PRIVATE &

CONFIDENTIAL

30.

Katrina Oakley

From: Kevin Moore
Sent: Monday, 14 July 2014 1:00 PM
To: Graeme Wood
Cc: Stuart Loone; Craig Heron
Subject: TRIM: Wharf Purchase
Attachments: Spring Bay Wharf Remedial Works 2011 PKC.doc.doc; ASD Pile inspections wharf stem.pdf.pdf; ASD Pile inspections wharf head.pdf.pdf

Graeme,

My turn to apologise for the delay in responding.

In regard to your request for more information in order to better understand the condition of the wharf, please refer to the attached self-explanatory condition reports. Despite being a few years old, they provide a very good assessment of the areas of deterioration and the recommendations for remedial work.

As Tasports doesn't know the different usage scenarios that you are contemplating, it wouldn't be appropriate for us to estimate the cost of remedial work. Suffice to say that the wharf retains value notwithstanding which development scenarios you may pursue.

I will be in Devonport and Launceston on Wed & Thurs this week but I will be back in Hobart on Friday if you would like to get together.

Regards

Kevin

Kevin Moore | General Manager Commercial & Trade

Tasmanian Ports Corporation
T 6222 6050 | **M** 0416 189 824 | **E** kevin.moore@tasports.com.au
Level 13, Trafalgar Building, 110 Collins Street Hobart TAS 7000 Australia | GPO Box 202, Hobart 7001
ww.tasports.com.au

From: Graeme Wood [mailto:graeme.wood@springbaymill.com]
Sent: Monday, 14 July 2014 12:35 PM
To: Kevin Moore
Subject: Fwd: Wharf Purchase

Hi Kevin,

How is this going?

I'm in Hobart Wednesday to Friday this week and keen to move the discussion forward.

Cheers

Graeme

---------- Forwarded message ----------
From: **Graeme Wood** <graeme.wood@springbaymill.com>
Date: Thu, Jul 3, 2014 at 9:38 AM
Subject: Wharf Purchase
To: Kevin Moore <Kevin.Moore@tasports.com.au>
Cc: Stuart Loone <stuart.loone@springbaymill.com>

Kevin,

Apologies in the delay in getting back to you. I am back in Aus and will be in Hobart next week.

Before I can respond with a counter offer to your proposal I really need to understand more about the condition of the wharf so I can understand the range of maintenance costs for different usage scenarios I am contemplating.

What information do you currently have available that may help this process?

Thank you,

Graeme Wood

ASD Pty Ltd Trading as:
A.C.N. 009 510 007 A.B.N. 25 009 510 007

ASD Contractors

PO Box 106 South Hobart Tasmania 7004
Workshop 44 Napoleon Street Battery Point Tasmania
Phone/Fax: 03 6323 1722 Mobile: 0418 560 955
Email: asds@tassie.net.au Web: www.asddiving.com.au

COMMERICAL DIVING
MARINE CONSTRUCTION

6 July 2009

Tas Ports Corp

ATT Andrew Dobbie

RE Triabunna Mill Wharf Inspection 1.7.09

ASD Contractors undertook an Inwater Inspection of timber fender piles and steel piles on wharf head, inspection of concrete beams and soffits on wharf head and breast dolphins.

Spread sheets have been attached.

Areas to note: Steel columns on BD4. One column connection to steel fendering has broken away. Remaining three have bad deterioration to plating in same area. In water area of these columns are in good condition, splash zone has moderate rusting.
935
936

Fender rubbing strips:
Mid section rubbing strips are coming to end of wear period, having worn down to frame depth.
940
942

Steel cross bracing:
Steel cross bracing under walkways has moderate to severe corrosion, photos show general condition.
975
973

Connections of walkway tressel pile sets, connection of crossheads to walkway beams and connection of crosshead to pile, have moderate to severe corrosion, with delamination. Photos show worst sighted.
977
980
985

Breasting dolphin #4
Concrete at north western corner has cracking to 5mm over 2m to side and underside.
981

Breasting dolphin #5
Spalling to soffit over approx 2m square, no reinforcement or rust leaching visible.
982
984

Breasting dolphin #6
General spalling to soffit over area of approx 30%. No reinforcement or leaching visible.
987

Wharf head concrete beams:

Pile row G

Pile #4
Cracking to 5mm over approx 3m side and underside of beam
943
944

Pile # 3-4
Cracking to 5mm to underside of beam over approx 3m
946
947

Pile # 2-3
Cracking to 3mm to underside of beam over approx 2m
948

Pile # 1
Cracking to 3mm on side and underside of beam
949
950

Pile # 2
Cracking to 5mm to side and underside of beam over approx 2m
951

Pile Row F
Pile #4
Cracking to 1mm on side of beam over approx 2m
952

Pile # 3
Cracking to 3mm son side of beam over approx 1.5m
953

Pile # 2
Cracking to 3mm on side and underside over approx 2m
954

Pile # 1
Cracking to 5mm on side and underside of beam
955
956

Cracking and spalling with reinforcement visible and rusting
957
958

Pile Row E

Pile #1
Cracking to 2mm on side and underside and spalling to underside of the beam
959

Pile # 1-2
Cracking to 3mm to underside of beam over approx 2m
960

Pile # 2
Cracking to 5mm to side and underside
967

Pile # 3
Cracking to 5mm and small spalling on underside of beam area over approx 2m
962
Spalling to approx 100mm with reinforcing showing and rusting
963

Pile # 4
Cracking to 5mm on side of beam over approx 1m
964

Pile Row D

Pile # 1
Cracking to 5mm on side of beam over approx 1m
966

Pile # 1
Cracking to 5mm on side and underside of beam over approx 4m
967

Pile # 2
Cracking to 5mm on side and underside of beam over approx 1m
968

Pile # 3
Cracking to 5mm on side and underside of beam on both sides over approx 4m
969

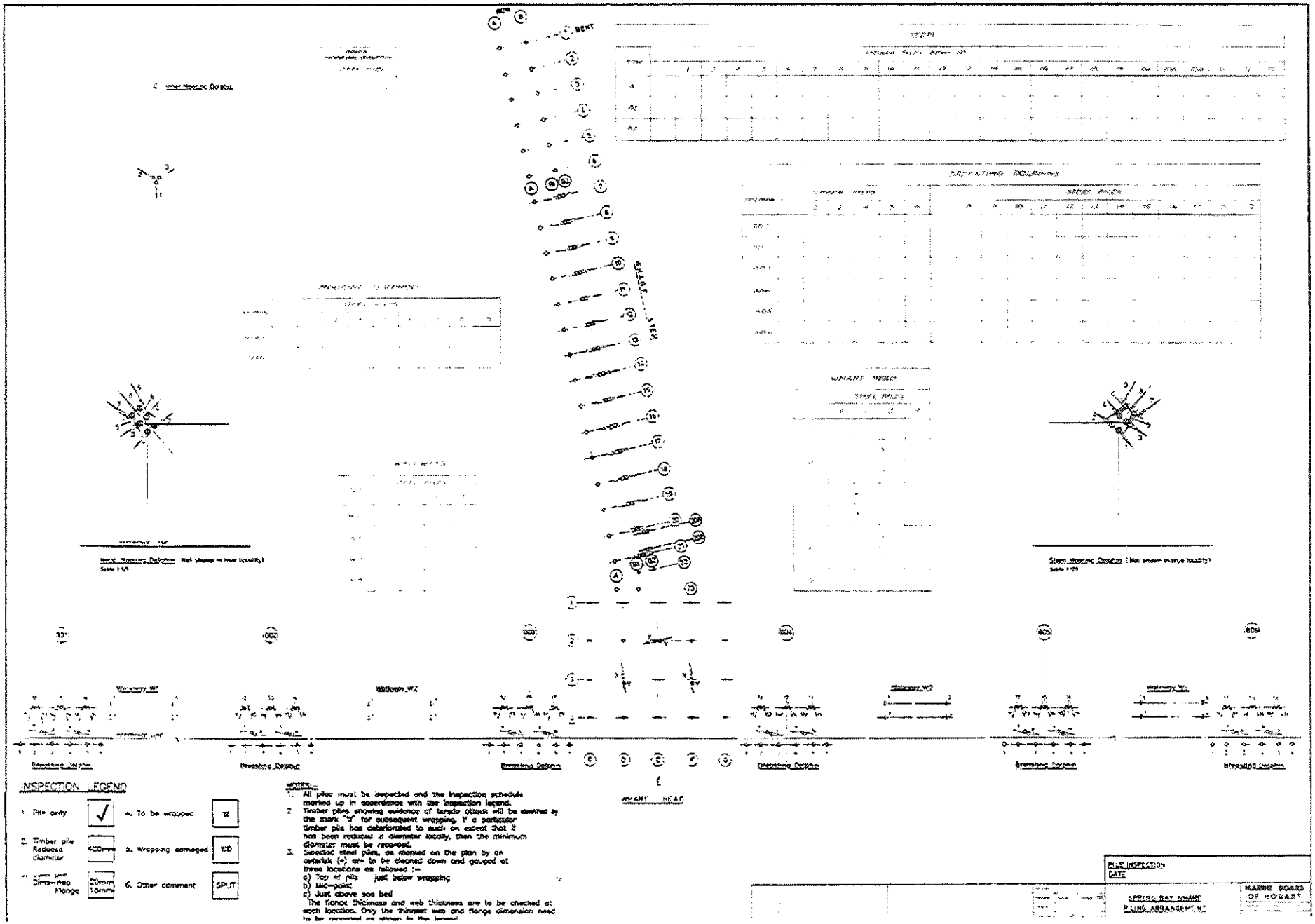
Pile # 4
Cracking to 2mm on side and underside of beam, both sides over approx 1m
970

Pile Row C

Pile # 3-4
Cracking to 5mm, spalling to 100mm over total span between piles, Reinforcement exposed and rusting
971

Regards,

Cam Macmillan



INSPECTION LEGEND

1. Pile okay	✓	4. To be wrapped	W
2. Timber pile Reduced diameter	400mm	5. Wrapping damaged	WD
3. Steel pile Dims-Web / Flange	20mm / 16mm	6. Other comment	SPLIT

NOTES:
1. All piles must be inspected and the inspection schedule marked up in accordance with the inspection legend.
2. Timber piles showing evidence of teredo attack will be identified by the mark "R" for subsequent wrapping. If a particular timber pile has deteriorated to such an extent that it has been reduced in diameter locally, then the minimum diameter must be recorded.
3. Selected steel piles, as marked on the plan by an asterisk (*) are to be cleaned down and gauged at three locations as follows :-
   a) Top of pile just below wrapping
   b) Mid-depth
   c) Just above sea bed
   The flange thickness and web thickness are to be checked at each location. Only the thinnest web and flange dimension need to be recorded as shown in the legend.

PILE INSPECTION
DATE

MARINE BOARD OF HOBART

TRIABU[illegible]A UNDERWATER TIMBER PILE IN[illegible]PECTION
DOLPHIN FENDER PILES

INSPECTION DATE:- 1.7.2009

ROW No.	AISLE No.	ATTACK (Y/N)	PILE DAMAGE (%)	WRAPPING	CONC. SLEEVING	SCORE	REPAIRS NEEDED & COMMENTS
BD1	1	Y	20			4	
BD1	2	Y	15			4	
BD1	3	Y	20			4	
BD1	4	Y	10			4	
BD1	5	Y	45			2	Tidal area
BD1	6	Y	30			3	
BD2	1	N	0			5	
BD2	2	Y	20			4	
BD2	3	Y	40			3	
BD2	4	Y	30			3	
BD2	5	Y	15			4	
BD2	6	N	0			5	
BD3	1	Y	20			4	
BD3	2	Y	15			4	
BD3	3	Y	25			3	
BD3	4	Y	15			4	
BD3	5	Y	15			4	
BD3	6	Y	20			3	

TRIABU[illegible]A UNDERWATER TIMBER PILE IN[illegible]PECTION

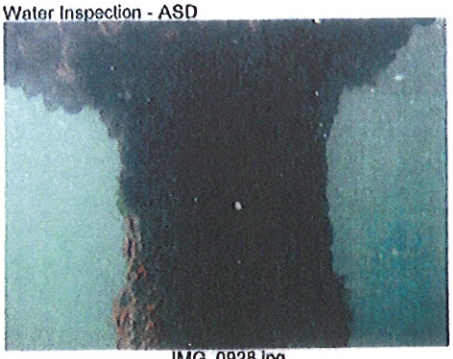
DOLPHIN FENDER PILES

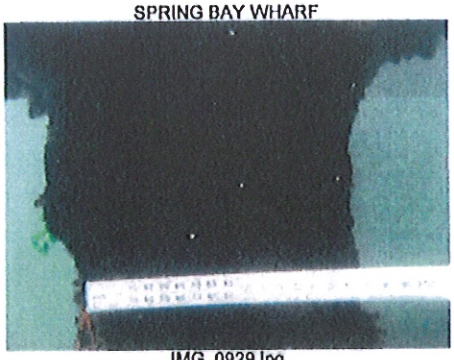
ROW No.	AISLE No.	ATTACK (Y/N)	PILE DAMAGE (%)	WRAPPING	CONC. SLEEVING	SCORE	REPAIRS NEEDED & COMMENTS
BD4	1	Y	15			4	
BD4	2	Y	20			3	
BD4	3	Y	50			2	Tidal area and top of pile # 0938 # 0932
BD4	4	Y	40			3	Tidal area
BD4	5	Y	35			3	
BD4	6	Y	75			2	Tidal Area # 0929 # 0930
BD5	1	Y	10			4	
BD5	2	Y	20			4	
BD5	3	Y	20			4	
BD5	4	Y	35			3	
BD5	5	Y	10			4	
BD5	6	Y	30			3	
BD6	1	Y	25			3	
BD6	2	Y	10			4	
BD6	3	Y	20			4	
BD6	4	Y	30			3	Tidal and mudline area
BD6	5	Y	20			4	
BD6	6	Y	10			4	

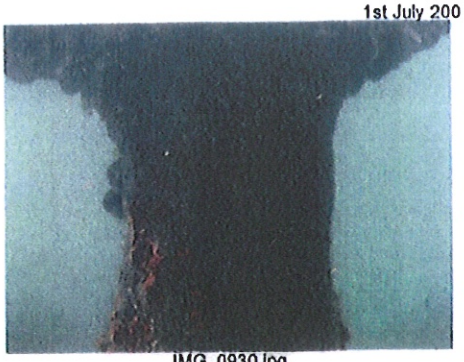
SCORE: (5)=Excellent (4)=Good (3)=Attacked but ok (2)=Bad attack, repairs required (1)=Replace pile

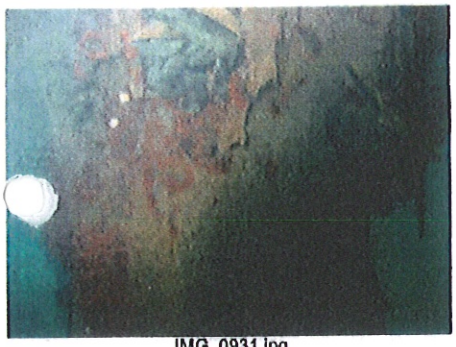
WRAPPING: (WO)=Wrapping ok (WD)=Wrapping Damaged (WR) Wrapping needs replacing (N/A)=No wrapping on pile

SLEEVING: (STA)=Sleeve in Tidal Area (SML)=Sleeve in Mud line (SFL)=sleeve is full length (SR)=Sleeve needs repairs (N/A)=No sleeve on pile (S/N)=Sleeve Needed


IMG_0928.jpg
01/07/2009


IMG_0929.jpg
01/07/2009


IMG_0930.jpg
01/07/2009


IMG_0931.jpg
01/07/2009


IMG_0932.jpg
01/07/2009


IMG_0933.jpg
01/07/2009


IMG_0934.jpg
01/07/2009


IMG_0935.jpg
01/07/2009


IMG_0936.jpg
01/07/2009


IMG_0937.jpg
01/07/2009

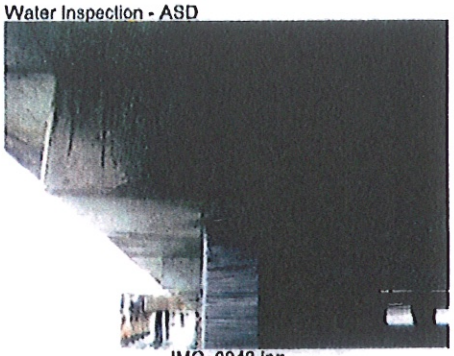

IMG_0938.jpg
01/07/2009


IMG_0939.jpg
01/07/2009

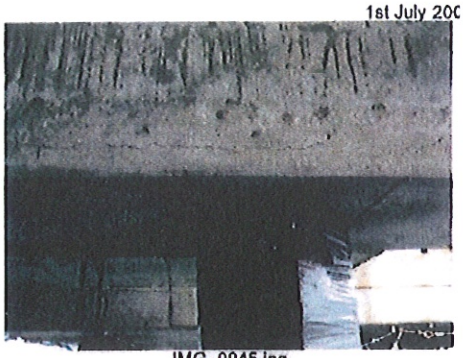

IMG_0940.jpg
01/07/2009


IMG_0941.jpg
01/07/2009

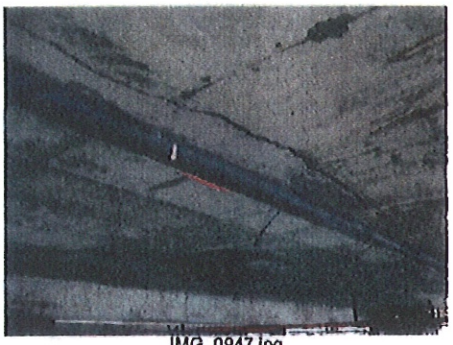

IMG_0942.jpg
01/07/2009


IMG_0943.jpg
01/07/2009


IMG_0944.jpg
01/07/2009


IMG_0945.jpg
01/07/2009


IMG_0946.jpg
01/07/2009

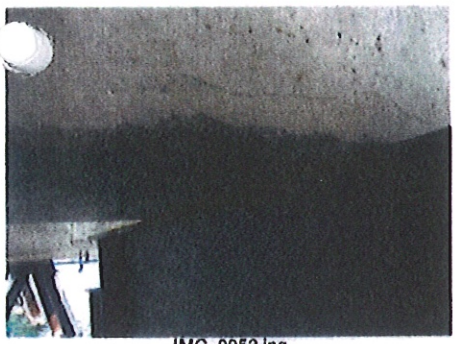

IMG_0947.jpg
01/07/2009


IMG_0948.jpg
01/07/2009


IMG_0949.jpg
01/07/2009


IMG_0950.jpg
01/07/2009


IMG_0951.jpg
01/07/2009


IMG_0952.jpg
01/07/2009

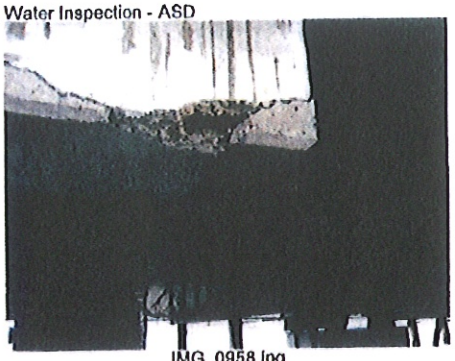

IMG_0953.jpg
01/07/2009

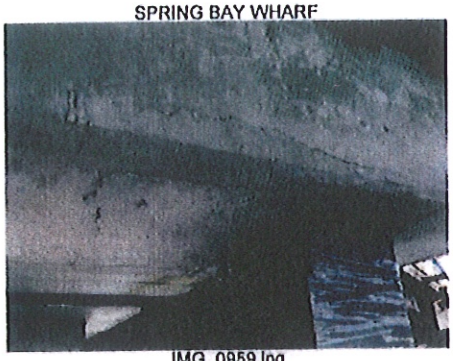

IMG_0954.jpg
01/07/2009

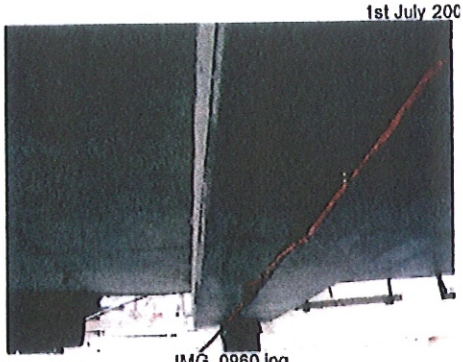

IMG_0955.jpg
01/07/2009


IMG_0956.jpg
01/07/2009

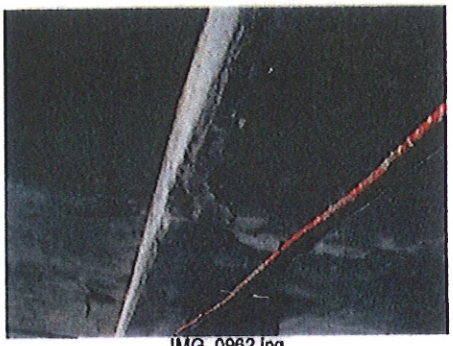

IMG_0957.jpg
01/07/2009

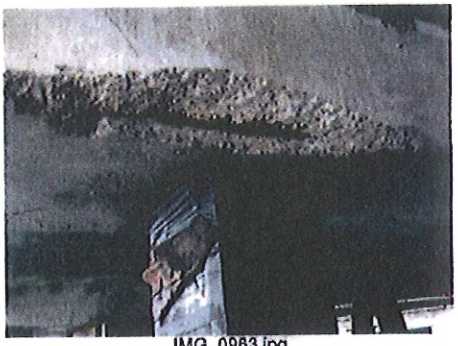

IMG_0958.jpg
01/07/2009


IMG_0959.jpg
01/07/2009


IMG_0960.jpg
01/07/2009

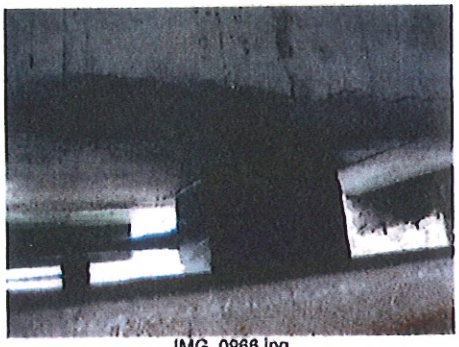

IMG_0961.jpg
01/07/2009


IMG_0962.jpg
01/07/2009


IMG_0963.jpg
01/07/2009


IMG_0964.jpg
01/07/2009

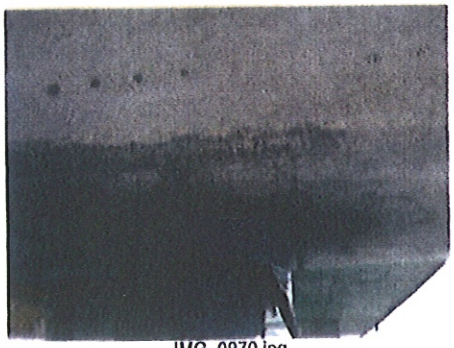

IMG_0965.jpg
01/07/2009


IMG_0966.jpg
01/07/2009

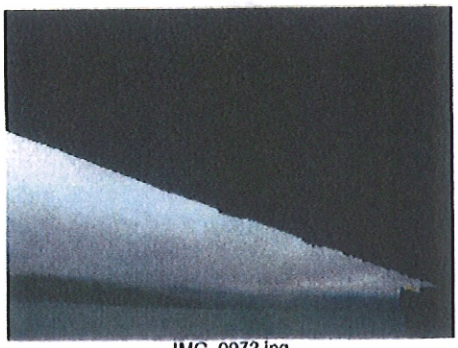

IMG_0967.jpg
01/07/2009


IMG_0968.jpg
01/07/2009

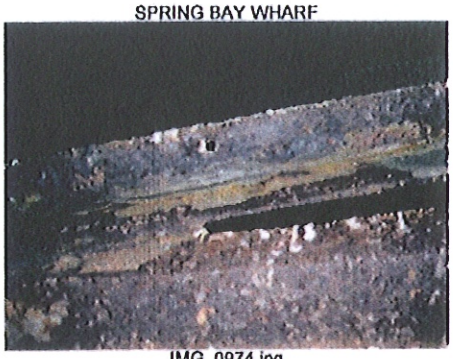

IMG_0969.jpg
01/07/2009


IMG_0970.jpg
01/07/2009


IMG_0971.jpg
01/07/2009


IMG_0972.jpg
01/07/2009

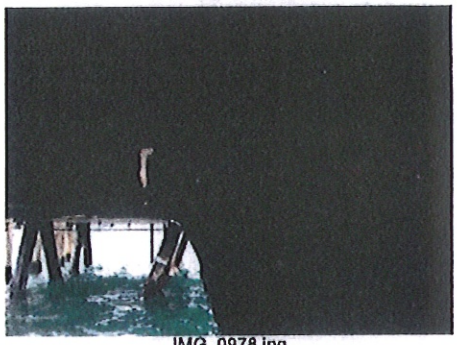

IMG_0973.jpg
01/07/2009


IMG_0974.jpg
01/07/2009


IMG_0975.jpg
01/07/2009

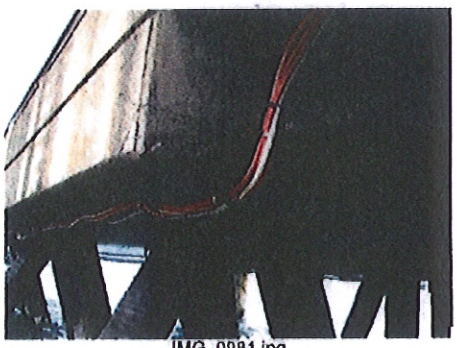

IMG_0976.jpg
01/07/2009


IMG_0977.jpg
01/07/2009


IMG_0978.jpg
01/07/2009

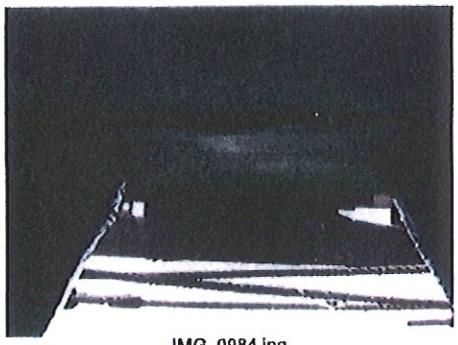

IMG_0979.jpg
01/07/2009


IMG_0980.jpg
01/07/2009

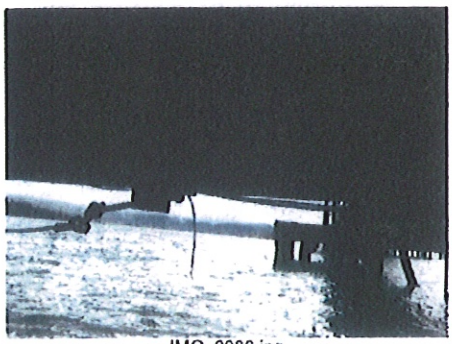

IMG_0981.jpg
01/07/2009

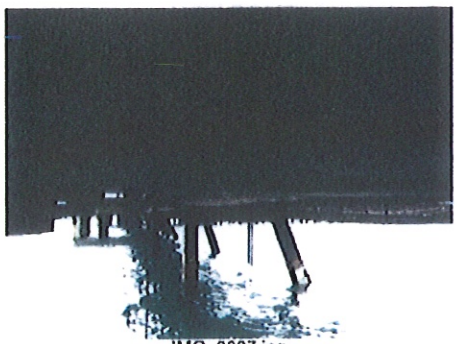

IMG_0982.jpg
01/07/2009


IMG_0983.jpg
01/07/2009


IMG_0984.jpg
01/07/2009


IMG_0985.jpg
01/07/2009


IMG_0986.jpg
01/07/2009


IMG_0987.jpg
01/07/2009

PORT: **TRIABUNNA** **WHARF:** **SPRING BAY WHARF**

INSPECTION DATE: Monday 9th February **INSPECTOR:** Andrew Dobbie, Asset Manager

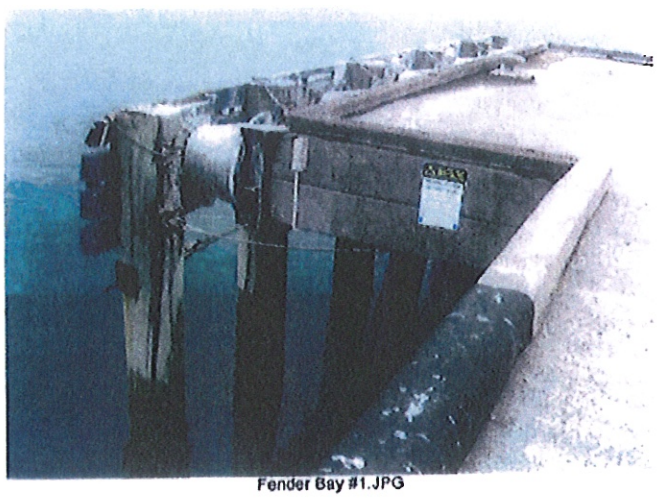
	Bay 1	Observation	Bay 2	Observation	Bay 3	Observation	Bay 4	Observation	Bay 5	Observation	Bay 6	Observation
FENDER BAY COMPONENT												
Timber Piles												
TP1	2	Insitu conc poured to top of missing pile section	3		3		2	Heavy necking @ tidal range (tr)	3		3	
TP2	3		3	Vertical cracking present	3		3		3		3	
TP3	3		3		3		2	Large vert cracking @ tr	3		3	
TP4	3		3		3		2	Large vert cracking @ housing	3	Top of checked housing broken off	3	
TP5	3	No pile capping in place	3	Heavy vert cracking present	3	Med vert cracking @ housing	2	Large vert cracking @ housing	3		3	
TP6	3	No pile capping in place	4		2	Large vert cracking @ housing	3	Med vert cracking @ housing	3		3	
Steel Piles												
SP1	na		na		na		1	Complete splice failure	na		2	Spliced joint heavy corrosion
SP2	na		na		na		1	Complete splice failure	na		na	
SP3	na		na		na		2	Severe corrosion loss of section	na		na	
SP4	na		na		na		2	Severe corrosion loss of section	na		2	Spliced joint heavy corrosion
Fender Units												
F1	3	" Typically to all units:	3	"	3	"	3	"	3	"	3	"
F2	3	Steel frame full of sawdust	3	"	3	"	3	"	3	"	3	"
F3	3	Fender units satisfactory	3	"	3	"	3	"	3	"	3	"
F4	3	No permanent deformation	3	"	3	"	3	"	3	"	3	"
F5	3	or large crack, gouging	3	"	3	"	3	"	3	"	3	"
Fender Covers												
C1	na		4		4		4		2	Badly buckled frame	na	
C2	na		4		4		4		4		na	
C3	na		4		4		4		4		na	
C4	na		4		4		4		4		na	
C5	na		4		4		4		4		na	
C6	na		2	Badly buckled frame	4		4		4		na	
Bollards												
B1	2-3	" Typ. HD nuts corroded	2-3	"	2-3	"	2-3	"	2-3	"	2-3	"

NOTES:

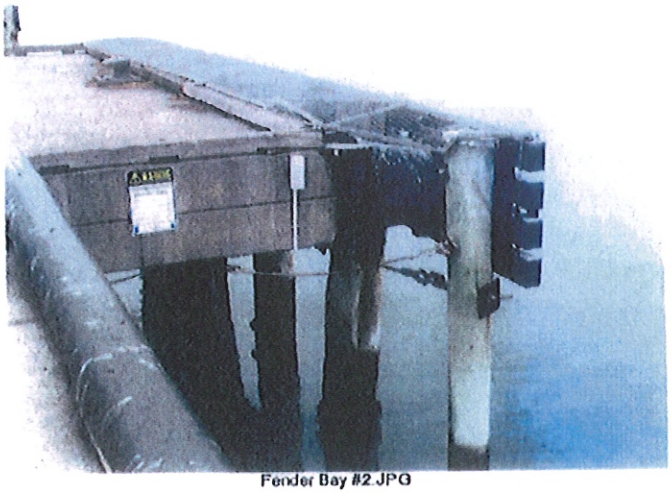
1. Tide at time of inspection was low
2. HPDE low friction fender pads require inspection from vessel
3. Main purpose of inspection was for asset inventory at Spring Bay Wharf for inclusion to ALM

REFERENCES:

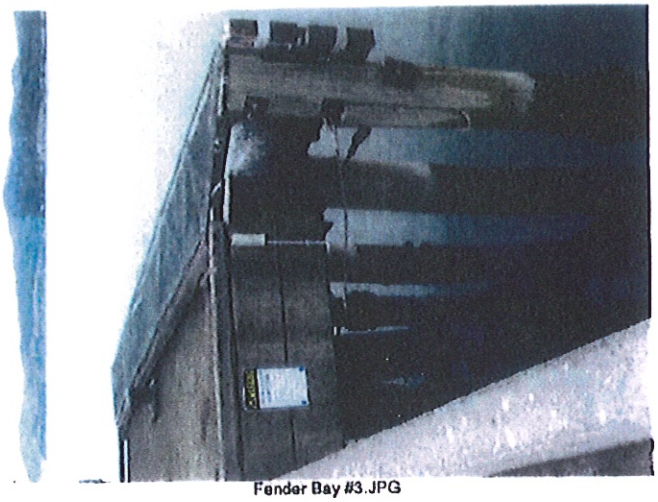
Appendix A	Fender Bay Components
Appendix B	Fender Bay General Arrangement
Advisory Note #3	Timber Pile - Deterioration Guide
Advisory Note #7	Condition Rating Guide - Piles



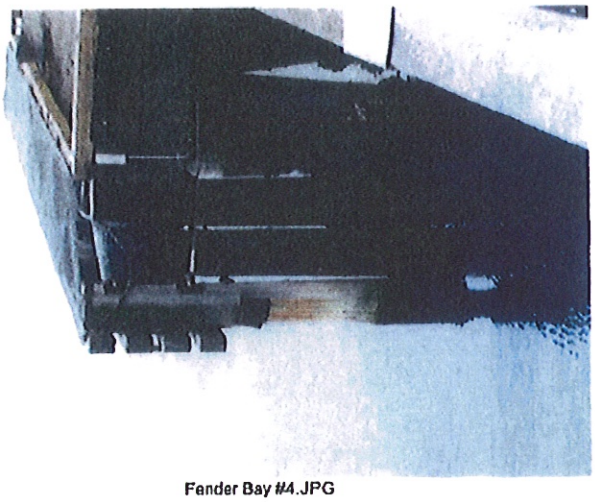
Fender Bay #1.JPG



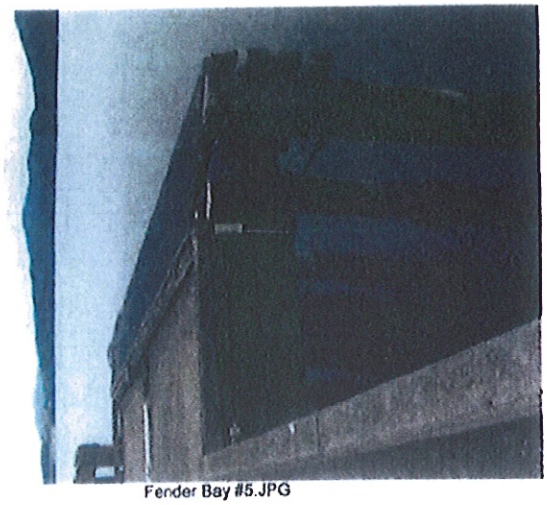
Fender Bay #2.JPG



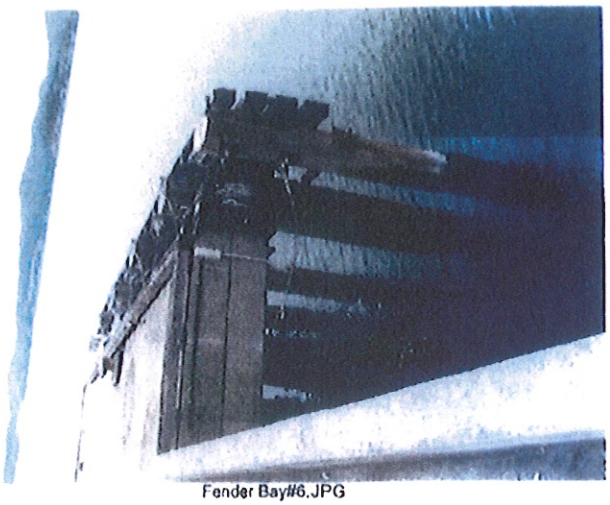
Fender Bay #3.JPG



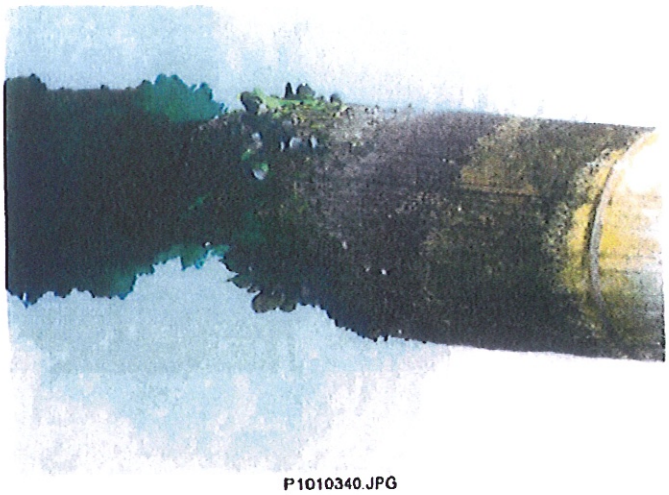
Fender Bay #4.JPG



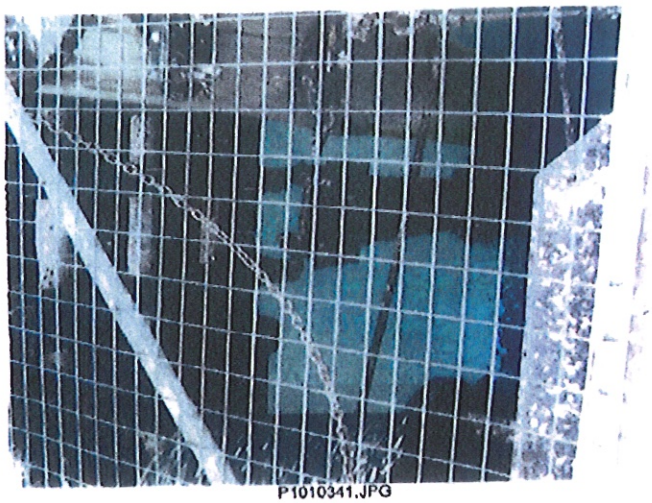
Fender Bay #5.JPG



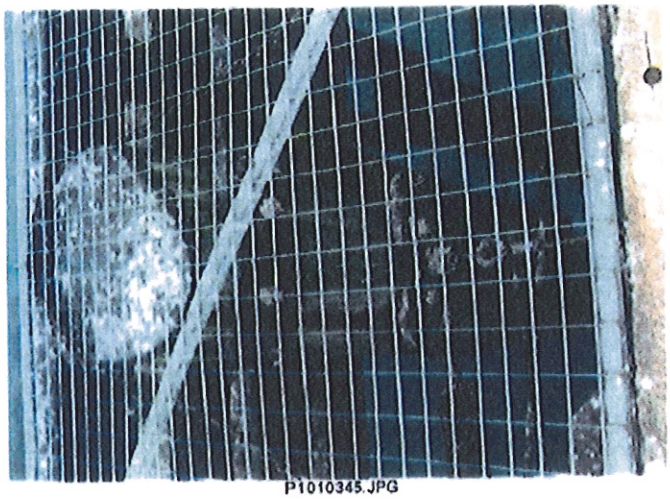
Fender Bay#6.JPG



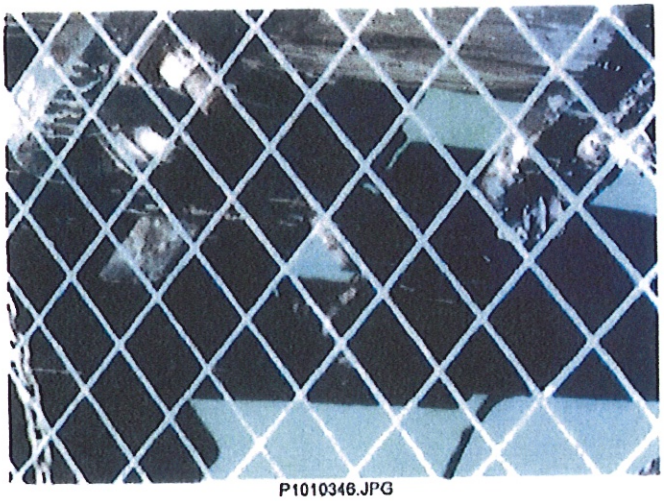
P1010340.JPG



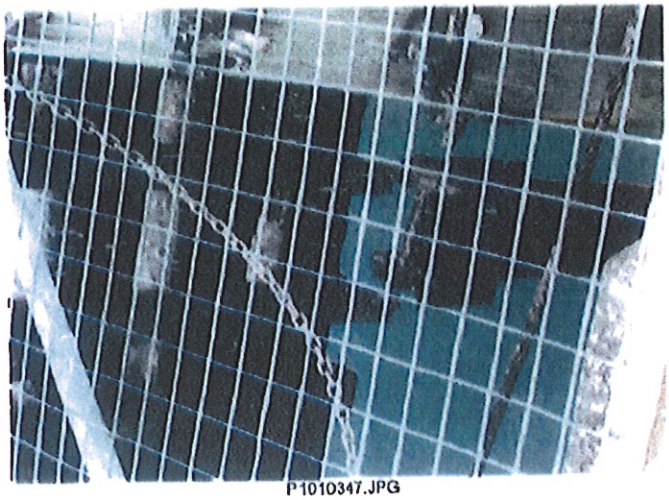
P1010341.JPG



P1010345.JPG



P1010346.JPG



P1010347.JPG

APPENDIX 4 - FENDER COMPONENTS

APPENDIX B

TasPorts Asset Lifecycle Management

ADVISORY NOTE – NO.3
PILE DETERIORATION – RATING GUIDELINE

	No Diagram	No Diagram
Rating 5 As New		
Rating 4 Near New	 95–100% REMAINING MAXIMUM DAMAGE	 95–100% REMAINING MINIMUM DAMAGE
Rating 3 Average	 90–95% REMAINING MAXIMUM DAMAGE	 90–95% REMAINING MINIMUM DAMAGE
Rating 2 Poor	 55–85% REMAINING MAXIMUM DAMAGE	 55–85% REMAINING MINIMUM DAMAGE
Rating 1 Unserviceable	 25–50% REMAINING	 0–25% REMAINING

TasPorts Asset Lifecycle Management

ADVISORY NOTE – NO.7, CONDITION RATING GUIDE - PILES

Asset Life 50 years

Rating	Definition	% Estimated Remaining Life	Steel	Timber	Concrete (Steel Cased)
5	Excellent	61-100	As new	As new	As new, some minor surface corrosion present.
4	Good	31-60	Acceptable physical condition. Minor wear and tear. Slight rusting (corrosion), loss of paint above water. No work required	Acceptable physical condition. Minor wear and tear. Little or no rot or decay, though there may be minor cracks, splits or checks having no affect on the strength of the element. No work required.	Acceptable physical condition. Minor wear and tear. General corrosion and loss of paint above water. No work required.
3	Average	21-30	Some heavy corrosion present with rust scale build-up. Estimated remaining life 10-15 yrs however conduct a more detailed assessment to define this more accurately.	Minor signs of rot or decay. Moderate necking evident, 350mm of diameter remaining, cracking extends beyond connections and splitting is <10mm wide.	Some heavy corrosion present. Estimated remaining life 10-15 yrs however conduct a more detailed assessment to define this more accurately.
2	Poor	11-20	Deterioration evident. Heavy corrosion above and/or below water. Failure unlikely in the near	Deterioration evident. Extensive decay, checking or splitting (<20mm wide). Heavy necking.	Significant deterioration evident in the form of corrosion related holing of

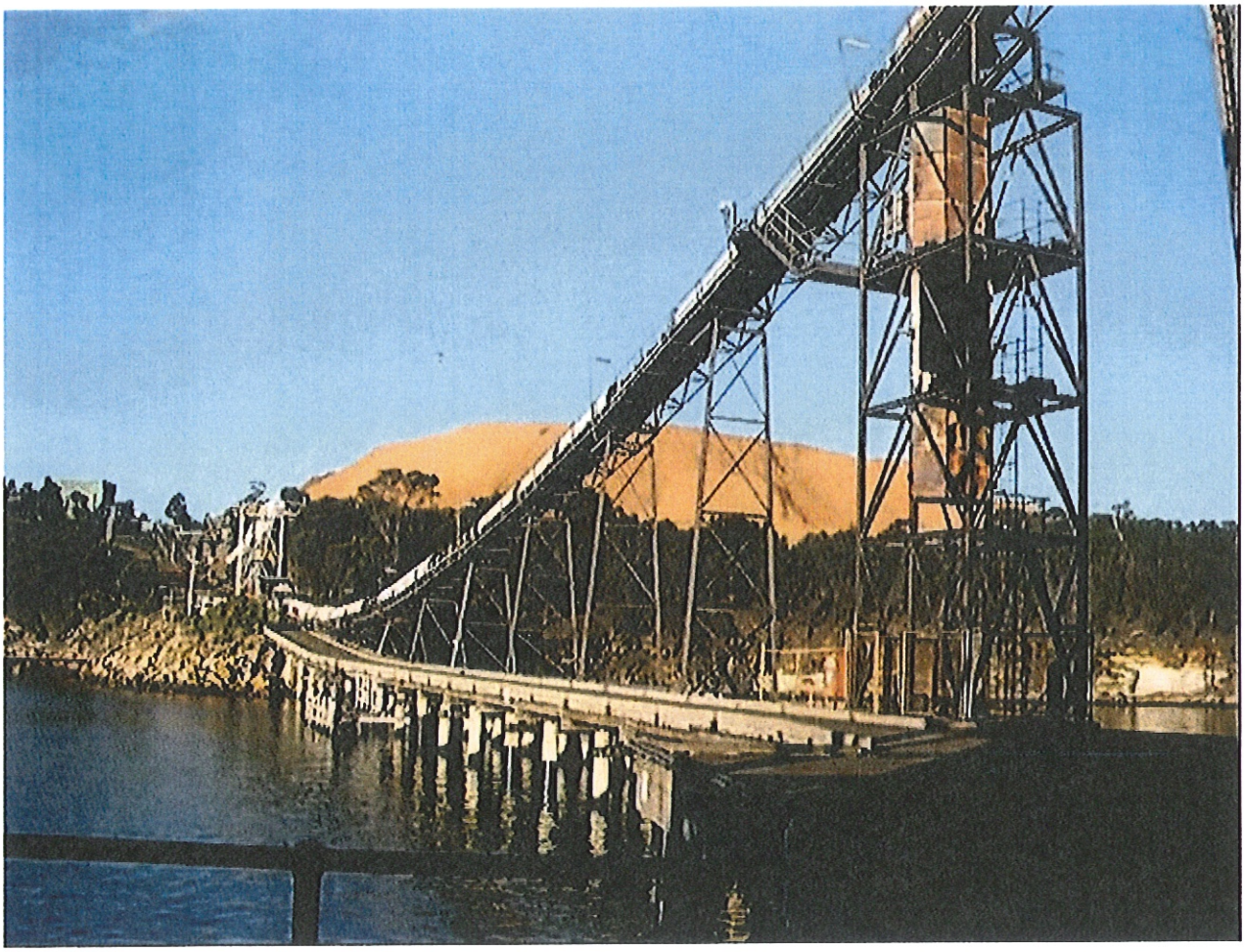
			future but further deterioration likely. Remedial work likely to be required in the next 5 yrs could include – replacing anode below water or wrapping pile above water.	300mm of diameter remaining along with heavy cracking that extends along the member. Failure unlikely in the near future but further deterioration likely. Remedial work required in next 5 years.	steel casing and exposure of concrete above and/or below water. Failure unlikely in the near future but further deterioration likely. Remedial work required in the next 5 years could include – patch repairs and/or the need for cathodic protection, a check to see if it is still functioning, replacing anode below water or wrapping pile above water.
1	Very Poor	0-10	Failure likely in the next 3 years. Significant loss of steel section through corrosion either surface or pitting. Fatigue failure of steel welds. Substantial work required short term or asset failed or failure imminent. Asset represents a risk. Major work or replacement required urgently.	Asset failed or failure imminent. Asset represents a risk. Major work or replacement required urgently or significant necking of piles down to 200mm diameter. They may also have large splits, especially under load bearing areas, heavy decay or checks which may have a reduction in strength of the member. Substantial work required in very short term.	Asset failed or failure immanent. Asset represents a risk. Major work or replacement required urgently or failure likely in the next 3 years. Significant holes in steel section to an extent that the concrete is exposed and showing signs of deterioration. Substantial work is required short term.

Wharves/Jetties Pile Criteria

TasPorts

Report

Spring Bay Wharf



JULY 2011

TASPORTS

Tasmanian Ports Corporation Pty Ltd
ABN 82 114 161 938

1 Franklin Wharf
GPO Box 202
Hobart Tasmania 7001
Phone: +61 3 6222 6000
Fax: +61 3 6231 0693
Email:secretary@tasports.com.au

Reference No:

MEMORANDUM TO: **Manager Infrastructure**
cc:

Date: **4/7/2011**

From: **Project Officer**

SUBJECT: **SPRING BAY WHARF REMEDIAL WORKS**

Background

The Spring Bay Wharf was originally designed and constructed by John Holland constructions during 1970 -1971 for the purpose of transferring wood chips from the chip mill to waiting ships. The design life span of the facility was considered at the time of construction to be 25 years

The wharf construction consists of:

Wharf Stem

The wharf stem construction consists of driven vertical treated timber piles large timber crossheads and bearers and timber deck. During the late 1970s the timber deck was covered with a concrete topping and concrete curb. A single raker pile was also driven in each bay and attached to the vertical pile to provide stability.

The crossheads as originally installed in the stem have a large cantilever out past the vertical and raker pile for the purpose of supporting the chip loader conveyor. The chip loader conveyor has been changed and upgraded a number of times to keep up with the changing requirements for loading the chips on to visiting ships, including vertical piles supports to the cantilever end of the conveyor support crossheads

Attached to the right hand side of the wharf stem is a landing that is used to transfer the pilot and linesman to and from the pilot boat. The landing has been constructed by driving two additional vertical piles adjacent to two of the stem structural piles and connected with large timber crossheads, bearers and timber deck.

Wharf Head

The wharf head consists of driven steel UBP vertical and raker piles cast into a reinforced concrete deck. The wharf head is made up of six individual concrete dolphins inter connected by walkways supported on large steel beams secured to vertical piles.

Mooring Dolphins

Located at the northern and southern ends of the wharf are two remote mooring dolphins for the purpose of securing the ships stern and headlines. Due to the remoteness of the dolphins they are only accessible by lines boat during the mooring of vessels and to conduct routine maintenance.

To the south of the main wharf there is also a forward breast line mooring dolphin that is accessible by land. The dolphin has been constructed as a large concrete mass with a triple quick release bollard bolted to the concrete.

Situated on the western side of the wharf is a stern breast line dolphin. The structure consists of three steel raker piles, steel deck and vertical hardwood timber fenders. This dolphin is also only accessible by boat.

The northern stern dolphin was totally rebuild in 1998 and has steel vertical and raker cylindrical piles cast into a reinforced concrete top.

The southern head line dolphin was rebuilt during 2009 where the existing piles were reused and a new concrete top was installed.

The mooring dolphins all have triple quick release hooks installed.

Wharf Condition

As a result of regular condition inspections there have been a number of engineering reports produced highlighting the deteriorating condition of the structural elements supporting the wharf structure.

In previous budgets it has been identified that funds need to be made available so as major repairs can be undertaken to keep the facility in a working condition. Due to budget restraints and cuts in budget expenditure the Spring Bay Wharf now requires a major injection of funds to address the severity of the deterioration and to extend its working life, a number of structural elements are now at a stage of requiring urgent repair.

Main Stem

Crossheads

- The crossheads, supporting the main stem of the wharf have severe horizontal cracking through the sections where they are secured to the vertical piles.
- The cantilever section of the crossheads have sagged due to the weight of the conveyor supports prior to the recent addition of vertical piles.
- A significant number of the crossheads, particularly where exposed to the weather show significant end rot, softening and shrinkage to the timber. This deterioration is also evident to the timber packers between the crossheads.

Wharf Condition Continued

Photo shows the severity of the cracked crossheads

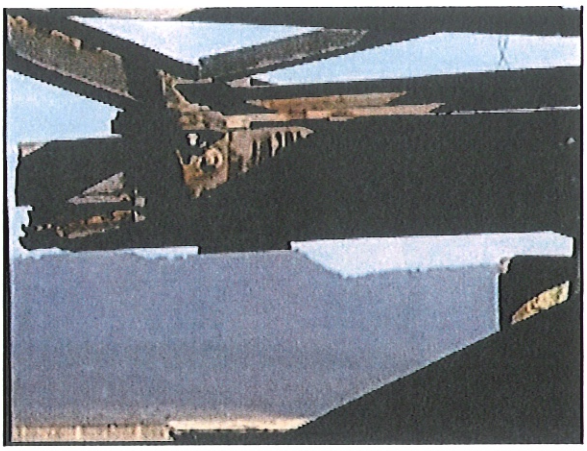


Photo shows the cantilever section of the crosshead & the level of decayed in a section of crosshead

Timber Bearers

- The majority of the timber bearers that span between the crossheads are in reasonable condition but there are also a number of bearers showing signs of major sagging and in some cases the sag in the timber is up to 100mm over a 4.5m span. The original decking secured to the bearers consisted of 200x125mm hardwood timber. Sometime after the original construction the stem timber deck was covered with a cast in-situ concrete deck. The increased dead load of the concrete is thought to have played a part in the sagging of the timber bearers.

Treated Timber Piles

- The treated timber piles supporting the wharf stem have substantial loss of section mainly in the tidal zone caused by wave action due to damaged or no pile wrapping. The underwater sections of the piles have large amounts of marine growth and indicate that the pile could be subjected to Toredo worm attack. Toredo worm attach occurs from the inside out and the pile ends up with honeycomb sections and loss of

structural capacity

Photo shows the extent of the deterioration and pile condition

- The 2009 underwater pile inspection identified that a number of timber piles had substantial section loss in the range of 15%-75% and required concrete encasement. As there has not been a pile inspection undertaken since 2009 it would be expected that the extent of deterioration will have increased.
- Currently there is a program to encase 8 piles identified in the 2009 pile survey as having 50% or above deterioration in the 2010-11financial year. A review of current pile deterioration is required to access future pile remediation work.

Steel UBP Piles

- During the original wharf construction the steel piles in the head of the wharf were wrapped with a Denso 200 series wrapping system to protect them from corrosion. Over time the method of securing the outer wraps has failed allowing the wraps to fall off leaving the steel section vulnerable to corrosion/erosion.
- Damage to the pile wrapping has also been caused by recreational fishing vessels operating in the area as they lay up against the piles.

- Areas to the top of the piles originally had a paint protection system applied to protect the steel from corrosion. The original paint system has now broken down and there are now visible signs of corrosion to the steel pile sections

Photo shows the condition of some of the pile wrapping

Wharf Condition Continued:

Trestle Beams

- The steel trestle beams that span between the wharf head concrete dolphins are in a deteriorated condition caused by corrosion. The original paint protection system has deteriorated over the years and exposed the steel to the salt water environment causing rust and delamination.

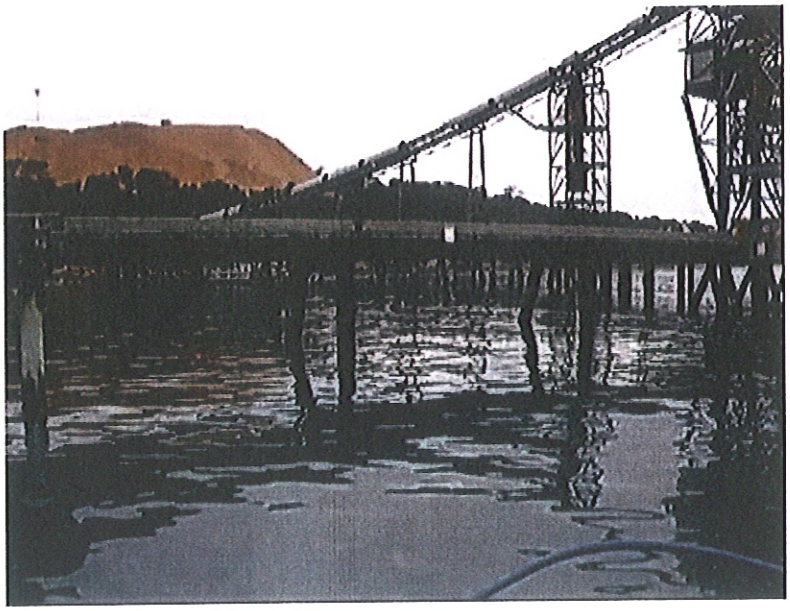


Photo shows the trestle beams that span from each concrete wharf head dolphin

Fender System

- Each of the concrete wharf head dolphins include a fender system consisting of 6 x Bridgestone rubber cone fenders attached to a large steel fender frame along the face of the wharf that are supported by timber piles and horizontal wire bracing. The steel frame is made up of large RHS sections with discrete panels of UHMWEP (high density polyethylene) fender facing material at each fender rubber position.

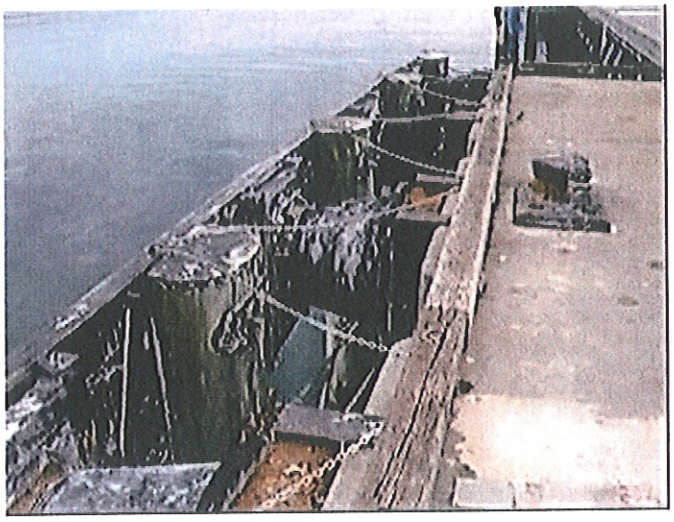
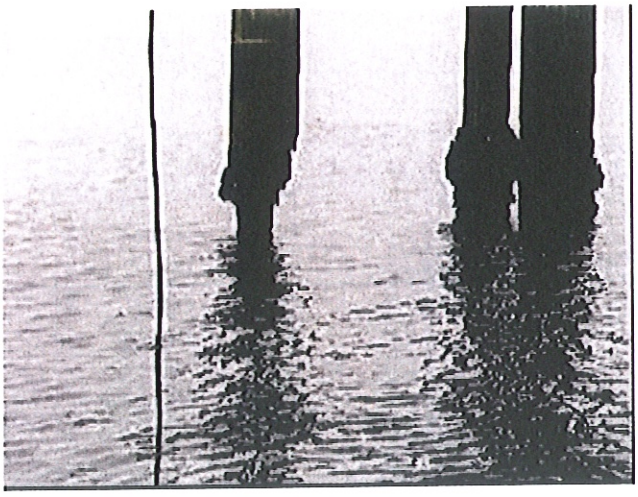


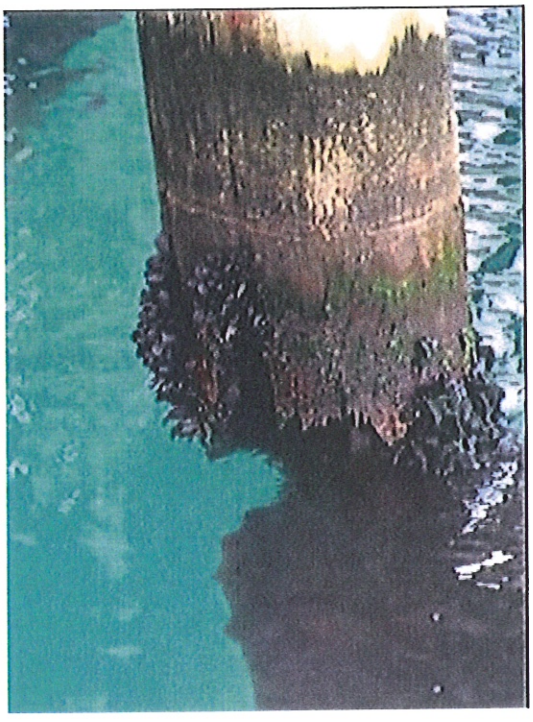
Photo shows the fender system configuration

Wharf Condition Continued

Fender System

- Currently a number of the treated timber piles are providing little or no support to the fender system, with over the years the pile wrapping becoming non-existent and the piles exposed to Toredo worm attack, erosion from tidal movement and wave action. eg. the third dolphin from the eastern end of the wharf has three piles that are providing little structural support and need to be replaced to support the fender frame.





Photos show the deteriorated condition of some of the piles in the stem and fender system

- The large steel fender frames fabricated from 150x200 RHS are showing signs of severe corrosion and a heavy build-up of delaminated rust. The fender frames were originally painted with a two pack epoxy resin paint system of which has eroded and now provides little protection to the steel.

Photo shows the wharf face fender frames and corrosion

Wharf Condition Continued:

Fender System

- Secured to the face of the steel fender frames are steel plates with high density polyethylene (HDPE) rubbing strips installed. The HDPE strips have worn over the years and are now at a point where they have worn down level with the steel sections. Some steel sections have been damaged due to the vessels rubbing steel on steel.

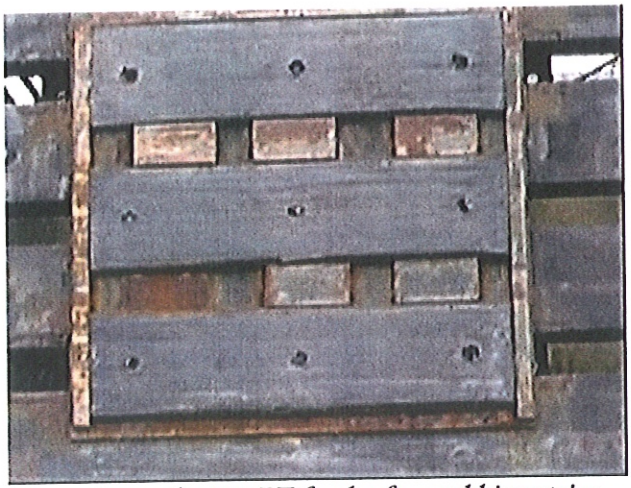


Photo shows the HDPE fender face rubbing strips

Safety Ladders

- Four steel fabricated safety ladders have been strategically positioned along the rear face of the main wharf head to assist in the retrieval of persons should they fall over the side during wharf operations. The safety ladders are in a state of disrepair and fail to comply with current standards AS1657.

Photo shows damaged non-compliant safety ladders

Wharf Condition Continued:
Wharf Edge Timber Curbs

- The original timber curbs are in a deteriorated condition due to the constant exposure to the weather. A number of the timber curbs have split away from their securing bolts or have been damaged through wharf operations. Prior to the uncertainty of the ongoing operation of the facility a program had commenced to over a period of time to replace the timber curbs with galvanised steel sections.

Photo shows damaged deteriorated wharf curb sections

Wharf Head Concrete Beams

- The wharf head concrete structural beams are showing severe signs of cracking & spalling. The wharf head section that carries the chip loader consists of three rows of five main beams. The structural beams have large cracks around the area where the piles have been encased in the concrete and horizontal cracking of the beams over lengths of 2.5-3.0 meters.

Photo shows the severity of the cracking to the main beams in the concrete wharf head

Wharf Condition Continued:

- The areas where the concrete has spalled from the beams, highlights the lack of concrete cover to the reinforcement (in some cases as low as 20mmThe cracking of the beams has been observed for some years now and is progressively getting worse.

Photo highlights the lack of concrete cover to the reinforcing steel

- During 2002 a steel support system was added to the main beams directly below the chip loader support structure. Originally these additions were considered "temporary" at the time and little if any attention to corrosion protection was provided to the system leading to its deteriorated state.

Photo shows the attempt to support the decaying concrete beams

Works Required to Address the Current Wharf Condition

Wharf Stem

Crossheads

- Due to the deteriorating condition of a number of crossheads, install additional support systems under the crossheads to provide support to the deck and conveyor system.

Treated Timber Piles

- Pending the results of the underwater survey undertake further concrete encasement of piles identified as needing repair.
- Replace missing pile wrapping to protect the piles from erosion and Toredo worm attack.

Wharf Head

Main Concrete Beams

- Undertake repairs to the main structural beam under the chip loader to prevent further cracking and spalling.

Timber Curbs

- Progressively replace damaged curb sections as required

Safety Ladders

- Fabricate and install four new safety access ladders to comply with AS1657 Ladders and Walkways.

Trestle Beams

- The trestle beams require sandblasting to remove the build-up of rust. A suitable paint protection system then needs to be applied to protect the beams from future corrosion.

Steel Piles

- Undertake repairs/replacement to the pile protective wrapping system to prevent future corrosion.

Fender System

Berthing fenders

- Investigate the need for the current berthing fender arrangement and determine if there is a simpler fender system that can be progressively installed to service the needs of future ships utilising the berth facilities.
- Pending the outcome of the fender investigations, and should the current fender system be retained the following should be considered.
  1. The fender frames require removal, repair, sandblasting and the application of a suitable marine grade paint system or galvanising.
  2. The replacement of the fender support piles identified in the underwater timber pile assessment as requiring replacement
  3. Installation of protective pile wraps to protect the piles from future erosion
  4. The HDPE protective rubbing strips on the face of the fender system require replacement to reduce friction on the steel sections and damage to the vessels.

Mooring Dolphins

Intermediate dolphin

- Undertake repairs to the intermediate dolphin to maintain a serviceable condition. ie replace deck and fender support mechanisms.

SUMMARY

A number of reports have been presented on the condition of the wharf structure at Spring Bay and with each confirming the ongoing and increasing deterioration of the facility.

This report highlights the seriousness of the continued deterioration and the necessity for a commitment of funds if the ongoing operation of the wharf is required in the medium to long term future.

In addition to the maintenance works identified it is recommended that:

1. An underwater survey of the treated timber piles be undertaken to determine the condition of the piles.
2. Pending the outcome of the underwater survey make funding available for further concrete encasement of the timber piles.
3. Investigate a method of supporting the deck in the event the crossheads have to be replaced or strengthened
4. Investigate repair methodology for the wharf head concrete beams.
5. A load assessment of the operational need of the facility be commenced in relation to existing condition and potential ongoing deterioration limits.

Prepared by:

Chris Schreck
PROJECT OFFICER

31.

Katrina Oakley

From: Graeme Wood <graeme.wood@springbaymill.com>
Sent: Friday, 25 July 2014 4:11 PM
To: Kevin Moore
Subject: TRIM: Re: FW: Triabunna Ship Loader - Demolition

Thank you Kevin. I'll have a counter offer to you this coming week.

Cheers

Graeme

On Fri, Jul 25, 2014 at 3:48 PM, Kevin Moore <Kevin.Moore@tasports.com.au> wrote:

Graeme,

Further to our discussions on 18 July, FYI please note there has since been the below & attached communications in regards to the demolition of the above wharf structures at Triabunna.

Regards

Kevin

Kevin Moore | General Manager Commercial & Trade

Tasmanian Ports Corporation
T 6222 6050 | M 0416 189 824 | E kevin.moore@tasports.com.au
Level 13, Trafalgar Building, 110 Collins Street Hobart TAS 7000 Australia | GPO Box 202, Hobart 7001
www.tasports.com.au

From: Philip Cooke
Sent: Friday, 25 July 2014 3:01 PM
To: Jesse Brunskill
Cc: Mark McCormack; Kevin Moore
Subject: RE: Triabunna Ship Loader - Demolition

Hi Jesse,

Please find attached a letter giving consent to proceed with the demolition of the above wharf structures at Triabunna.

Regards

Phil

Phil Cooke | General Manager Infrastructure & Maintenance

Tasmanian Ports Corporation
T 6421 4944 | **M** 0418 931 845 | **E** Philip.Cooke@tasports.com.au
18 Formby Road Devonport TAS 7310 Australia | P.O. Box 478, Devonport 7310
www.tasports.com.au

From: Jesse Brunskill [mailto:Jesse.Brunskill@hazellbros.com.au]
Sent: Thursday, 24 July 2014 11:47 AM
To: Philip Cooke
Cc: Mark McCormack
Subject: Triabunna Ship Loader - Demolition

Phil,

Thanks for your time on the phone last Friday.

I have not received correspondence to confirm Tasports response to our submission?

These are my notes from our phone call;

- Tasports will not 'approve' the engineering proposal and will not be assuming any liability for the suitability of the design and calculations, will be prepared to allow us to proceed and will issue a letter listing a number points to be considered;

    1. The existing structure is in a dilapidated state and Tasports cannot give any assurance as to the structural condition.

    2. The engineering process appears to be complicated and if the process is not followed, there is a risk that unexpected loads will be imparted on the wharf (ie. Incidental loads from a loaded crane)

    3. The proposal shows no lateral restraint to the steel crane frame to resist acceleration or braking forces. I assume this related to the slewing motion of the crane and torsional loads on the wharf structure as well as the risk of movement if there is slippage between the steel frame and the wharf deck surface.

    4. There is no support for the outriggers shown (questioning if we intend to put them down or not?)

    5. Does the removal of the ship loader require a building permit?

- We need to be well aware that the structure is degraded and Tasports stopped maintaining it when the mill was shut down – only repairing what was required

- Some of the piles have necked down to 50% and there is significant corrosion on the fender frames

- Be very cautious

Can you please let me know when we might receive your letter as Triabunna Investments are anxious for the project to get underway so their EPA permits don't expire.

If you need any further detail please call me.

Kind Regards,

Jesse

Jesse Brunskill

Operations Manager – Civil (Tasmania)

Hazell Bros Group

M 0400 353 081 P (03) 6277 7986

14 Farley Street, Derwent Park, TAS 7868

www.hazellbros.com.au

PLEASE CONSIDER THE ENVIRONMENT BEFORE YOU PRINT THIS E-MAIL

32

TasPorts

24 July 2014

Mr Jesse Brunskill
Operations Manager
Hazell Bros Group
14 Farley Street
Derwent Park, Tas, 7868

Dear Jesse,

RE: Triabunna: demolition

As discussed in our phone conversation of Friday 18 July, Tasports consents to Hazell Bros demolition of the above wharf assets on the Triabunna wharf.

Tasports has reviewed the documents supplied by Hazel Bros and believes on the basis of these, that Hazell Bros has an understanding of the works and has processes in place to undertake the works safely.

While Tasports will not explicitly approve the detail of the engineering carried out, we are happy that the engineering has been done, and on review of the documents supplied, we would offer the following observations for your consideration.

- The dilapidated state of the infrastructure means that the performance of the structure cannot be guaranteed
- The engineering drawings provided attempt to mitigate some of the risks associated with the demolition work, however, there are residual risks that may need to be mitigated before the works can proceed safely, some control measures may include but are not limited to;
    - Confirming the assumptions made by TCS in determining a demolition process are correct (i.e. that the condition of the piles beneath the water line is adequate etc.)
    - Ensuring the work is completed in the staged sequence to the appropriate standard as described by the drawings

Head Office
48 Formby Road, Devonport
PO Box 478
Devonport Tasmania 7310
F 03 6421 4988
E secretary@tasports.com.au

Port of Bell Bay
Mobil Road, Bell Bay
Locked Bag 4
George Town Tasmania 7253
F 03 6382 1695
E bellbay@tasports.com.au

Port of Burnie
Port Road, Burnie
PO Box 216
Burnie Tasmania 7320
F 03 6434 7373
E burnie@tasports.com.au

Port of Hobart
Level 13, Trafalgar Building
110 Collins Street
GPO Box 202
Hobart Tasmania 7001
F 03 6222 6122
E Hobart@tasports.com.au

Port of King Island
285 Grassy Harbour , Grassy KI
PO Box 341, Currie KI
Tasmania 7256
F 03 6461 1386
E kireception@tasports.com.au

- Implementing a process for dealing with structural anomalies found during the construction work
- Ensuring that the structure is not overloaded during the works by incidental loadings from the demolition works
- Ensuring that the axle loadings shown are in accordance with the recommendations made by TCS
- Implementing a process to mitigate the risks identified by TCS in their drawing notes
- Ensuring there is lateral restraint to the steel crane frame to resist acceleration or braking forces
- Ensuring there is support for the crane outriggers to be placed while it is on the steel crane frame working its way along the wharf and demolishing the structure as it goes.

In addition, we would like to point out that structure atop the wharf may also require a building permit for demolition and advice should perhaps be sought from a building surveyor to confirm whether or not a permit is required.

If you have any questions, please do not hesitate to contact me on 0418 931 845

Yours sincerely,

Phil Cooke
General Manager Infrastructure and Maintenance

PRIVATE &

CONFIDENTIAL

34.

From: barry berwick [mailto:barry.berwick@gmail.com]
Sent: Thursday, 3 November 2011 12:36 PM
To: Geoff Duggan
Subject: Orford Triabunna CoC

Hi Geoff,

As discussed please find attached the Orford Triabunna Chamber of Commerce letter which I assume all directors have received.

I understand you may consider a letter from Tasports to update and explain the current situation.

Regards

Barry

ORFORD TRIABUNNA CHAMBER of COMMERCE

25th October 2011

Barry Berwick

13 Lord St

Wellington Point Qld 4160

Dear Sir,

I am writing on behalf of 160 businesses in Triabunna. We are very concerned about the continued impact of the chip mill remaining closed.

Our village is small (only 900 residents) and the continued employment of our residents is our primary concern. 35 families representing 10% of our population have already moved from the area due to lack of employment. Many of our businesses are closing and our school is very negatively impacted.

Unless the chip mill is reopened our community could be devastated.

It is our understanding that Tasports require conditions on the use of the jetty and docking facilities at the mill which are almost uncommercial and certainly not consistent with the arrangements which existed with Gunns Ltd.

The mill is essential to the survival of our village and we urge you to rapidly settle on a reasonable agreement with the new owners so we can survive. Our future and our children's future is in your hands.

DISCUSSION WITH GEOFF D 3/11/11

- STATUS - DIRECTIONS TO SIGN THE LEASE FROM GOV'T.
  - FINANCING POSITION

- ADDRESS OF DIRECTORS - ASIC COMPANY SEARCH, - PUBLICALLY AVAIL.

Yours faithfully

Denis Bignold, Vice President

Mob: 0407292519

PO Box 89 , Triabunna, Tas 7190

Mr WEEDON - Just as an adjunct comment to that, the other thing that is important to understand is that the Bell Bay development is not purely about containers. A large part of the development is about handling the rest of the commodities that need to go through Bell Bay. So whether it is forestry, whether it is minerals, there is a very active port still in operation despite what the media would have us believe that because containers have gone -

Mr O'BYRNE - Mr Hidding called it a ghost port and it has over 250 calls in there in the next 12 months.

CHAIR - It costs more, though, doesn't? At the end of the day, it will cost more to put it out at Bell Bay.

Mr O'BYRNE - No.

CHAIR - If it is coming from the west coast, it will.

Mr WEEDON - For bulk commodities, absolutely, but for containers when there were three operators in the market for that period of time it was a very competitive market between them, irrespective of which port they called on and that is the unfortunate development that we have suffered in the course of this year.

Mr GAFFNEY - Thank you.

CHAIR - I want to talk about Triabunna. It is close to my heart and obviously everyone is feeling for the situation.

Mr O'BYRNE -Absolutely.

CHAIR - I am interested to know what the status is and what the status is of the wharf lease to Triabunna Investments at this point in time.

Mr O'BYRNE - The Government has been unequivocal about this. We have been wanting Triabunna opened since Triabunna Investments purchased it from Gunns and we have been working as hard as we can and doing all that we can to make sure that we can get it open but I think if you want the current update I will let Paul or Dan answer.

Dr NORTON - It is a legal position that has actually been signed.

CHAIR - Do they have a lease?

Dr NORTON - They have had one for about a month.

CHAIR - Is the detail of that lease available to the committee?

Mr WEEDON - It is a commercial agreement between ourselves and Triabunna Investments.

Dr NORTON - It is the Gunns lease. Gunns approached us, and I do not know when exactly, but it was in the middle of the year and they asked us to agree to them signing the lease we had with them to Triabunna Investments; so it is an assignment of the existing Gunns lease.

We actually had a tripartite discussion with ourselves, Gunns and Triabunna Investments. Our preference, from a strictly commercial basis, was to have a new lease with Triabunna Investments. We put that to them, I think, at that tripartite meeting. They did not refuse that; they indicated that they would give consideration to it. We followed up with them for a couple of months to find out what their position was in relation to that. We then became aware that they did not want to go down that route and the dilemma that we faced was either, do not allow the lease to be assigned or assign it. If we do not allow the lease to be signed, we could potentially be having impacts on the forest industry and the community, so we agreed to sign the lease.

CHAIR - On the same arrangements that you had with Gunns?

Dr NORTON - As far as we are concerned, in relation to Triabunna, the deal that Gunns had is exactly the same as the deal that Triabunna Investments have in relation to the use of the wharf. I think it is important to understand that TasPorts owns the wharf at Triabunna, and that is basically all. Gunns owns all of Triabunna Investments and owned all of the infrastructure for loading woodchips. They sold that to Triabunna Investments as part of the deal. There is absolutely nothing from a port-utilisation point of view that is precluding Triabunna Investments from utilising that. It was about a month ago that we finalised that transaction and immediately after that I think they went out seeking tenders for an operator.

CHAIR - You said it is just a reassignment of the same lease, so it the time frame exactly the same as it was with Gunns?

Dr NORTON - It is the same lease.

CHAIR - What is the time frame on that lease?

Mr WEEDON - We can give you that. It is in the 2020s, so it is a long-term lease.

Mr MULDER - It is interesting you say you have just signed over the lease. I think Triabunna Investments said that several millions of dollars were being demanded up-front.

Dr NORTON - That was never the case.

Mr MULDER - Not more lies, surely?

Dr NORTON - We never demanded an up-front payment.

Mr MULDER - I take your word for it. I do not need much further explanation than that.

Dr NORTON - You can trust us or you can trust Alec Marr.

Mr MULDER - Please do not invite me to choose. There was a question about the wharf maintenance and things such as that. Who was responsible for that in the past and who is responsible for it now?

Dr NORTON - We own the wharf and therefore as a part of the commercial lease arrangements we have to maintain the wharf in appropriate order. We have expenditure which we will have to make on an ongoing basis. Our initial preference was a new lease and that was because under the existing lease we may have to continue to put maintenance in and no

woodchips go across it, so we would have outgoings and no income. We have an interesting legislative set of objectives, which has already been referred to here today, which causes some people concern. From where I sit, I think it was very sensibly structured, but it gives us two objectives. One is to act commercially and one is to facilitate trade. The problem is that sometimes there is tension between those two so we have to make a judgment call. In this particular case, if we were looking strictly at a commercial basis, we would have said, 'A new lease or nothing', but that does not facilitate trade or take into account the broader social and community issues. When we reached the decision to assign the lease, we did advise our shareholders that we were doing it because we did not want to be subsequently accused publicly of doing something that was non-commercial. We indicated that in our view that was the case and our shareholders indicated to us that they were not uncomfortable with that decision, but it was our decision.

Mr MULDER - Did you ever make an offer for the Gunns' chipper at Burnie? There was some reporting that you did make an offer.

Dr NORTON - When we say we made an offer, we engaged with Gunns as to whether they would be interested in selling it to us.

Mr WEEDON - The current situation in Burnie is that Gunns has a long-term lease over an area of land adjacent to Berth No. 7, which they use for the storage of the woodchips. They also have a licence over the use of the berth which allows them to operate their privately owned woodchip loader and conveyor systems for the purposes of loading the ships. At a time earlier this year we were approached by a number of mills and operators in the north to say, they would really like to be able to use Burnie as their gateway. Would TasPorts be prepared to see if it was possible to acquire that equipment so that they could turn it from a privately owned and controlled loading facility into a common user facility? That was the base for our exploratory discussions with Gunns. Their position was to say they would be prepared to look at it but their expectations of the value of it were clearly out of any ballpark -

CHAIR - Should have got Alec Marr to negotiate for you. He can get things as cheap as chips.

Mr MULDER - I guess on the same line though, the woodchips coming off the Hobart port was also mentioned at that time. Was there any discussions around that?

Mr WEEDON - We have worked with a group that is looking at the statewide feasibility of how forestry products are moved around the State.

Mr O'BYRNE - There is no doubt that Triabunna has created an enormous problem for the southern forest industry. And that is why we worked extremely hard to make sure that the Triabunna issue could have been resolved. And it has been resolved. I know that there have been a lot of accusations made against TasPorts that we have been dragging our chain but quite easily Triabunna Investments could have issued an expression of interest for an operator parallel to discussions with the Government about signing the lease. They chose not to.

Mr MULDER - They will do nothing while they are given an opportunity to explain all that.

Mr O'BYRNE - It is quite in regular commercial negotiations to have running a number of parallel processes on the basis that a situation will occur at a certain point and you need to have

your ducks lined up if you are genuinely interested in getting it open and clearly that has not happened in Triabunna Investments' case. It is out to tender so let us see how that process goes.

Mr MULDER - Just going back to the Burnie thing, - and I am only interrupting the answer because you have already given it to me - was the intention there to continue to operate that as a chipping facility if you had bought the chipper?

Mr WEEDON - We would not be doing any chipping no, it was purely the ship loading equipment that we said we would be prepared to buy. There are two options, you either have a common user basis, which means that anybody that wants to load it brings their ships in and loads it and uses it and they pay us a charge for doing that, or it is privately owned. We felt at the time, the inputs that we were getting from our customers was, it would be great if you would take the capital risk and convert it to a common user facility. We said yes, we would be prepared to if we could get a commercially reasonable outcome.

Mr DEAN - I think Hampshire is about to open again, isn't it? So I am told. I want to move into a different area.

CHAIR - That will be fine, I know that Mrs Taylor wants to go to lost time injury, it is not that, is it?

Mr DEAN - I want to go to Strahan and a question on Bell Bay. Apparently there was a meeting of NTD recently and the chair and the CEO were at the meeting where a regional impact study for the port of Bell Bay was discussed. I understand that coming from that meeting invitations have now gone out for consultants to tender for the purposes of completing a review in relation to the Bell Bay port. Are you aware of that?

Mr WEEDON - Not the specific scope of it, I am aware of the initiative but not the specifics.

Dr NORTON - It did not come from the meeting that I was in attendance at; that was a briefing that Paul and I gave to the mayors. There has been a number of subsequent initiatives.

Mr DEAN - The project objectives are that this will deliver a business case that justifies capital expenditure to upgrade the port of Bell Bay based on increased freight demand potential and regional State competitiveness considerations.

I am wondering, has it been discussed with you as yet, this position that NTD want to adopt? What sort of outcome could be expected from this when TasPorts, you, have completed a fairly close study and background on Bell Bay and what the position is.

Mr WEEDON - I was broadly aware of the initiative but we have not been engaged in any detailed discussions about scope or intent.

Mr O'BYRNE - My understanding is there is work being done because there are some short-term infrastructure needs in the Bell Bay area that both TasPorts and TasRail are committed to. My understanding is, and I will need to clarify, that they are engaging a consultant to facilitate discussions to get that. This has nothing to do with Infrastructure Australia but this is just some short-term issues with the rail and port interface. So I will need to clarify that.

[4.45 p.m.]