

3.1. Hunts Lookout Footbridge Replacement

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ATTACHMENTS	Nil
CSP LINK	1. Our Living Environment 1.1 Protected, enhanced and biodiverse natural environment 2. Our Built Infrastructure 2.1 Infrastructure and assets meet diverse community needs

PURPOSE:

The purpose of this report is to inform Councillors and the community about plans to replace a pedestrian footbridge in Cremorne Reserve (Hunts Lookout) that was destroyed by a fallen tree in December 2022.

EXECUTIVE SUMMARY:

- Hunts Lookout is a small, natural gully located at the north-eastern end of Cremorne Reserve, where it adjoins Harnett Park in Mosman Council LGA. A creek that flows through the gully delineates the boundary between North Sydney and Mosman Council.
- The popular and well-used Cremorne Reserve pathway traversed the gully via an ~12m long pedestrian footbridge. This footbridge was destroyed by a fallen tree (privately owned) on the Mosman side of the gully in mid-December 2022.
- Full removal of the failed tree was not completed until late January, following which an engineering assessment of the whole structure was carried out recommending full replacement.
- In cooperation with Mosman Council, NSC engaged a structural engineer to design a replacement footbridge to suit the environment, meet current Australian Standards and be constructable in the difficult-to-access location.
- North Sydney Council recently sought quotations from suitably qualified contractors to construct the replacement footbridge. The successful contractor is expected to complete the complex build by July 2023.

RECOMMENDATION:

1. **THAT** the report be received.

Background

Cremorne Reserve is an iconic parkland fringing the picturesque Cremorne Point foreshore on Sydney Harbour. A popular pedestrian footpath winds through the reserve, connecting locals with two commuter ferry wharves; picnic areas; a playground and adjoining residential areas (including within Mosman LGA). At the north-eastern end of Cremorne Reserve, a ~12m long footbridge crosses a small creekline gully to join Harnett Park in Mosman Council LGA. The alignment of this creekline through the centre of the gully delineates the boundary between North Sydney and Mosman Council areas.

Report

The Hunts Lookout footbridge (pictured below) located in Cremorne Reserve (Cremorne Point) provides an important pedestrian link between Cremorne Reserve in North Sydney LGA and Harnett Park in Mosman LGA.



The original ~12m-long timber footbridge was partially destroyed by a large Coral Tree, which failed around the middle of December 2022, smashing through a 5m-long section of the raised footbridge on the Mosman Council side of the LGA boundary (see image below). As the tree fell from privately owned land into both Harnett Park and Cremorne Reserve, Mosman Council facilitated the landowner's cooperation in arranging removal of the failed tree.

With several branches of the failed Coral Tree also 'hung up' in adjacent canopy and an unknown extent of damage caused to close-by standing trees, assessment and removal of this material by arborists was necessary in order to provide safe access for Council staff to evaluate the extent of the damage and determine options going forward.



Full removal of the fallen tree and associated debris was completed in late January 2023 (see below), at which point North Sydney Council arranged for a structural engineer to assess the remaining in-tact section of footbridge to determine whether repair was an option or full replacement would be required. Based on the aged condition of the existing structure and level of decay evident in the old hardwood timber subframe, it was determined that full replacement was the only viable option.



Due to the steep-sided gully environment and distance from near-by streets, access to the footbridge location for construction purposes is exceedingly difficult and for the most part, only possible on-foot. This being the case, North Sydney Council arranged for the demolition and removal of the remaining footbridge (see below) structure by a specialist bushland track construction contractor, experienced in removing track infrastructure in especially difficult-to-access areas. Removal of the old, damaged footbridge was completed by the beginning of February 2023.



In early February, North Sydney Council appointed a structural engineer to design a replacement footbridge for Hunts Lookout that:

- Complies with current Australian Standards and relevant building codes (the original footbridge did not meet current building standards),
- Compliments the natural environment of Hunts Lookout, and
- Due to access constraints, uses construction materials that can be transported to the site mostly by-hand.

Given the footbridge length, suspended distance between supporting piers and height above ground level, this was a complex design exercise further complicated by the difficulties around access and construction methodology.

Following refinement of several design options, a final draft design for the replacement footbridge was completed in early March. This design was reviewed by both North Sydney and Mosman Council engineering teams before being finalised and accepted.

The new footbridge will feature a (black-painted) galvanised steel sub-frame instead of the hardwood timber used in the original structure. This change provides greater longevity and shortens the construction timeframes, as hardwood beams of the size required to span such lengths need to be specially milled and dried for a lengthy period before they can be used. Similarly, the treated pine timber deck has been replaced with grippy fibre-reinforced-plastic mesh panels commonly used in bushland track construction. These panels provide a long service life and high grip levels suited to the moist, creekline environment of Hunts Lookout. A reference to the previous timber footbridge has been integrated into the contemporary design with the retention of timber for the posts and handrails – albeit with stainless-steel mesh inserts (similar to the Coal Loader’s handrails) to comply with non-climbable fall prevention requirements.

In early April, NSC prepared a request for quotations from suitably experienced contractors to construct the new footbridge. Submissions closed on the 21st of April and the successful contractor has been appointed. At this stage, it is expected that construction of the replacement footbridge will be completed by July 2023.

Both North Sydney and Mosman Councils are acutely aware of the important link this footbridge provides to the community and are working to complete its (unplanned) replacement as soon as possible. Site signage and a news item on Council’s website is providing the North Sydney and Mosman communities with updated information on the progress of this project.

Consultation requirements

Community engagement is not required.

Financial/Resource Implications

Being a shared asset, resourcing for the replacement footbridge will be shared equally between North Sydney and Mosman Councils. Funding options for North Sydney Council’s contribution to the total cost are currently under consideration.

Legislation

The new footbridge has been designed in accordance with the relevant Australian Standards and building codes for pedestrian infrastructure.