

RISK ASSESSMENT

Location	PT SAMSON/JOHNS CREEK BREAKWATER WALKWAY
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OVERVIEW

The Shire leases the Point Samson/Johns Creek breakwater from Department of Transport (DoT) to accommodate a footpath for public recreation purposes. The breakwater has been damaged due to wave action caused by high tides and storms. The damage has resulted in the concrete footpath located on top of the breakwater being undermined.

Warning signage has been erected however this has largely been ignored by the public who continue to access the breakwater.

Specific advice has been received from a consulting engineer with expertise in the field of marine structures that recommends a methodology to repair and reinstate the footpath structure and ensure it does not suffer the same damage from any future event.

Due to continued public use despite signs advising otherwise, Council Officers revisited the site on 19 August 2014 for the purpose of undertaking a risk assessment, in accordance with Council Policy CG01 – Risk Management.

Council Officers found that the first 100 metres of the pathway (prior to the left bend) has been substantially undermined consistent with wave action at high tides. In some sections almost all the rock armour supporting the concrete has been washed out. It is difficult to accurately establish the thickness of the pathway concrete but in some sections it would appear to be in the vicinity of 100mm. The concrete is constructed with steel fibre reinforcement and in itself shows little damage with. There is further damage along the pathway however it does not appear to be as severe.

Council Policy CG01 – Risk Management provides guidance on the areas to be assess, measures of consequence and risk acceptance criteria.

HEALTH – Pathway collapsing whilst being used by a member of the public

Whilst is acknowledged there is a risk the pathway may collapse whilst being used by the public it is considered that if in the unlikely event that should happen the nature and type of injuries from the resulting fall.

	Existing	Temporary measure	Post permanent repairs
Likelihood	2	2	1
Consequence	3	3	1
Risk	Moderate	Moderate	Low

FINANCIAL – Cost risk post repair to pathway

GHD Pty Ltd have undertaken an assessment of the damage sustained and have provided an estimate of \$355,500 +/- 50% to effect repairs. The risk is the potential additional damage with regard to a recurrence. The repairs proposed will result in a more robust structure.

	Existing	Temporary measure	Post permanent repairs
Likelihood	3	3	1
Consequence	3	3	1
Risk	Moderate	Moderate	Low

SERVICE INTERRUPTION – Restricted use of pathway

If further damage occurs before repairs can be completed then it is likely that the [path will need to be closed even in the short term.

	Existing	Temporary measure	Post permanent repairs
Likelihood	3	3	1
Consequence	5	5	1
Risk	High	High	Low

ENVIRONMENT – Damage to surrounding flora/fauna due to repair work

In terms of environmental impact the risk is considered to be insignificant as all works would be undertaken on the existing breakwater and would not impact on the surrounding flora/fauna. All repair work would be undertaken by a duly qualified contractor.

	Existing	Temporary measure	Post permanent repairs
Likelihood	1	1	1
Consequence	1	1	1
Risk	Low	Low	Low

REPUTATION – Knowledge of but failure to effect repairs sooner rather than later

In terms of damage to the City's reputation it is considered any collapse of the footpath would be a minor risk provided no serious injuries were sustained by a member of the public.

	Existing	Temporary measure	Post permanent repairs
Likelihood	1	1	1
Consequence	2	2	2
Risk	Low	Low	Low

COMPLIANCE

The City of Karratha has entered into a lease with the Department of Transport for the breakwater and whilst the lease talks to standards/permits for the construction of the footpath it does not specifically mention maintenance of the pathway.

However Clause 9 of the Lease specifies the Lessee will insure and keep insured with a reputable insurance office approved by the Lessor, in the joint names of the Lessor and the Lessee for the respective rights and interests:-

- (a) The premises against loss or damage by fire, storm, tempest, explosion, collision, strikes, riots, civil commotion, malicious damage, **flood, impact water damage**, earthquake and any other risks which the Lessor considers reasonable and notifies to the Lessee from time to time, to the full replacement value thereof:

It could therefore be argued that the City of Karratha would be in breach of its obligations under this Lease if it were to delay repairs until the 2015/16 Budget but this would represent a minor risk in terms of compliance.

	Existing	Temporary measure	Post permanent repairs
Likelihood	1	1	1
Consequence	2	2	2
Risk	Low	Low	Low

CONCLUSION

Whilst the damage sustained to the rock armour supporting the pathway is quite substantial in parts it appears that the footpath has suffered minor damage with only minor cracking and some breakages.

The results of the risk assessment for the various categories result in Moderate (health and financial) High (reputation) and the remaining categories result in Low risk. This is regardless of the implementation of temporary measures or not. The risks are reduced to Low in all categories once repairs are carried out in accordance with GHD advice.

Advice received from LGIS is that our public liability insurance will cover an event provided we are seen as acting prudently and warning the public when a hazard (that we are aware of) exists. LGIS also advise that warning signs should be erected and should remain in place until a decision is made regarding the repairs.

RECOMMENDATION

Although there are risks with the present situation, with or without the temporary measures, it is considered that given there is no budget to carry out this work that the risks are bearable until such time as funds can be identified to complete repairs even if this means funding becoming available 2015/2016

Martin Waddington

Manager Infrastructure Services

APPENDIX A

