

Shute Harbour

Project Update # 003 – 13 December 2016

At the Council meeting on the 7th December 2016, Council decided to provide authorization to the Chief Executive Officer to award the Demolition Tender for the South Molle Jetty. This will enable the works to commence as soon as possible after the awarding of the Tender. This should be well before the next meeting of Council which won't be until the 25th January 2017.

Lloyd Roberts Jetty

Report Indicates Southern Arm Deterioration

Visual inspections of the Lloyd Roberts Jetty were undertaken by GHD (May 2016) and Cardno (July 2016). Those reports indicated that a significant amount of spalling was occurring on the Lloyd Roberts jetty on the southern arm of the jetty. On the eastern arm of the jetty not far from the jetty abutment a very large area of deterioration was evident. That deterioration had gone beyond spalling to the point where the re-forcing was exposed and in some instances broken. This means that in this area the jetty has no load rating capacity and has been closed to foot traffic until an assessment of the cost to repair can be undertaken. At this stage the repair method and cost has not been prepared because an assessment needed to be done on the jetty structure that relied upon physical testing of the concrete rather than another visual inspection.

Cardno have prepared a report and conservatively estimated that remaining life of the jetty, based on no repairs be undertaken (Section 4.3 of the report). This remaining life would be approximately five (5) years. However, if Council were to undertake repairs that included repairs to the areas of spalling on the southern arm, the area of deterioration on the eastern arm, the pylons and the soffit this life would be extended to at least the remaining the design life of the jetty, approximately another twenty (20) years.

Pontoon Configuration Change

If and when the Lloyd Roberts jetty is demolished then the pontoon configuration would need to change. Pontoon D and the access gangways from pontoons A, G and the jetty would be removed prior to demolition of the jetty. Once the demolition is complete the inside berths on Pontoons A and G would become available. No net loss of berths would occur once the demolition is complete. Additionally it is possible to configure a new gangway and Pontoon structure that incorporates Pontoon D and Pontoon H (currently attached to the South Molle Jetty). This would achieve an increase in usable berths to twelve (12) pontoon berths.

Overall there would be a reduction from the eighteen berths currently available with a combination of the South Molle Jetty, South Molle Jetty pontoons and Lloyd Roberts Jetty pontoons. However, an analysis of the

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activity at Shute over the past two years since the departure of Cruise Whitsundays clearly indicates that some of the available berths have a very low usage or no usage at all.

Shute Harbour Terminal Facility

Inspection of Terminal Building and Pylons

A detailed inspection of the undermining of the terminal building and state of the pylons was undertaken by a Cardno engineer and Council's building inspector. The report clearly indicates that building from the deck and above is in a relatively good state of repair. An inspection of all the building above deck and other buildings was undertaken and an estimate of the work required to all the buildings at the facility was prepared by McNeil Building. This is provided at attachment 3. The repair estimate to the Terminal building above deck was \$157,243.46. The caveat on this estimate was that there may be significantly more work required but that would only be able to be provided once a detailed inspection and testing of the deck, under roof and roof were carried out. An additional quote was received another local contractor and this estimate was significantly more than the estimate provided by McNeil. The work would need to be Tendered due to the possibility of the repairs exceeding \$200k. For all intents and purposes it would be safe to assume that the minimum repair cost would be \$160k – for above deck works.

The Cardno inspection was a visual inspection and did not include any sample testing. The inspection report provides details of the inspection a suggested repair method and a cost for that repair. The damaged area would require repairs to support the slab and stop further washing away of the building slab support. The repair method incorporates stabilising the undermining with: footings and reinforced block wall filled with concrete to form a retaining wall, pumping of cement stabilised grout into the voids and a rock gabion to protect the retaining wall. The estimate of this repair is \$482k. An estimate of the repairs to the steel and pylons under the deck is provided by Cardno and this is in the order of \$140k.



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Estimated Costs of Repair

The total estimated cost of the repairs to the terminal building is as follows:

Terminal Building above deck works	\$157,243
Terminal Building undermining repairs	\$482,365
Terminal Building pylon and steel repairs	\$140,010
Total estimated building repairs	\$779,618

This repair would bring the building up to a lettable state but there may also be fit out costs or other installation costs that would need to be recovered from potential tenants. This is aside from the fact that the building is in a vulnerable position in the event of a cyclone and would continue to have repair costs not attributable to a normal slab on ground building because it is built over water. Due to the fact that the repairs if undertaken may push the potential rentals to a point that is significantly above what would be a market rate for the building it would more than likely be the best option to demolish and look to building on land a lower cost option for the future based on the requirements provided to Council from proponents as part of the Expression of Interest.

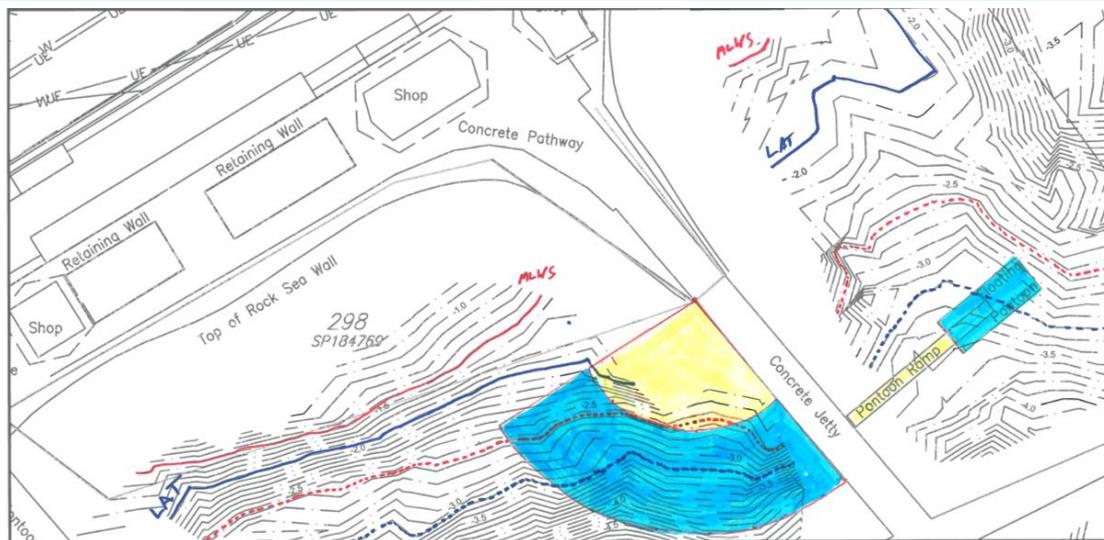
The building undermining has obviously occurred as a result of an event, possibly a cyclone. The recent cyclones that have affected the building and facility are Ului (2010) and Dylan (2014). It is possible that Council may be able to claim under insurance policies that were in place at the time and recoup the repairs. However, the initial advice from the Council's insurance agents that Council should have inspected the facility and should have made the claim at the time. The fact that this has not happened diminishes Council's position significantly. A claim has been submitted and the outcome will be reported to Council once known.

Dinghy Pontoon

At the operators meeting on the 31st October 2016 it was proposed by the operators that the Dinghy pontoon be repositioned somewhere within the Council lease area possibly utilising a mainland access point or the South Molle jetty abutment. This positioning would need to be informed by a Hydrographic Survey. The survey was undertaken approximately two weeks ago.

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Cardno assessed two locations one from the mainland and one from the abutment. The location on the mainland would require a significant fixed gangway extension to the Dinghy Pontoon gangway and the costs would be significant. The South Molle jetty abutment was assessed and the map of the potential area for the installation is attached. However the advice from Cardno about this area is as follows: ***“There will be a reduction in depth at the new location, regardless of the angle of the pontoon from the concrete walkway. This reduction in depth is localised to the rear (gangway-side) portion of the pontoon.”***

If Council were to consider locating the pontoon on the abutment, abutment works and a fixed gangway would have to be constructed at this location for the pontoon to work and provide a service no matter what the tide. The fixed gangway would require two pylons. A preliminary design was prepared by Cardno for discussion but no costing has been provided. Suffice to say that the cost would be significant and it would not then be a “temporary” location and would compromise any future use of the South Molle Jetty abutment. Based on the potential for a significant cost and that the pontoon can’t be installed without a fixed gangway which compromises future use, it is considered that this option should no longer be considered.

Council have helped the smaller boat operators by installing steps on Pontoons G and A. To date these have been well received and are being well used.