

GRANITE ISLAND CAUSEWAY PROJECT

EXISTING CAUSEWAY CONDITION



Existing Causeway



Historic Outline

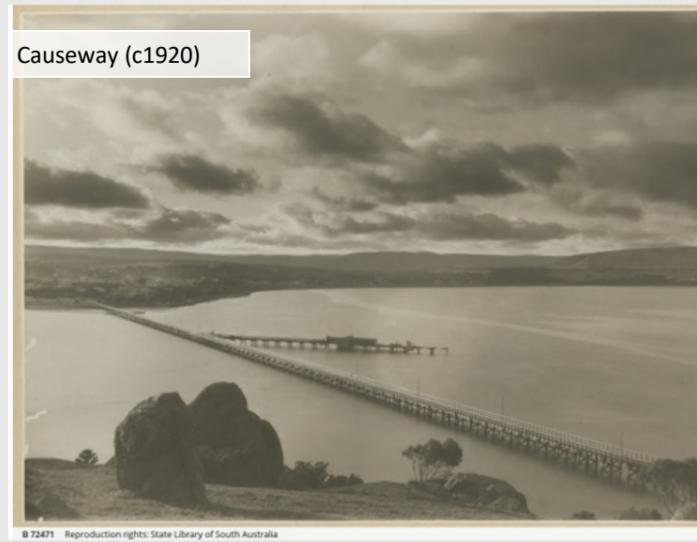
A Heritage Architect (Flightpath) was engaged to complete a heritage impact statement. This identified:

- The timber structure now known as Granite Island Causeway was first constructed in 1864 as Victoria Pier, with a spur that extended into deeper water to service the delivery of cargo;
- The Causeway (along with the tramway) was extended to connect to Granite Island in 1875. The screw pile jetty was completed in 1881;
- Horse drawn passenger tram services commenced across the Causeway in 1894;
- The spur on the Victoria pier was used as lifeboat storage and swimming baths but fell into disrepair and was demolished in 1956;
- The Causeway has undergone continuous repairs and replacement of its structural members and associated alterations during life;
- Much of the original timber has been replaced to stabilise the structure to provide short term safety and maintain access to Granite Island;
- The Causeway was re-built in 1967 with the deck and balustrade completely replaced; and
- Approximately 10% of the original structure under deck remains. Most of the original elements (particularly the piles) are no longer providing structural support.

Victoria Pier (c1867)

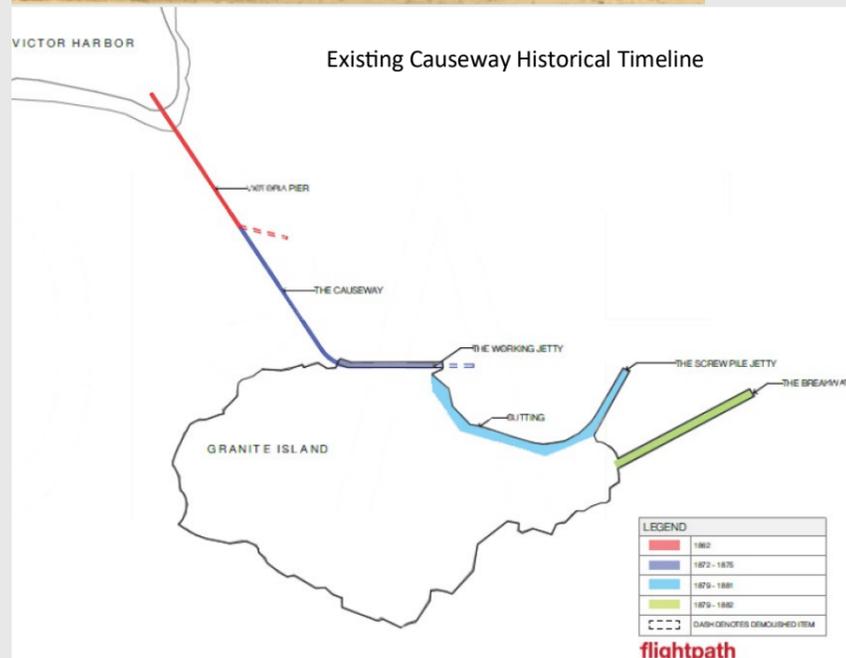


Causeway (c1920)



Existing Causeway Condition Assessment

- DPTI engaged engineering consultancy GHD to do an assessment on the condition of the existing and manage short term stability to maintain access to the island.
- The existing structure was assessed to enable repairs to be undertaken to retain safe access to Granite Island until the new causeway is constructed.
- 98% of existing piles require replacement. No original timber piles would be retained in the refurbishment.
- A large proportion of the timber from the 1957 reconstruction would need to be replaced in the refurbishment.
- To undertake refurbishment the Causeway would require closure for a significant period minimum of a year to salvage existing timber, install new piles and replace the remaining timbers with salvaged and new materials.
- A summary of the approximate number of timber members and timber deck that could be retained in any



Causeway (c1880)



Structural Timber	No.	No. that could be	To be replaced	Notes
Timber Piles	219	5	98%	No original piles can be retained
Steel Piles	90	0	100%	Steel piles are not original
Bracing & cross wailing	412	0	100%	All members require replacement
Cross Heads	206	144	30%	Only 8.3% of the total are original
Longitudinal beams	420	360	14%	Only 4% of the total are original

Deck Area (m ²)	Area (approx.) m ²	m ² that could be	To be replaced	Notes
Lower Deck	2,268	454	80 %	No deck is original
Upper Deck	2,268	0	100 %	No deck is original

GRANITE ISLAND CAUSEWAY PROJECT EXAMPLES OF PREVIOUS REPAIRS



Government of South Australia
Department of Planning,
Transport and Infrastructure

