

## REPORT CM/7.16/21.06



**Subject:** Clifftop Walkway Upgrade

**TRIM No:** A20/0387

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### RECOMMENDATION:

That Council:

1. Endorses the concept design Clifftop Walkway Upgrade Eastern Reserve and Diamond Bay Reserve attached to the report.
2. Endorses removing lighting from the design.
3. Proceeds to detailed design and the submission of a development application.
4. Notes engagement completed to date on the project and proceeds to public consultation as part of the development application process.

#### 1. Executive Summary

The purpose of this report is to seek Council's approval to proceed with a development application for the concept design Clifftop Walkway Upgrade at Eastern Reserve and Diamond Bay Reserve. Recent planning advice is that a DA is required for this project due to the current walkway passing through the E2 conservation zone in two small sections where it encroaches past the cliff-line in Eastern Reserve.

The concept design has been developed based on Australian Standards, technical requirements and advice, planning advice, grant fund requirements of the NSW Government Public Legacy Program and through consultation with Sydney Water and internal stakeholders.

#### 2. Introduction/Background

Council committed to the replacement of the existing Eastern Reserve and Diamond Bay Reserve boardwalks and viewing platform dating back to June 2019 (CM/8.3/19.06 and CM/7.5/19.09).

Council engaged consultancy Cardno in 2019 to complete asset condition assessments of Eastern Reserve and Diamond Bay Reserve boardwalks and a Feasibility Report comparing repair and replacement options. Both boardwalks were assessed as being in poor (condition 4) to very poor (condition 5) condition. As a result, short term remediation works (CM/7.14/19.11) were completed in June 2020 to ensure that stairways and walkways are secure until scheduled replacement as part of this project which is timed to coincide with Sydney Water's Refresh Vaucluse and Diamond Bay Project which will require Sydney Water to undertake works in Eastern and Diamond Bay Reserves to under bore pipe connections, build a pumping station and connect a new sewer rising main to the existing sewer network for treatment at Bondi Sewerage Treatment Plant.

In addition to the remediation works, temporary safety works (CM/7.10/20.07) based on an independent access assessment were completed in June 2020 to deter and restrict people from leaving the boardwalk through attachment at selected points of: secure mesh infill panels to existing fencing; and, hoarding beneath the boardwalk. Further safety measures including additional mesh infill and removal of the Diamond Bay lookout were undertaken in 2021.

Head Consultancy Thompson Berrill Landscape Design (TBLD) were engaged to design replacement boardwalks and upgrades to Eastern Reserve and Diamond Bay Reserve. The objectives are to:

- Connect the coastal walk.
- Improve pedestrian safety, amenity and equity of access where possible.
- Improve access to natural features and vantage points.
- Consistent coastal walk design language, materials and finishes.
- Protect and celebrate heritage and cultural value.
- Protect and enhance remnant vegetation.
- Minimise landscape and visual impact.
- Ensure residential amenity.
- Investigate opportunities to light the walkway.

As well as utilising robust materials, providing safe maintenance access, minimise construction risks, provide value for money as well as environmental and social sustainability.

### 3. Relevant Council Resolutions

Meeting and date	Item No.	Resolution
Council 21 July 2020	CM/7.10/20.07	<p>That Council:</p> <ol style="list-style-type: none"> <li>1. Receives and notes the findings and recommendations of the independent coastal risk assessment.</li> <li>2. Notes that a number of recommendations from the risk assessment have been addressed via the remediation works undertaken at the Diamond Bay Reserve boardwalk and Eastern Avenue Reserve, including installation of mesh infill panels to the existing balustrade and installation of hoarding beneath the boardwalk to further deter and restrict access to the cliff edge in 'hotspot' locations.</li> <li>3. Endorses ongoing implementation of the risk treatment plans set out in the coastal risk assessment report in accordance with the recommended priorities.</li> <li>4. Notes that it has provided for the design and reconstruction works of the Diamond Bay Reserve and Eastern Avenue boardwalks in its Capital Work program.</li> <li>5. Notes the actions undertaken to date in relation to coastal safety risks in Table 1 of this report.</li> <li>6. Notes that the fence at the northern end of Rodney Reserve has collapsed, and replaces the fence as soon</li> </ol>

		as possible due to safety concerns.
Council 19 November 2019	CM/7.14/19.11	That Council: <ol style="list-style-type: none"> <li>1. Receives and notes the current status of actions to improve safety along the coastal cliff edge outlined in this report.</li> <li>2. Undertakes remediation works on the Diamond Bay and Eastern Avenue boardwalks as per condition assessment findings, noting cost estimates outlined in this report, with works to be funded from the SAMP reserve.</li> <li>3. Proceeds to the design stage of reconstructing the Diamond Bay Reserve and Eastern Avenue boardwalks, noting cost estimates outlined in this report, with works to be funded in the 2020–21 capital works program.</li> <li>4. Includes the possibility of a viewing platform as part of the design of the reconstructed boardwalk.</li> <li>5. Does not install CCTV cameras at Diamond Bay Reserve at this stage until the final design is completed.</li> <li>6. Acknowledges the heritage significance of the existing stone archway, wall and steps at Diamond Bay Reserve, and commences proceedings to heritage list them in order to protect and maintain these items as part of any future design and works.</li> </ol>
Council 17 September 2019	CM/7.5/19.09	That Council: <ol style="list-style-type: none"> <li>1. Notes the current status of actions to improve safety along the coastal cliff edge outlined in this report.</li> <li>2. Considers and investigates the cost and feasibility of installing a viewing platform at Diamond Bay Reserve as part of any works proposed on the Diamond Bay boardwalk, following consideration of the boardwalk condition assessment.</li> <li>3. Officers report back to Council with the results of the investigation.</li> </ol>
Council 20 August 2019	CM/11.4/19.08	That Council: <ol style="list-style-type: none"> <li>1. Treats this report as confidential in accordance with section 11(3) of the <i>Local Government Act 1993</i>, as it relates to a matter specified in section 10A(2)(g) of the <i>Local Government Act 1993</i>. The report contains advice concerning litigation, or advice that would otherwise be privileged from production in legal proceedings on the ground of legal professional privilege.</li> </ol>

		<ol style="list-style-type: none"> <li>2. Expresses its sympathy and sadness at the tragic loss of life that occurred at the Diamond Bay Reserve on Saturday, 17 August 2019.</li> <li>3. Notes the action taken and underway in response to Council resolution CM/8.3/19.06.</li> <li>4. Notes the additional action undertaken by Council following the tragic events of 17 August 2019.</li> <li>5. Notes the legal advice and summary of issues set out in the report.</li> <li>6. Endorses the carrying out of an independent coastal risk review by suitably qualified assessors to guide further decision making on risk management along the Waverley local government area coastline. Diamond Bay Reserve is to be a priority, with an interim report to be presented to Council as soon as possible.</li> <li>7. Urgently explores and takes appropriate action related to: <ol style="list-style-type: none"> <li>(a) Installing additional temporary barriers.</li> <li>(b) Signage.</li> <li>(c) Social media messaging, including on WeChat, Weibo and similar channels.</li> <li>(d) Internet sites, tourist sites and other PR outlets, including TripAdvisor.</li> <li>(e) Compliance action.</li> <li>(f) Investigating legal remedies, including trespass.</li> </ol> </li> <li>8. Investigates action related to: <ol style="list-style-type: none"> <li>(a) Community education.</li> <li>(b) Licensing and other legal options.</li> <li>(c) CCTV.</li> <li>(d) Identifiable commercial operators, such as photographic businesses.</li> <li>(e) Parking regulations in the immediate vicinity.</li> <li>(f) Activities by other Councils in managing similar locations.</li> </ol> </li> <li>9. Contacts the State Member for Vaucluse, Gabrielle</li> </ol>
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		Upton, MP, to seek assistance in this matter. 10. Requests the Diamond Bay/Vaucluse and Dover Heights Precincts to provide input.
Council 18 June 2019	CM/8.3/19.06	That Council:  1. Officers investigate measures to restrict or deter movement from the Diamond Bay Reserve and the Coastal Boardwalk to the cliff ledge. Such measures to include:  (a) Appropriate multilingual signage  (b) Further physical barriers to restrict or hinder movement to the cliff ledge.  2. Investigates the cost and appropriateness for CCTV and consults the local police area command.  3. Officers report back to Council by September 2019 with a further investigation to consider the appropriateness and cost of installing a viewing platform from the coastal boardwalk.  4. Increases the frequency of ranger patrols in the area, in particular on weekends.  5. Installs an additional bin in Diamond Bay Reserve.  6. Informs the Vaucluse/Diamond Bay Precinct of Council's decision.  7. As part of the investigation Council officers liaise with Sydney Water and groups representing recreational fishermen about the access taken along the edge of the cliff to Sydney Water infrastructure by local fishermen.

#### 4. Discussion

The concept design (Attachment 1) has been developed based on Australian Standards, technical requirements, planning advice, grant fund requirements of the NSW Government Public Legacy Program and through consultation with Sydney Water and internal stakeholders. The draft concept design includes:

- Replacement of Diamond Bay lookout to capture coastline views in a more geotechnically stable location.
- Replacement of boardwalks along existing line except for Diamond Bay where it is moved landward to reduce risk from geotechnical instability.
- Extension of Eastern Reserve boardwalk with low boardwalks at either end over uneven surfaces to prevent erosion and trip hazards.
- Replacement of existing boardwalk fence, George Street fence and clifftop fence at beginning and end of Eastern Reserve boardwalk to improve safety and protection of remnant vegetation.

- Widening at lookout areas provided to stop and enjoy views and allow for pedestrian passing.
- Bollards at entry points to Eastern Reserve to improve views and visibility of access to walkway.
- Seating with paving at entry points to improve accessibility to views.
- Planting with low level native plants at selected fence-lines and cliff edges to restrict access and improve habitat corridors.
- Bins at entry points to reduce litter.

The following additional items have been included as a result of feedback from the NSW Government's Public Spaces Legacy Program who have recently confirmed \$2.993 million in grant funding towards the project:

- New stairs with landing paving at top and bottom midway between Bulga Rd and Eastern Ave
- Sealed path and lookout north of Oceanview Avenue.

The following additional items have been included as a result of feedback from Councillors at the workshop on 11 May:

- No handrail on cliffside of boardwalk in area near stone archway at Diamond Bay to further deter people from leaving the boardwalk
- Accessible areas noted.

Council officers recommend not including lighting in the DA package. Dimmable timed lighting to improve user safety and wayfinding at dawn and dusk was previously included in the concept design for the Councillor Workshop however, given the DA process and time constraints lighting has been removed from the design. Should Council wish to pursue lighting it can be developed into a separate future project.

The existing boardwalk is 2 m wide in total (approximately 1.8 m internal width). The proposed boardwalk in the draft concept design is 2.2 m wide total (2 m internal width) with additional widening at lookout areas provided to stop and enjoy views and allow for pedestrian passing. This is shown in Attachment 2 cross sections. Lookout areas have been placed to take advantage of views while avoid impacts on vegetation and/or heritage items.

The boardwalk is proposed to be fenced by the approved 1.2 m high Waverley Coastal Fence which is consistent with Waverley Cemetery boardwalk and supported by an independent risk assessment. A 1.8m high fence utilised at clifftop sports fields was not considered appropriate along the boardwalk as: hoarding will be included below the boardwalk at Diamond Bay, and this has proven to be effective at deterring most people from leaving the boardwalk; it would be inconsistent with other walkway areas; provide a visual barrier to enjoying the scenery; and would add considerable weight to the boardwalk structure in an area with high wind loading and geotechnical risk. The fence material is a durable stainless steel milled finish which will dull over the asset life and be suitable for the harsh coastal conditions. A handrail is included on both sides of the fence, except in the vicinity of the Diamond Bay lookout where a handrail is provided on the landward side only to deter people from leaving the boardwalk. This complies with Australian Standards which does not require handrails on flat sections and lookouts.

Geotechnical investigations identified a potential rockfall hazard at the current Diamond Bay lookout location. A peer review and risk assessment was undertaken by an independent geotechnical engineer. Based on the recommendations of an independent geotechnical engineer, to reduce risk: the existing Diamond Bay lookout has been removed; the future boardwalk has been relocated landward to a more geotechnically stable area: and a cable support system concealed beneath the boardwalk will be included in detailed design.

Geotechnical investigations also identified a potential risk at a steep slope adjacent to George St. Additional geotechnical investigations are being undertaken to inform detailed design.

An independent flora and fauna assessment concluded that there are no significant impacts on remnant vegetation or heritage (Landscape Conservation Area, Aboriginal Heritage and proposed heritage items).

Latest planning advice is that a development application (DA) is required for this project. An independent planning consultant has advised that the project cannot be Exempt development under SEPP Infrastructure 2007 as the current boundary of Eastern Reserve does not align with the cliff top and is encroached in two locations by the E2 conservation zone. Since the Councillor workshop, Council's Strategic Town Planning team have advised that the DA pathway will be quicker and more likely to obtain approval than an update to the Eastern Reserve boundaries in the Local Environmental Plan. As the project is time sensitive around Sydney Water works and grant funding requirements, progression via DA needs to occur as soon as possible and detailed design will be progressed while awaiting a DA determination. It is anticipated that this will keep the project on time with construction in early 2022 and completion by December 2022.

## 5. Financial impact statement/Time frame/Consultation

### Financial

The current quantity surveyor cost estimate is for \$3.6 million for boardwalk replacement and safety upgrades. This excludes the cost for recently added items including new stairs and sealed path.

Council's Long Term Financial Plan allocates \$1.8 million (2021–22 and 2022–23) towards boardwalk replacement and an additional \$1.8 million (2022/23) to coastal walk and cliff top upgrades.

Council has received confirmation that \$2.993 million in grant funding has been allocated from the NSW Government's Public Spaces Legacy Program. Additional funding is anticipated from Sydney Water (to compensate for the impact of their Refresh Vaucluse and Diamond Bay Project works) and is subject to current Heads of Agreement negotiations.

### Time frame

The table below outlines the predicted timings of key milestones for the project. Construction is planned to commence early 2022 and staged around Sydney Water works in order to minimise the length of time that the walkway will be closed and construction impacts on neighbouring properties. Works are required to be completed by December 2022 in order to meet grant funding requirements.

Table 1. Milestones.

Milestone	Estimated Completion
Council report	June 2021
DA submission	July 2021
Detailed design for tender for construction	December/January 2021
Tender for construction (following DA approval)	February 2022
Contract finalisation	February 2022
Construction of both stages (subject to completion of Sydney Water works)	December 2022

### Consultation

During the development of the concept design, engagement was undertaken with Sydney Water, NSW Government and Council staff across: Open Space Planning, Asset Maintenance, Urban Design and Heritage, Environmental Sustainability, Asset Management, Major Projects, Strategic Town Planning, Safety and Wellbeing and Risk Management.

A concurrent community consultation and DA process will be required in order to meet the grant funding and Sydney Water construction timeline.

Public Notifications will be undertaken by Council's Planning team during the DA process. This will enable neighbouring property owners and others to provide feedback for consideration by the development assessor and the experts on the Waverley Local Planning Panel as part of their deliberations on how well the project meets NSW Government and Waverley Council development objectives and controls.

Council's Project Manager will also undertake meetings with key stakeholders such as the precinct committee and Sydney Water as well as conduct on-site Have Your Say pop-ups to inform the community that the project is going through a DA pathway and submissions can be made through the NSW Planning Portal. This will be complemented by communications via letter box drop, site signage, website updates and Council newsletter updates.

## **6. Conclusion**

It is recommended that Council endorses the concept design of the Clifftop Walkway Upgrade at Eastern Reserve and Diamond Bay Reserve for development application and detailed design. As outlined in this report, the replacement boardwalk and proposed upgrades to Reserves will improve safety and user experience of the spectacular coastline and adjacent remnant vegetation while preserving heritage value.

## **7. Attachments**

1. CWU Concept Design
2. CWU Concept Design - Typical Section .