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SOUTHERN GULF ISLANDS HARBOURS COMMISSION
Notice of a meeting on **Friday, October 27, 2017** at 9 am
Saanich Peninsula Health Unit, 2170 Mt. Newton X Road, Saanichton, BC

D. Hargreaves, N. Pender Island
D. Maude, Mayne Island
J. Hall, Piers Island
B. Mabberley, Galiano Island
L. Peck, Saturna Island
R. Fenton, S. Pender Island
D. Howe, SGI EA Director

AGENDA

1. Approval of the Agenda

2. Adoption of the Minutes of the Meeting held September 22, 2017

3. Chair's Remarks

4. Presentations/Delegations
   - BC Ambulance Service re: Swartz Bay Dock Use

5. Correspondence
   - Email dated October, 22, 2017, regarding Port Browning Dock

6. 2017 Southern Gulf Islands Harbours Capital Projects – Recommendation to Award (Report #SGIHC 2017-06)

7. Sturdies Bay Wharfinger RFP Update (Verbal)

8. Miners Bay Dock – CRD/BC Ferries Update (Verbal)

9. Dock Operations Reports – Attached

10. New Business

11. Adjournment

To ensure a quorum, please advise Margaret at 250.474.9606 if you or your alternate cannot attend.

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Minutes of a Meeting of the Southern Gulf Islands Harbour Commission
Held September 22, 2017 at the Saanich Peninsula Health Unit, Mt. Newton X Road, Victoria, BC

PRESENT: Commission: B. Mabberley, Galiano Island; David Maude, Mayne Island; B. Young, Piers Is.; L. Peck, Saturna Island; Robert Fenton, S. Pender Island; D. Howe, Regional Director
Staff: Ted Robbins, General Manager, Integrated Water Services; Dan Robson, Manager, Saanich Peninsula and Gulf Islands Operations; Dale Puskas, Manager, Capital Works; M. Brown (recorder); Peter Binner, Dock Operations Coordinator
ABSENT: Dave Hargreaves
PUBLIC: 4

The meeting was called to order at 9:06 am.

1. Approval of Agenda
MOVED by Robert Fenton, **SECONDED** by, Larry Peck
that the agenda be approved with the addition of the following: (a) Lyall Harbour seaplane dock, (b) wharfinger status and (c) spill response.

CARRIED

2. Adoption of Minutes

MOVED by Bryce Young, **SECONDED** by, Larry Peck
that the minutes of the June 9, 2017 meeting be adopted. CARRIED

3. Chair's Remarks – The Chair noted that this would be Bryce Young's final meeting on the Commission and thanked him for his dedication to Piers Island.

4. Presentations/Delegations - John Hall (for Brian Wheeler) re Piers Island Dock
Mr. Hall handed out photocopies of the dock and gave background information on the numbers of dock users and residents, its exposure to marine traffic and southeast winds. He further stated that boats are rafted 2 or 3 deep in the summer and are being damaged and also noted his concern re people getting injured. He would like to have some consultation re user experience.

Ted Robbins stated that the tenders were closing for this year's work on Piers Island and that they would come back to the commission. Mr. Hall was shown the recent plans for the dock which also included the lease area.

5. Correspondence

a) Dan MacDonald, Seair Seaplanes, July 12, 2017, regarding Mayne Island seaplance dock relocation

Commission members noted some good points raised in the letter.

b) Brian Wheeler, July 16, 2017, regarding Piers Island dock

This material was covered in the presentation by Mr. Hall. Peter Binner confirmed that the problem with the Piers Island and Montague dock ladders had been resolved.

c) Correspondence regarding Montague Harbour Dock

Dan Robson reported on the wharfinger's engagement with dock users and his desire for enforcement of CRD bylaws regarding boats tying up without identification or payment of fees.

Commission members noted this problem also happens at other CRD docks. It was agreed that further discussion would take place during an In Camera meeting.

d) Spill Response Equipment Storage

Ben reported that the Western Canada Marine Response Corporation has been mandated to work with local coastal communities in the event of an oil spill and that they be able to deploy containment booms. A pilot project is underway in Whaler Bay. The initial proposal was for a sea can shipping container on a 30'x12' float being attached to the dock.

Commission members discussed the issue and suggested using the wharfhead or installation of a mooring. It was reported that funds had been allocated to Regional Director Mike Hicks for the protection of Sooke Harbour. Ted Robbins noted that this may be a topic for the EA Services Committee and that he will contact Dirctor Hicks.

6. Miners Bay Dock

Ted Robbins reviewed his meeting with BC Ferries CEO, Mark Collins, and stated that there will be an on site meeting where they will provide their opinion on potential upgrades.

Commission members questioned the issue of ferry speed reduction in Active Pass and Ted reported that this has happened in other areas but ferry captains will be asked to confirm what has happended in Active Pass in the past. Commission members questioned if the DOT should be involved. Further discussion ensued on establishment of a trust fund. It was also noted that BC Ferries and Islands Trust were not included in the transportation plans for the area.

7. Operating Budget Update - Attachment

Dan provided an updated information package and noted that the operations budget is healthy except in the administrative expenses due to the divestiture process.

8. Wharfinger Agreement Status

Ted reported that all of the wharfinger agreements will need to be renewed at the end of this year. The wharfinger at Sturdies Bay has resigned. Further discussion will take place at the in camera meeting.

9. Dock Operations Reports - Attachment

Peter Binner noted that there are a lot of small jobs needing to be done. Peter reviewed the report, noting floats requiring repairs to bull rails and moving of a light standard at Port Washington. It was reported that there is an issue at Horton Bay re the length of the loading

zone. Dan stated that maintenance items identified by Peter can just be done if there are no budget implications.

10. 2017 Capital Plan Work Schedule – Attachment

Dale reported that the 2016 Change Orders had been completed. It appears there will be a budget surplus to go to the Reserve Fund. The schedule notes work to be done on Piers, Is., Montague Hbr. and Miners Bay.Ted stated that the plan is to bring tenders back to the commission

11. Lyall Harbour Dock Divestiture Update

Ted stated that the divestiture process has been put on hold due to the fuel dock infrastructure issue. Commission members discussed the future longevity of a fuel dock on Saturna Island. Currently the issue is between a private business and the DFO.

12. New Business

Lyall Harbour Seaplane Dock

Larry Peck provided information and spoke of the safety concerns raised re SE winds and the current placement of the light standard on the dock. An offer of an 8x16 ft float and funds for its installation has been received to help alleviate safety risks for seaplanes. It was noted that we would have to request DFO approval and that some technical information would be required. Larry suggested that the item be tabled.

Director Howe left the meeting, 11:40am.

13. Motion to Close the Meeting

MOVED by Robert Fenton, **SECONDED** by Bryce Young that the SGIHC close the meeting in accordance with the Community Charter, Part 3, s. 90 (1)(a) *personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality;*

CARRIED

The Committee closed the meeting at 11:42 am.
The regular meeting of the SGIHC reconvened at 12.10 pm.

14. Adjournment

MOVED by Robert Fenton **SECONDED** by Larry Peck that the meeting adjourn, 12:10 pm.
CARRIED

From: mklein@telus.net [mailto:mklein@telus.net]
Sent: Sunday, October 22, 2017 7:22 PM
To: crdreception <crdreception@crd.bc.ca>
Subject: Contact Us - Submission

The following message was received through the form at 'https://www.crd.bc.ca/contact-us?r=crd-reception'. Neither the name nor the e-mail address can be confirmed as accurate.

••

Your Name:

Your Email Address:
mklein@telus.net

Message:
You should update your website about the dock in Port Browning. Your website says that "most" of the dock is taken up by long term moorage...when in fact the "entire" dock is taken up with permanent long term moorage, in fact they are even rafted now and there is absolutely NO ROOM for anyone else, let alone a visitor or boater passing thru. You should have a section of the dock that is exempt from long term moorage so at least someone else can come in from time to time...and the fees you charge for long term are so low I'll bet you have a waiting list a mile long of people waiting to sign on. Pretty bad state of affairs down there, very disappointing and hardly fair to the rest of us out there!

Submitted at:10/22/2017 7:22:02 PM
Submitted via:https://www.crd.bc.ca/contact-us?r=crd-reception
User Agent:Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_6) AppleWebKit/604.1.38 (KHTML, like Gecko) Version/11.0 Safari/604.1.38
User Host Address:207.81.236.237

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Agenda Item #6
REPORT #SGIHC 2017-06

REPORT TO SOUTHERN GULF ISLAND HARBOURS COMMISSION
MEETING OF FRIDAY, OCTOBER 27, 2017

SUBJECT **RECOMMENDATION TO AWARD 2017 CAPITAL PROJECTS CONTRACTS 2017-305 , 2017-306 & 2017-307**

ISSUE

Seek approval for award of contracts 2017-305 Piers Island, 2017-306 Miners Bay and 2017-307 Fernwood Dock and Montague Harbour.

BACKGROUND

In 2015 the CRD commissioned Moffatt & Nichol to conduct a condition assessment of the 11 facilities within the Southern Gulf Island Harbours (SGIH) service. Moffatt & Nichol recommended numerous repairs, timelines for repairs and recommended future funding requirements outside of the 5-year period.

The approved 2017 capital plan identified three capital projects for the Miners Bay, Piers Island and Montague Harbour facilities. Additionally, the Fernwood Dock on Salt Spring Island, not within the SGIH service area, required work, and to realize administrative efficiencies and try to leverage scale of economies was included in tendering process. The four facilities were inspected by Moffatt & Nichol, the wharfingers and CRD staff in May 2017 to confirm scope of works for each facility.

The following Invitation to Tenders were issued, and closed September 22, 2017:

2017-305: 2017 Dock Infrastructure Improvements for Piers Island
2017-306: 2017 Dock Infrastructure Improvements for Miners Bay, Mayne Island
2017-307: 2017 Dock Infrastructure Improvements for Fernwood Dock, Salt Spring Island and Montague Harbour, Galiano Island

Three tenders were received for Piers Island and Miners Bay, and only two tenders were received for Montague Harbour and Fernwood Dock. A summary of the tenders received is as follows:

	Ruskin Construction	**Heavy Metal Marine**	**Pacific Industrial Marine**
Piers Island	$169,917.30	$89,950.77	**$78,748.95**
Miners Bay	$151,090.80	**$78,310.58**	$122,472.00
Montague Harbour & Fernwood Dock	**N/A**	**$150,226.55**	$195,964.65

The tender submissions have been evaluated and confirmed to be valid. Moffatt & Nichol have recommended award of the following:

2017-305	2017 Dock Infrastructure Improvements for Piers Island	Pacific Industrial
2017-306	2017 Dock Infrastructure Improvements for Miners Bay	Heavy Metal
2017-307	2017 Dock Infrastructure Improvements for Fernwood Dock, Salt Spring Island and Montague Harbour, Galiano Island	Heavy Metal

Piers Island Dock Configuration

Required works and received bids are less than anticipated in 2015 when the 5-year capital plan was projected. Staff have evaluated whether it is possible to reconfigure the dock as per Moffatt & Nichol's January 12, 2017 report or add an additional float. The two options included: option 1, add an additional 40 ft float section to the existing dock; or option 2, reconfigure the dock to a single 100 ft long dock with a 30 ft float at the end. Figures of option 1 and option 2 are in Appendix A. Comparison of key points and estimated costs are summarized below:

	Option 1	**Option 2**
Approx. Berth Length	220 ft	220 ft
Easy Future Expansion	No	Yes
Estimated Costs*****	$145,000	$475,000

***** Includes Engineering, permitting and administrative costs, excludes required approach and gangway works

Both options result in the same amount of approximate berth length, but the orientation under option 2 could allow for future expansion without majority of the float removal and should have reduced impacts due to ferry induced waves. Option 2 also assumed that the old floats would be removed and all new timber floats installed, there may be cost savings if the existing floats were rehabilitated.

Appendix B is a summary of the 2017 Capital Projects construction budget with lowest bids applied. Only the required abutment works and soft costs such mobilization have been applied for Piers Island. As illustrated in Appendix B approximately $547,000 of the 2017 Capital project budget is remaining.

Miners Bay Dock Configuration

In addition to the Piers Island dock facility reconfiguration, staff have previously investigated reconfiguration of the Miners Bay dock based upon a vessel wake assessment. Findings were presented at the January 27, 2017 commission meeting. A summary of the reconfiguration options are as follows:

	Rubble Mound Breakwater	**Floating Breakwater**	**Pile Panel Breakwater**	**Wave Baffles and Relocated Float**
	$4,595,000	**$1,991,000**	**$2,617,000**	**$676,000**
Advantages	• Excellent protection from wind and waves; • Very robust construction; and • Low maintenance.	• Allows circulation of current into the protected area • Low footprint on seabed for anchoring system; • Could provide additional moorage • Permitting may be easier to obtain; • Robust construction • Low maintenance depending on materials used	• Good protection from wind and waves; • Allows some circulation of current into the protected area; • Low footprint on seabed for anchoring system; • Could provide additional moorage ; • Permitting may be easier to obtain; • Robust construction; • Low maintenance depending on materials used	• Very good protection from wind and waves; • Allows some circulation of current into the protected area • Low footprint on seabed for new pile supports for access platform and floats; • No modification of the existing water lot is required and • Lowest cost option to construct.

Disadvantages	• Very expensive to construct; • May obstruct ocean views from shore; • Occupies a large footprint on the sea bed and will exceed existing water lot limits; • Permitting may be difficult to obtain	• Expensive to construct; • Existing water lot will have to be expanded • May not be effective at wave attenuation with longer wave length incident waves.	• Expensive to construct; • Existing water lot will have to be expanded and, • May obstruct ocean views from shore.	• May have some conflict activities at the wharf head with nearby existing float access.

- Estimates costs include 30% construction contingency but do not include project contingency or project management.

Staff have been in discussions with BC Ferries regarding the potential to assist the CRD with the upgrades.Staff will have met with BC Ferries to discuss options, a summary of the discussion will be presented at the October 27th, 2017 commission meeting.

ALTERNATIVES

Alternative 1

That the Southern Gulf Islands Harbours Commission:

a) Approve award of 2017-306 2017 Dock Infrastructure Improvements for Miners Bay to Heavy Metal Marine for $78,310.58.
b) Approve award of 2017-307 2017 Dock Infrastructure Improvements for Fernwood Dock, Salt Spring Island and Montague Harbour, Galiano Island to Heavy Metal Marine for $150,226.55.
c) Approve award of 2017-305 2017 Dock Infrastructure Improvements for Piers Island to Pacific Industrial Marine for $78,748.95.

Alternative 2

That the Southern Gulf Islands Harbours Commission request additional information from staff.

IMPLICATIONS

Alternative 1
The 2017 Capital Projects budget is sufficient to complete the works as planned. Carrying out the work as planned will maintain the level of service and improve user safety. However, the Piers Island works will not address capacity and wave issues. Completion of the works is required to maintain the level of service at each dock facility.

Alternative 2
Staff will present the requested information at the next Commission meeting.

CONCLUSION

The Southern Gulf Islands Harbours service area encompasses eleven facilities throughout the Southern Gulf Islands. Continued maintenance and improvements are required to ensure the expected level of service is maintained and that required services can continue.

RECOMMENDATION

That the Southern Gulf Islands Harbours Commission:

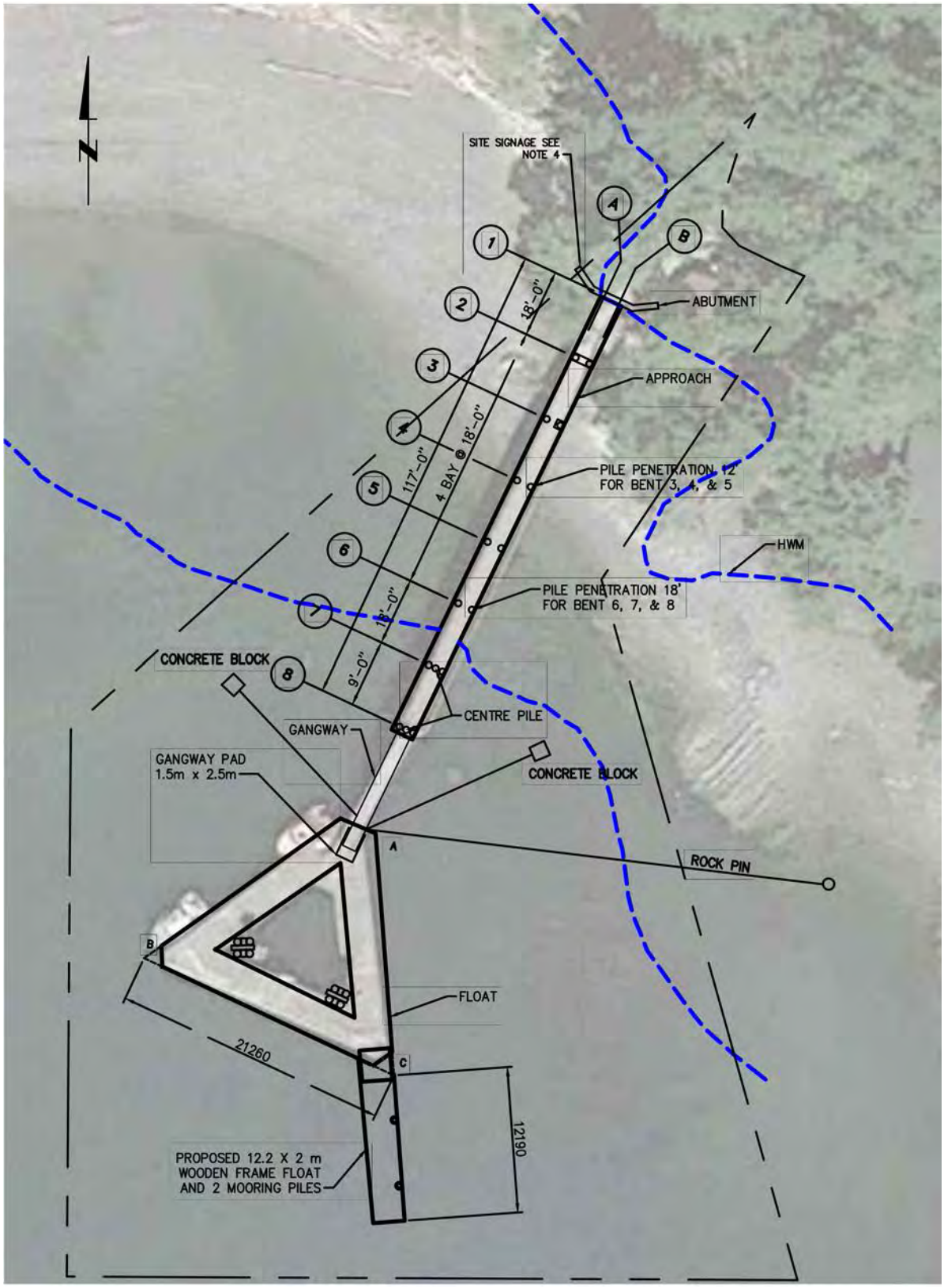
a) Approve award of 2017-306 2017 Dock Infrastructure Improvements for Miners Bay to Heavy Metal Marine for $78,310.58
b) Approve award of 2017-307 2017 Dock Infrastructure Improvements for Fernwood Dock, Salt Spring Island and Montague Harbour, Galiano Island to Heavy Metal Marine for $150,226.55.
c) Approve award of 2017-305 2017 Dock Infrastructure Improvements for Piers Island to Pacific Industrial Marine for $78,748.95.

Submitted by:	Dale Puskas, P.Eng., Manager, Capital Projects
Concurrence:	Ted Robbins, BSc, CTech., General Manager, Integrated Water Services

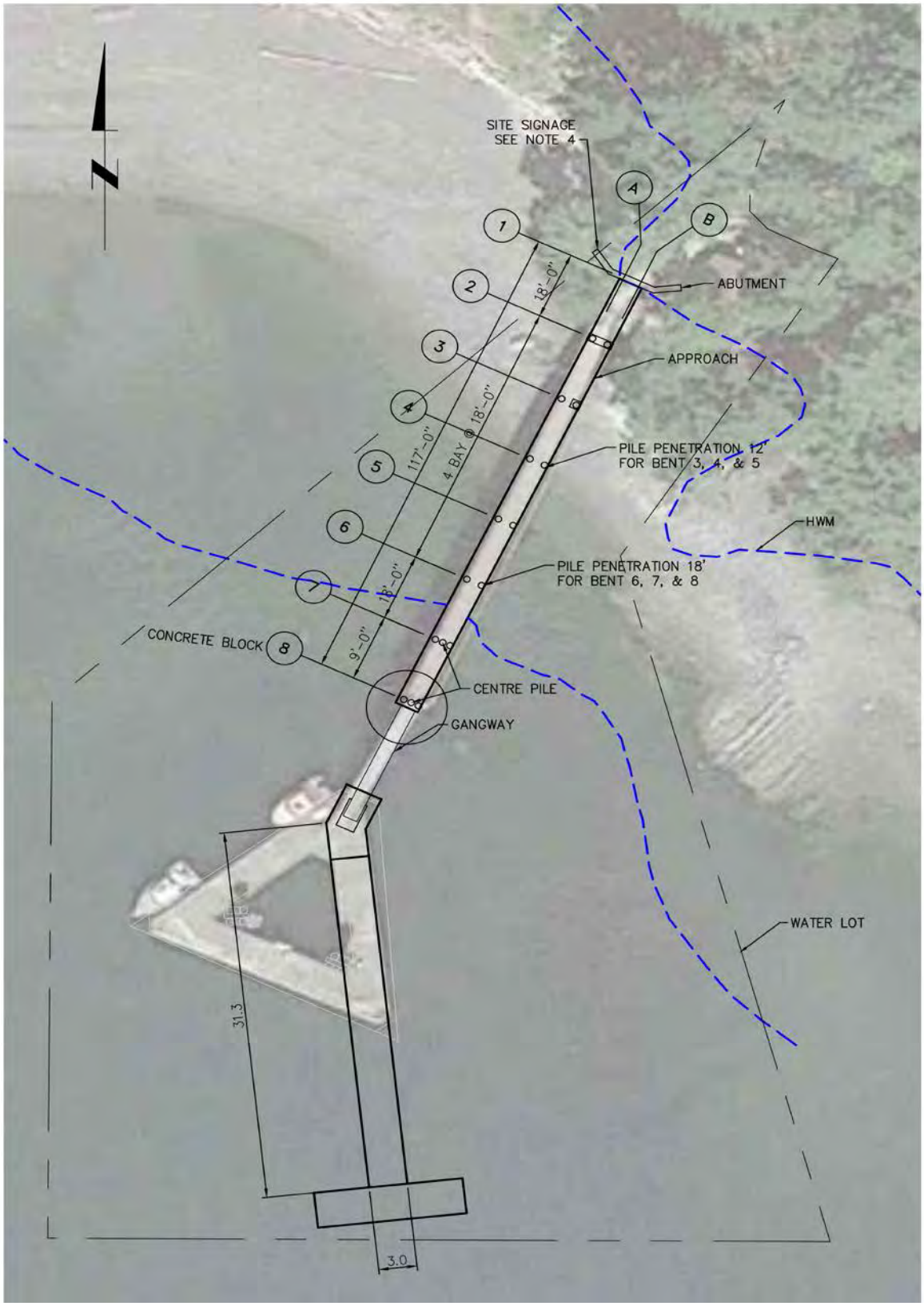
DP/TR:so

Attachments: Appendix A Piers Island Options Figures
Appendix B Construction Budget Summary
Appendix C Moffatt & Nichol's Recommendations to Award

APPENDIX A
OPTION 1



OPTION 2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SITE SIGNAGE
SEE NOTE 4
A
B
1
2
3
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6
7
8
ABUTMENT
APPROACH
PILE PENETRATION 12'
FOR BENT 3, 4, & 5
HWM
PILE PENETRATION 18'
FOR BENT 6, 7, & 8
CONCRETE BLOCK
CENTRE PILE
GANGWAY
WATER LOT
18'-0"
117'-0"
4 BAY @ 18'-0"
18'-0"
9'-0"
31.3
3.0

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APPENDIX B
SUMMARY OF 2017 CAPITAL PROJECTS BUDGET

	PIERS ISLAND	MINERS BAY	MONTAGUE HARBOUR*
CONSTRUCTION BUDGET	$ 152,333	$ 256,000	$ 184,933
CONTINGENCY BUDGET	$ 30,467	$ 51,200	$ 36,987
SUBTOTAL	**$ 182,800**	**$ 307,200**	**$ 221,920**
LOW TENDERS	$ (22,585)	$ (78,311)	$ (47,313)
SUGGESTED CONTINGENCY (10% CONTRACT)	$ (3,000)	$ (8,000)	$ (5,000)
BUDGET REMAINING	**$ 157,215**	**$ 220,889**	**$ 169,607**
2017 CAPITAL WORKS REMAINING BUDGET			**$ 547,711**

* Excludes Fernwood Dock works

Only required items, includes: Bonding & Insurance, Mob/Demob.,Rock Filter and Riprap at Abutment, Dispose of Existing Concrete Footings

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MEMORANDUM

To:	**Dale Puskas, P.Eng., Manager, Capital Projects, Infrastructure Engineering**
From:	**Helen Soderholm, P.Eng. and Paul Hoo, P.Eng., Moffatt & Nichol**
Date:	**October 10, 2017**
Subject:	**Tender Evaluation for Contract No. 2017-306 – Miners Bay**
M&N Job No.:	**9369-V17**

1. Introduction

Moffatt & Nichol (M&N) is pleased to submit the bid evaluation for Southern Gulf Islands Harbour Service Dock Infrastructure 2017 Improvements at Miners Bay, Contract No. 2017-306.

Capital Regional District (CRD) posted the invitation for bids for the subject project on their CRD website on Friday, September 1, 2017. No mandatory pre-bid meeting was held. Three bids were received within the specified closing time on September 21, 2017, 02:00 PM from the following firms:

- Ruskin Construction Ltd. (Ruskin);
- Heavy Metal Marine Ltd. (Heavy Metal); and,
- Pacific Industrial and Marine Ltd. (Pacific).

2. Analysis of Bid Amounts

An arithmetic check was done on the Schedule Values completed by the bidders.

Heavy Metal was the only submission with a contingency amount, specifically $3,551.50 which is 5% of $71,030.00, the Sub-total from Schedule and Prices.

Heavy Metal's submitted GST value of $5,220.70 is 7% of $74,581.50: the total from Schedule and Prices ($71,030.00) plus their 5% contingency ($3,551.50). The correct value should be calculated at 5% of the new subtotal $74,581.50, i.e. $3,729.08. These corrections have been used in Table 2.1 below, which summarizes the lump sum price for this Contract (No. 2017-305) from the three bidders.

TABLE 2.1: SUMMARY OF LUMP SUM BID PRICE FOR CONTRACT NO. 2017-306

Description	Ruskin	Heavy Metal	Pacific
Total from Schedule of Prices and Estimated Quantities	$143,896.00	$74,581.50	$116,640.00
GST	$7,194.80	$3,729.08	$5,832.00
Total Tendered Amount	$151,090.80	$78,310.58	$122,472.00

From Table 2.1 above, Heavy Metal's bid price is the lowest of the three bids, differing by $72,780.22 from Ruskin's bid, a difference of -48%, and from Pacific's by -36 %, a difference of $44,161.42.

Refer to Appendix A for a detailed comparison of the Schedule of Prices and Estimated Quantities by line item. The engineer's high-level estimate for the proposed work was $207,062, which included a 25% contingency. (The increase from the Design Memo OPC of $179,000 is primarily due to the addition of new anchor blocks resulting from calculations of mooring forces during the design of the rigid connection between Floats B and C.)

3. Analysis of Schedule

Table 3.1 below shows the summary of the overall work schedule for each bidder. Ruskin's schedule is the shortest at 90 days. Pacific Industrial and Marine's schedule has the longest duration, 240 days or approximately 8 months. Ruskin's schedule may be over optimistic, given the likelihood of weather delays over the winter period. Heavy Metal's schedule of 120 days (4 months) is preferable.

TABLE 3.1: SUMMARY OF SCHEDULE FOR CONTRACT NO. 2017-306

Description	Ruskin	Heavy Metal	Pacific
Schedule of Completed Works After Notice to Proceed	90 days	120 days	240 days

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4. Analyses of Labour and Equipment Rates

Table 4.1 below summarizes the force account (labour) rates that each bidder intends to use in the work. In general, the labour rates are typical of the marine construction industry.

TABLE 4.1: SUMMARY OF FORCE ACCOUNT RATES FOR CONTRACT NO. 2017-306

Personnel	Ruskin		Heavy Metal		Pacific	
	Hourly Rate	**Overtime Hourly Rate**	**Hourly Rate**	**Overtime Hourly Rate**	**Hourly Rate**	**Overtime Hourly Rate**
Project Manager	$125	-	-	-	-	-
Superintendent	$93.10	$136.26	-	-	$120.00	-
Foreman	$89.70	$131.30	$81.97	$163.93	$95.00	1.5 x over 8 hrs and less than 11 hrs. 2 x over 11 hrs, Sundays and holidays
Operator	$87.40	$127.90	$73.18	$146.35	-	
Bridgeman	$79.80	$116.80	$72.30	$144.59	$85.00	
Welder	$79.80	$116.80	$73.18	$146.35	$90.00	

Table 4.2 below summarizes the equipment rates, complete with operator, that each bidder intends to use in the work. In general, the equipment rates are typical of the marine construction industry.

TABLE 4.2: SUMMARY OF EQUIPMENT RATES FOR CONTRACT NO. 2017-306

Equipment	Ruskin		Heavy Metal		Pacific		
	Hourly Rate	Overtime Hourly Rate	Hourly Rate	Overtime Hourly Rate	Hourly Rate	Overtime Hourly Rate	Daily Rate
Marine Derrick	-	-	-	-	$500	$620	-
Crane and Spud Barge	$540*	$580*	$425†	$500†	-	-	-
Material Barge	$150	$150	-	-	-	-	$1,500
APE 150 Vibro Hammer	$150	$150	-	-	-	-	-
Welding Machine	$50‡	$50‡	-	-	-	-	-
Tool can (small tools)	$40	$40	-	-	-	-	-
Tug Boat	-	-	$375	$375	-	-	-
Excavator	-	-	-	-	$165	$210	-
Crew Boat	-	-	-	-	-	-	$500
Vibro/Excavator	-	-	-	-	-	-	$1000

* with crane operator only.

† rate given as crane only, we are assuming it includes a barge.

‡ does not include welder.

5. Qualifications

In general, all bids were found to be in conformance with the bid conditions, except for a missing List of Proposed Equipment Suppliers by Heavy Metal.

In terms of qualifications, Ruskin provided a list of three past projects, citing Seaspan and BC Ferries projects which involved the construction of ferry berths and a ferry terminal, as well as civil infrastructure. Heavy Metal Marine also provided a list of three past projects, including new float installation, timber float repairs and mooring installations; these projects were for Public Works, the Ministry of Transportation and Infrastructure and Seaspan Ferries. Pacific Industrial and Marine listed three past projects, all CRD's SGIHA programs, and all with Moffatt Nichol as the Engineers.

Ruskin listed 12 Worksafe BC Non-Compliance Violations, dated between February 20, 2013 to October 29, 2014. Heavy Metal Marine has no Worksafe BC non-compliance violations history. Pacific Industrial and Marine has not listed any violations with this submission, however, we note that for the 2016 tenders Pacific listed three violations on June 17, 2016. Violation descriptions are: access to electrical panel (Section No. 19.7(1)), electrical lockout procedures not on site (Section No. 10.4(1)) and additional power switch required (Section No. 12.3(1)).

6. Conclusions

Heavy Metal Marine Ltd. is the lowest bidder for the proposed work, in the total tendered amount of **$78,310.58.**

If you should have any questions or require clarifications, please do not hesitate to contact the undersigned.

Prepared by:	Reviewed by:
[Original signed by: Helen Soderholm]	[Original signed by: Paul Hoo]
Helen Soderholm, P.Eng. Project Engineer	Paul Hoo, P.Eng. Project Manager

Attachments: Appendix A: Comparison of the Schedule of Prices and Estimated Quantities

Appendix A:
Comparison of Schedule of Prices and Estimate Quantities

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Schedule of Prices and Estimated Quantities Comparison Table for Miners Bay Contract No. 2017-306

ITEM	DESCRIPTION	UNITS	QTY	RATE			AMOUNT		
				Ruskin Construct.	Heavy Metal Marine	Pacific	Ruskin Construct.	Heavy Metal Marine	Pacific
1	Bonding and Insurance *(not to exceed 1% of total tender amount)*	Lump Sum	n/a	n/a	n/a	n/a	$ 1,425	$650	$1,100
2	Mobilization and Demobilization *(not to exceed 5% of total tender amount)*	Lump Sum	n/a	n/a	n/a	n/a	$ 15,435	$5,000	$5,500
3	Remove, dispose and replace treated timber piles	Each	9	$ 4,670.00	$3,000	$5,400	$42,030	$27,000	$48,600
4	Remove, dispose and replace treated timber piles bracing	Each	1	$ 830.00	$1,100	$1,150	$830	$1,100	$1,150
5	Replace rub boards on Floats A and B	Lin. Ft.	70	$ 35.00	$25	$20	$2,450	$1,750	$1,400
6	Replace rub boards in all piles wells on Float A	Lin. Ft.	80	$ 35.00	$25	$25	$2,800	$2,000	$2,000
7	Attach UHMW-PE wearing surfaces in all pile wells on Float A	Each	16	$ 190.00	$75	$125	$3,040	$1,200	$2,000
8	Remove, dispose and replace foam billets in Float B	Each	3	$ 8,230.00	$850	$3,075	$24,690	$2,550	$9,225
9	Remove existing grating, Gangway B landing, replace with lighter gauge	Each	1	$ 770.00	$1,580	$2,460	$770	$1,580	$2,460
10	Construct rigid connection between Float B and C	Each	1	$ 9,890.00	$7,900	$8,603	$9,890	$7,900	$8,603
11	Replace anchor chains for Float C	Each	2	$ 3,225.00	$1,500	$1,200	$6,450	$3,000	$2,400
12	Supply and install concrete anchor blocks	Each	12	$ 618.00	$450	$850	$7,416	$5,400	$10,200
13	Replace corroded float fasteners	Each	80	$ 115.00	$30	$185	$9,200	$2,400	$14,800
14	Reposition one anchor and supply and install new anchor chair Float D	Each	1	$ 6,935.00	$5,200	$3,550	$6,935	$5,200	$3,550
15	Replace tire fenders Float D	Each	6	$ 635.00	$200	$150	$3,810	$1,200	$900
16	Repair Gangway B hanger assembly	Each	1	6725	$3,100	$2,752	$6,725	$3,100	$2,752
	Sub-total from Schedule of Prices and Estimated Quantities						$143,896	$71,030	$116,640

Contingency Allowance	$0.00	$3,551.50	$0.00
Goods and Services Tax (GST)	$7,194.80	$3,729.08	$5,832.00
Total Including Tax	$151,090.80	$78,310.58	$122,472.00

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MEMORANDUM

To:	**Dale Puskas, P.Eng., Manager, Capital Projects, Infrastructure Engineering**
From:	**Helen Soderholm, P.Eng. and Paul Hoo, P.Eng., Moffatt & Nichol**
Date:	**October 10, 2017**
Subject:	**Tender Evaluation for Contract No. 2017-307 – Monague-Fernwood**
M&N Job No.:	**9369-V17**

1. Introduction

Moffatt & Nichol (M&N) is pleased to submit the bid evaluation for Southern Gulf Islands Harbour Service Dock Infrastructure 2017 Improvements for Fernwood Dock and Montague Harbour, Contract No. 2017-307.

Capital Regional District (CRD) posted the invitation for bids for the subject project on their CRD website on Friday, September 1, 2017. No mandatory pre-bid meeting was held. Three bids were received within the specified closing time on September 21, 2017, 02:00 PM from the following firms:

- Heavy Metal Marine Ltd. (Heavy Metal); and,
- Pacific Industrial and Marine Ltd. (Pacific).

2. Analysis of Bid Amounts

An arithmetic check was done on the Schedule Values completed by the bidders. No errors were found in both bids.

There was an adjustment to the Heavy Metal's GST calculation. The submitted GST value of $9,827.90 is 7% of $140,398.65: the total from Schedule and Prices ($133,713.00) plus their 5% contingency ($6,685.65). The correct value should be calculated at 5% of the new subtotal $140,398.65, i.e. $7,019.93. These corrections have been used in Table 2.1 below, which summarizes the total tendered price for this Contract (No. 2017-307) from the two bidders.

TABLE 2.1: SUMMARY OF LUMP SUM BID PRICE FOR CONTRACT NO. 2017-307

Description	Heavy Metal	Pacific
Total from Schedule of Prices and Estimated Quantities	$133,713.00	$186,633.00
Contingency	$6,685.65	$0.00
GST	$7,019.93	$9,331.65
Total Tendered Amount	$147,418.58	$195,964.65

From Table 2.1 above, Heavy Metal's bid price is the lowest of the two bids, differing from Pacific's by $48,546.07 or -24.8 %.

Refer to Appendix A for a detailed comparison of the Schedule of Prices and Estimated Quantities by line item. The engineer's high-level estimate for the proposed work was $252,410, which included a 25% contingency.

3. Analysis of Schedule

Table 3.1 below shows the summary of the overall work schedule for each bidder. Ruskin's schedule is the shortest at 90 days. Pacific Industrial and Marine's schedule has the longest duration, 240 days or approximately 8 months. Heavy Metal's schedule of 120 days (4 months) is preferable.

TABLE 3.1: SUMMARY OF SCHEDULE FOR CONTRACT NO. 2017-307

Description	Heavy Metal	Pacific
Schedule of Completed Works After Notice to Proceed	120 days	240 days

4. Analyses of Labour and Equipment Rates

Table 4.1 below summarizes the force account (labour) rates that each bidder intends to use in the work. In general, the labour rates are typical of the marine construction industry.

TABLE 4.1: SUMMARY OF FORCE ACCOUNT RATES FOR CONTRACT NO. 2017-307

Personnel	Heavy Metal		Pacific	
	Hourly Rate	Overtime Hourly Rate	Hourly Rate	Overtime Hourly Rate
Project Manager	-	-	-	-
Superintendent	-	-	$120.00	-

Personnel	Heavy Metal		Pacific	
	Hourly Rate	Overtime Hourly Rate	Hourly Rate	Overtime Hourly Rate
Foreman	$81.97	$163.93	$95.00	1.5 x over 8 hrs and less than 11 hrs. 2 x over 11 hrs, Sundays and holidays
Operator	$73.18	$146.35	-	
Bridgeman	$72.30	$144.59	$85.00	
Welder	$73.18	$146.35	$90.00	

Table 4.2 below summarizes the equipment rates, complete with operator, that each bidder intends to use in the work. In general, the equipment rates are typical of the marine construction industry.

TABLE 4.2: SUMMARY OF EQUIPMENT RATES FOR CONTRACT NO. 2017-307

Equipment	Heavy Metal		Pacific		
	Hourly Rate	Overtime Hourly Rate	Hourly Rate	Overtime Hourly Rate	Daily Rate
Marine Derrick	-	-	$500	$620	-
Crane and Spud Barge	$425†	$500†	-	-	-
Material Barge	-	-	-	-	$1,500
APE 150 Vibro Hammer	-	-	-	-	-
Welding Machine	-	-	-	-	-
Tool can (small tools)	-	-	-	-	-
Tug Boat	$375	$375	-	-	-
Excavator	-	-	$165	$210	-
Crew Boat	-	-	-	-	$500
Vibro/Excavator	-	-	-	-	$1000

* with crane operator only.

† rate given as crane only, we are assuming it includes a barge.

‡ does not include welder.

5. Qualifications

In general, all bids were found to be in conformance with the bid conditions, with the exception of a missing List of Proposed Equipment Suppliers by Heavy Metal.

In terms of qualifications, Heavy Metal Marine also provided a list of three past projects, including new float installation, timber float repairs and mooring installations; these projects were for Public Works, the Ministry of Transportation and Infrastructure and Seaspan Ferries. Pacific Industrial and Marine listed three past projects, all CRD's SGIHA programs, and all with Moffatt Nichol as the Engineers.

Heavy Metal Marine has no Worksafe BC non-compliance violations history. Pacific Industrial and Marine has not listed any violations with this submission, however, we note that for the 2016 tenders Pacific listed three violations on June 17, 2016. Violation descriptions are: access to electrical panel (Section No. 19.7(1)), electrical lockout procedures not on site (Section No. 10.4(1)) and additional power switch required (Section No. 12.3(1)).

6. Conclusions

Heavy Metal Marine Ltd. is the lowest bidder for the proposed work, in the total tendered amount of **$150,226.55.**

If you should have any questions or require clarifications, please do not hesitate to contact the undersigned.

Prepared by:	Reviewed by:
[Original signed by: Helen Soderholm]	[Original signed by: Paul Hoo]
Helen Soderholm, P.Eng. Project Engineer	Paul Hoo, P.Eng. Project Manager

Attachments: Appendix A: Comparison of the Schedule of Prices and Estimated Quantities

Appendix A:
Comparison of Schedule of Prices and Estimate Quantities

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Schedule of Prices and Estimated Quantities Comparison Table for Contract No. 2017-307

ITEM	DESCRIPTION	UNITS	QTY	RATE		AMOUNT	
				Heavy Metal Marine	Pacific	Heavy Metal Marine	Pacific
1	Bonding and Insurance *(not to exceed 1% of total tender amount)*	Lump Sum	n/a	n/a	n/a	$1,200	$1,800
2	Mobilization and Demobilization *(not to exceed 5% of total tender amount)*	Lump Sum	n/a	n/a	n/a	$6,500	$9,000
3	Replace damaged timber decking	Lin. Ft.	102	$74	$41	$7,548	$4,182
4	Replace damages kick boards	Lin. Ft.	27	$40	$100	$1,080	$2,700
5	Supply and install hot-dip galvanised steel welded bar grating at approach entrance	Each	1	$1,652	$2,600	$1,652	$2,600
6	Paint handrails, side rails and uprights on wharf approach	L.S.	1	$13,520	$9,394	$13,520	$9,394
7	Extend existing pile footing, Bent 12, Pile B	L.S.	1	$8,700	$3,875	$8,700	$3,875
8	Remove, dispose and replace treated timber piles	Each	9	$3,000	$4,400	$27,000	$39,600
9	Remove, dispose and replace treated timber pile bracing	Each	4	$1,100	$2,100	$4,400	$8,400
10	Replace broken rubber fender section	Lin. Ft.	6	$200	$135	$1,200	$810
11	Sandblast and repaint gangway frame, and repair rusted C-Channel bea,	L.S.	1	$9,600	$3,460	$9,600	$3,460
12	Replace roller bearings, sandblast and repaint roller and north side support. Re-install roller guiderail.	L.S.	1	$5,300	$2,300	$5,300	$2,300
13	Install bird spikes on lamps	Each	4	$200	$700	$800	$2,800
14	Repair light sensor on Bent 21	Each	1	$750	$1,000	$750	$1,000
15	Paint Light Standards	Each	2	$500	$1,900	$1,000	$3,800
16	Strip and re-paint approach railings	Lin. Ft.	57	$79	$55	$4,503	$3,135
17	Re-shim gap between pile and pile cap	L.S.	1	$1,580	$515	$1,580	$515
18	Pump out fibreglass flotation billets north end Float A	L.S.	4	$150	$350	$600	$1,400
19	Replace corroded billet fasteners Float A	Each	80	$30	$180	$2,400	$14,400
20	Replace anodes on steel pipe piles (Float A and Float C)	Each	2	$800	$825	$1,600	$1,650
21	Supply/install alminum transition plate between Floast A & B)	Each	1	$1,200	$2,100	$1,200	$2,100
22	Replace corroded billet fasteners Float B	Each	80	$30	$180	$2,400	$14,400
23	Replace timber pile frames Float B	Lin. Ft.	64	$75	$150	$4,800	$9,600
24	Replace rub boards Float B	Lin. Ft.	64	$45	$58	$2,880	$3,712
25	Remove existing steel gangway, supply and install new alumium gangway	Each	1	$21,500	$40,000	$21,500	$40,000
	Sub-total from Schedule of Prices and Estimated Quantities					$133,713	$186,633

Contingency Allowance		$6,685.65	$0.00
Goods and Services Tax (GST)		$9,827.90	$9,331.65
Total Including Tax		$150,226.55	$195,964.65

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MEMORANDUM

To:	**Dale Puskas, P.Eng., Manager, Capital Projects, Infrastructure Engineering**
From:	**Helen Soderholm, P.Eng. and Paul Hoo, P.Eng., Moffatt & Nichol**
Date:	**October 10, 2017**
Subject:	**Tender Evaluation for Contract No. 2017-305 – Piers Island**
M&N Job No.:	**9369-V17**

1. Introduction

Moffatt & Nichol (M&N) is pleased to submit the bid evaluation for Southern Gulf Islands Harbour Service Dock Infrastructure 2017 Improvements for Piers Island, Contract No. 2017-305.

Capital Regional District (CRD) posted the invitation for bids for the subject project on their CRD website on Friday, September 1, 2017. No mandatory pre-bid meeting was held. Three bids were received within the specified closing time on September 21, 2017, 02:00 PM from the following firms:

- Ruskin Construction Ltd. (Ruskin);
- Heavy Metal Marine Ltd. (Heavy Metal); and,
- Pacific Industrial and Marine Ltd. (Pacific).

2. Analysis of Bid Amounts

An arithmetic check was done on the Schedule Values completed by the bidders.

Heavy Metal was the only submission with a contingency amount, specifically $4,079.40 which is 5% of $81,588.00, the subtotal from Schedule and Prices.

The submitted GST value of $5,996.72 is 7% of $85,667.40: the subtotal from Schedule and Prices ($81,588.00) plus their 5% contingency ($4,079.40). The correct value should be calculated at 5% of the new subtotal $85,667.40, i.e. $4,283.37. These corrections have been used in Table 2.1 below, which summarizes the lump sum price for this Contract (No. 2017-305) from the three bidders.

TABLE 2.1: SUMMARY OF LUMP SUM BID PRICE FOR CONTRACT NO. 2017-305

Description	Ruskin	Heavy Metal	Pacific
Total from Schedule of Prices and Estimated Quantities	$161,826.00	$85,667.40	$74,999.00
GST	$8091.30	$4,283.37	$3,749.95
Total Tendered Amount	$169,917.30	$89,950.77	$78,748.95

From Table 2.1 above, Pacific's bid price is the lowest of the three bids, differing by $79,966.53 from Ruskin's bid, a difference of 47%, and from Heavy Metal's by 14%, a difference of $9,984.24.

Refer to Appendix A for a detailed comparison of the Schedule of Prices and Estimated Quantities by line item. The engineer's high-level estimate for the proposed work was $145,286, which included a 25% contingency.

3. Analysis of Schedule

Table 3.1 below shows the summary of the overall work schedule for each bidder. Ruskin's schedule is the shortest at 90 days. Pacific Industrial and Marine's schedule has the longest duration, 240 days or approximately 8 months. Ruskin's schedule may be over optimistic, given the likelihood of weather delays over the winter period. Heavy Metal's schedule of 120 days (4 months) is preferable.

TABLE 3.1: SUMMARY OF SCHEDULE FOR CONTRACT NO. 2017-305

Description	Ruskin	Heavy Metal	Pacific
Schedule of Completed Works After Notice to Proceed	90 days	120 days	240 days

4. Analyses of Labour and Equipment Rates

Table 4.1 below summarizes the force account (labour) rates that each bidder intends to use in the work. In general, the labour rates are typical of the marine construction industry.

TABLE 4.1: SUMMARY OF FORCE ACCOUNT RATES FOR CONTRACT NO. 2017-305

Personnel	Ruskin		Heavy Metal		Pacific	
	Hourly Rate	**Overtime Hourly Rate**	**Hourly Rate**	**Overtime Hourly Rate**	**Hourly Rate**	**Overtime Hourly Rate**
Project Manager	$125	-	-	-	-	-
Superintendent	$93.10	$136.26	-	-	$120.00	-
Foreman	$89.70	$131.30	$81.97	$163.93	$95.00	1.5 x over 8 hrs and less than 11 hrs. 2 x over 11 hrs, Sundays and holidays
Operator	$87.40	$127.90	$73.18	$146.35	-	
Bridgeman	$79.80	$116.80	$72.30	$144.59	$85.00	
Welder	$79.80	$116.80	$73.18	$146.35	$90.00	

Table 4.2 below summarizes the equipment rates, complete with operator, that each bidder intends to use in the work. In general, the equipment rates are typical of the marine construction industry.

TABLE 4.2: SUMMARY OF EQUIPMENT RATES FOR CONTRACT NO. 2017-305

Equipment	Ruskin		Heavy Metal		Pacific		
	Hourly Rate	Overtime Hourly Rate	Hourly Rate	Overtime Hourly Rate	Hourly Rate	Overtime Hourly Rate	Daily Rate
Marine Derrick	-	-	-	-	$500	$620	-
Crane and Spud Barge	$540*	$580*	$425†	$500†	-	-	-
Material Barge	$150	$150	-	-	-	-	$1,500
APE 150 Vibro Hammer	$150	$150	-	-	-	-	-
Welding Machine	$50‡	$50‡	-	-	-	-	-
Tool can (small tools)	$40	$40	-	-	-	-	-
Tug Boat	-	-	$375	$375	-	-	-
Excavator	-	-	-	-	$165	$210	-
Crew Boat	-	-	-	-	-	-	$500
Vibro/Excavator	-	-	-	-	-	-	$1000

*with crane operator only.

† rate given as crane only, we are assuming it includes a barge.

‡ does not include welder.

5. Qualifications

In general, all bids were found to be in conformance with the bid conditions, with the exception of a missing List of Proposed Equipment Suppliers by Heavy Metal.

In terms of qualifications, Ruskin provided a list of three past projects, citing Seaspan and BC Ferries projects which involved the construction of ferry berths and a ferry terminal, as well as civil infrastructure. Heavy Metal Marine also provided a list of three past projects, including new float installation, timber float repairs and mooring installations; these projects were for Public Works, the

Ministry of Transportation and Infrastructure and Seaspan Ferries. Pacific Industrial and Marine listed three past projects, all CRD's SGIHA programs, and all with Moffatt Nichol as the Engineers.

Ruskin listed 12 Worksafe BC Non-Compliance Violations, dated between February 20, 2013 to October 29, 2014. Heavy Metal Marine has no Worksafe BC non-compliance violations history. Pacific Industrial and Marine has not listed any violations with this submission, however, we note that for the 2016 tenders Pacific listed three violations on June 17, 2016. Violation descriptions are: access to electrical panel (Section No. 19.7(1)), electrical lockout procedures not on site (Section No. 10.4(1)) and additional power switch required (Section No. 12.3(1)).

6. Conclusions

Pacific Industrial and Marine Ltd. is the lowest bidder for the proposed work, in the total tendered amount of **$78,748.95**. We recommend that CRD requests Pacific Industrial and Marine to provide the remedial procedures that were taken to address their past WorkSafeBC non-compliance violations, and reasons for the omissions from this tender.

If you should have any questions or require clarifications, please do not hesitate to contact the undersigned.

Prepared by:	Reviewed by:
[Original signed by: Helen Soderholm]	[Original signed by: Paul Hoo]
Helen Soderholm, P.Eng. Project Engineer	Paul Hoo, P.Eng. Project Manager

Attachments: Appendix A: Comparison of the Schedule of Prices and Estimated Quantities

Appendix A:
Comparison of Schedule of Prices and Estimate Quantities

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Schedule of Prices and Estimated Quantities Comparison Table for Piers Island Contract No. 2017-305

ITEM	DESCRIPTION	UNITS	QTY	RATE			AMOUNT		
				Ruskin Construct.	Heavy Metal Marine	Pacific Industrial	Ruskin Construct.	Heavy Metal Marine	Pacific Industrial
1	Bonding and Insurance *(not to exceed 1% of total tender amount)*	Lump Sum	1	n/a	n/a	n/a	$1,602	$800	$750
2	Mobilization and Demobilization *(not to exceed 5% of total tender amount)*	Lump Sum	1	n/a	n/a	n/a	$14,980	$5,000	$3,750
3	Install rock filter and riprap armout in front of concrete abutment and along shoreline	Tonnes	31	$1,140	$340	$267	$35,340	$10,540	$8,277
4	Remove, dispose and replace treated timber piles	Each	6	$4,270	$3,000	$3,324	$25,620	$18,000	$19,944
5	Remove and dispose of existing concrete footings, install new reinforced concrete footings.	Each	3	$7,950	$8,200	$2,836	$23,850	$24,600	$8,508
6	Replace worn rub boards and add UHMW wearing surfaces	Lin. Ft.	102	$112	$74	$30	$11,424	$7,548	$3,060
7	Replace Anchor chains	Each	3	$3,920	$2,200	$1,470	$11,760	$6,600	$4,410
8	Remove, dispose and replace foam billets on all floats	Each	10	$3,725	$850	$2,630	$37,250	$8,500	$26,300
	Sub-total from Schedule of Prices and Estimated Quantities						**$161,826**	**$81,588**	**$74,999**

Contingency Allowance		$0.00	$4,079.40	$0.00
Goods and Services Tax (GST)		$8,091.30	$4,283.37	$3,749.95
Total Including Tax		$169,917.30	$89,950.77	$78,748.95

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **04-Oct-2017** DOCK FACILITY: **Sturdies Bay, Galiano Island** Agenda Item #9

INSPECTOR: **Peter Binner** WHARFINGER: **Wharfinger**

APPROACH

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

The railings on this Wharfhead/Approach need pressure washing and painting. The Notice Board also needs to be cleaned up and painted.
The new lock that was supplied has not been replaced and the previous Wharfinger will return this to Ben Maberly along with the key for the existing lock.

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

Gangway is newly painted and the bed for the rails is old but is still usable for the time being but some new planking could be considered if there is any new work scheduled for this dock.
The Bull rails on both sides of the float are very loose and are also well worn and cracked in some areas. These rails in the center area of the float could be replaced along with replacing the bolts that are holding them. This dock sees some rough weather and there are signs of serious wear from boats tied here and this may be the cause of the loose Bull rails and broken bolts. This is not a major job and should be considered as a repair outside of a Capital Works project.
The Loading Zone needs new paint and new signs (2).

Repair/work completion date:

OTHER INSPECTIONS

☑	Lighting	Lighting is on 24/7 is this necessary???	☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	current	☑	Unpaid Moorage	No Wharfinger at the moment

COMMENTS / INSTRUCTIONS:

The main concern at this point in time is the issue with the loose and worn Bull Rails. It is also possible that the bolts sistering the internal stringers are also worn and allowing the float to flex more than it was designed to do. The area affected is in the middle area to the Western end of the float. If there are boats tied to this float over the winter, it will only exacerbate the problem and delaying the needed repairs will compromise the ability to safely keep a vessel tied to the dock along with increasing the cost of repairs if the repair is not done in a timely manner.

If more comments are required, additional page will be attached

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **05-Oct-2017** DOCK FACILITY: **Port Browning, Pender Island**

INSPECTOR: **Peter Binner** WHARFINGER: **Claude Kennedy**

APPROACH

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

This Approach is badly in need of Pressure washing and painting of the railings. At this point there will likely be a number of deck planking and bull rail timbers and spacers that will need to be replaced due to the rot that continues to affect this area,

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

More rot continuing to take place with the decking along with the rot on the Notice Board in this area. Pressure washing and painting is required.
The fire extinguisher has been replaced and is up to date, the housing is OK.

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

Things are in good condition with the Gangway and the floats except for a slight dip in South East corner of the float. It is not a concern at the moment but will continue to monitor the situation.

Repair/work completion date:

OTHER INSPECTIONS

☑	Lighting	12 volt motion sensor lighting	☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	up to date	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

The Approach, the small Wharfhead area and the Notice Board getting require pressure washing and painting. Painting will have to wait until next Summer. There are now a considerable number of deck planking and Bull Rails and spacer blocks that will require replacement along the Approach and the small Wharfhead.
The floats and Gangway are in good condition.

If more comments are required, additional page will be attached.

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **04-Oct-2017** DOCK FACILITY: **Piers Island**

INSPECTOR: **Peter Binner** WHARFINGER: **Mike Smart**

APPROACH

Facility Kiosk Inspection: ☑ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

No change in the Approach, all existing items that need attention are still current.
- Painting of the Approach Railings is required
- A metal grate is required at the head of the Approach decking

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

No Wharfhead

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

No new issues in this area. The Ladders were moved to the 2 outside points of the float.

Yellow paint is required for the Loading Zone area.

Repair/work completion date:

OTHER INSPECTIONS

☐	Lighting	no lighting	☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	current	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

Nothing new to report here, things are in reasonably good shape and all previous issues that have not been dealt with are still current.
The Railings on the Approach require paint, a grate at the head of the Approach is required and UHMW is required in the Pile Wells on the Float.

If more comments are required, additional page will be attached.

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CRD
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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **04-Oct-2017** DOCK FACILITY: **Montague Harbour, Galiano**

INSPECTOR: **Peter Binner** WHARFINGER: **Erik Meden**

APPROACH

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

The railing that the Notice Board is attached to needs to be more secure. This could be added to the list of repair items that are slated for this dock. There are a few rotten 4X4's that need to be replaced, basically this side of the railing could be rebuilt, it is not a big job.
The railings require painting along with the Notice Board.

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

No Wharfhed

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

The floats are in good condition, there is only minor wear and tear happening at this dock.

The Wharfinger is requesting an additional sign for the Loading Zone stating that boats are not left unattended as this is also used for Emergency vessels. The same sign is needed at Swartz Bay.

Repair/work completion date:

OTHER INSPECTIONS

☑	Lighting		☑	Life Rings / Heaving Lines	
☑	Extinguishers (expiry dates)	up to date. A new Fire Extinguisher Box is needed on the Notice Board.	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

Things are in generally good condition at this dock. Yellow Paint is required for the Loading Zone areas and the Dinghy Landing areas.
A new sign is required for the Loading / Ambulance Zone.
Erik the Wharfinger, is having an easier time understanding the complexities with the job after a few challenging months.

If more comments are required, additional page will be attached.

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CRD
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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **04-Oct-2017** DOCK FACILITY: **Lyall Harbour, Saturna Island**

INSPECTOR: **Peter Binner** WHARFINGER: **Ryan Dentry**

APPROACH

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

There is no Approach

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

The Wharfhead is in good condition, Larry Peck is going to repair the one piling that is missing the capping material.
A new envelope box is required and it could be recommended that a new sturdier type of box be sourced as all of these boxes need replacement at the other facilities.
A new lock was put on the lock box.

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

The Gangway is in good order, all other previously noted issues with the floats are still current: Floats are low in the water and there is a broken Bull Rail bolt that needs replacing along with investigating why it broke.
The Bull Rails that indicate the loading and float plane landing zones, all require yellow paint.
The Kayak float still needs to have proper lines to provide a more secure attachment to the dock. Larry Peck will follow up with the owner regarding this issue.
The electrical extension cords that are being run from the fuel dock to the Kayak float and a private boat on the dock are poorly arranged and not suitable for the Marine environment and these cords need to be removed .

Repair/work completion date:

OTHER INSPECTIONS

☑	Lighting		☑	Life Rings / Heaving Lines	
☑	Extinguishers (expiry dates)	out of date	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

Yellow paint is required for the rails at Float Plane Landing area. A Float Plane Landing symbol could also be added to this area. Procuring something that can stand up to the elements and the general wear and tear that this sign would get needs investigating. 2 or 3 regulation CRD Float Plane Landing signs are also required.
The electrical extension cords running from the fuel float are a safety concern, the owner of the fuel float should be concerned with this arrangement. The CRD docks do not have a policy that provides their moorage customers with power and the cables need to be removed. Larry Peck will likely follow up on this along with communicating with the owner of the Kayak Float regarding the lines that are needed to secure the structure to the dock.

If more comments are required, additional page will be attached.

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **04-Oct-2017** DOCK FACILITY: **Miners Bay, Mayne Island**

INSPECTOR: **Peter Binner** WHARFINGER: **Neil Jensen**

APPROACH

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

No changes to the Approach. The Notice Board has an area of rot developing, on one side and the fire extinguisher is up to date and the housing is good.

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

There is a potential SAFTY HAZARD with the low rail that prevents vehicles going out to the decommissioned Wharfhead. This blockade is less than 1 foot in height and could easily be tripped over. It would make sense to install a higher barrier but in the mean time the barrier can be repainted so that it will be more noticable.
The old fuel lines are getting rustier.

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

Float A Gangway is in good condition and the newly replaced Pile Well rub boards are working well. The Bull Rails on the South West side are getting worn and there are a few areas where the bolts are getting loose. This float gets serious wear and tear from the wind and wave action.
Floats B, C & D have no new visible problems, all previous issues are still current. The Yellow Paint for the rails at the float plane landing needs repainting. The signs located here are faded and need to be replaced.
An additional apron that was needed for the Mail delivery people hauling their dolly up the Gangway has been installed. Things seem to be working OK at the moment with this Gangway.

Repair/work completion date: 04-Oct-2017

OTHER INSPECTIONS

☑	Lighting		☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	2 are up to date	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

Along with the ongoing safety issues on C & D floats, there is the potential hazard that I see with the blockade at the beginning of the decommissioned Wharfhead. It is too low and can easily blend in with the decking, making it easy to trip over and constructing a higher railing in this location would be simple and effectively SAFER. Recommend repainting the existing barrier until a more visible railing is installed. An idea could be to make this a simple bench for people to sit on.

If more comments are required, additional page will be attached.

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **04-Oct-2017** DOCK FACILITY: **Horton Bay, Mayne Island**

INSPECTOR: **Peter Binner** WHARFINGER: **Richard Jarco**

APPROACH

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

There is a small section of rotten Bull Rail at the beginning of the Approach and here could also be some issues with rotten deck planking but there is metal non skid over this area of planking that makes it hard to have a good look. This area gets very little sunlight and is also very damp.
The railings and decking need pressure washing and painting. The Notice board is in good condition and the fire extinguisher housing is also good.

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

There is no Wharfhead

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

This Gangway is in rough shape and the floats are all low in the water. The dinghy float is still only accessed by stepping over a gap that is about 30" wide, there is a possible SAFTY issue here and this float is needed so attaching a few planks over this span is recommended.
There are 2 other fire extinguishers on the float, these 2 extinguishers have no inspection tags on them and is there a record as to when they were installed? There are a total of 3 fire extinguishers on this dock.
Yellow paint is needed for the Loading zone rails.

Repair/work completion date:

OTHER INSPECTIONS

☑	Lighting		☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	current	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

Things are looking pretty rough in a lot of areas on this dock.
The number of boats at the dock has become dramatically less than in the Summer. This has taken the pressure off of the Loading Zone, likely until next Summer.
Pressure washing and painting is highly recommended here.

If more comments are required, additional page will be attached.

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **03-Oct-2017** DOCK FACILITY: **Swartz Bay**

INSPECTOR: **Peter Binner** WHARFINGER: **Mike Smart**

APPROACH

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

At some point, the concrete Approach requires pressure washing around the railing uprights where they are fixed to the concrete.
The Notice Board is in good condition, the fire extinguisher was updated but the plastic housing is broken and needs to be replaced.

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

There is no Wharfhead

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

The planking that was required to extend the bed that the transition plate slides on has been installed.
There is some movement with some of the bull rails on the West side of the float and will be monitored.
The end of the float that has the Loading Zone and Emergency Landing is lower in the water that the rest of the float. There is an encapsulated foam billet in this location.
A new sign is required to state that the landing zone is also for emergency and that "NO" boat is to be left unattended.

Repair/work completion date: 01-Sep-2017

OTHER INSPECTIONS

☑	Lighting		☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	current	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

This dock is in reasonably good condition except for some of the worn and loose Bull Rails and the very end of the float that is lower than the rest of the float.
The sign for the emergency use and yellow paint for this area is also required.
Pressure washing of the steel uprights where they are attached to the concrete is required.

If more comments are required, additional page will be attached.

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **05-Oct-2017** DOCK FACILITY: **Hope Bay, Pender Island**

INSPECTOR: **Peter Binner** WHARFINGER: **Peter Binner**

APPROACH

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

There was a slight accident with a truck that broke a small part of the railing, just off of the main part of the Approach structure. The owner of the truck will have the railing repaired.
This area still needs pressure washing and painting of the railings.

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

The fire extinguisher was replaced and is up to date, housing is good. Otherwise no new issues here.

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

Aluminum skid rails for the transition plate on the Gangway were installed. New paint was applied to the Loading Zone Bull Rails. There are still a few lengths of rub board that need to be replaced, otherwise things are in good condition.

Repair/work completion date:

OTHER INSPECTIONS

☑	Lighting	good	☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	up to date	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

Pressure washing of the Approach and the Wharfhead along with painting the railings is recommended.
A few parents have requested adding more wire screening that could help prevent small kids from falling in between the railings on the Wharfhead.

If more comments are required, additional page will be attached.

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **05-Oct-2017** DOCK FACILITY: **Port Washington, Pender Island**

INSPECTOR: **Peter Binner** WHARFINGER: **Rod MacLean**

APPROACH

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

No new Issues with the Approach, railings require painting otherwise in good condition.

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

There are also no new issues in this area. The Notice Board is in reasonable condition.

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☑ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

Both Gangways need painting and both floats have bull rail issues that require attention.
There is an electrical wire on B Float that is hanging in the water and a lamp head that is hanging askew. On Float A, there is an electrical box that needs a better weather proof connection at the box.
Floats B & C are showing their age, quite a bit of old worn planking and Bull Rails. The transition between these floats require attention, there is considerable wear with the chains and wood. Things will likely survive for another few years, the floats don't usually get a lot of traffic but repairs are required with these floats in the near future.

Repair/work completion date:

OTHER INSPECTIONS

☑	Lighting	working but with issues	☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	out of date	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

The Loose Bull Rails on both floats require immediate attention . There are some electrical issues that also need immediate attention.
The Pilots would like the lamp standard moved further away from the landing area.

If more comments are required, additional page will be attached.

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Southern Gulf Islands Harbours DOCK INSPECTION REPORT

DATE: **04-Oct-2017** DOCK FACILITY: **Retreat Cove, Galiano Island**

INSPECTOR: **Peter Binner** WHARFINGER: **Kiyoshi Okuda**

APPROACH

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

The Approach is unchanged, pressure washing and the railings require painting.

Otherwise things are in good condition.

Repair/work completion date:

WHARF HEAD

Facility Kiosk Inspection: ☑ Signage ☑ Envelope Supply ☑ Notices Posted ☑ Rates Posted

The notice board could also use a wash and some new paint along with the railings in this area.
The Fire Extinguisher is out of date but the housing is good.
This area is also in good condition otherwise.

Repair/work completion date:

GANGWAY FLOATS

Facility Kiosk Inspection: ☐ Signage ☐ Envelope Supply ☐ Notices Posted ☐ Rates Posted

The Gangway has new paint and everything on the float is in good order, No further issues.

Note: There is no "Loading Zone" at this dock, no yellow paint required.

Repair/work completion date:

OTHER INSPECTIONS

☐	Lighting	No Lighting	☑	Life Rings / Heaving Lines	good
☑	Extinguishers (expiry dates)	expired	☐	Unpaid Moorage	

COMMENTS / INSTRUCTIONS:

Pressure washing and painting is required , otherwise this dock is in good condition. No other issues to report.

If more comments are required, additional page will be attached.