

TORQUAY FRONT BEACH - SEA WALL PROJECT

The Great Ocean Road Coast Committee plan to invest \$450,000 to upgrade the Torquay Front Beach Sea Wall over the next two years.

Planned works involve replacing the beach access stairs near Anderson Street, establishing an all abilities footpath between Cosy Corner and Anderson Street stairs, and installing a coastal protection structure to prevent erosion and improve access.

The works are to be completed in accordance with the recommendations of the Torquay Central Foreshore Master Plan 2005, following extensive consultation including on site displays and direct mail out to residents along the Esplanade, and again in 2016.

The existing Torquay Front Beach sea wall ends at Anderson Street and the unprotected northern section of beach below the toilet block is subject to ongoing erosion.

PROPOSED WORKS

The aim of this project is to complete the pedestrian walking path link along the sea wall through to Cosy Corner by:

- Upgrading the exisiting northern foreshore access stairs
- Replacing the existing beach access stairs
- Extend exisiting pathway to the northern foreshore
- Protect the Norfolk Island Pines
- Install additional lighting



Example of erosion mitigation option 1: natural rock

SOME OPTIONS FOR EROSION MITIGATION

Option 1 - Extend the sea wall in natural rock

The use of rockwork is cheaper than bluestone and concrete. The more gentle sloping shape, rougher surface and gaps between the larger rocks, would stabilise the existing erosion and reducing wave energy. This option also mitigates future risks with sea level rise and increased storm severity.

Option 2 - Extend the bluestone sea wall

The most expensive option. Additional funds would need to be sourced, delaying works. This option does nothing to dissipate wave energy or assist in holding sand on the beach. In the longer term this option would likely cause further erosion problems, requiring additional stabilisation measures in the future.

Option 3 - Extend the sea wall in concrete

The use of concrete is cheaper than bluestone. As with option 2, it would not reduce wave energy or assist in holding sand on the beach. Other consideration is that concrete would not be consistent with the heritage character of this section of the foreshore.

Option 4 - Install a rock groyne (sea wall off shore) and undertake beach renourishment

Used sometimes in cases of severe erosion. The use of an off shore sea wall would change the landscape of the foreshore. Torquay Front Beach is generally stable with only this short section of erosion.

Option 5 - Do nothing

Consequence would be that the existing stairs will need to be closed in the interests of public safety as the bank becomes steeper and more unstable. The bank will continue to erode but is unlikely to threaten the toilet block in the short term.

OPTIONS FOR BOARDWALK OVER TREE ROOTS

To minimise the risk to the trees the new path excavation works will be undertaken by hand within their root zone and will be supervised by a qualified arborist. The construction of the new path it will be built up using a low boardwalk set on posts carefully placed to avoid roots.

Option 1: Timber

Timber is strong and provides the greatest flexibility in avoiding critical tree roots and construction delays. Australian hardwood is used extensively on the foreshore and is consistent with the heritage character of the area.

Option 2: Recycled plastics

Now widely available and commonly used in coastal locations these products are not as strong as timber or steel. These materials are also not currently used in this area of the foreshore and may not be in keeping with the heritage character

Option 3: Stainless steel

Durable but expensive and not widely used on the Torquay Foreshore. To design the subfloor the tree roots need to be exposed. The delay between exposing the roots and then design and fabrication of the boardwalk subfloor in steel will significantly increase the risk to tree health.



Location of planned work - Price Street to Anderson Street

HAVE YOUR SAY

We are currently seeking community feedback via an online survey. To complete the survey or seek more information, visit our website at www.gorcc.com.au.

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OPTIONS FOR HANDRAILS

Option 1: Aluminium magnesium

This product it looks like the dull colour of galvanised steel but is more durable and corrosion resistant. Cheaper to install and replace if damaged

Option 2: Galvanised steel

Existing handrails on the sea wall promenade beach access steps are galvanised steel. The low key grey colour is consistent with the heritage character, however they are subject to increased level of corrosion and required more regular replacement than other more durable products.

Option 3: Stainless steel

Durable but not currently used on the foreshore. More expensive to install and replace if damaged than other products.

OPTIONS FOR BEACH ACCESS STAIRS

Option 1: Concrete

The existing foreshore access stairs provide a base for new concrete. The existing granitic stair base can be reshaped and new concrete poured over the top using gravity, without need for machinery access and disturbance of vegetation or cultural heritage values.

Option 2: Fibre reinforced plastic

These products provide higher levels of tread grip and are more durable than timber. There is limited machine access to dig in post holes, supply and erect the structure. The longevity of these products in these conditions is not well known.

Option 3: Timber

The foreshore stairs are located within an area of native vegetation. If replaced in timber the area will be continually disturbed every 20-25 years when they need to be rebuilt. The stairs will be overshadowed by vegetation which means in winter they will remain wet and more slippery for longer.

ADDITIONAL PUBLIC LIGHTING

Option 1: Solar powered bollard lighting

Cheaper and easier to install, they provide less light than traditional electricity based systems but are renewable.

Option 2: Extend the existing lighting

Conduits can be extended from the existing lights and low level LED lighting can be used along the new stairs. This approach will require additional costs to establish and maintain but provide more light.

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