

## 1. Can the staircase(s) be replaced with a universally accessible beach ramp?

Unfortunately, it is not feasible to install a universally accessible ramp at these locations. There is an 11-meter difference in elevation between the beginning of the access way (at the top of the dunes) and the beach level. As per the Australian Standards, all universal access pathways are required to have a gradient of no greater than 1 in 14. Therefore, to install a universal access pathway at this location, significant clearing of native vegetation and major rock breaking would be required. This would result in significant environmental impacts and the cost would far exceed the project budget. The City will continue to investigate possible locations for universal access ramps as part of the ongoing Beach Access Renewal Program.

## 2. What are the renewal costs based upon?

The costs presented on the information page are estimates only. These estimates are based upon the costs of previous beach access way construction projects within the City and account for the following:

- Demolition of existing beach access way sections;
- Installation of the new beach access way sections which are secured into bedrock and able to withstand significant wave forces during extreme winter storms;
- Dune stabilisation; and
- Management and design fees.

As per the City's Procurement Policy, a public Request for Tender will be issued for the construction of the preferred option and a panel of officers will evaluate all Tenders received.

### 3. What materials will be used for the renewal of these structures?

The existing staircases were constructed with timber and galvanised steel components which are not appropriate for the coastal environment as they have high maintenance requirements and issues with structural defects in the short term. Numerous issues were identified in the western portion of the two structures resulting in public safety risks and the need for remedial works.

The design will focus on the use of low maintenance and highly durable materials suitable for a coastal environment and may include aluminium, fibre reinforced plastic, composite materials and stainless steel.