITIVE METACENTRIC HEIGHT IS REQUIRED FOR ALL EXPECTED LOADING CONDITIONS AND ANGLES OF TILT.
- 7.3 FLOATS SHALL BE DESIGNED TO CARRY A UNIFORMLY DISTRIBUTED LOAD OF 3.0 kPa OVER THE WHOLE OR ANY PART OF THE DECK. STABILITY SHALL BE CHECKED AND VERIFIED FOR THIS LOADING CONDITION INCLUDING THE SUBMERGED ELEMENTS, MAXIMUM ANGLE OF HEEL SHALL NOT EXCEED 6 DEGREES.
- 7.4 FLOATS SHALL BE DESIGNED TO CARRY, AT ANY LOCATION ON THE FLOAT DECK, A CONCENTRATED LOAD OF 1.8 kN PLACED AT ANY LOCATION, NO CLOSER THAN 300mm TO ANY EDGE. STABILITY SHALL BE CHECKED AND VERIFIED FOR THIS LOADING CONDITION INCLUDING THE SUBMERGED ELEMENT, MAXIMUM ANGLE OF HEEL SHALL NOT EXCEED 6 DEGREES.

8.0 FLOAT APPURTENANCES AND HARDWARE

- 8.1 FENDERS OR RUB STRIPS SHALL BE PROVIDED AROUND THE PERIMETER OF THE FLOAT. THESE CONTINUOUS ITEMS SHALL HAVE HIGH RESISTANCE TO ENVIRONMENTAL ELEMENTS, SUCH AS UV LIGHT, AND MARINE GROWTH.
- 8.2 FIXED SAFETY LADDERS SUFFICIENT FOR EGRESS FROM THE WATER SHALL BE PROVIDED, SPACED AT INTERVALS LESS THAN 30M. THE LADDERS SHALL EXTEND A MINIMUM OF 1M BELOW THE WATER SURFACE. CORROSION SHALL BE CONSIDERED IN THE MATERIAL SELECTED AND FABRICATION DETAILS OF THE LADDER.
- 8.3 FLOATS SHALL PROVIDE MOORING WELL IN THE LOCATIONS PROVIDED FOR THE MOORING SYSTEM.



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Drawn:	Drawing Check:	Designed:	Design Check:	Approver:
JTH	MF	HH	MF	GH

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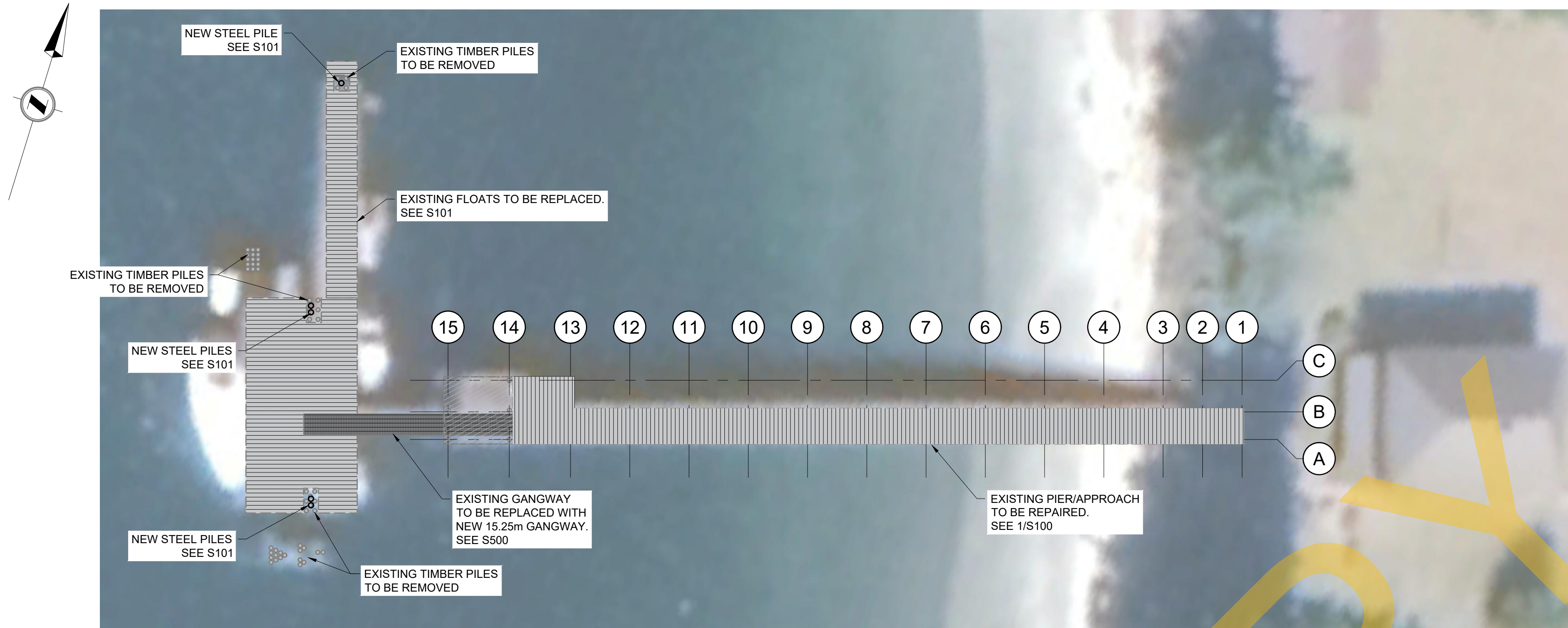
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GENERAL NOTES & DESIGN CRITERIA

Project No.
2211-71343

Rev.
PC

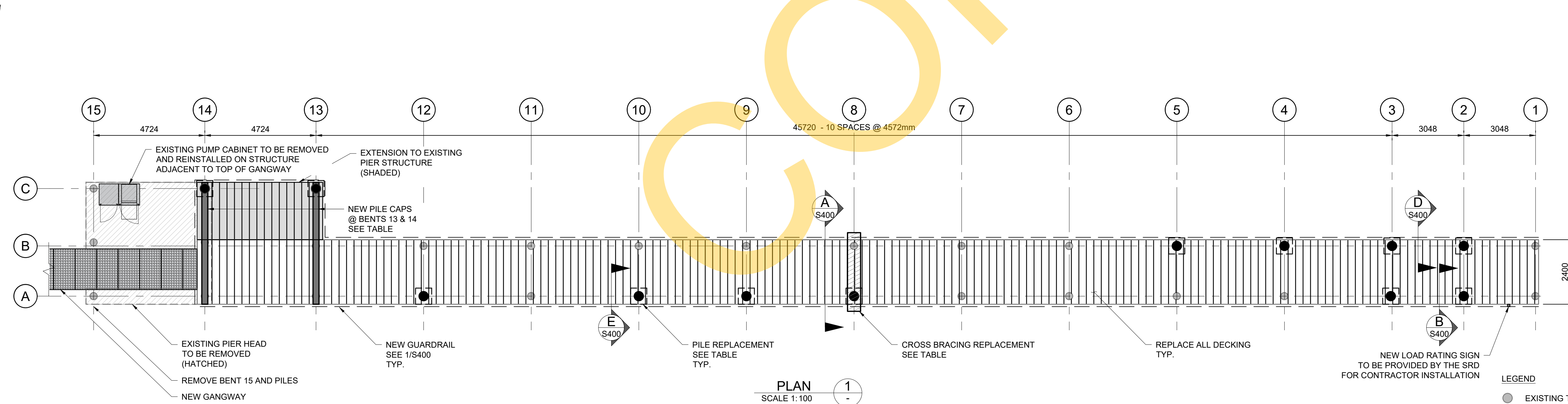
Drawing No.
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PLAN
SCALE 1:250



KEY PLAN
NTS



PLAN
SCALE 1:100

PILE REPAIRS	
PILE NO.	REPAIRS
2A	REPLACE PILE
2B	FRESH HEAD AND INSTALL NEW SINGLE CORBEL
3A	FRESH HEAD AND INSTALL NEW SINGLE CORBEL
3B	REPLACE PILE
4B	FRESH HEAD AND INSTALL NEW SINGLE CORBEL
5B	REPLACE PILE
8A	INSTALL GALVANIZED STEEL PILE CLAMPS
9A	REPLACE PILE
10A	INSTALL GALVANIZED STEEL PILE CLAMPS
12A	REPLACE PILE
13-15	MODIFICATIONS TO TRESTLE. SEE PLAN

NOTE:
 1. CONTRACTOR TO PROVIDE 3 ADDITIONAL PILES ON SITE IF NEEDED
 2. CONDITIONS OF PILES AT BENT 13 AND 14 TO BE INSPECTED PRIOR TO INSTALLATION OF NEW PILE CAPS, AND REPLACED IF REQUIRED.

PILE CAP REPAIRS	
BENT NO.	REPAIRS
13	REPLACE PILE CAP
14	REPLACE PILE CAP

CROSS BRACE REPAIRS	
BENT NO.	REPAIRS
8	REPLACE CROSS BRACE

LEGEND

- EXISTING TIMBER PILE
- NEW TIMBER PILE
- ▬ NEW TIMBER PILE CAP
- ▨ REPLACE TIMBER CROSS BRACING
- NEW GUARDRAIL

- NOTES:
 1. FOR GENERAL NOTES SEE S100.
 2. SEE SHEET S400 FOR ALL TIMBER REPAIR DETAILS FOR PILES, PILE CAPS, AND CROSS BRACING.

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STRATHCONA REGIONAL DISTRICT

PORT NEVILLE
 GENERAL ARRANGEMENT
 AND PIER PLAN

Drawing No. S100

Project No. 2211-71343

Rev. PC

NOTES:

1. FOR GENERAL NOTES SEE S100

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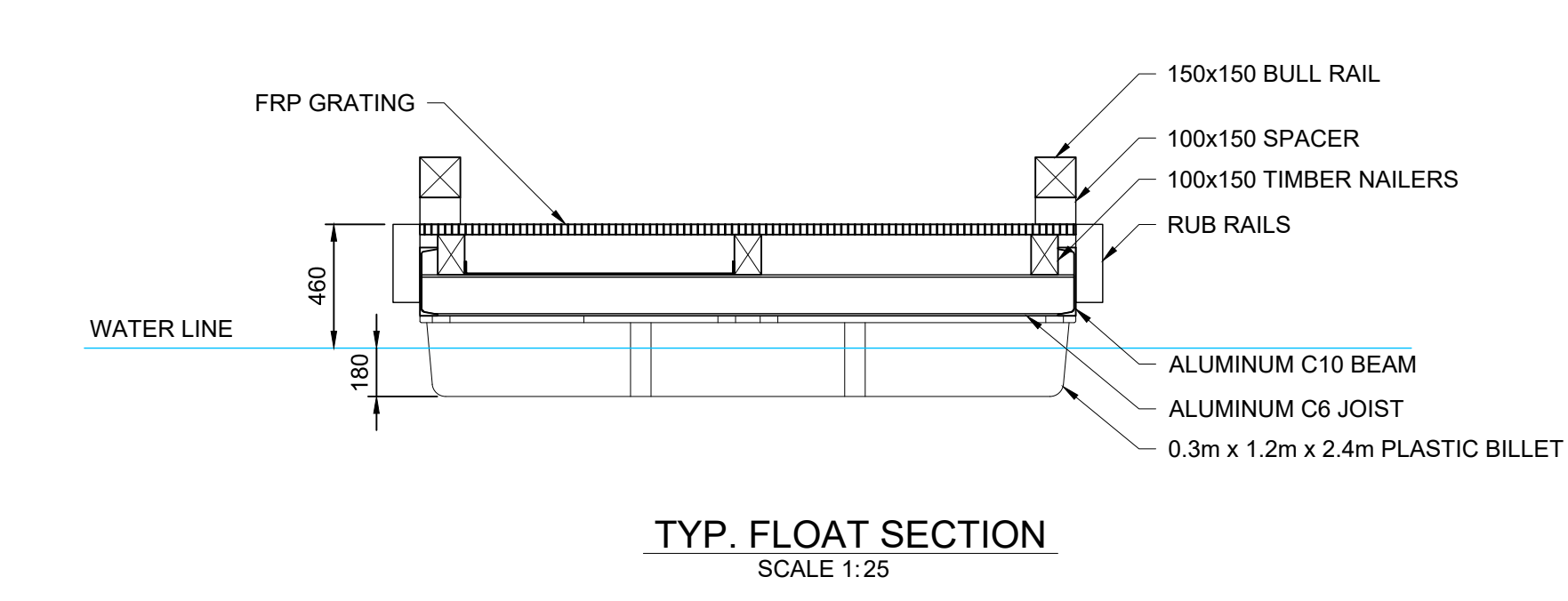
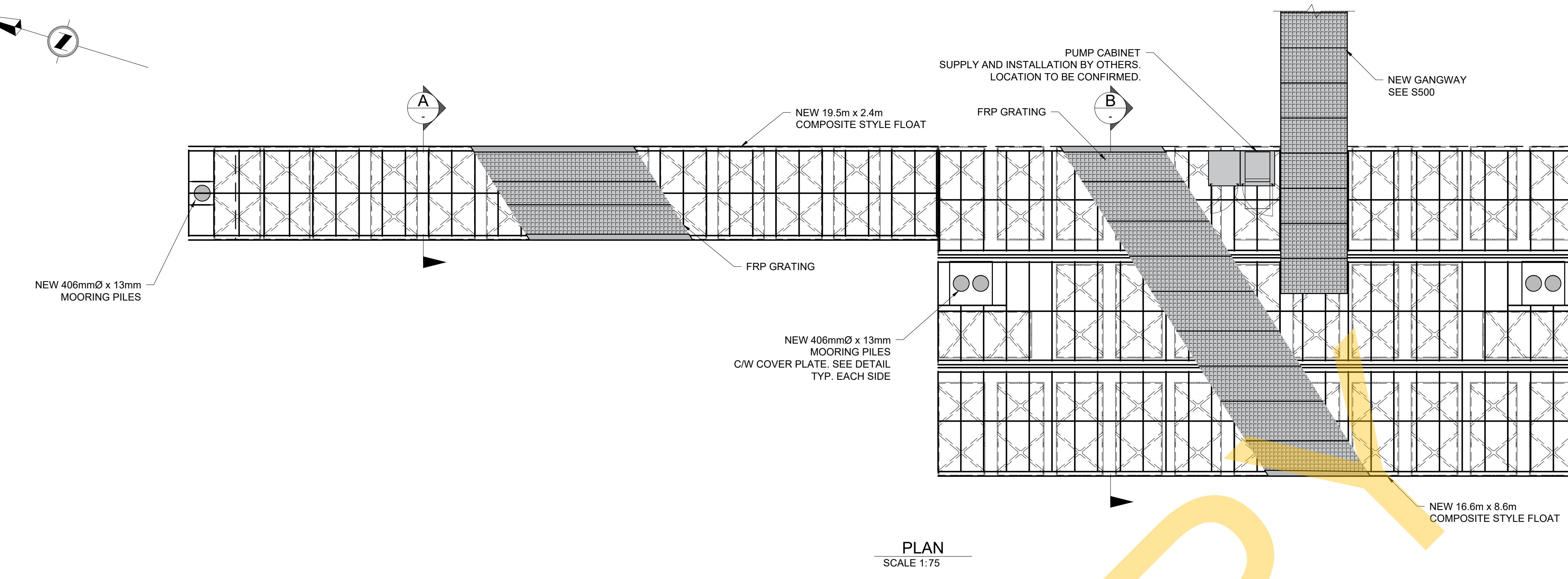
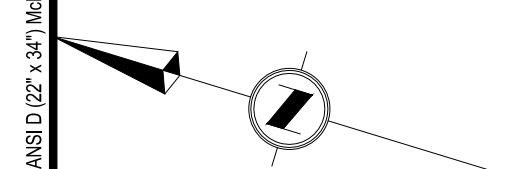
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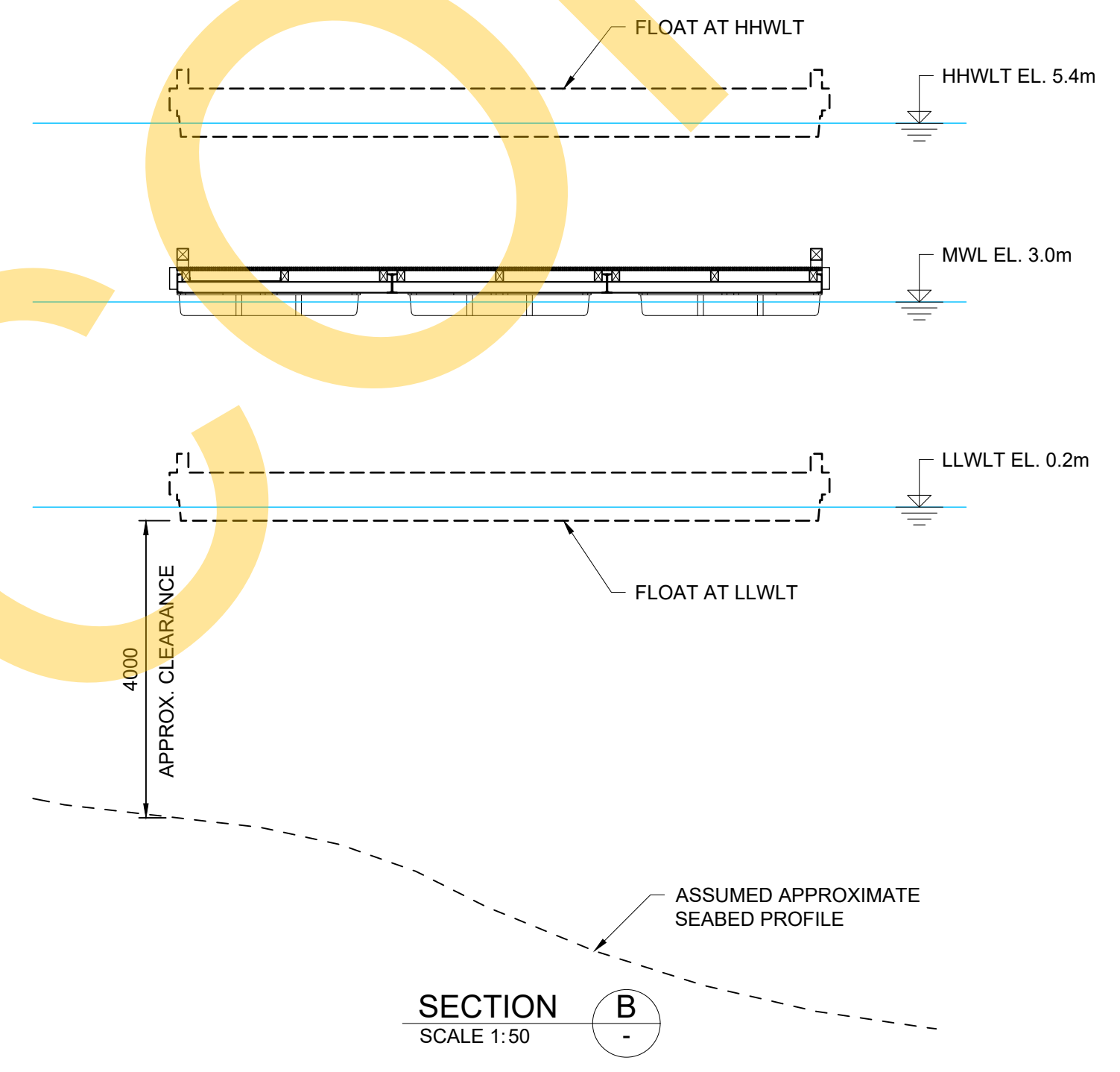
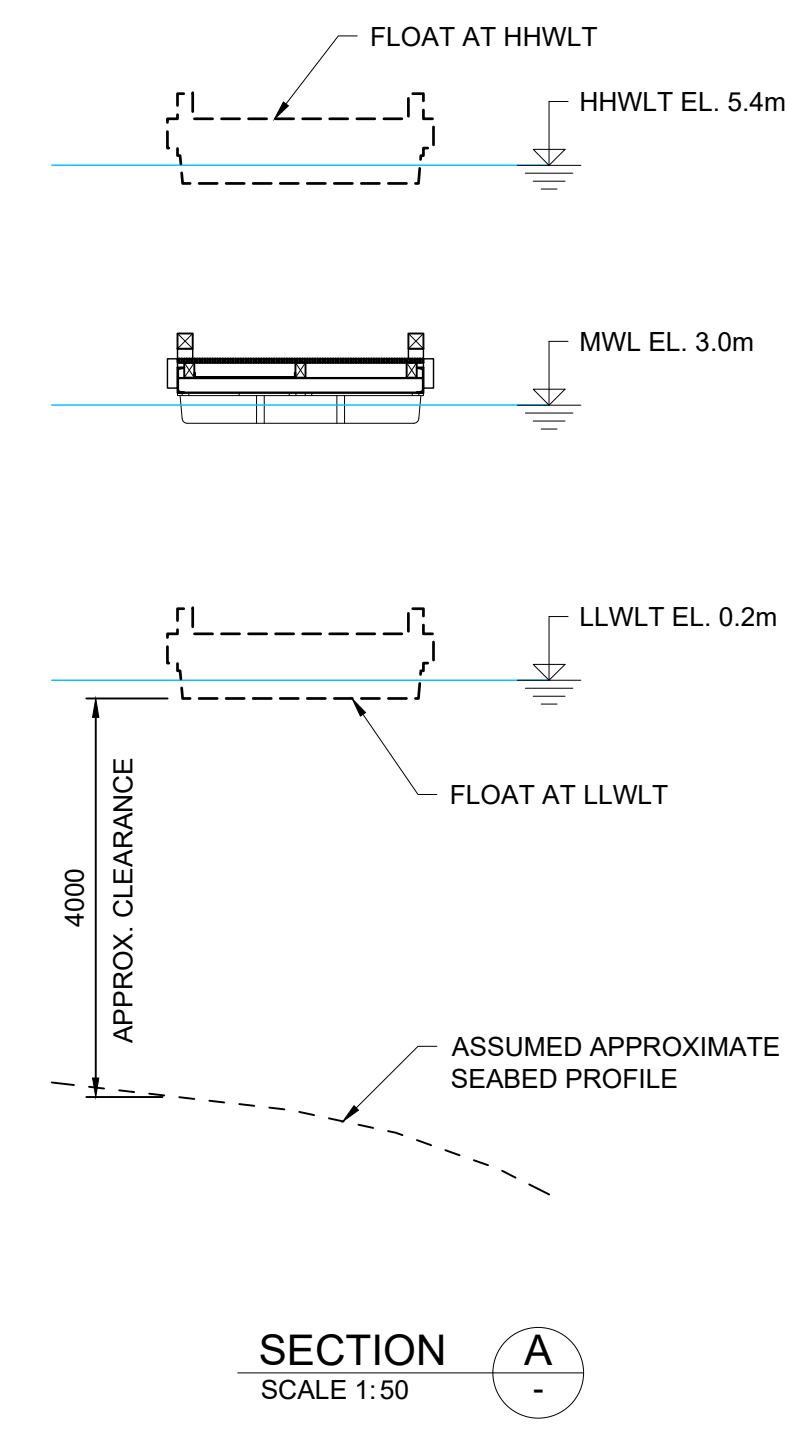
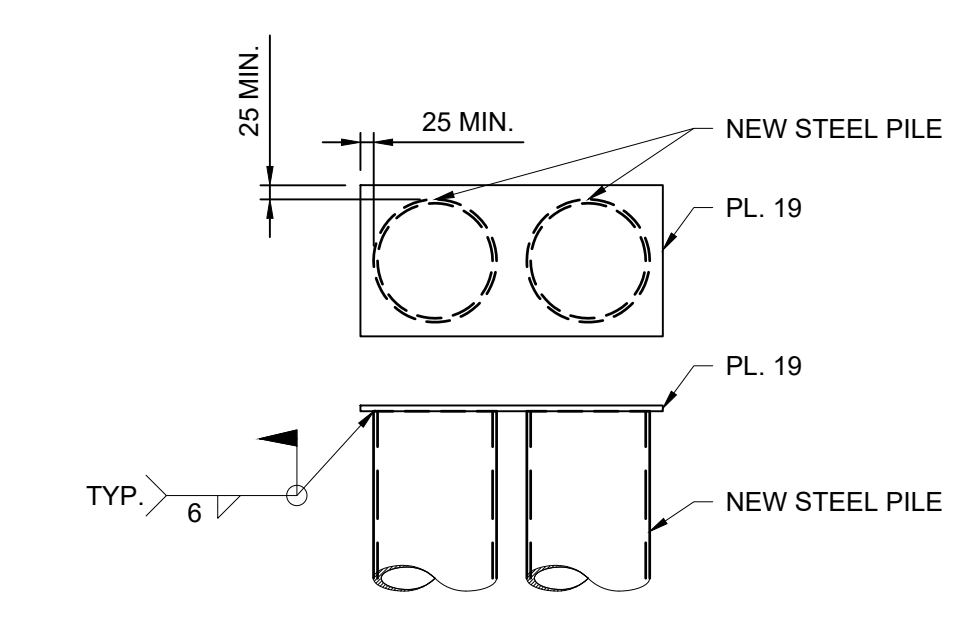
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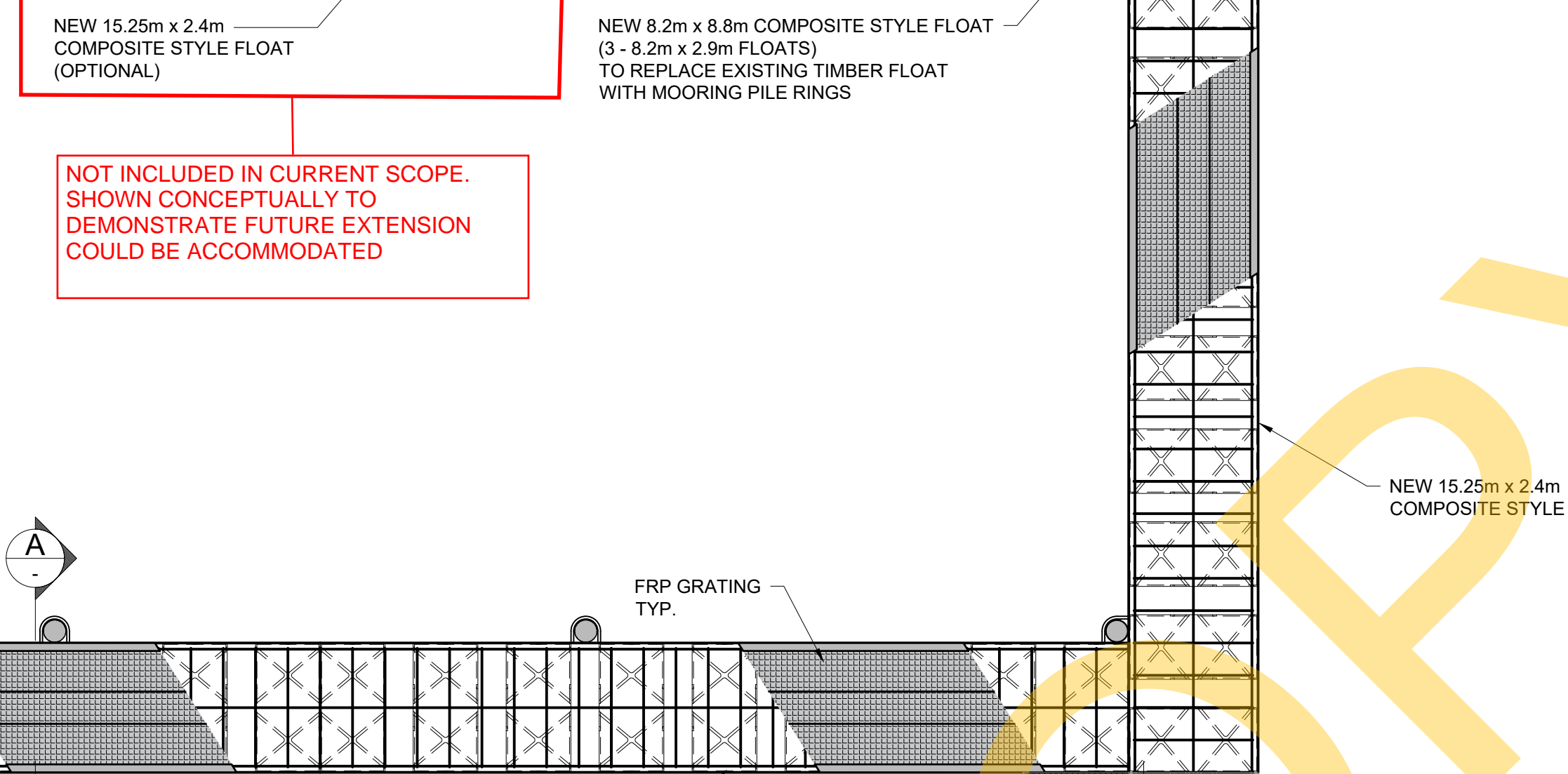
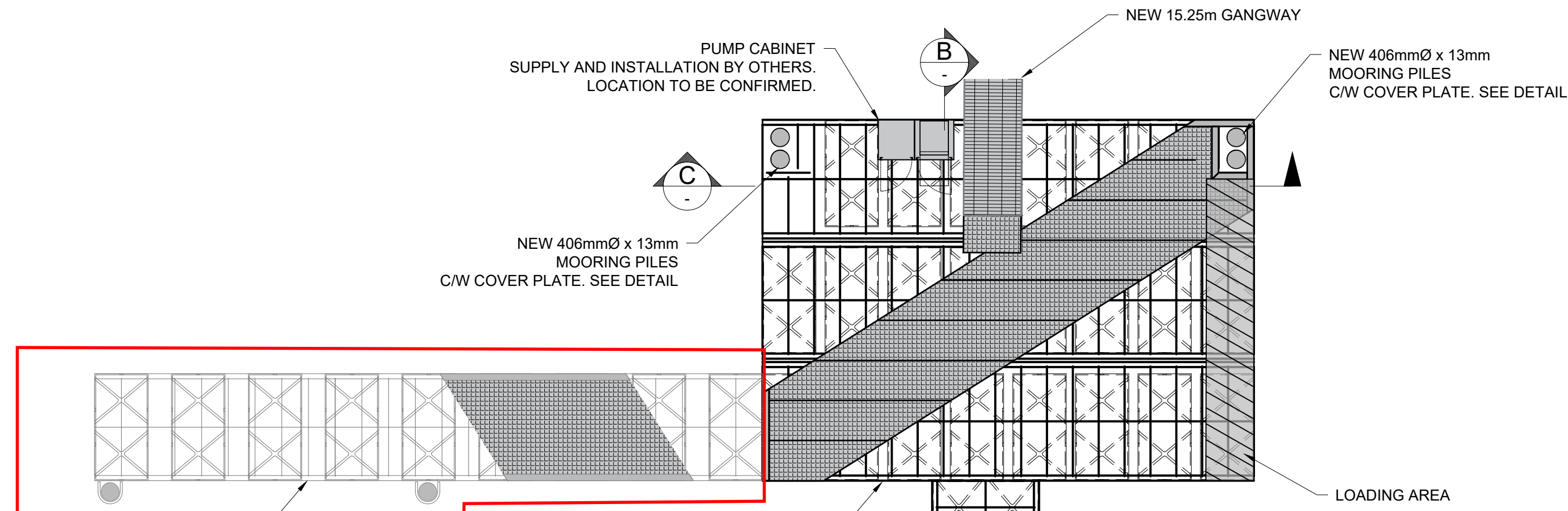
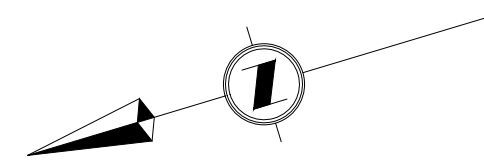
PORT NEVILLE
 NEW FLOAT DESIGN

Drawing No.	S101
Project No.	2211-71343
Rev.	PC



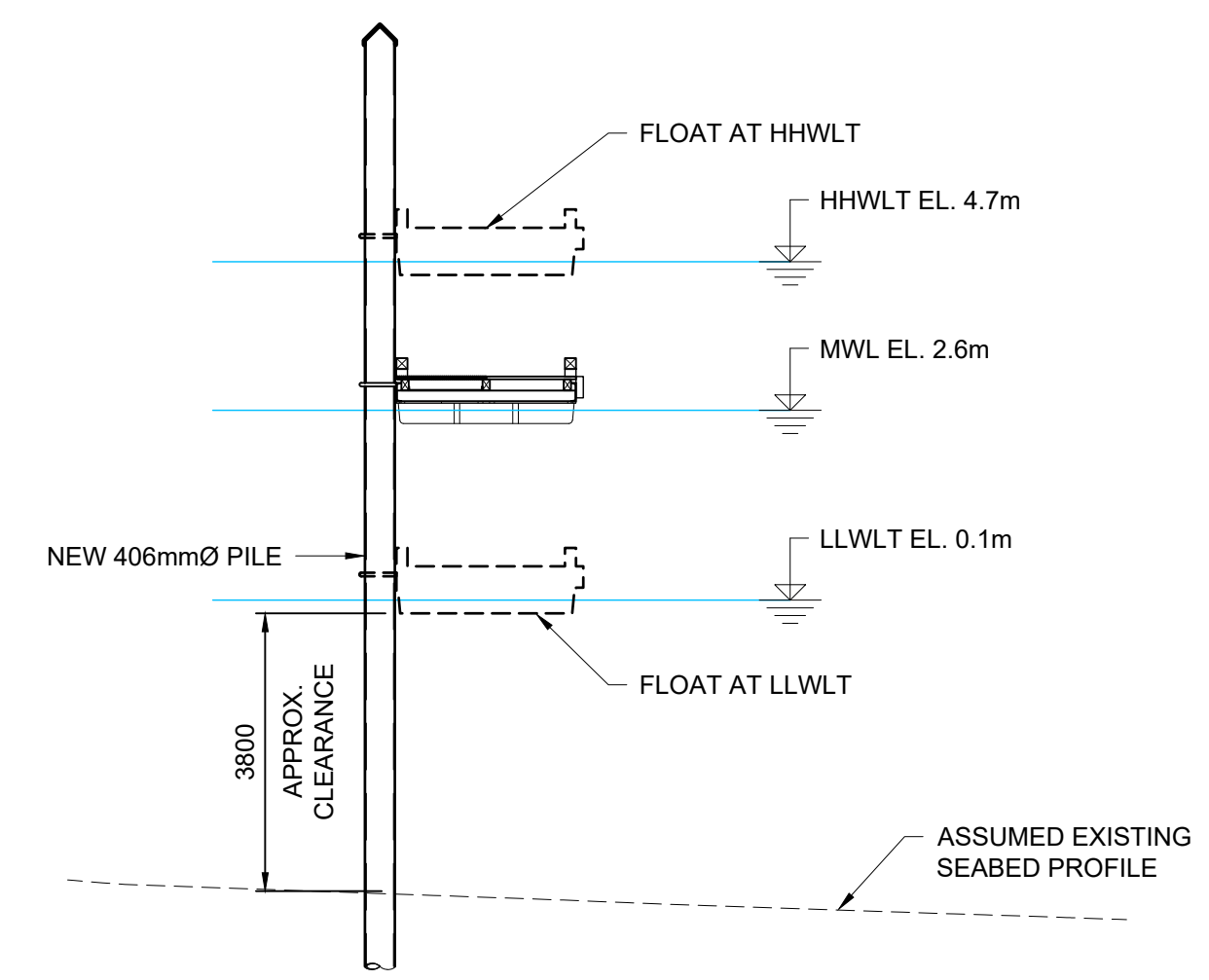
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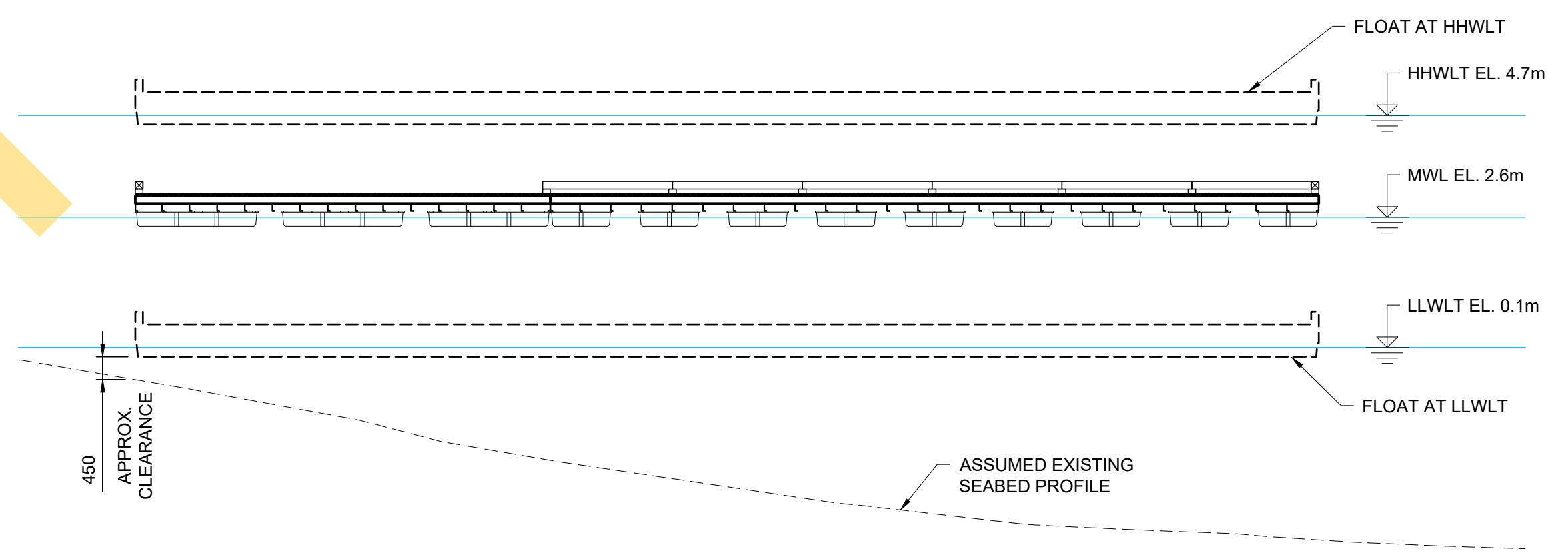


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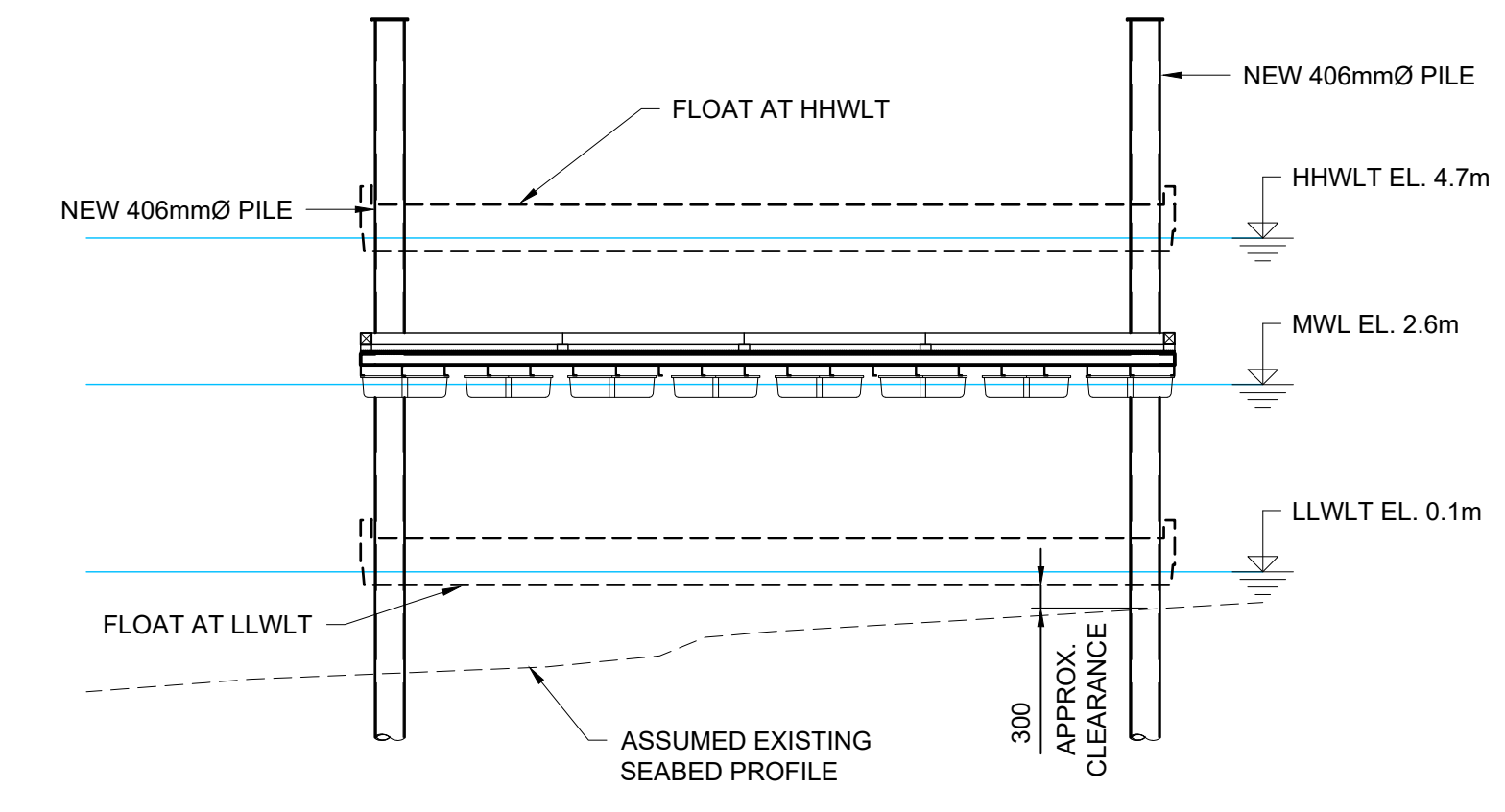
NOT INCLUDED IN CURRENT SCOPE. SHOWN CONCEPTUALLY TO DEMONSTRATE FUTURE EXTENSION COULD BE ACCOMMODATED



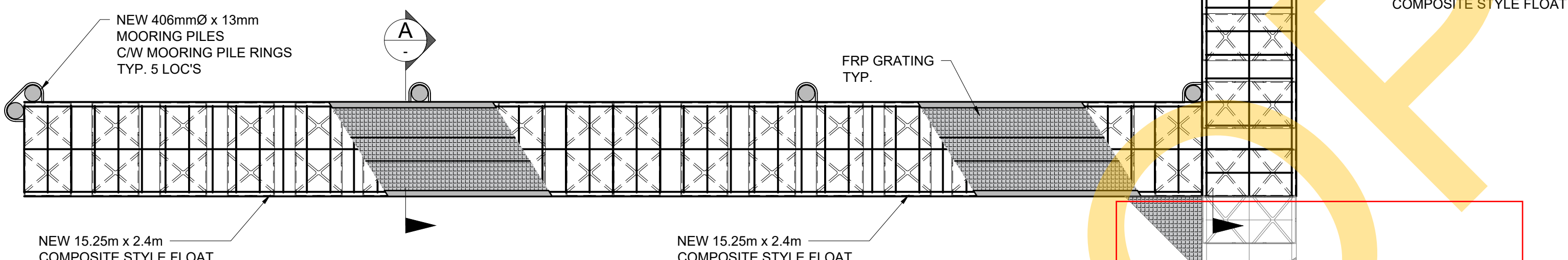
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SECTION B
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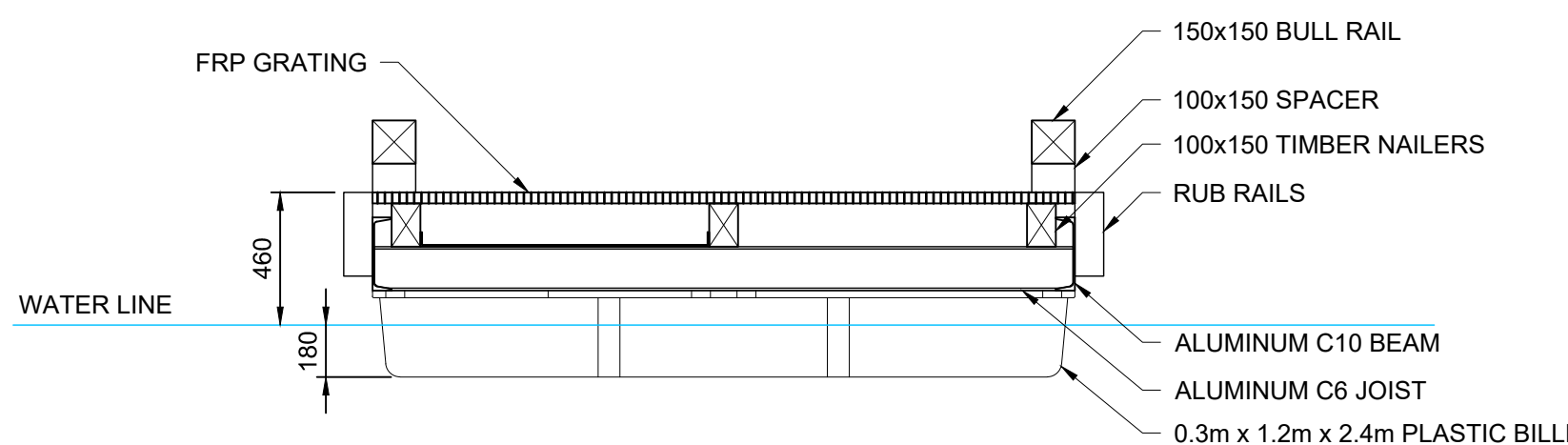


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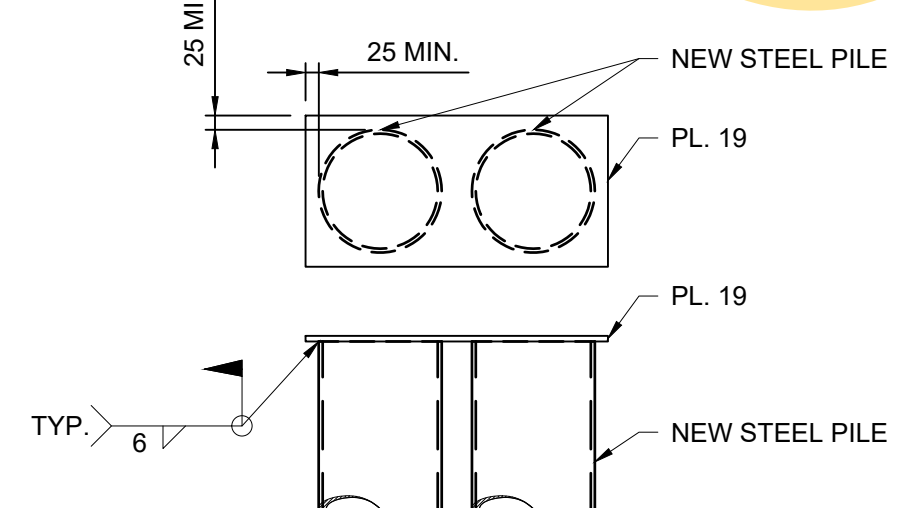


PLAN
SCALE 1:100

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TYP. FLOAT SECTION
SCALE 1:25



COVER PLATE DETAIL
SCALE 1:25

NOTES:
1. FOR GENERAL NOTES SEE S100

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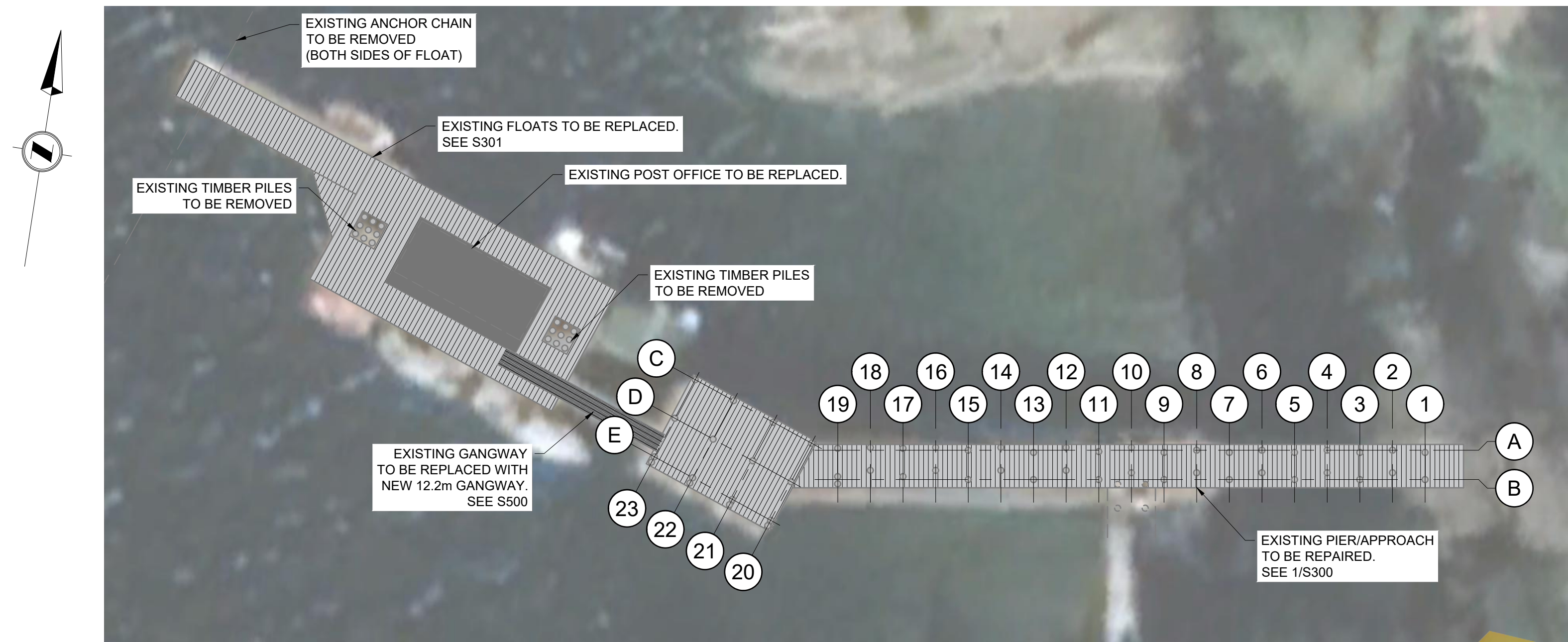
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OWEN BAY
 NEW FLOAT DESIGN

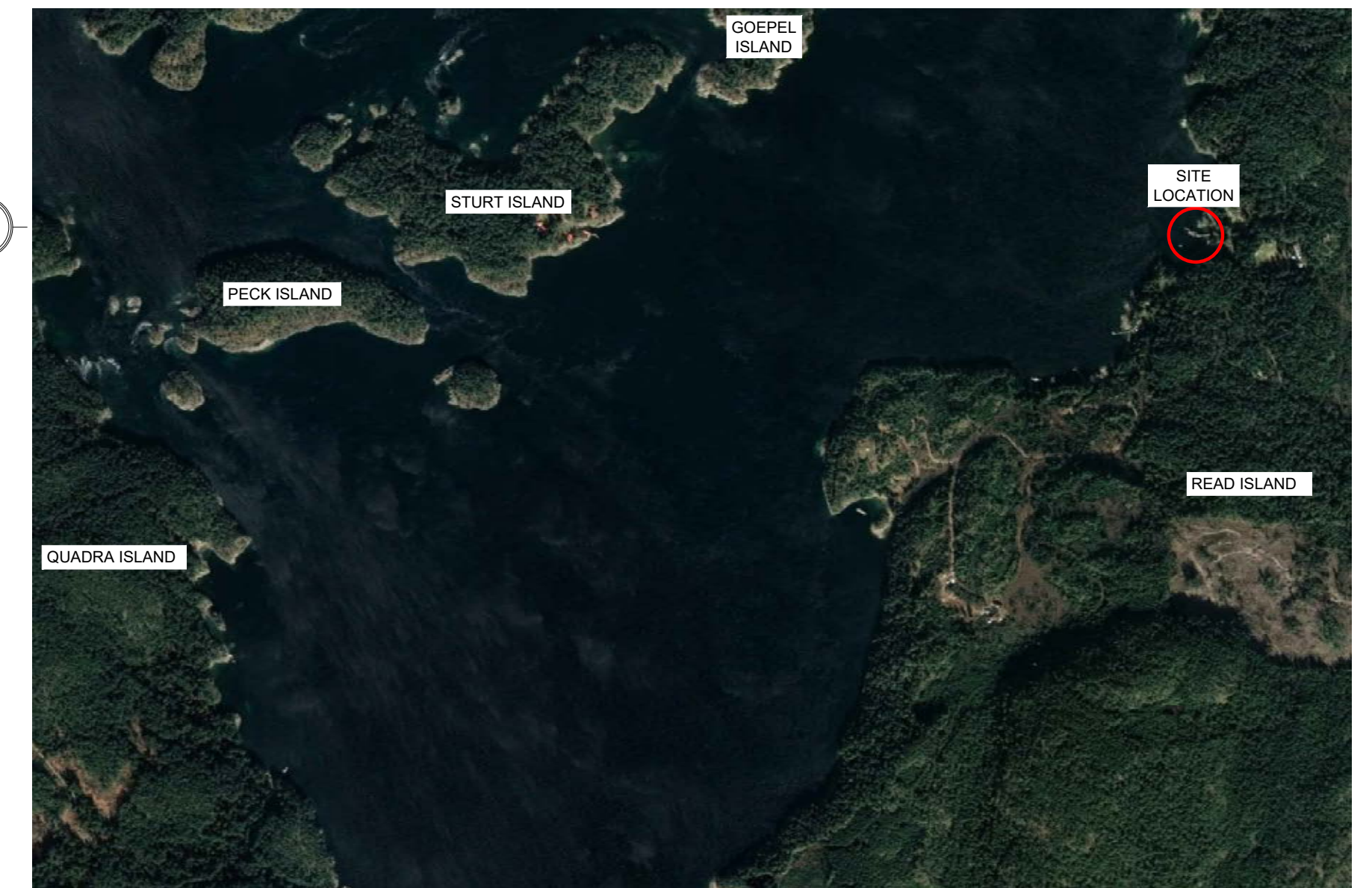
Drawing No.
S201

Project No.
 2211-71343

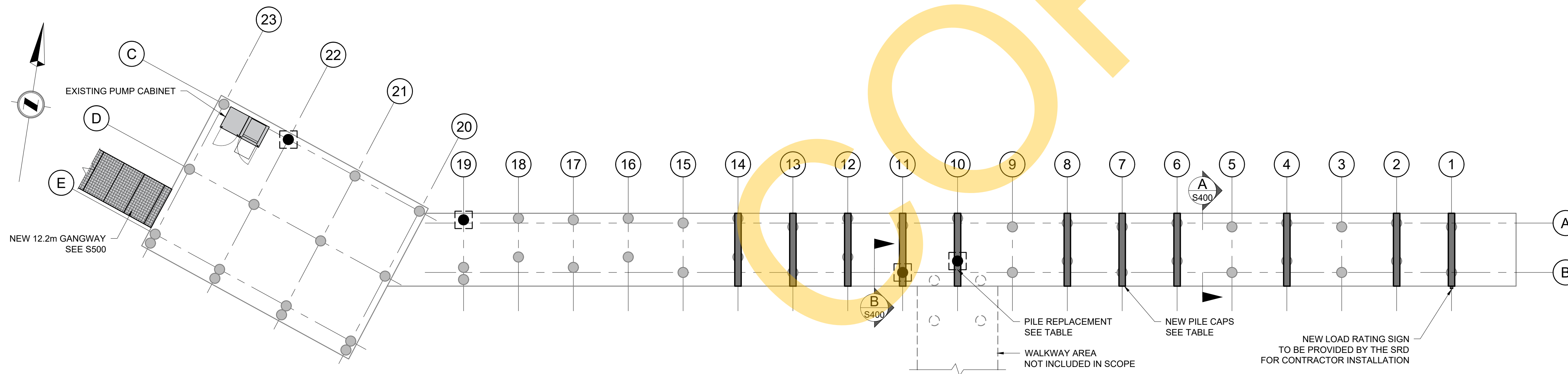
Rev.
 PC



PLAN
SCALE 1:250



KEY PLAN
NTS



PLAN
SCALE 1:100

LEGEND

- EXISTING TIMBER PILE
- NEW TIMBER PILE
- NEW TIMBER PILE CAP

PILE REPAIRS	
PILE NO.	REPAIRS
10B	REPLACE PILE
11B	REPLACE PILE
19A	REPLACE PILE
22C	REPLACE PILE

PILE CAP REPAIRS	
BENT NO.	REPAIRS
1	REPLACE PILE CAP
2	REPLACE PILE CAP
4	REPLACE PILE CAP
6	REPLACE PILE CAP
7	REPLACE PILE CAP
8	REPLACE PILE CAP
10	REPLACE PILE CAP
11	REPLACE PILE CAP
12	REPLACE PILE CAP
13	REPLACE PILE CAP
14	REPLACE PILE CAP

- NOTES:
- FOR GENERAL NOTES SEE S100.
 - SEE SHEET S400 FOR ALL TIMBER REPAIR DETAILS FOR PILES, PILE CAPS, AND CROSS-BRACING.

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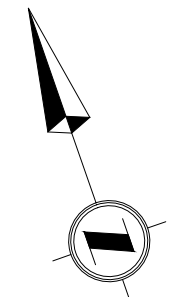
STRATHCONA REGIONAL DISTRICT

SURGE NARROWS
GENERAL ARRANGEMENT
AND PIER PLAN

Drawing No.	S300
Project No.	2211-71343
Rev.	PC

ORIGINAL DWG SIZE: A3 (D 22 x 31) McElhanney - 2019-11-10

SAVED BY: JTH Date: 2022-12-02 15:33 FILE: X:\21112-PROJECTS\21112-2022\21112-2022-12-02\Drawings\01_1_Surge Narrows New Float Design.dwg



NEW 13.7m x 2.4m COMPOSITE STYLE FLOAT. GRATING ON THIS FLOAT SHALL BE PAINTED YELLOW TO DENOTE SEAPLANE USE. BULLRAILS TO BE PAINTED YELLOW WITH SIGNAGE INSTALLED EVERY 3m ALONG THE BULLRAIL STATING "SEAPLANE MOORING ONLY"

STIFF LEG BRACE TO PROVIDE LATERAL SUPPORT FOR SEAPLANE DOCK AREA SHALL BE CAPABLE OF SUPPORTING THE DESIGN LIVE LOAD OF FLOATS, WITH BILLET'S INCLUDED AS REQUIRED

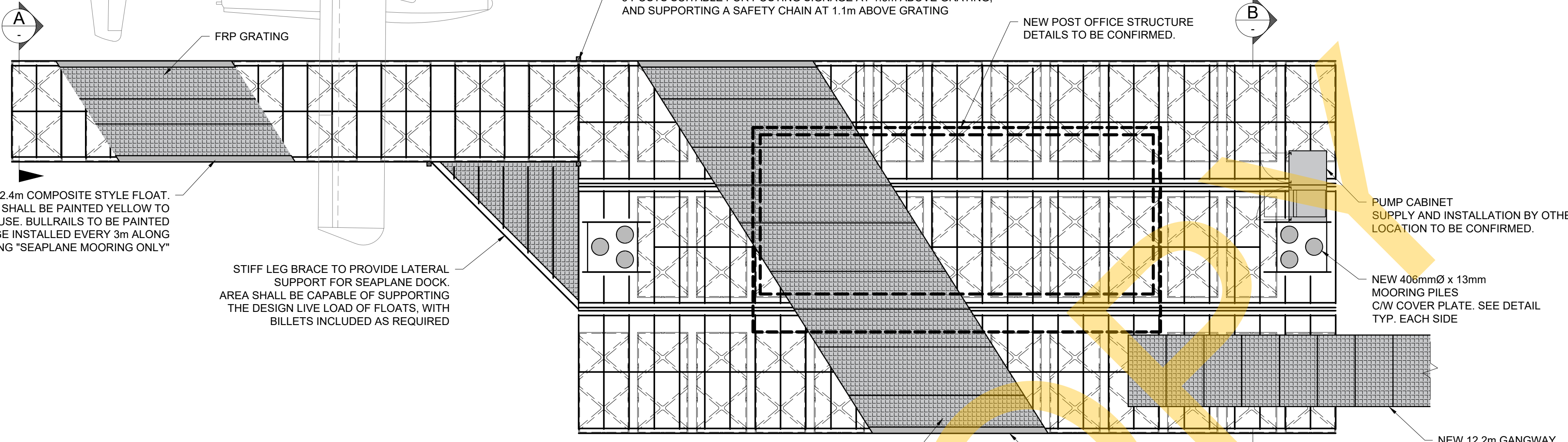
SEAPLANE SAFETY SIGNAGE TO BE PROVIDED BY THE SRD. 3 POSTS SUITABLE FOR POSTING SIGNAGE AT 1.5m ABOVE GRATING, AND SUPPORTING A SAFETY CHAIN AT 1.1m ABOVE GRATING

NEW POST OFFICE STRUCTURE DETAILS TO BE CONFIRMED.

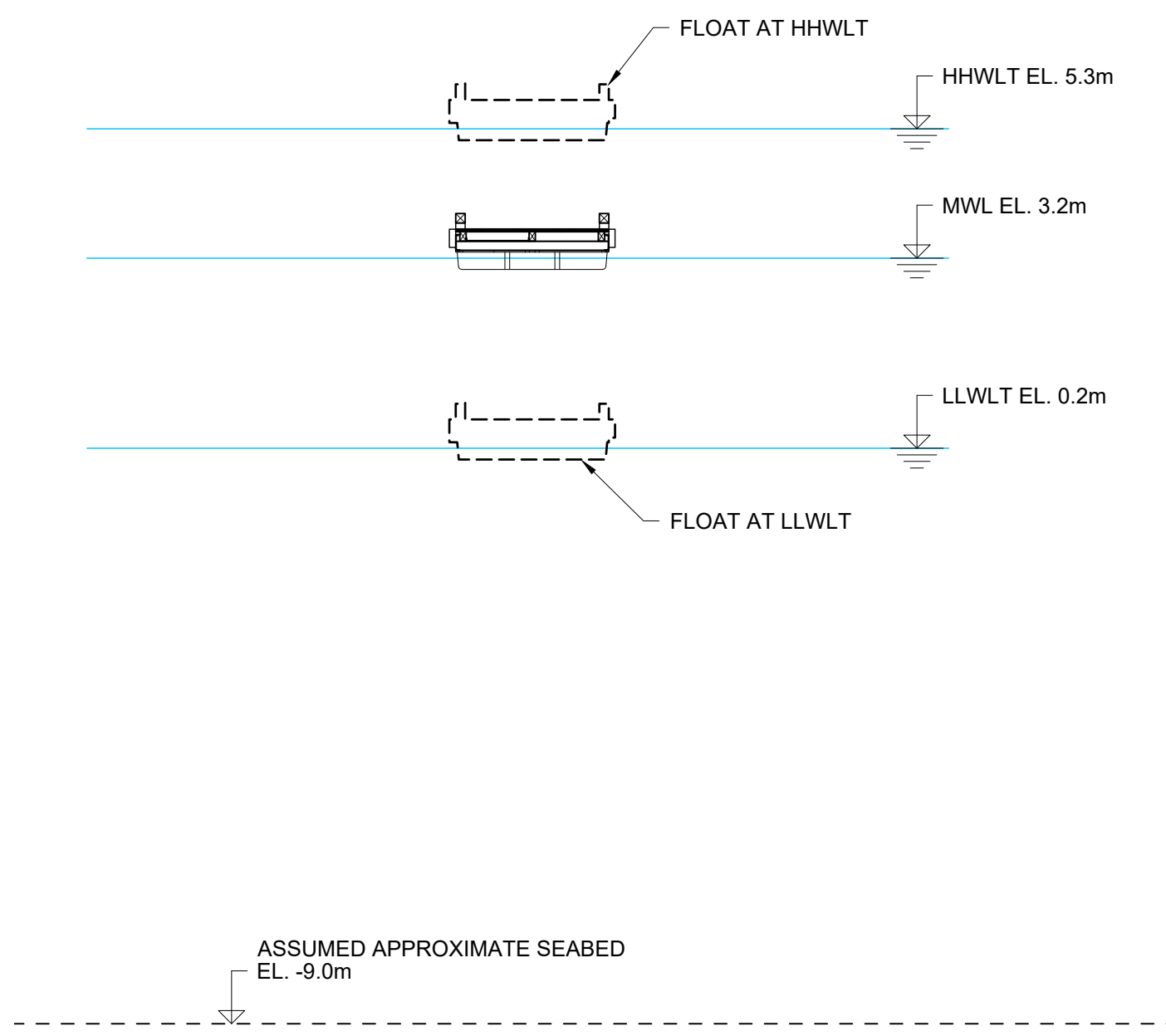
PUMP CABINET SUPPLY AND INSTALLATION BY OTHERS. LOCATION TO BE CONFIRMED.

NEW 406mmØ x 13mm MOORING PILES C/W COVER PLATE. SEE DETAIL TYP. EACH SIDE

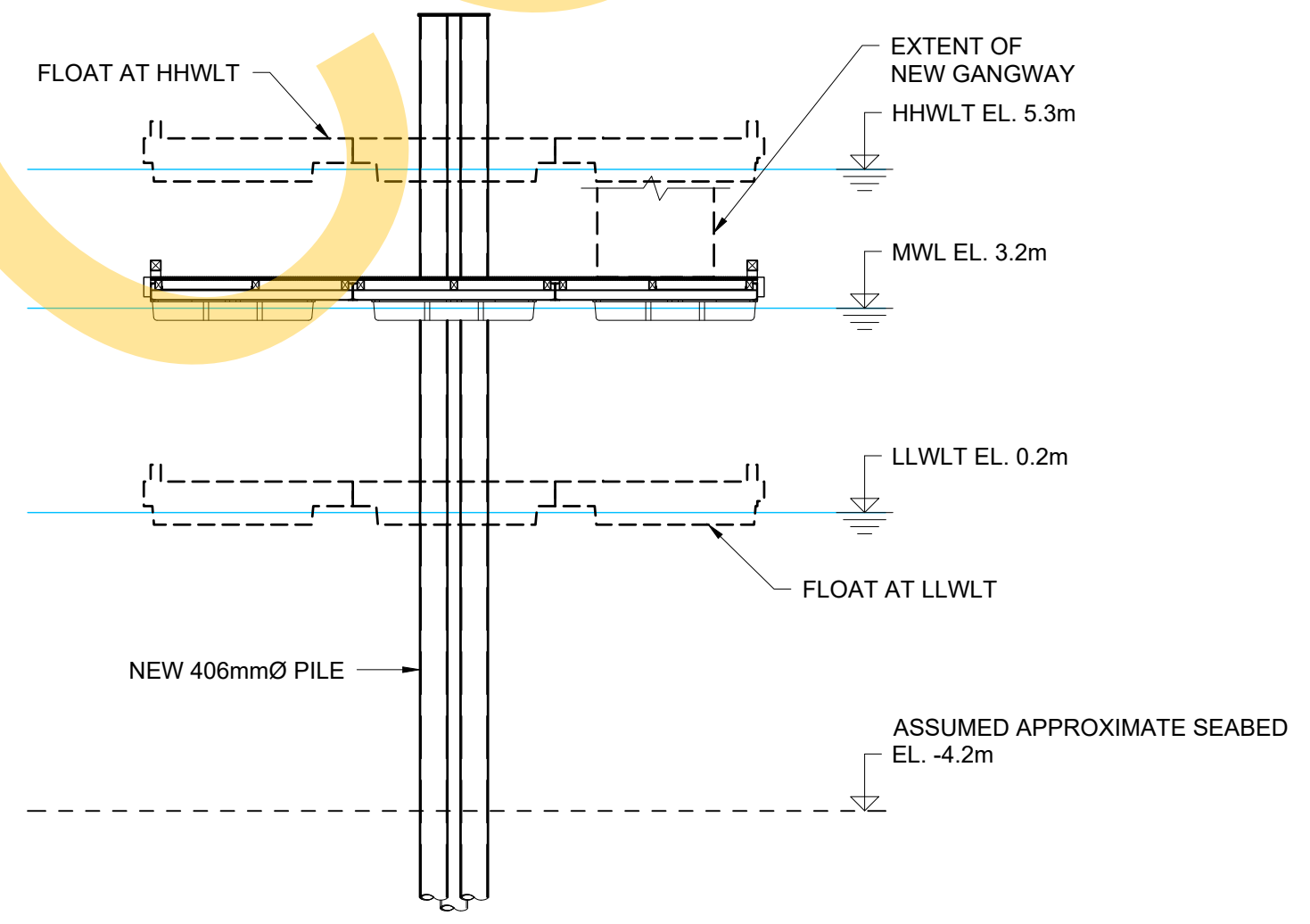
NEW 12.2m GANGWAY SEE S500



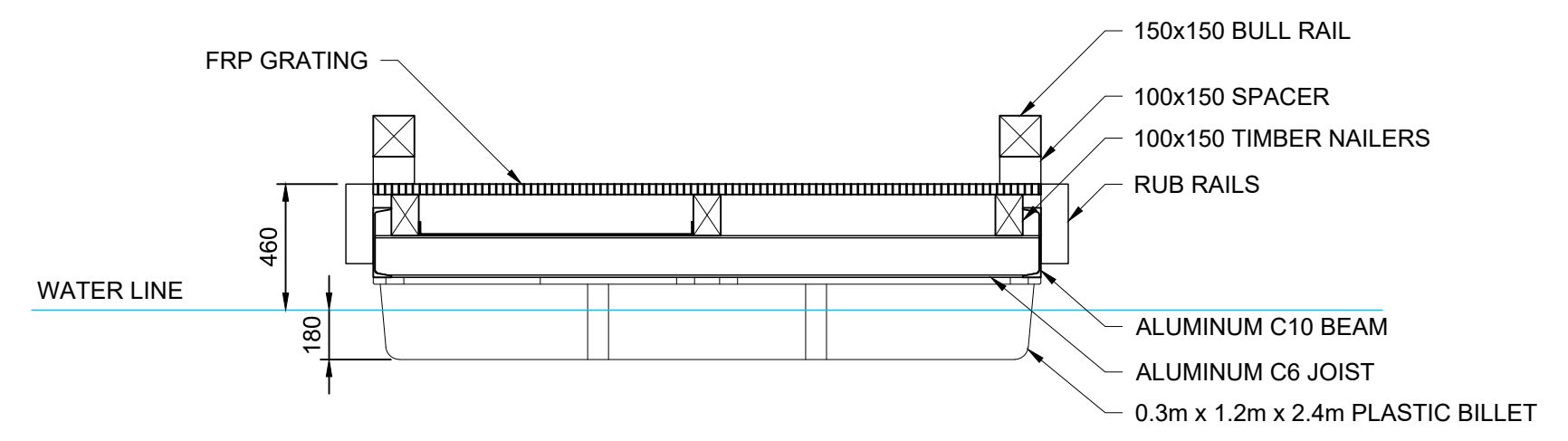
PLAN
SCALE 1:75



SECTION A
SCALE 1:100

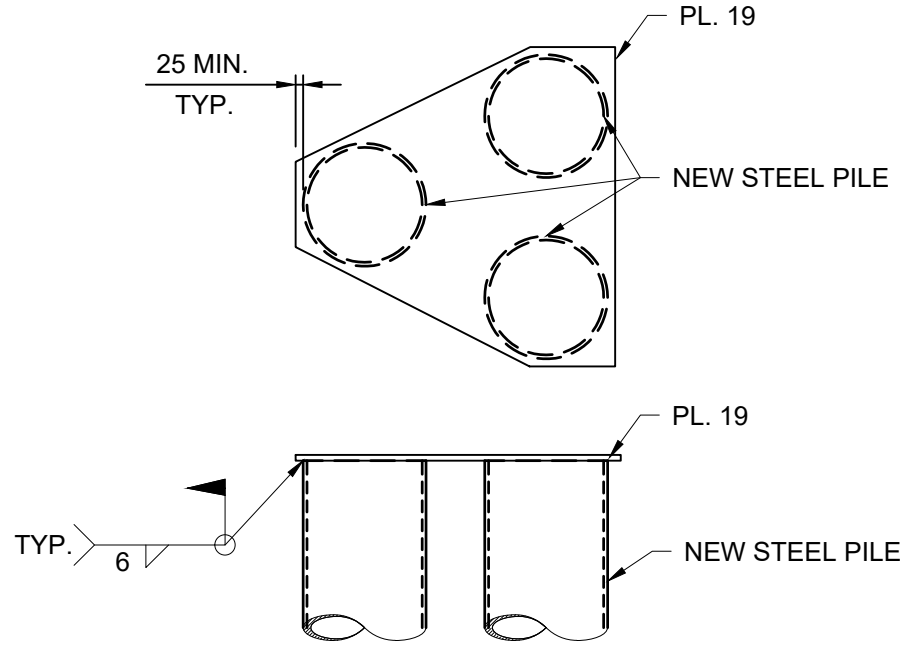


SECTION B
SCALE 1:100



TYP. FLOAT SECTION
SCALE 1:25

NOTE:
COMPOSITE FLOAT ARRANGEMENT SHOWN IS INDICATIVE ONLY. CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN OF THE FLOATING DOCKS AND WILL PROVIDE SEALED SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO MATERIAL PROCUREMENT AND FABRICATION



COVER PLATE DETAIL
SCALE 1:25

NOTES:
1. FOR GENERAL NOTES SEE S100

Rev	Date	Description	App'd
PC	2022-12-02	ISSUED FOR 100% REVIEW	GH
PB	2022-11-11	ISSUED FOR 90% CONCEPT	GH
PA	2022-08-25	ISSUED FOR CONCEPT	MF

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CLIENT:

990 CEDAR ST, CAMPBELL RIVER, BC, V9W 7Z8

McElhanney

1211 Ryan Road
Courtenay BC
Canada V9N 3R6
T 250 338 5495

Drawn: JTH
Drawing Check: MF
Designed: HH
Design Check: MF
Approver: GH

**PRELIMINARY
NOT FOR
CONSTRUCTION**

STRATHCONA REGIONAL DISTRICT

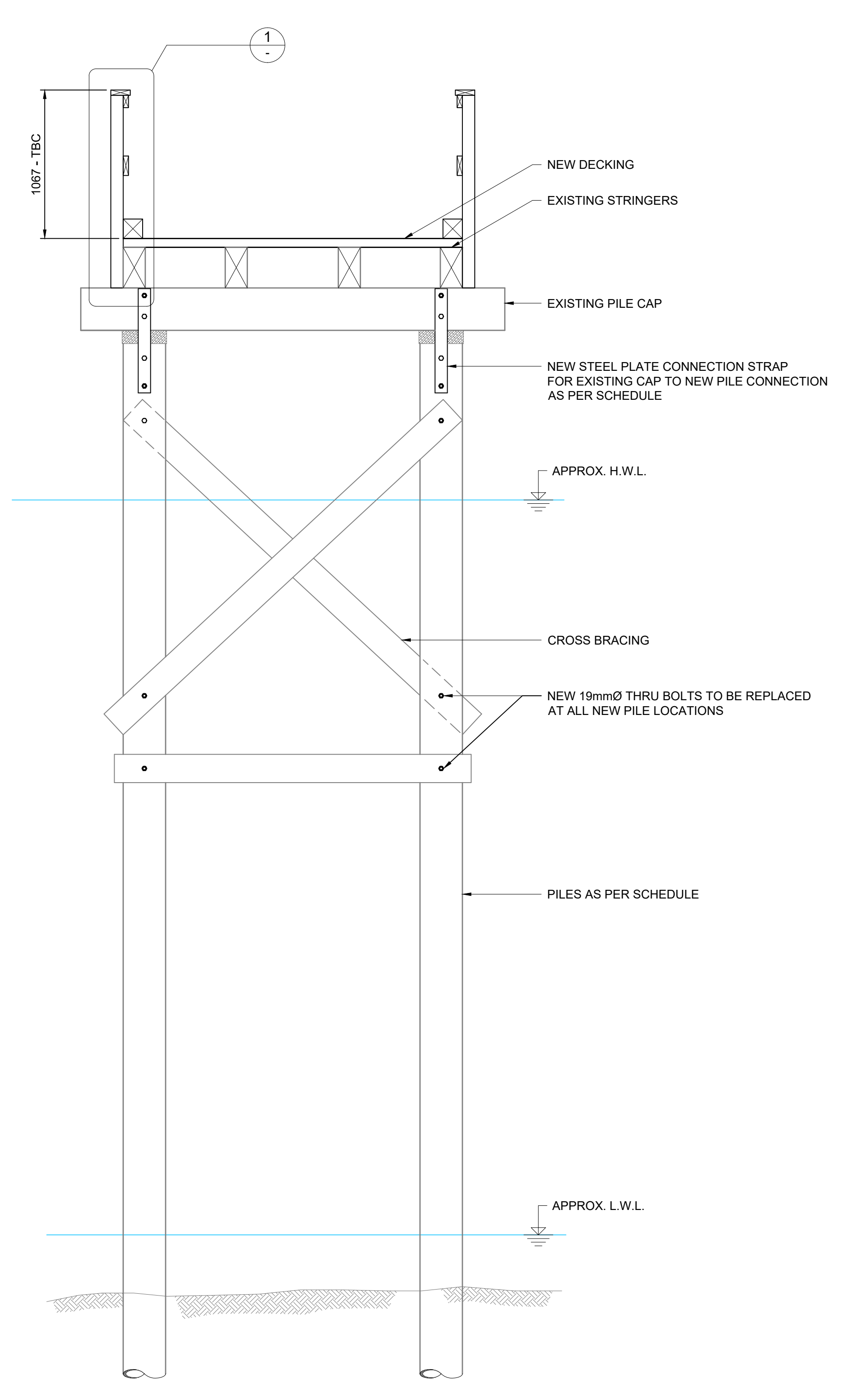
**SURGE NARROWS
NEW FLOAT DESIGN**

Drawing No.
S301

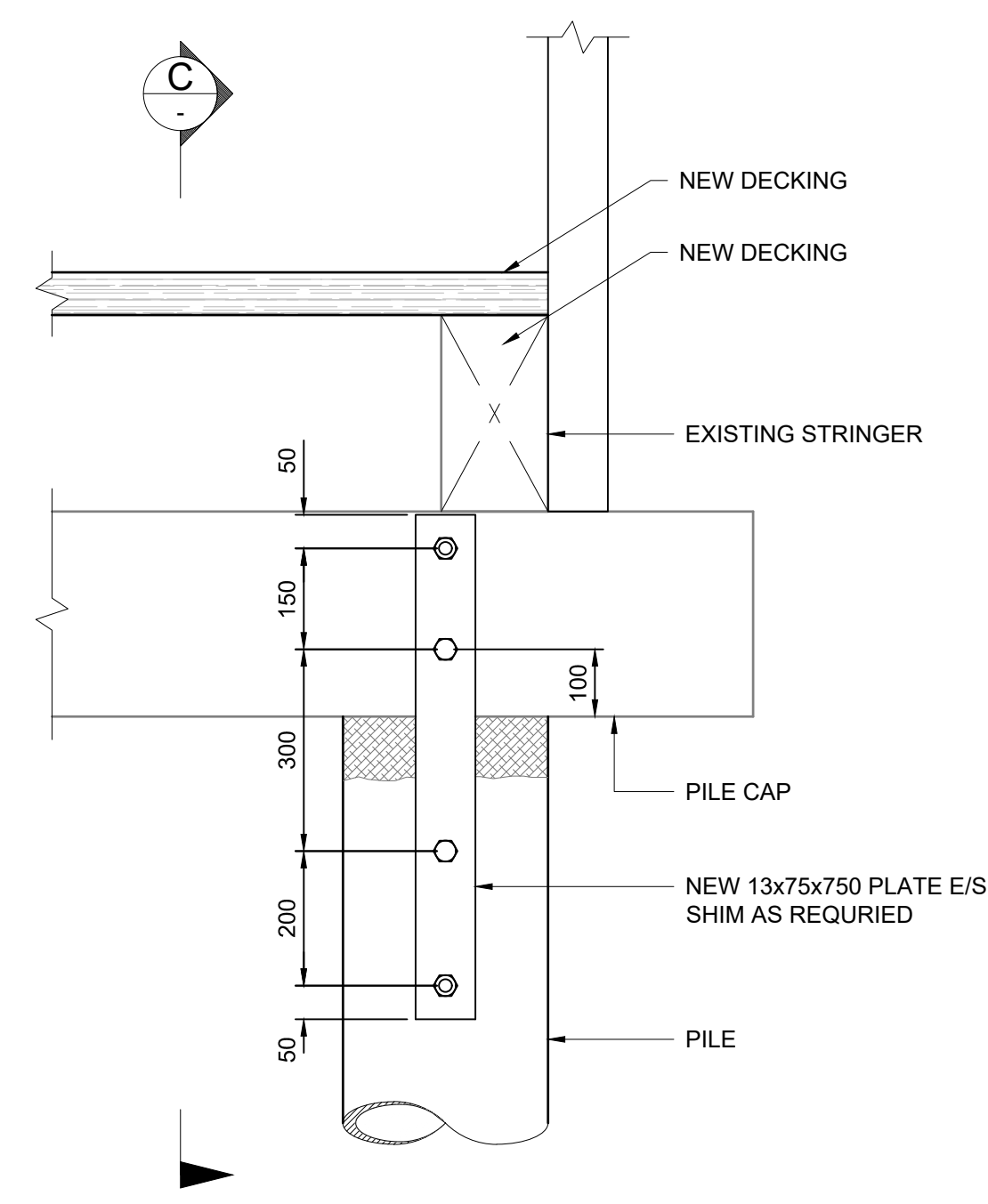
Project No.
2211-71343

Rev.
PC

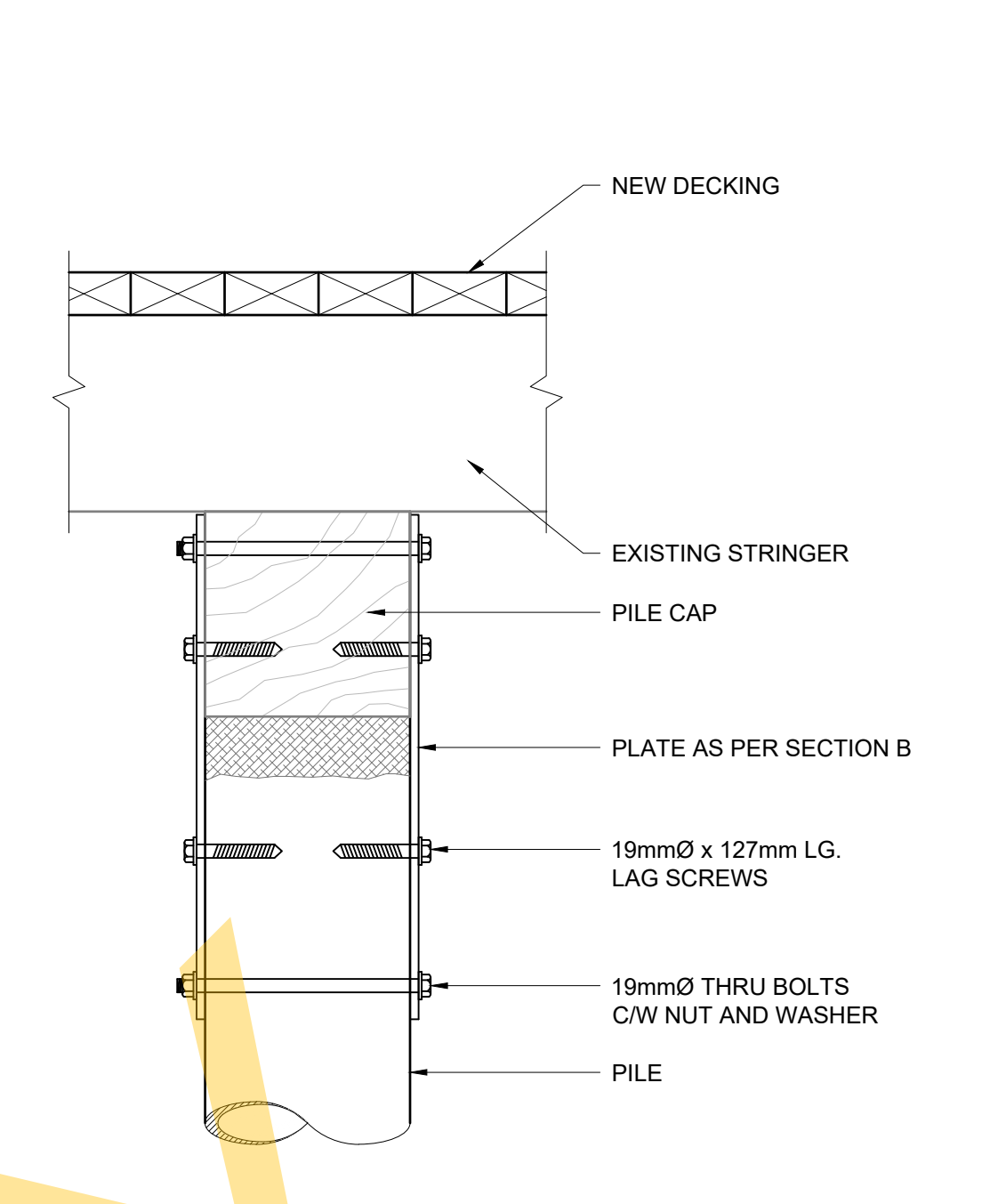
DESTROY ALL PRINTS BEARING PREVIOUS REVISION



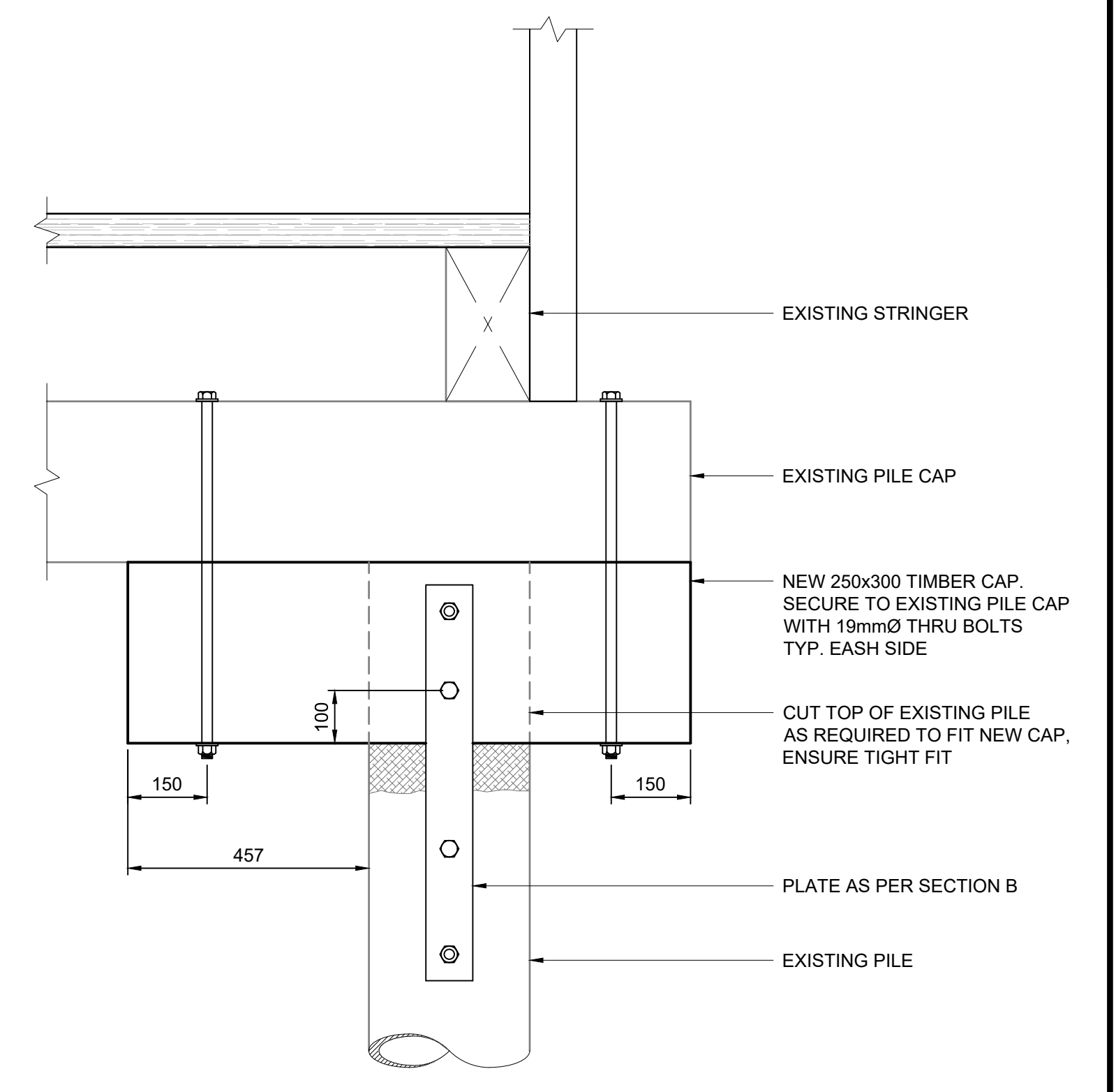
SECTION 1
SCALE 1:25
S100 S200 S300



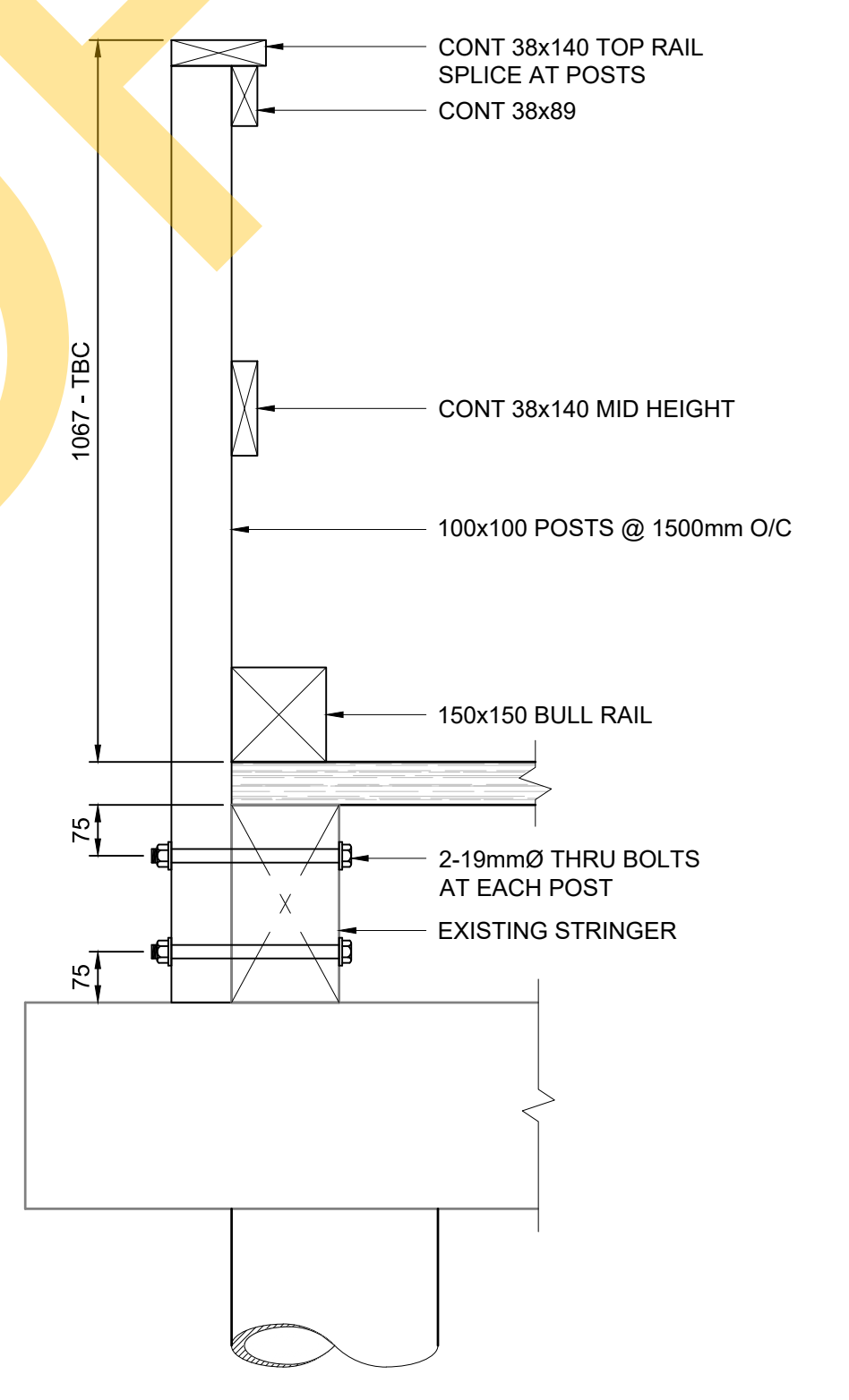
SECTION B
SCALE 1:10
S100 S200 S300



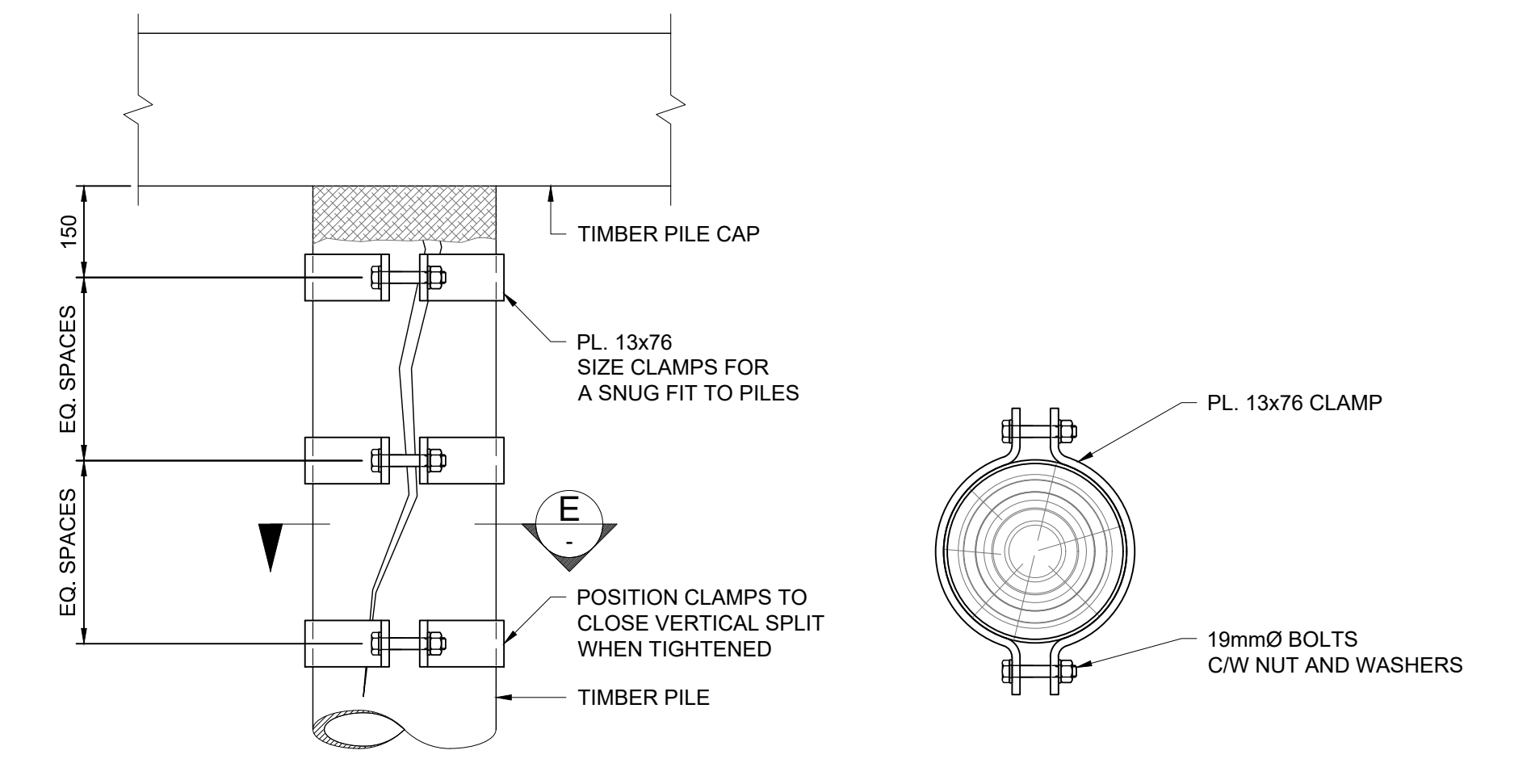
SECTION C
SCALE 1:10



SECTION D
SCALE 1:10
S100



DETAIL 1
SCALE 1:10



GALVANIZED STEEL CLAMPS
SCALE 1:10

SECTION E
SCALE 1:10
S100

NOTES:
1. FOR GENERAL NOTES SEE S100

NOTE:
CONTRACTOR TO CONFIRM TRUE PILE DIAMETER PRIOR TO FABRICATION OF CLAMPS.

Rev	Date	Description	App'd
PC	2022-12-02	ISSUED FOR 100% REVIEW	GH
PB	2022-11-11	ISSUED FOR 90% REVIEW	GH
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Drawn: JTH
Drawing Check: MF
Designed: HH
Design Check: MF
Approver: GH

PRELIMINARY
NOT FOR
CONSTRUCTION

STRATHCONA REGIONAL DISTRICT

TYPICAL PIER SECTION
AND REPAIR DETAILS

Drawing No.
S400

Project No.
2211-71343

Rev.
PC



BYLAW NO. 487

A BYLAW TO ESTABLISH A WHARVES SERVICE WITHIN ELECTORAL AREA C (DISCOVERY ISLANDS-MAINLAND INLETS)

WHEREAS the Regional District may, pursuant to the *Local Government Act*, operate any service that it considers necessary or desirable for all or part of the Regional District;

AND WHEREAS the Regional Board wishes to establish a wharves service for the benefit of Electoral Area C (Discovery Islands-Mainland Inlets);

AND WHEREAS the approval of the electors has been obtained in accordance with s.345 of the *Local Government Act*,

NOW THEREFORE the Board of Directors of the Strathcona Regional District, in open meeting assembled, enacts as follows:

Service Established

1. There is hereby established a service to be known as the Electoral Area C wharves service.

Participating Area

2. The participating area for the service is Electoral Area C (Discovery Islands-Mainland Inlets).

Service Area Boundaries

3. The boundaries of the service area encompass all of Electoral Area C (Discovery Islands-Mainland Inlets).

Service Described

4. The service hereby established includes the construction, operation, maintenance and improvement of wharf facilities and related infrastructure located at Owen Bay, Port Neville and Surge Narrows.

Cost Recovery

- 5. The costs of the service may be recovered by one or more of the following methods:
 - (a) property value taxes imposed in accordance with s.378 of the *Local Government Act*;
 - (b) fees and charges imposed under s.397 of the *Local Government Act*;
 - (c) revenues received by way of agreement, enterprise, gift, grant or otherwise; and
 - (d) revenues raised by other means authorized under the *Local Government Act* or another Act.

Maximum Annual Requisition

- 6. The maximum amount that may be requisitioned annually for the service is the greater of \$137,187 or the equivalent of \$0.0935 per \$1,000 of net taxable assessments within the service area.

Citation

- 7. This bylaw may be cited for all purposes as Bylaw No. 487, being Electoral Area C Wharves Service Establishing Bylaw 2023.

READ A FIRST TIME ON THE DAY OF , 2023

READ A SECOND TIME ON THE DAY OF , 2023

READ A THIRD TIME ON THE DAY OF , 2023

APPROVED BY THE INSPECTOR OF MUNICIPALITIES ON THE DAY OF , 2023

APPROVED BY THE ELECTORS ON THE DAY OF . 2023

RECONSIDERED, FINALLY PASSED AND ADOPTED ON THE DAY OF , 2023

Chair

Corporate Officer



STAFF REPORT

DATE: January 6, 2023 **FILE:**

TO: Chair and Directors,
Regional Board

FROM: Dave Leitch
Chief Administrative Officer

RE: BYLAW NO. 461 – ELECTORAL AREA C WHARVES SERVICE

PURPOSE/PROBLEM

To clarify the alternatives available to the Board when considering the matter of the proposed Electoral Area C wharves service.

EXECUTIVE SUMMARY

At its September 21, 2022 meeting the Board considered the attached report and deferred further consideration of the matter until January 2023.

ALTERNATIVES

Since most of the Board directors are newly elected or appointed since this matter was last considered it is worthwhile to reiterate the alternatives currently before the Board with respect to this matter.

Option A – elector assent by voting. The ability to exercise this option has expired.

Option B – abandon the service proposal. This would suggest that the wharves infrastructure would be returned to Transport Canada in accordance with the contribution and transfer of assets agreement. More details are provided in the deferred report.

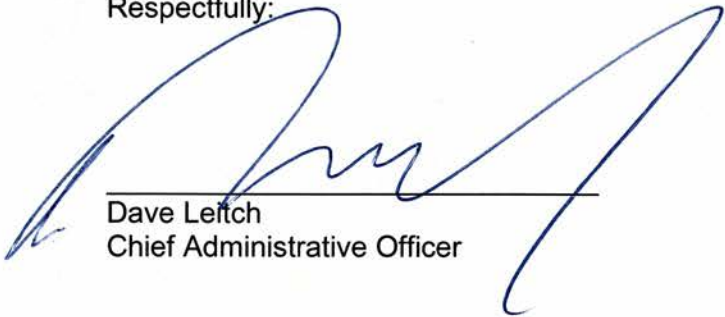
Option C – develop a new service establishing bylaw that will be seen more favourably by ratepayers in Electoral Area C. This may require that additional consultation with users and other interested parties be conducted from the outset to ensure that identified objectives of the service can be met by the Regional District.

While the Board is under no obligation to decide this issue at the current meeting, it would be useful from a workplan perspective to determine the Board's preference without undue delays.

RECOMMENDATION

THAT the report from the Chief Administrative Officer be received.

Respectfully:



Dave Leitch
Chief Administrative Officer

Prepared by: *T. Yates, Corporate Services Manager*

Attachments: Copy of September 16, 2022 report to the Board

COPY



STAFF REPORT

DATE: September 16, 2022

FILE:

TO: Chair and Directors,
Regional Board

FROM: Dave Leitch
Chief Administrative Officer

RE: BYLAW NO. 461 – ELECTORAL AREA C WHARVES SERVICE

PURPOSE/PROBLEM

To consider the results of the alternative approval process that was recently conducted for Bylaw No. 461, being Electoral Area C Wharves Service Establishing Bylaw 2022.

EXECUTIVE SUMMARY

At its April 27, 2022 meeting the Board considered the matter of establishing a wharves service for Electoral Area C and passed the following resolution:

Abram/Leigh: SRD 364/22

THAT approval of the electors for Bylaw No. 461 be authorized to be obtained using an alternative approval process.

Following approval by the Inspector of Municipalities in June, the Board considered the attached report and initiated the alternative approval process (AAP) for Bylaw No. 461. Public notices regarding the proposal were subsequently displayed prominently on the Regional District's website, public notice posting board, and in local media publications in accordance with the requirements of the *Community Charter*. At the conclusion of the elector response period the Regional District had received more than enough objections to prevent Bylaw No. 461 from being adopted without first obtaining elector approval by an assent voting process.

The results of the AAP have confirmed that at least 10% of the ratepayers in Electoral Area C are opposed at this time to funding the operation of these public wharf assets, and it is possible that much of that opposition results from misinformation or a lack of understanding of the initiative. The opposition to the service proposal was well organized and was likely fueled by public statements made by the elected director questioning the proposal and the Regional District's motivations for creating the service. This despite having sponsored the resolutions to advance the initiative and supporting the AAP process at Board meetings with the understanding that the wharves initiative would be cost neutral for local ratepayers. If the director had additional concerns about the proposal, those should have been addressed before placing the matter in front of local ratepayers for their approval.

This leaves the Board with 2 choices for dealing with the proposed Electoral Area C wharves service. It can either seek elector approval using an assent voting process or it can abandon further efforts to establish a wharves service. An analysis of these options is included below.

Option A (Elector Assent by Voting). Pursuant to s.174 of the *Local Government Act*, general voting day for assent voting on a bylaw that was subject to an AAP must be held on a Saturday not later than 80 days following the AAP response deadline. Taking into account the statutory deadlines associated with public notifications, scrutineer appointments and other procedural requirements associated with assent voting, it is not possible to include Bylaw No. 461 for a decision in conjunction with the October 15 elections. Therefore, if the Board wishes to continue with the wharves service initiative, it will be necessary to introduce a new service establishing bylaw that considers the increased cost of seeking elector approval via a stand-alone assent voting process.

Option B (Abandon the Service Proposal) – Although the Board is currently supporting maintenance and operations of the Surge Narrows, Owen Bay and Port Neville wharf facilities through the Electoral Area administration service, this was always considered as an interim measure pending establishment of a wharves service. The current funding method would not be recommended for the longer term as such funding is neither assured on an annual basis nor is it appropriate that other electoral areas be required to contribute funding in support of local infrastructure from which they derive little or no benefit. This raises the possibility of returning the wharf assets in question to Transport Canada from whence they came. This would include the return of \$2,894,500 in funding that was initially provided to the Regional District when the wharves were divested by Transport Canada. The rationale for this position (as contemplated in the 2014 Transport Canada funding agreement) would be that the Regional District has used its best efforts to establish a wharves service but that it was unable to secure the approval of electors.

While it could be argued that the question of financial support for wharf infrastructure should have been put to the electors in 2014 before accepting ownership of these assets (as is the case with all other Regional District services), that did not happen in this case. Be that as it may, the Board is now faced with the question of how best to resolve the current situation since, if it is ultimately decided that the design and construction of wharves infrastructure is to continue, there is much to be done before the late 2024 deadline for use of the Transport Canada funding.

RECOMMENDATION

THAT the report from the Chief Administrative Officer be received.

Respectfully:



Dave Leitch
Chief Administrative Officer

BACKGROUND/HISTORY

For a number of years, the Regional District has been operating and maintaining wharves at various locations within Electoral Area C (Discovery Islands-Mainland Inlets). Several of these are physically connected to Regional District parks and are maintained through the Electoral Area C parks budget. In 2014 the Regional District entered into an agreement with Transport Canada whereby additional wharf facilities located at Owen Bay, Port Neville and Surge Narrows were acquired and, with Federal capital funding of \$2,894,500 the Regional District took on the responsibility for upgrading, operating and maintaining these facilities to appropriate public standards. Although the Regional District had no service in place to fund these facilities, operational and regular maintenance costs could be covered out of electoral area administration until a separate service was established. Further, the capital funding agreement allowed the Regional District to return the wharves to Transport Canada jurisdiction should it be unable to establish a service intended to cover operational and maintenance costs over the long term.

POLICY ANALYSIS

The elector response period for the Bylaw No. 461 AAP ran for 43 days in total and a minimum of 242 elector responses were required to prevent adoption of the bylaw without first obtaining approval of the electors by voting. At the conclusion of the AAP response period, a total of 424 elector response forms had been received by the Regional District. Analysis of those responses confirmed that 343 could easily be verified by reference to the current list of registered electors, while the rest either could not meet the elector requirements or would require further analysis before elector status could be determined. However, based on the information included with the response forms, it is believed that additional investigation would likely confirm that a number of the unvalidated 81 elector responses were submitted by persons who could qualify as electors. In any event, since the number of valid responses exceeds the minimum response requirements of the AAP, approval of the electors with respect to Bylaw No. 461 cannot be declared.

Therefore, in order to proceed with this initiative, the Board would first need to receive approval by holding an assent voting opportunity for electors of Electoral Area C. In the absence of an Electoral Area C wharves service being established to meet the ongoing operational and maintenance costs associated with these facilities, all such costs would have to be recovered through the Electoral Area Administration service budget. This would distribute the financial burden among all of the electoral areas and is not seen as a sustainable model as it conflicts with the fundamental philosophy of Regional District financing which requires that those who receive the benefit of a service are responsible to pay for its operation.

FINANCIAL IMPLICATIONS

In general terms, an AAP is often used to gauge the initial response by ratepayers to a service initiative since it is much less costly process in comparison to assent voting. If the AAP confirms support by ratepayers the costs associated with an assent voting process can be avoided. It should be kept in mind that an AAP only counts opposition to a proposal and does not allow supporters of the proposal to participate in the process.

In the present case, the costs spent on the wharves service AAP total approximately \$500 and have been covered by the Electoral Area C feasibility reserve fund. Should the Board decide to seek approval for the service by conducting an assent voting process, it is estimated that an additional \$15,000 - 20,000 will need to be spent. Those costs would also be recovered initially from the Electoral Area C feasibility reserve fund.

In the event it is decided to return the 3 wharf facilities to Transport Canada, the \$2,894,500 in Federal funds provided in 2014 would also need to be returned in accordance with the original divestiture agreement. Any shortfall in funding would be a financial liability against the Electoral Area administration service which covers all electoral area activities that are outside the scope of

a separate service. Approximately 1/3 of that shortfall would be charged against the Electoral Area C tax base according to the cost-sharing formula used for that service.

Had the wharves service initiative been approved, the cost to maintain these facilities would have been fully offset by reductions in the Electoral Area C parks budget, thereby not affecting the amount of taxes required from local ratepayers. It is possible that some of the AAP respondents were not aware of this fact or had other cost issues related to the proposal. Based on various emails, social media posts, and newspaper editorials published during the AAP response period it is possible that some respondents objected to Bylaw No. 461 because of a mistrust of Regional District motives or because they were misinformed about the rationale for the service.

LEGAL IMPLICATIONS

The concept of operating and maintaining public wharves under either a parks service or electoral area administration service is problematic from a legal perspective and was the primary reason for advancing the service establishment initiative. The Regional District recognized this fact in 2014 when it executed the Transport Canada agreement which stated that it would use best efforts to establish a separate service for funding wharves infrastructure. The prospect of continuing to operate and maintain these wharves under the existing arrangement is clearly not in alignment with the legal framework established for regional district financial operations. It is therefore in the public interest to determine whether the Regional District will be establishing a service for operating wharves and, if not, to consider returning the assets and funding acquired under the divestiture agreement back to Transport Canada.

Prepared by: T. Yates, Corporate Services Manager

Attachments: September 6, 2022 Corporate Officer certification
Public Notice - Alternative Approval Process for Bylaw No. 461
Bylaw No. 461
June 30, 2014 letter agreement between SRD and Transport Canada
Copy of June 24, 2022 report to the Board



BYLAW NO. 461

CORPORATE OFFICER'S CERTIFICATION

I, Thomas Lloyd Yates, Corporate Officer for the Strathcona Regional District, hereby certify as follows with respect to Bylaw No. 461, being Electoral Area C Wharves Service Establishing Bylaw 2022:

1. THAT Bylaw No. 461 was given third reading at a regular scheduled meeting of the Board of Directors of the Regional District held on June 15, 2022;
2. THAT the Board of Directors has, by Res. SRD 364/22, authorized the approval of the electors for Bylaw No. 461 to be obtained by an alternative approval process;
3. THAT the total number of electors within the area affected by Bylaw No. 461 was fairly determined to be 2,419;
4. THAT notice of the alternative approval process was published on July 6, 2022 and July 13, 2022 in accordance with the requirements of the *Community Charter*;
5. THAT elector response forms were made available to the public via the Regional District's website and at the Regional District corporate office from June 30, 2022 until August 11, 2022;
6. THAT 424 elector response forms were received prior to the August 11, 2022 deadline for receiving elector response forms;
7. THAT 343 of the elector response forms received have been verified as validly completed by qualified electors; and
8. THAT more than 10% of the estimated number of eligible electors affected by Bylaw No. 461 have submitted elector response forms before the above noted deadline.

In accordance with s.86 of the *Community Charter*, I hereby declare that the approval of the electors with respect to Bylaw No. 461 has not been obtained.

DATED this 6th day of September, 2022.

A handwritten signature in black ink, appearing to read "Thomas Lloyd Yates", written over a horizontal line.

Corporate Officer

NOTICE OF ALTERNATIVE APPROVAL PROCESS

BYLAW NO. 461

ELECTORAL AREA C WHARVES SERVICE

Public notice is hereby given that the Board of Directors for the Strathcona Regional District may proceed with final passage and adoption of Bylaw No. 461, being Electoral Area C Wharves Service Establishing Bylaw 2022, at its meeting of Wednesday, August 17, 2022 unless at least 10% of the eligible electors within the proposed service area submit elector response forms not later than 4:30 p.m. on August 11, 2022.

Bylaw No. 461 would establish a service for funding the operation and maintenance of wharf infrastructure within Electoral Area C (Discovery Islands-Mainland Inlets).

The number of eligible electors within the boundaries of the proposed Electoral Area C wharves service area has been fairly determined to be 2,419 and the number of valid elector response forms required to prevent the adoption of Bylaw No. 461 without first obtaining the assent of the electors by voting is 242. Elector response forms must be in the form approved by the Regional Board and may be obtained online at www.srd.ca or in person at the Regional District office during regular office hours. Only persons who qualify as electors within Electoral Area C of the Strathcona Regional District are entitled to sign and submit an elector response form.

Further information regarding Bylaw No. 461 or this alternative approval process may be obtained at www.srd.ca or by contacting the Regional District.

T. Yates,
Corporate Officer



990 Cedar Street, Campbell River, BC V9W 7Z8
Tel: 250-830-6700 • Fax: 250-830-6710
Toll-free: 1-877-830-2990

www.srd.ca



BYLAW NO. 461

A BYLAW TO ESTABLISH A WHARVES SERVICE WITHIN ELECTORAL AREA C (DISCOVERY ISLANDS-MAINLAND INLETS)

WHEREAS the Regional District may, pursuant to the *Local Government Act*, operate any service that it considers necessary or desirable for all or part of the Regional District;

AND WHEREAS the Regional Board wishes to establish a wharves service for the benefit of Electoral Area C (Discovery Islands-Mainland Inlets);

AND WHEREAS the approval of the electors has been obtained in accordance with s.345 of the *Local Government Act*,

NOW THEREFORE the Board of Directors of the Strathcona Regional District, in open meeting assembled, enacts as follows:

Service Established

1. There is hereby established a service to be known as the Electoral Area C wharves service.

Participating Area

2. The participating area for the service is Electoral Area C (Discovery Islands-Mainland Inlets).

Service Area Boundaries

3. The boundaries of the service area encompass all of Electoral Area C (Discovery Islands-Mainland Inlets).

Service Described

4. The service hereby established includes the construction, operation, maintenance and improvement of wharf facilities and related infrastructure.

Cost Recovery

5. The costs of the service may be recovered by one or more of the following methods:
 - (a) property value taxes imposed in accordance with s.378 of the *Local Government Act*,
 - (b) fees and charges imposed under s.397 of the *Local Government Act*,

- (c) revenues received by way of agreement, enterprise, gift, grant or otherwise; and
- (d) revenues raised by other means authorized under the *Local Government Act* or another Act.

Maximum Annual Requisition

- 6. The maximum amount that may be requisitioned annually for the service is \$50,000 or the equivalent of \$0.0397 per \$1,000 of net taxable assessments within the service area, whichever is greater.

Citation

- 7. This bylaw may be cited for all purposes as Bylaw No. 461, being Electoral Area C Wharves Service Establishing Bylaw 2022.

READ A FIRST TIME ON THE 27TH DAY OF APRIL, 2022

READ A SECOND TIME ON THE 27TH DAY OF APRIL, 2022

READ A THIRD TIME ON THE 15TH DAY OF JUNE, 2022

APPROVED BY THE INSPECTOR OF MUNICIPALITIES ON THE 21ST DAY OF JUNE, 2022

APPROVED BY THE ELECTORS ON THE DAY OF . 2022

RECONSIDERED, FINALLY PASSED AND ADOPTED ON THE DAY OF , 2022

Chair

Corporate Officer

