

## SUTHERLAND SHIRE COUNCIL ASSESSMENT REPORT

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| <b>Panel Reference</b>                                                                              | PPSSSH-169                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>DA Number</b>                                                                                    | DA24/0290                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>LGA</b>                                                                                          | Sutherland Shire Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Proposed Development</b>                                                                         | Construction of sandstone revetment wall, stairs, path, artwork and sandstone block seating                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Street Address</b>                                                                               | 165 Sir Joseph Banks Drive, Kurnell                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applicant/Owner</b>                                                                              | Department of Climate Change, Energy, The Environment and Water C/o Charlie Sammoun                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Date of DA lodgement</b>                                                                         | 13 June, 2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Number of Submissions</b>                                                                        | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Recommendation</b>                                                                               | Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011)</b> | Clause 8A (b), Schedule 6 State Environmental Planning Policy (Planning Systems), 2021 - development for the purpose of coastal protection works carried out by or on behalf of a public authority.                                                                                                                                                                                                                                                                                                                                                     |
| <b>List of all relevant s4.15(1)(a) matters</b>                                                     | <ul style="list-style-type: none"> <li>• Heritage Act, 1977.</li> <li>• National Parks &amp; Wildlife Act 1974.</li> <li>• Water management Act, 2000.</li> <li>• Coastal Management Act, 2016</li> <li>• Fisheries Management Act, 1994</li> <li>• State Environmental Planning Policy (Planning Systems) 2021</li> <li>• State Environmental Planning Policy (Resilience and Hazards) 2021</li> <li>• Sutherland Shire Local Environmental Plan 2015 (SSLEP 2015).</li> <li>• Sutherland Shire Development Control Plan 2015 (SSDCP 2015).</li> </ul> |

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|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>List all documents submitted with this report for the Panel's consideration</b> | <ul style="list-style-type: none"> <li>Plans</li> <li>Appendix 'A' Kurnell Revetment Wall Peer Review – GHD Consulting</li> <li>Appendix 'B' - SSDCP 2015 Compliance table</li> <li>Appendix 'C' – IDA General Terms of Approval – National Parks and Wildlife Act, 1974</li> <li>Appendix 'D' – IDA General Terms of Approval – Heritage Act 1977</li> <li>Appendix 'E' IDA Response - Water Management Act 2000</li> <li>Appendix 'F' – DPI Fisheries – Letter of Consent</li> </ul> |
| <b>Report prepared by</b>                                                          | Timothy Jennings – Development Planner – Sutherland Shire Council                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Report date</b>                                                                 | 30 April 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

#### Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report? **Yes**

#### Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? **Yes**

*e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*

#### Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report? **Not Applicable**

#### Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.24)? **Not Applicable**

*Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions*

#### Conditions

Have draft conditions been provided to the applicant for comment? **Yes**

*Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report* **Crown Application**

## REASON FOR THE REPORT

Schedule 6 of State Environmental Planning Policy (Planning Systems) 2021, requires this application to be referred to the Sydney South Planning Panel (SSPP) as the development is for the purpose of coastal protection works carried out by or on behalf of a public authority (other than development that may be carried out without development consent under clause 19(2)(a) of State Environmental Planning Policy (Coastal Management) 2018).

## PROPOSAL

The application is for the construction of a sandstone revetment wall, comprising a series of stepped blocks sited above the mean high-water mark (MHW) of Botany Bay, on the north-western beachfront of the Kamay Botany Bay National Park. The proposal also includes the construction of an access pathway and stairs, seating and areas for public artwork.

## THE SITE

The subject site is 165 Sir Joseph Banks Drive, Kurnell. The site encompasses the bulk of the Kamay Botany Bay National Park and is zoned C1 National Parks and Nature Reserves. The area of works is localised within the north-western portion of the lot.

## ASSESSMENT OFFICER'S RECOMMENDATION

### 1.0 THAT:

- 1.1 That Development Application No. DA24/0290 for Construction of sandstone revetment wall, stairs, path, artwork and sandstone block seating at Lot 323 MP 144 Polo Street Sanitary Reserve 165 Sir Joseph Banks Drive, Kurnell be approved, subject to the conditions of consent

## ASSESSMENT OFFICER'S COMMENTARY

### 2.0 DESCRIPTION OF PROPOSAL

The application is for the construction of sandstone revetment wall, stairs, a pathway, artwork and sandstone block seating along the north-western beachfront of the Kamay Botany Bay National Park.

The proposed works stretch 220m, from the Kamay Ferry Wharf currently under construction in the south-west to the north-west. The wall is divided into two sections, a primary component to the south-west, 150m in length and a smaller, 30m-long component to the north-east, which includes an access pathway and stairs from the existing concrete walking track from the south to the beach. The two components are separated by a creek mouth that extends into the Botany Bay water catchment. An existing stone retaining wall, located on either side of the creek mouth is to be retained and incorporated into the design of the new

wall. The works are entirely located behind the MHWM to varying degrees (1.3m up to 3.3m).

The primary purpose of the wall is to prevent coastal erosion and protect 14 established Norfolk Pine trees that line the corresponding section of the foreshore. A series of temporary sandbags were installed in 2018 for this purpose and are still located at the site. As part of this application, the top layer of the sandbags is to be removed, with up to seven layers of sandstone blocks placed over the retained bags. The first, lowest row of blocks is to be anchored to the bedrock below. Seating, and areas reserved for public artwork displays, are incorporated into the block wall design.

General arrangement plans, and cross sections of the works are provided below.

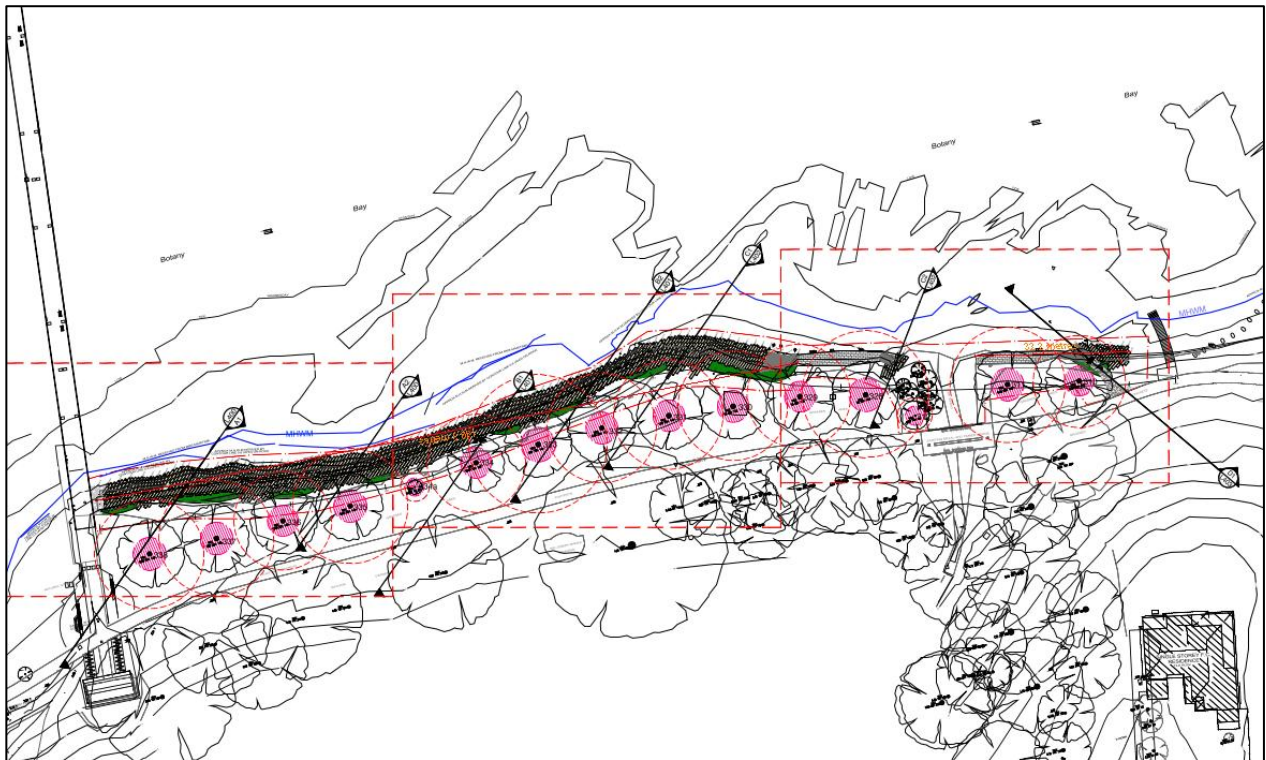


Figure 1: Site Plan of the entire proposed revetment wall (in black), with Norfolk Pines identified in pink

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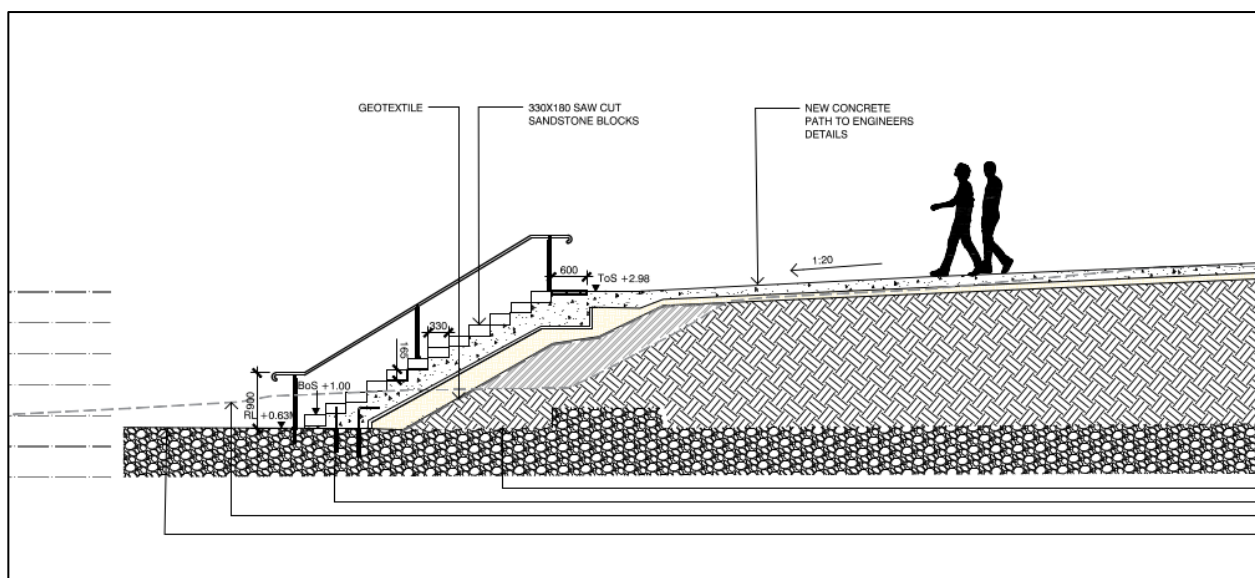


Figure 4: Cross section depicting proposed access pathway, stairs and handrail, extending from the existing concrete walking track to the beach/bedrock

### 3.0 SITE DESCRIPTION AND LOCALITY

The subject site is Lot 323 MP 144, comprising the northern and eastern extent of the Kurnell Peninsula, and encompassing the bulk of the Kamay Botany Bay National Park. The site is irregular in dimension, extending towards Boat Harbour to the south, along the Kurnell cliff face that faces the Pacific Ocean, into Botany Bay to the north and north-west. Built forms on the site are largely associated with the National Park land use, with private access roads, pedestrian pathways, car parking, historic cottages, viewpoint sites, landmarks and public artwork all located within the lot. The site contains a large number of Aboriginal artefacts, including engravings, middens and burial sites. The site is adjoined by the Kurnell residential allotments to the west and south, and the Caltex Oil Refinery and land managed by the La Perouse Local Aboriginal Land Council to the west. The site area is 364 Hectares.

The area of works is localised within the north-western portion of the lot and encompasses a 220m long stretch of foreshore to the east of the new Kamay Ferry Wharf which is currently nearing completion. It is accessed from land by a pedestrian path, with the most direct route being from the corner of Prince Charles Parade and Captain Cook Drive. An existing sandbag revetment wall is located within the corresponding location of the works. The pedestrian path and a row of 14 Norfolk Pines are located along the top of the bank, immediately south of the proposed works. The area further south is characterised by a high level of vegetation and tree canopy.

Also within proximity are the Alpha House historic cottage, Nuwi Canoes, Commemoration Flat picnic area, Sir Joesph Banks memorial and Captain Cook Obelisk. The natural ground surface of the work-area extends from the MHW to approximately 3.5m AHD.

Aerial images of the site and area of works, and a locality plan, with land-use zoning, are provided below.



Figure 4: Aerial image of subject site, highlighted in yellow, with area of works in north-eastern portion of lot

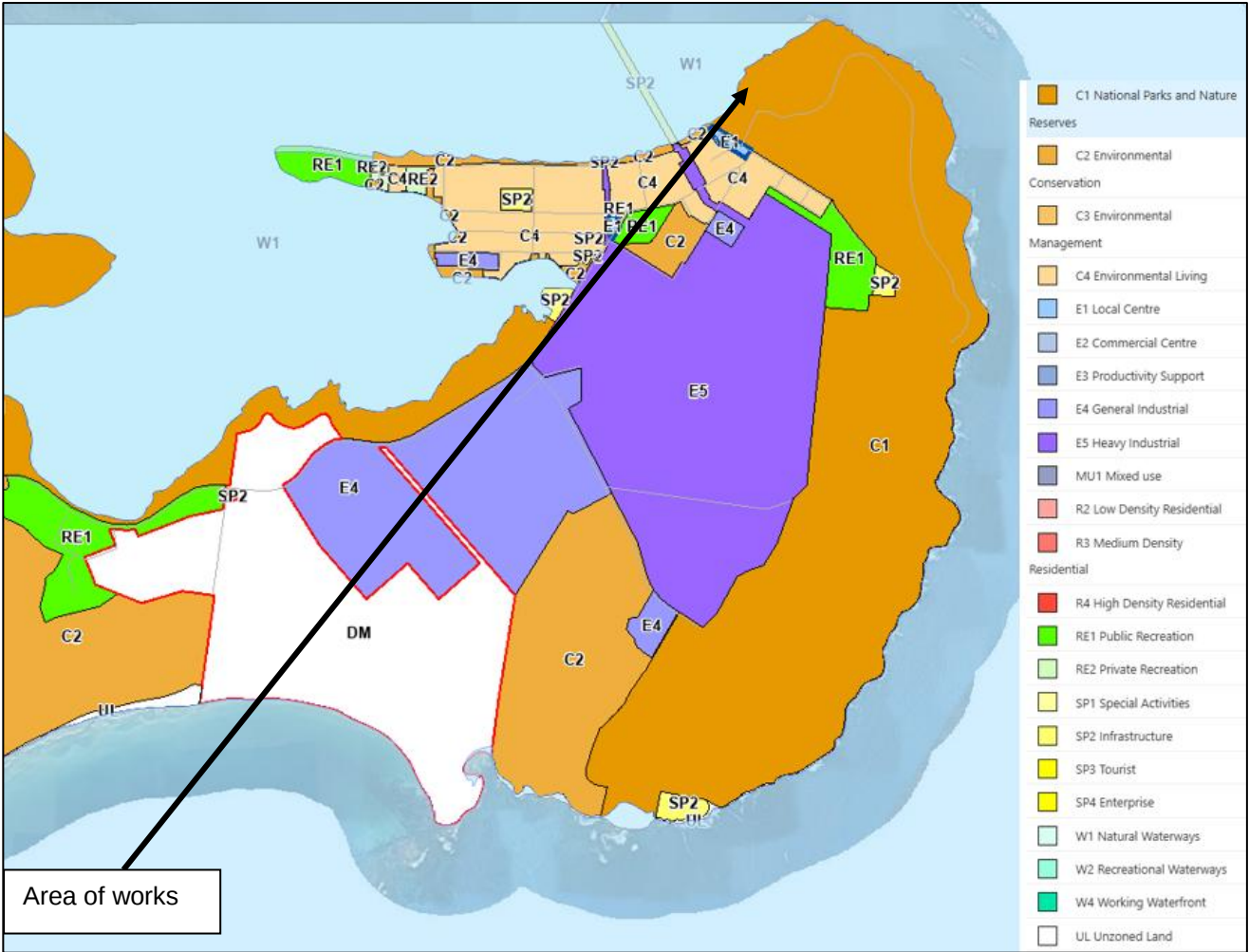


Figure 5: Locality Plan, including land-use zoning table and associated legend



Figure 6: Specific location of proposed works, highlighted in red



*Figure 7: Oblique view of the area of proposed works, with existing sandbag wall and Kamay Ferry Wharf visible (under construction)*

#### **4.0 BACKGROUND**

A history of the development proposal is as follows:

- A pre-application discussion (PAD) was held on 15 December 2023 regarding this development. As a result of this a formal letter of response was issued by Council dated 15 January 2024. A full copy of the advice provided to the Applicant is contained within Appendix “A” of this report and the main discussion points contained in this letter are as follows:
  - Permissibility of certain coastal protection works within the site and the pathway for determination of such development consent.
  - Design recommendations of the proposal in respect to ensuring long term health of the Norfolk Pines within proximity to the works.
  - Recommendations in terms of supporting documentation and expert reports to enable a thorough assessment of the proposed works and construction process, and anticipated impacts on marine and terrestrial ecology, aboriginal heritage and state/local heritage.
  - Likely referrals to external bodies during assessment.
- The current application was submitted on 13 June 2024.
- Site inspections were undertaken 10 and 17 July 2024.
- The application was placed on exhibition, with the last date for public submissions being 27 July 2024. No submissions were received.
- On 13 September 2024, Council officers requested that the following additional information be provided:

- Detailed information in respect to the design methodology of the revetment wall, including an assessment of current/potential coastal hazards, vulnerability, an outline of alternative design options, commentary of design-life, acknowledgement of coastal input data used, assessment of the impacts of sea level rise, impacts on beach access and potential for modification beyond the intended design life.
- Further information in respect to the impacts on trees and vegetation, specifically greater construction methodology detail, and the provision of an arborist report to outline recommendations to in respect to construction methodology and the location/design of the access pathway and stairs.
- Additional plans, in the form of cross-sections and a northern elevation of the proposal, to enable a thorough assessment of the visual appearance of the structure and the presentation, of the concrete fill located underneath the lowest row of sandstone blocks.
- Minor plan corrections and additional annotations.
- Amended plans and information were lodged on 7 November 2024. The amended documentation included a suite of revised plans, an arborist report and a Coastal Hazards and Process Report.

## **5.0 ADEQUACY OF APPLICANT'S SUBMISSION**

In relation to the Statement of Environmental Effects, plans and other documentation submitted with the application and / or after a request from Council, the applicant has provided adequate information to Council to enable an assessment of this application.

## **6.0 PUBLIC PARTICIPATION**

The application was notified in accordance with the provisions of Appendix A of the Sutherland Shire Community Engagement Strategy 2023 (SSCES) and the requirements of the SSPP until 27 July 2024.

Council notified fifty-three adjoining or affected owners of the proposal, and no submissions were received.

### **Revised Plans**

The applicant lodged revised plans on 7 November 2025. The revised plans provided additional detail in respect to the proposed revetment wall, via additional cross-sections, elevations and minor clarifications.

In accordance with the requirements of SSCES these plans were not publicly notified as, in the opinion of Council, the changes being sought did not intensify or change the external impact of the development to the extent that neighbours ought to be given the opportunity to comment. The summary of issues below is in relation to the plans notified as part of this application.

## **7.0 STATUTORY CONSIDERATIONS**

The subject land is located within Zone C1 National Parks and Nature Reserves pursuant to the provisions of Sutherland Shire Local Environmental Plan 2015. The relevant zoning table indicates that there are no development types permissible with consent in the zone. However, the area of development is mapped as

being within the 'coastal zone' as per the provisions of Chapter 2 Coastal Management, in the State Environmental Planning Policy (Resilience and Hazards), 2021.

Chapter 2, cl.2.16 of the Resilience and Hazards SEPP specifically deals with '*coastal protection works*' which are defined as:

- (a) *beach nourishment activities or works, and*
- (b) *activities or works to reduce the impact of coastal hazards on land adjacent to tidal waters, including (but not limited to) seawalls, revetments and groynes.*

The proposal relates to the installation of a revetment wall made up of stacked sandstone blocks along the edge of a beach to prevent further erosion of the sand bank, to protect the existing Norfolk Island Pines and to provide public access to the foreshore. The proposed works are consistent with the above definition.

Further, cl.2.16(2) outlines situations where 'coastal protection works' are carried out by a Public Authority as follows (emphasis added):

***Development for the purpose of coastal protection works may be carried out on land to which this Policy applies by or on behalf of a public authority:***

- (a) *without development consent—if the coastal protection works are:*
  - (i) *identified in the relevant certified coastal management program, or*
  - (ii) *beach nourishment, or*
  - (iii) *the placing of sandbags for a period of not more than 90 days, or*
  - (iv) *routine maintenance works or repairs to any existing coastal protection works, or*
- (b) ***with development consent—in any other case.***

The proposed development does not solely consist of any of the types permissible without development consent and is therefore considered permissible with development consent as outlined under cl.2.16(2)(b).

The following Environmental Planning Instruments (EPIs), Development Control Plan (DCP), Codes or Policies are relevant to this application:

- Heritage Act, 1977.
- National Parks & Wildlife Act 1974.
- Water management Act, 2000.
- Coastal Management Act, 2016.
- Fisheries Management Act, 1994
- State Environmental Planning Policy (Planning Systems) 2021.
- State Environmental Planning Policy (Resilience and Hazards) 2021.
- Sutherland Shire Local Environmental Plan 2015 (SSLEP 2015).

- Sutherland Shire Development Control Plan 2015 (SSDCP 2015).

## 8.0 COMPLIANCE

### 8.1. Coastal Management Act, 2016

Part 5, Clause 27 of the Coastal Management Act, 2016, stipulates that development consent cannot be granted for coastal protection works unless the consent authority is satisfied that certain requirements have been met. Below is an assessment of the proposed development in respect to these requirements:

*(a) the works will not, over the life of the works—*

*(i) unreasonably limit or be likely to unreasonably limit public access to or the use of a beach or headland, or*

*(ii) pose or be likely to pose a threat to public safety*

The proposed revetment wall is positioned the corresponding location of the existing sandbag wall and does not impede access from the bank to the beach. The provision of a new access stair and pathway to the eastern section, connecting to the existing pedestrian pathway to the south, increases pedestrian accessibility to from the beach. The proposed works in no way pose a risk to safety of visitors to the specific area of the National Park.

*1(b) satisfactory arrangements have been made (by conditions imposed on the consent) for the following for the life of the works—*

*(i) the restoration of a beach, or land adjacent to the beach, if any increased erosion of the beach or adjacent land is caused by the presence of the works,*

*(ii) the maintenance of the works.*

*(2) The arrangements referred to in subsection (1) (b) are to secure adequate funding for the carrying out of any such restoration and maintenance, including by either or both of the following—*

*(a) by legally binding obligations (including by way of financial assurance or bond) of all or any of the following—*

*(i) the owner or owners from time to time of the land protected by the works,*

*(ii) if the coastal protection works are constructed by or on behalf of landowners or by landowners jointly with a council or public authority—the council or public authority,*

*(b) by payment to the relevant council of an annual charge for coastal protection services (within the meaning of the Local Government Act 1993).*

*(3) The funding obligations referred to in subsection (2) (a) are to include the percentage share of the total funding of each landowner, council or public authority concerned.*

The works are to be undertaken on Crown Land by, or on behalf of, the Crown. Council is satisfied that appropriate funding is to be implemented/provided by the Public Authority to oversee any required restoration or maintenance works over the design life of the works. As such, conditions of consent relating to allocation of funding have been deemed unnecessary.

The proposed works are deemed to be consistent with the requirements for coastal protection works in the Act.

## **8.2. State Environmental Planning Policy (Resilience and Hazards) 2021**

### *Chapter 2 Coastal Management*

Chapter 2 of the Resilience and Hazards SEPP seeks to balance social, economic and environmental interests by promoting a coordinated approach to coastal management consistent with the Coastal Management Act 2016. Chapter 2 of the Resilience and Hazards SEPP applies to land within the coastal zone across NSW. All foreshore land within the Sutherland Shire is identified as being within the coastal zone, in some instances the coastal zone extends beyond waterfront properties. In addition, much of the Sutherland Shire foreshore is identified as being within the coastal environment area and the coastal use area.

Before granting development consent on any land within the coastal zone the consent authority must be satisfied that the proposed development is not likely to cause increased risk of coastal hazards on that land or other land. Council is satisfied that the proposed revetment wall, stairs, path, artwork and sandstone block seating are unlikely to cause increased risk of coastal hazards on that land or other land. It is noted at this stage Council does not have any certified coastal management programs which require consideration.

The subject site is within the coastal zone and is also identified on the Resilience and Hazards SEPP map as coastal environment area and coastal use area. Although not specifically mapped as such, the provisions of the coastal vulnerability area clause are also to be applied, as the site is a potential coastal vulnerability area.

### *Development on land within the coastal vulnerability area (clause 2.9)*

Although not specifically mapped as such, the provisions of the coastal vulnerability area clause are as relevant, as the site is a potential coastal vulnerability area. To this end, the consent authority should not grant development consent unless it is satisfied that:

- (a) *if the proposed development comprises the erection of a building or works—the building or works are engineered to withstand current and projected coastal hazards for the design life of the building or works, and*
- (b) *the proposed development:*
  - (i) *is not likely to alter coastal processes to the detriment of the natural environment or other land, and*
  - (ii) *is not likely to reduce the public amenity, access to and use of any beach, foreshore, rock platform or headland adjacent to the proposed development, and*
  - (iii) *incorporates appropriate measures to manage risk to life and public safety from coastal hazards, and*

- (c) *measures are in place to ensure that there are appropriate responses to, and management of, anticipated coastal processes and current and future coastal hazards.*

The application is for a sandstone block wall revetment constructed over an existing temporary sandbag seawall. The Applicant has submitted a Coastal Hazards and Process Report which tests aspects of the proposed revetment wall in terms of its design longevity and the likelihood of degradation of the surrounding coastal environment. This Report has been reviewed by Council's consulting Coastal Engineer who has concluded that the proposed wall design is entirely appropriate given the constraints of the site in terms of design approach and lifespan, foundational stability, armour layering, degradation, outflanking, wave overtopping and reflectivity (these design aspects are discussed in detail in the "Assessment section of this Report, with a full copy of the review located in **Appendix 'A'**). Specific recommendations in respect to monitoring of the structure to identify issues over its design life have been imposed via conditions on consent.

Additionally, the proposal is generally consistent with the form of existing structures within the coastal area and is designed to ensure there is no impact to public safety or additional risk to life. The addition of formalised stair access from the existing concrete walking track to the beach, block seating and artwork ensures that the proposal contributes to the amenity and usability of the beachfront and embankment above. The proposal is deemed as consistent with the provisions of the coastal vulnerability area.

*Development on land within the coastal environment area (clause 2.10)*

The site is identified as being land within the "coastal environment area" on the Resilience and Hazards SEPP map. This requires the consent authority to consider certain factors before development consent is granted. These factors include the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment; coastal environmental values and natural coastal processes; the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014); marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms; existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability; Aboriginal cultural heritage, practices and places and the use of the surf zone.

These factors have been considered in the assessment of this application. The proposed revetment wall has been designed to incorporate existing coastal structures, notably the existing sandbag wall, into the design, which minimises the impacts the level of excavation and fill required and impact on the site due to construction. As such, the impact on terrestrial and aquatic ecological and biodiversity values is deemed to be minimal and nearby Aboriginal cultural artefacts and heritage items are protected. The revetment wall has been designed as to reduce wave reflection and maintain existing overtopping levels and is unlikely to significantly impact amenity and beach stability. Public access to the beachfront from the picnic site and associated walking track is improved via the formalisation of stair access to/from the beach. Council is thus

satisfied that, subject to appropriate conditions, the development has been designed, sited and can be managed to avoid any adverse impact detailed in Clause 2.10(1).

*Development on land within the coastal use area (clause 2.11)*

The site is identified as being land within the “coastal use area” on the Resilience and Hazards SEPP map. This requires the consent authority to consider certain factors and be satisfied of certain requirements before development consent is granted.

Specifically the consent authority must consider whether the proposed development is likely to cause an adverse impact on existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability; overshadowing, wind funneling and the loss of views from public places to foreshores; the visual amenity and scenic qualities of the coast, including coastal headlands; Aboriginal cultural heritage, practices and places, and cultural and built environment heritage.

These factors have been considered in the assessment of this application. The proposed access stair and pathway formalise access from the existing concrete walking track to the beach, providing safe and practical access for members of the public. The revetment wall represents a small increase in height in comparison to existing sandbag wall and will have a negligible impact on existing view lines and generate minimal additional overshadowing. The sandstone block wall design is complementary to existing landforms, representing an improvement over aging/temporary existing structures in terms of visual appearance, and provides a link between local heritage items and Aboriginal cultural artefacts within the locality. Council is satisfied that, subject to appropriate conditions, the development has been designed, sited and can be managed to avoid any adverse impact detailed in Clause 2.11(1).

Further Council has considered the bulk, scale and size of the proposed development and its impact on the surrounding coastal and built environment. The application has been deemed acceptable in this regard, as the revetment wall is complimentary to the scale of existing structures along the embankment and beachfront.

*Development within the coastal zone generally (Clause 2.12)*

The site is identified as being in the ‘coastal zone’ on the Resilience and Hazards SEPP map. Consent must not be granted on development on land within the coastal zone unless the consent authority is satisfied that the proposed development is not likely to cause increased risk of coastal hazards on that land or other land. This aspect is addressed in the “Assessment” section of this Report.

*Chapter 4 Remediation of Land (Previously SEPP 55)*

Chapter 4 of State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) requires Council to consider whether the land subject to the development proposal is contaminated; and if the site is contaminated, Council must be satisfied that the site is suitable or can be made suitable (i.e. following remediation) for the proposed land use.

A site inspection identified that the site is currently occupied by the Kamay Botany Bay National Park and associated ancillary man-made structures, serving the purpose of visitor-amenity, roads and car parking facilities, toilets, footpaths, public artwork, landmarks and vantage points. The Kamay National Park was established in 1984. A search of Council's records, including historical files, has revealed that the site has had multiple previous uses including informal residential settlements and sand mining.

A search of Council's contaminated land register specifies that the site is not potentially contaminated, however the adjacent Botany Bay Waterway, within proximity to the proposed works, is considered contaminated land, due to use for Oyster Farming and uncontrolled filling. These works did not take place in the vicinity of the proposed development and the development is unlikely to be affected by this designation. Nonetheless, the application has been conditioned to ensure that if unexpected soil and/or groundwater contamination is encountered during any works; all work must cease, and the situation must be promptly evaluated by an appropriately qualified, experienced and certified environmental consultant.

In conclusion, the site is suitable for the proposed development in accordance with requirements of the Resilience and Hazards SEPP.

### **8.3. State Environmental Planning Policy (Planning Systems) 2021**

State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP) identifies State and Regionally Significant development in NSW. Schedule 6 of the SEPP identifies this application as regionally significant development as it is for certain coastal protection works. As such, the application is referred to the South Sydney Planning Panel for determination.

### **8.4. Sutherland Shire Local Environmental Plan 2015**

The proposal has been assessed for compliance against Sutherland Shire Local Environmental Plan 2015. A list of the applicable development standards is provided below, which are addressed in the "Assessment" section of this Report.

- Zone C1 National Parks and Nature Reserves
- Clause 5.10 Heritage Conservation
- Clause 6.1 Acid Sulfate Soils
- Clause 6.3 Earthworks
- Clause 6.4 Stormwater Management
- Clause 6.5 Environmentally Sensitive Land – Terrestrial Biodiversity
- Clause 6.6 Environmentally Sensitive Land – Groundwater Vulnerability
- Clause 6.7 Environmentally Sensitive Land – Riparian Land and Watercourses
- Clause 6.16 Urban Design - General
- Clause 6.19 Kurnell Peninsula

## 8.5. Sutherland Shire Development Control Plan 2015

The proposal has been assessed for compliance with SSDCP 2015. A list of the applicable chapters and sections is provided below:

- Chapter 10 – Foreshores & W1 Natural Waterways,
  - Part 7 – Controls for Inclinator and Stairs (compliance table can be found in **Appendix 'B'**)
- Chapter 39 – Natural Resource Management
  - Part 1 – Biodiversity Strategy - Greenweb
  - Part 3 – Threatened Species

## 9.0 SPECIALIST COMMENTS AND EXTERNAL REFERRALS

The application was referred to the following internal and external specialists for assessment and the following comments were received:

### Department of Climate Change, Energy, the Environment and Water

#### National Parks and Wildlife Act 1974

The works are in the Kamay Botany Bay National Park and, as such, the application is integrated development under s.90 of the National Parks and Wildlife Act 1974.

In summary, General Terms of Approval have been granted for the proposed development, with a full copy of this approval in **Appendix 'C'**. Specifically, the terms require a s.90 Aboriginal Heritage Impact Permit to be sought and granted prior to the commencement of works. The permit application must be accompanied by appropriate documentation and mapping, Aboriginal community consultation, complete records satisfying the requirements of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (2010) and must include long term management of Aboriginal objects.

#### Heritage Act 1977

The works are located within a lot identified on the State Heritage Register and, as such, the application is considered integrated development under Section 60 of the Heritage Act, 1977.

In summary, General Terms of Approval have been provided for the development, with approved modifications under Section 65A of the Act. A full copy of this approval is located in **Appendix 'D'**. Notably, the terms stipulate that a suitably qualified heritage consultant must be nominated for the project to provide input on detailed design and provide heritage advice, ensure work is carried out by qualified tradespersons, protect landscape/built elements, implement a 'heritage interpretation plan', photograph archival recordings, and act appropriately in terms of unexpected finds, including with Aboriginal objects.

### Department of Planning and Environment - Water

The works are proposed in waterfront land and the application is therefore integrated development under Section 90(2) of the Water Management Act 2000. The Department of Planning and Environment – Water

have confirmed that the proposed development is exempt from the need to obtain a controlled activity approval (as the works are being undertaken by a public authority) and no further agency action is necessary. A full copy of this response is located in **Appendix 'E'**.

### **DPI Fisheries**

Prior to lodgement of the application, the applicant has sought a response from DPI fisheries in respect to compliance with s.199(1)(a) of the Fisheries Management Act 1994 (the Act). Fisheries has confirmed that there are no objections to the proposed works in respect to protection of key fish habitats, aquatic habitat protection and threatened species conservation, subject to requirements in respect to saltmarsh within the vicinity of works, seawall design, erosion and sediment control measures and process requirements in the event of any fish kill. The application has been conditioned accordingly. A full copy of this consent is located in **Appendix 'F'**.

### **La Perouse Local Aboriginal Land Council**

The application was referred to the La Perouse Local Aboriginal Land Council (LPLALC) for comment. As of the date of this report, a response from the LPLALC has not been received.

### **Consulting Coastal Engineer**

The application was referred to Council's consulting Coastal Engineer who provided a review of revised plans and documents, notably the Coastal Hazard and Process Report. The comments received from Council's position in respect to likely coastal risks associated with the design of the proposal, which are discussed in the "Compliance" and "Assessment" sections of this Report. A full copy of this Report is located in **Appendix 'A'**.

### **Consulting Arborist**

The application was referred to Council's consulting arborist who reviewed the original suite of plans and documentation. The following comments were received:

- No arborist report submitted with application upon lodgement. It is unclear if the plans have been prepared under the supervision of an arborist or have been provided to an arborist for comment. This is unclear and unsupportive.
- Concerns raised in respect to the Construction management plan, which fails to show tree protection zones, a lack of clarity over vehicle entry points, the type of machinery that will be used within the work zone and whether vehicles, materials and equipment are being stored within tree protection zones (TPZs)
- The tree protection methodology for the identified work compound is, at this stage, non-existent and cannot be supported.
- The proposed stairs/pathway to are in close proximity to Tree 310. Without an arborist report, the impacts to this tree cannot be understood.
- Recommendation made that the Applicant submit an arborist report. Based off this report, a site-specific tree protection plan, in accordance with AS4970-2009 should be prepared, outlining how

works are to be managed in the TPZs of all trees.

### **Landscape Specialist (Assessment Teams)**

Following submission of a revised arborist report, amended plans and construction management plans, the application was referred to Council's Assessment Teams' Landscape Specialist. The following comments were received:

- The proposal generally improves public access and the foreshore environment by using the sandstone block revetment to prevent scouring and erosion and protect the existing trees and significant cultural areas
- The submitted arborist report is thorough and offers tree protection recommendations that aim to establish TPZ fencing, restrict the type of machinery used within the TPZs, dictate excavation methodology, outline project arborist supervision and ensure that the site compound is outside of the TPZ area of all trees.
- A design amendment is recommended that the footpath within the TPZ of Tree 310 should either be installed above existing grade or have the finished levels determined by preliminary excavation of the slab footprint to identify significant roots (as determined by the Project Arborist).

### **Ecologist (Council Officer)**

The application was referred to Council's Ecologist who provided the following comments:

- The proposed works are highly unlikely to result in a significant environmental impact requiring the project to be offset as per the Biodiversity Offset Scheme established under the Biodiversity Conservation Act 2016.
- The Aquatic Ecology Assessment does not assess any potential impacts from wave reflection, current and sediment movement on the nearby seagrasses, as it provided no assessment in the subtidal zone, however, the Statement of Environmental Facts does provide detail regarding the above and stated that sediment transport would not be significantly different to the current sediment transport processes occurring at the sandbag wall, and there is little sediment available for transport during operation as the sandstone blocks will be installed on top of bedrock. It also stated that the staggered blocks design will create an uneven wall for greater wave energy dissipation to reduce wave reflection impacts during operation.
- The block wall design does provide avenue for habitat. This has been done by using natural materials of sandstone blocks, not mortared, the wall being tiered and staggered with the arrangement promoting niches for intertidal plant and animal colonisation.
- Overall, it appears there would be minimal impact on both the terrestrial and aquatic ecological and biodiversity values in the surrounding area associated with the proposed construction and operation of the revetment wall. It will be a long-term solution to the stabilisation of the shoreline erosion, it will provide protection of the aboriginal heritage items and ultimately the Norfolk Island Pines when completed.

### **Environmental Scientist (Assessment Teams)**

The application was referred to Council's Assessment Teams Environmental Scientist who provided the following comments:

- The entire waterway of Kurnell / Botany Bay is mapped as 'Contaminated Land' due to historical oyster farming activities, however these did not take place in the vicinity of the proposed development and the development will not be affected by this. The development proposes reusing of site soil and the importation of some new soil. The suitability of both the imported and reused soil in the context of the site must be considered. Conditions have been recommended (and imposed) in respect to above.
- The development is designed, sited and will be managed to avoid any significant adverse environmental impacts with regard to groundwater.
- The site is located within the Class 5 Acid Sulfate Soils map as per Clause 6.1 of SSLEP 2015. The development is unlikely to lower the local water table and as such no acid sulfate soil assessment is required. Due to the low elevation of the site and the proximity to Class 1 acid sulfate soils, an unexpected finds condition is warranted, to ensure appropriate action is undertaken if acid sulfate soils are encountered during works.
- The proposed seawall design is acceptable for the location – The stepped design will minimise wave reflection, thus minimising coastal erosion and will consist of rough natural sandstone to allow for the growth and habitation of marine invertebrates.
- The development is supportable, subject to recommended conditions relating to the above matters.

### **Heritage Expert (Council Officer)**

The application was referred to Council's Heritage Expert who provided the following comments:

- The site contains 12 items of local heritage significance, as per SSLEP 2015, and an item of State significance, being the Kurnell Historic Site (in Kamay Botany Bay National Park).
- The proposed works are necessary to protect the coastal landscape and traditional vegetation will not be impacted. Native vegetation will be conserved and enhanced.
- An approval under Section 60 of the Heritage Act was approved (and has since been modified) for this works as this is a State significant item. Conditions of consent have been recommended to ensure consistency with the Section 60 approval.
- Proposal is acceptable, subject to the recommended conditions.

## **10.0 ASSESSMENT**

A detailed assessment of the application has been carried out having regard to the matters for consideration under Section 4.15(1) of the Environmental Planning and Assessment Act 1979. The following matters are considered important to this application.

### **10.1. Zone Objectives**

The development site is located in the C1 National Parks and Nature Reserves Zone. The objectives of the

zone are as follows:

- To enable the management and appropriate use of land that is reserved under the *National Parks and Wildlife Act 1974* or that is acquired under Part 11 of that Act.
- To enable uses authorised under the *National Parks and Wildlife Act 1974*.
- To identify land that is to be reserved under the *National Parks and Wildlife Act 1974* and to protect the environmental significance of that land.

The proposed revetment is specifically designed to prevent coastal erosion and assist in retention of the 14 Norfolk Pine Trees that front the Botany Bay foreshore of the Kamay Botany Bay National Park, enhancing the use of existing facilities within an area of cultural, environmental and visual significance within the park. The works thus represent appropriate management and use of the National Park land, and the proposal is considered to be consistent with the objectives of the zone.

## **10.2. Design of Revetment Wall and Coastal Risk Evaluation**

The site is identified as being in the 'coastal zone' on the Resilience and Hazards SEPP map. As per Clause 2.12 of the SEPP, consent must not be granted on development on land within the coastal zone unless the consent authority is satisfied that the proposed development is not likely to cause increased risk of coastal hazards on that land or other land.

Upon request from Council, the Applicant has submitted a Coastal Hazards and Process Report to outline design methodology, assess current/potential coastal hazards of the structure, outline potential design alternatives and detail how the structure will age and degrade over time. This Report has been reviewed by Council's consulting Coastal Engineer. A full copy of this review is available in **Appendix 'A'**. The following assessment relies on this review and covers matters deemed pertinent in respect to determining compliance with the SEPP:

### Toe Stability:

Toe stability is the structure's resistance to erosion at its base caused by wave action and the movement of sand and sediment from around the base of the foundation. If the foundation is undermined, the structure may become unstable. In respect to the proposal, a concrete mass is to be cast over bedrock beneath the toe blocks to prevent undermining. Toe block anchors are to be installed at every fourth block along the length of the structure, with two anchors per block. Noting the aesthetic, recreational and constructability requirement is to adopt a relatively uniform block height, the proposed approach is appropriate for the intended purpose of enhancing the existing shoreline

### Foundations:

The foundation is the base of the structure that supports and distributes the weight, to ensure the structure is stable. Weak or unstable foundations can lead to settling, tilting, or collapse of the structure. Ensuring a stable base is crucial to maintaining the structure's integrity against wave action. In respect to the proposal, the toe of the structure is specified to be constructed on a mass concrete foundation overlying bedrock, with

the existing sandbags directly overlying bedrock, providing a high bearing capacity base in comparison to overlying sands. The underlayers are to be comprised of concrete, backfill and drainage material made of ballast or aggregate, placed over the existing sandbags.

The proposed construction over sandbags may pose concerns if the sandbags degrade, resulting in potential loss of material and formation of voids beneath the structure should fines be washed out. However, the potential for fines to be washed out is reduced by the inclusion of formal drainage paths and the containment of finer materials within geotextile and concrete. Additionally, the blockwork structure is specified to have a 0-3 mm gap between blocks, meaning underlying foundation material is unlikely to be lost through the structure. The proposed approach appears appropriate for the intended design life.

#### *Armour layer and underlayers*

An armour layer is the outer protective layer of the structure capable of resisting wave energy and preventing erosion and damage to the underlayers. Improperly designed armour layer may fail to withstand wave forces, leading to excessive damage, frequent maintenance or structural failure. In respect to the proposal, the armour layer for the block wall structures has been designed using large interlocked sandstone blocks along the length of the structure. The armour layer for the rock revetment transition structures has been designed using two layers of sandstone, with a sandstone underlayer underlain by compacted fill

The proposed approach generally aligns with typical industry practice for this type of structure. Ordinarily, an allowable level of damage during the design event would be specified in order to allow the asset owner to plan for an appropriate level of maintenance over the design life. This has been imposed via condition of consent.

#### *Outflanking and end effects*

Outflanking and end effects refer to localised impacts at the ends of the structure or excessive levels of damage at interfaces between different types of shoreline protection. There are several interfaces along the proposed shoreline design, including the Kamay Ferry Wharf to the west and transition elements to existing sloped block walls surrounding the creek mouth. The proposal comprises a transition structure of rock armour revetment and toe blocks. The rock revetment will align with each side, transitioning linearly from the proposed structure to the existing block wall, and the toe will align with the existing wall, with two anchors per block.

Whilst the proposed structure would typically extend beyond the area's most at risk to reduce potential for outflanking, the proposal has been designed to consider both aesthetic and heritage aspects of the site, by preserving existing shoreline protection. The proposed approach generally aligns with typical industry practice and appears appropriate given the site constraints. To ensure the structure performs as intended over the design life, the application has been conditioned to require the interfaces between the existing and proposed shoreline protection to be monitored over the design life, with maintenance to be undertaken when required.

### Material Degradation

Material degradation relates to the potential for deterioration of the sandstone blocks, geotextile fabric, or other materials used in the construction due to exposure to saltwater, wave action, UV radiation, and other environmental factors. The proposal specifies differing sandstone material properties for the revetment armour rock and the remaining blocks, billets and stair treads. Sandstone blocks are also noted to require a protective coating to reduce ingress of moisture and salts, which is intended to improve durability.

According to the Hazard and Process report submitted by the Applicant, the sandstone blocks will be subject to more severe environments due to periodic cleaning and have an increased difficulty of replacement as opposed to the armour, requiring the better material properties. The underlayer is not exposed to as severe conditions and as such, does not require equivalent material properties. The proposed geotextile is designed for coastal applications, with a resistance to environmental factors such as saltwater. It restricts the migration of fine soil particles while remaining permeable to water, thereby preventing fines washout. Along the length of the structure, the geotextile is to be cut in line with the top block and consideration has been given to its exposure to erosion and overtopping. However, given the low frequency and magnitude of overtopping rates, this is considered to be a reasonable approach.

### Overtopping

Overtopping refers to when wave action and storm surges cause waves to flow over the top of the structure, potentially damaging the landside assets including the footpath and other assets. Considering the predicted maximum wave runup levels over the lifespan of the structure, the proposed crest height will reduce overtopping under current conditions. Towards the end of the design life, the structure may have overtopping in some areas, similar to current conditions. Whilst overtopping may occur in extreme weather events, the inclusion of the drainage layer may reduce the impacts on landside assets. This approach appears appropriate given the site constraints. To ensure that the proposal continues to effectively drain and no pooling of water occurs, the application has been conditioned to require monitoring of the structure following extreme weather events.

### Drainage

Drainage refers to the management of water flow behind the structure. Poor drainage can raise water levels behind the structure, leading to an increase in pressure on the structure. Increases in water levels also leads to drainage through unintended flow paths, which may result in loss of fines from “piping” or “washout”, and in some cases can cause geotechnical instability and failure.

The proposed design includes a drainage layer however there is no drainage behind the concrete footing (up to +2.1 mAHD) resulting in potential increases in groundwater levels which may cause potential impacts to slope stability and nearby trees and create unintended flow paths. This is considered to be an acceptable risk given the site constraints and can be addressed via periodic monitoring conditioned by this consent.

### Wave Reflection Issues

Reflection of wave energy occurs when a wave strikes the structure and is reflected back towards the sea or along the shoreline. Reflected waves can intensify erosion in front of the structure or damage adjacent areas. The blockwork design is more reflective of wave energy than a natural sandy foreshore, and is therefore expected to have some impact on natural erosion and accretion cycles.

It is noted that whilst a less reflective solution could be developed, this would come at a cost in terms of durability, footprint of the structure and encroachment into landside middens or the intertidal zone. Accordingly, the proposed approach is appropriate given the site constraints.

### Settlement or Deformation

Settlement or deformation may occur when the structure exhibits uneven downward movement or shifting due to poor soil conditions or insufficient compaction. This can lead to structural instability, misalignment and localised stresses. The weight of the proposed sandstone blocks has potential to cause the sandbags to compress, which, combined with potential degradation of sandbags, may lead to uneven settling. However, the design has arranged blocks in an interlocking placement that will distribute the weight and may reduce potential movement.

There is also a risk that the top sandstone block may be subject to uneven settlement when placed on the compacted backfill. However, the proposed fill material is subject to 95% compaction and as a result, any settlement is expected to be minimal and gradual over the design life. To assist in identification of any issues over the design life, the application has been conditioned to require periodic monitoring of the top sandstone block and fill layer and undertaking maintenance if any issues are identified.

### Concluding Comments

The proposed revetment wall is deemed as the most suitable design given the site constraints and intended purpose. The development is not likely to cause increased risk of coastal hazards on the site or on other land and the application has been deemed supportable in this regard.

## **10.3. Design Amendments - Access Stair Design and Tree Retention**

The proposed pathway towards the access stairs is partially located within the TPZ of one of the Norfolk Pines (identified as Tree 301 of the approved plans). To ensure that the health and vigour of this specimen is retained, a design amendment condition has been imposed upon the consent, requiring the footpath within the TPZ of Tree 310 to either be installed above existing grade, or have the finished levels determined by preliminary excavation of the slab footprint to identify significant roots (as determined by the Project Arborist).

#### **10.4. Construction Methodology**

The proposed development will involve the importation of building materials and associated construction vehicles and equipment, as well as the establishment of zones for work compounds, storage and access. The works will require access across, and within, the TPZs of the Norfolk Pines, in order to reach the existing embankment and beachfront.

The applicant has submitted a Construction and Environmental Management Report with the application, which has been revised upon request from Council, to incorporate the provisions of a revised Arborist Report. The recommendations of both reports have been reviewed and are deemed as satisfactory to ensure trees and vegetation are protected and retained. To ensure that the construction process is consistent with this documentation, the Arborist Report and Construction Management Plan have been approved as part of this consent, thus requiring the following tree protection measures to be undertaken:

- Two (2) fenced TPZ areas should be established prior to the commencement of the works. A combined TPZ area should be established for Trees 310 and 311 (eastern side of creek bed), and a combined TPZ area established for Trees 312-338 (western side of creek bed).
- To allow for transportation, offloading and placement of sandstone blocks, temporary accessways should be installed as required through the TPZ areas. Temporary accessways should consist of ground mats placed on 200mm layer of coarse-grade mulch. The mulch should be installed on a highly porous geofabric (to allow for easy mulch removal) which extends 300mm beyond the mulch layer.
- TPZ fencing should be installed on either side of the accessway to protect the trees from mechanical damage.
- Vehicular and machinery access must be restricted to the temporary accessway (or areas of existing pavement) and be less than 4.3m in height.
- The works should be completed in sections with the temporary accessway removed and reinstalled within the next section on completion of the works. TPZ fencing should be reestablished following removal of the temporary accessway.
- To provide for materials storage, a temporary accessway (as detailed above) should be installed along the northern edge of the footpath within the TPZ areas of the trees.
- The site compound is not be located within the TPZ areas.
- All excavation work (including removal of existing groundcover vegetation) in TPZ areas should be undertaken using hand tools only. Roots (>25mmØ) should be retained and protected with a covering of geotextile fabric pending assessment by the Project Arborist.
- The excavation for the stairs within the TPZ of Tree 310 should be undertaken using hand tools only. Roots (>25mmØ) should be retained and protected with a covering of geotextile fabric pending assessment by the Project Arborist. Where required by the Project Arborist, roots should be incorporated into the subbase layer below the stairs.
- The walkway slab within the TPZ area of Tree 310 should either be installed above existing grade, or have the finished levels determined by preliminary excavation of the slab footprint to identify significant roots (as determined by the Project Arborist).

- The pruning of roots greater than 25mm should be undertaken by the Project Arborist only.

#### 10.5. Heritage – State and Local

The development site is within, or adjacent to multiple items of environmental heritage pursuant to SSLEP 2015. The site is also located within the wider Kurnell Historic Site (in the Kamay Botany Bay National Park) which is identified as being of the State Heritage Register. The table below outlines the applicable items:

| Item Name                                                 | Address                                | Significance | Item no. |
|-----------------------------------------------------------|----------------------------------------|--------------|----------|
| Kurnell monuments (in Kamay Botany Bay National Park)     | Kamay Botany Bay National Park         | Local        | 2503     |
| Kurnell Historic Site (in Kamay Botany Bay National Park) | Polo Street and Sir Joseph Banks Drive | State        | 2504     |
| Alpha Farm site                                           | Cape Solander Drive                    | Local        | A2517    |
| Banks memorial                                            | Cape Solander Drive                    | Local        | A2512    |
| Captain Cook's landing place                              | Cape Solander Drive                    | Local        | A2510    |
| Captain Cook's landing site                               | Cape Solander Drive                    | Local        | A2511    |
| Captain Cook monument                                     | Cape Solander Drive                    | Local        | A2514    |
| Captain Cook watering hole                                | Cape Solander Drive                    | Local        | A2518    |
| Captain Cook watering well                                | Cape Solander Drive                    | Local        | A2519    |
| Flagpole                                                  | Cape Solander Drive                    | Local        | A2520    |
| Forby Sutherland monument                                 | Cape Solander Drive                    | Local        | A2515    |
| Landing place wharf abutment                              | Cape Solander Drive                    | Local        | A2516    |
| Solander monument                                         | Cape Solander Drive                    | Local        | A2513    |

The proposed works aim to conserve and restore the foreshore and its significance through the conservation of the place, its vegetation and monuments. All trees are to be conserved, and the block seating is of an understated nature, with a low visual impact. The sandstone used for the revetment wall is consistent with the natural landforms of the area and compliments existing built forms within the general vicinity.

The applicant has acquired a Section 60 Approval, (which has been modified under Section 65A of the Heritage Act 1977). The terms stipulate that a suitably qualified heritage consultant must be nominated for the project to provide input on detailed design and provide heritage advice, ensure work is carried out by qualified tradespersons, protect landscape/built elements, implement a 'heritage interpretation plan', photograph archival recordings, and act appropriately in terms of unexpected finds, including with Aboriginal objects.

In addition to the Section 60 Approval, the application has been conditioned to require photographic archival recording of the site to be undertaken and submitted to Council's Heritage Officer for assessment and approval. All work must be carried out by suitably qualified tradespersons with practical experience in conservation and restoration of similar heritage items, under the supervision of the nominated heritage consultant. The impact on adjacent heritage items has been deemed as acceptable, and subject to conditions, the proposal is supportable.

#### **10.6. Aboriginal Significance**

The area surrounding the development site contains a number of Aboriginal artefacts, including nearby shell middens, and areas of high cultural significance, including burial sites and engravings.

The works are in the Kamay Botany Bay National Park and, as such, the application is integrated development under s.90 of the National Parks and Wildlife Act 1974.

As part of the Integrated Development General Terms of approval under s.90 of the National Parks and Wildlife Act 1974, a s.90 Aboriginal Heritage Impact Permit is to be sought and granted prior to the commencement of works. The permit application must be accompanied by appropriate documentation and mapping, Aboriginal community consultation, complete records satisfying the requirements of the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (2010) and must include long term management of Aboriginal objects.

#### **10.7. Acid Sulfate Soils**

The subject site is identified as within 'Class 5' on the Acid Sulfate Soils Maps and the provisions of Clause 6.1 are therefore applicable. The objectives of this Clause are to ensure that development does not disturb, expose or drain acid sulphate soils and cause environmental damage.

Within Class 5, the trigger under SSLEP 2015 is works within 500m of adjacent Class 1, 2, 3 or 4 land that is below 5m AHD and by which the watertable is likely to be lowered below 1m AHD on adjacent Class 1, 2, 3 or 4 land.

The development is unlikely to lower the local water table and as such no acid sulfate soil assessment is required. Due to the low elevation of the site and the proximity to Class 1 acid sulfate soils, a precautionary condition has been imposed upon the consent, ensuring that appropriate action is undertaken, if acid sulfate soils are encountered during works.

#### **10.8. Earthworks**

The proposal includes earthworks and therefore Clause 6.2 of SSLEP 2015 is applicable. Clause 6.2 requires certain matters to be considered in deciding whether to grant consent. These matters include impacts on drainage; future development; quality and source of fill; effect on adjoining properties; destination of excavated material; likely disturbance of relics; impacts on waterways; catchments and sensitive areas

and measures to mitigate impacts. The relevant matters have been considered and the application is acceptable.

#### **10.9. Stormwater Management**

Clause 6.4 of SSLEP 2015 requires Council to be satisfied of certain matters in relation to stormwater management prior to development consent being granted. These matters include maximising permeable surfaces; on-site stormwater retention minimising the impacts on stormwater runoff. These matters have been addressed to Council's satisfaction.

#### **10.10. Terrestrial biodiversity**

The subject land is identified as containing "Biodiversity" on the Terrestrial Biodiversity Map and therefore Clause 6.5 of SSLEP 2015 is applicable.

Clause 6.5 requires Council's assessment to consider certain matters. Council must consider the potential adverse impact of the development on vegetation/ flora, fauna, biodiversity and habitat. Of further consideration is the conservation and recovery of flora and fauna and their habitats and the potential to fragment or diminish the biodiversity structure, function and connectivity of the land. The relevant matters have been considered as part of the assessment of this application and the proposal is acceptable in this regard.

Further, clause 6.5 requires Council to be satisfied of certain matters prior to development consent being granted. These matters include the design of the development to avoid or minimise the impact; management to minimise the impact if it cannot be avoided and mitigation if the impact cannot be minimised. These matters have been addressed to Council's satisfaction.

#### **10.11. Ground water vulnerability**

The subject land is identified as "groundwater vulnerable" on the Groundwater Vulnerability Map and the provisions of Clause 6.6 are therefore applicable.

Clause 6.6 requires Council's assessment to consider certain matters. Council must consider the likelihood of groundwater contamination; impacts on groundwater dependant ecosystems; the cumulative impact on groundwater and appropriate measures to avoid, minimise or mitigate the impacts. The relevant matters have been considered as part of the assessment of this application and the proposal is acceptable in this regard.

Further, Clause 6.6 requires Council to be satisfied of certain matters prior to development consent being granted. These matters include the design of the development to avoid or minimise impact; management to minimise the impact if it cannot be avoided and mitigation if the impact cannot be minimised. These matters have been addressed to Council's satisfaction.

**10.12. Riparian land watercourses**

The subject land is identified as “Environmentally Sensitive Land” on the Riparian Land and Watercourses Map and the provisions of Clause 6.7 are therefore applicable.

Clause 6.7 requires Council’s assessment to consider certain matters. Council must consider impacts on water quality, water flows, aquatic and riparian species, habitats, ecosystems, stability of the bed, free passage of fish and other aquatic organisms, and future rehabilitation. Council must also consider developments impact on water extraction and appropriate measures to avoid, minimise or mitigate the impacts. The relevant matters have been considered as part of the assessment of this application and the proposal is acceptable in this regard.

Further, Clause 6.7 requires Council to be satisfied of certain matters prior to development consent being granted. These matters include the design of the development to avoid or minimise impact; management to minimise the impact if it cannot be avoided and mitigation if the impact cannot be minimised. These matters have been addressed to Council’s satisfaction.

**10.13. Urban design (general)**

Clause 6.16 of SSLEP 2015 contains certain matters of consideration relating to urban design, such as the extent to which high quality design and development outcomes for the urban environment of Sutherland Shire have been attained, whether buildings strengthen, enhance or integrate into the existing character of distinctive locations, contribute to the desired future character of the locality concerned, facilitate improvements to the public domain, retain the natural environment, respond to existing landforms or preserve, enhance or reinforce specific areas of high visual quality, ridgelines and landmark locations.

The primary purpose of the proposed revetment wall is to protect a landmark location of high visual quality and environmental and cultural significance from coastal erosion, protecting 14 Norfolk Pines that extend along the waterfront of Botany Bay. The staggered sandstone block design is consistent with existing natural landforms and enhances the existing character of the location. Proposed access pathways, stairs, block seating and areas reserved for public artwork strengthen and reinforce the use of the area as an educational and scenic space, integrating the beachfront into the surrounding recreational facilities to the east. The relevant matters have been considered as a part of the assessment of the application and the proposal is considered to be acceptable.

**10.14. Kurnell Peninsula**

The subject site is located within the Refinery Risk Area identified on the Activity Hazard Risk Map. The proposed development being coastal protection works, is not a form of development that must not be granted consent within the area.

In assessing this application council has had regard to any relevant reports prepared by the Department and given to Council in relation to risk assessment, transportation, dangerous goods routes and guidelines

on risk assessment criteria and methodology. The application is considered acceptable in this regard.

#### **10.15. Greenweb**

The subject site is identified within Council's Greenweb strategy. The Greenweb is a strategy to conserve and enhance Sutherland Shire's bushland and biodiversity by identifying and appropriately managing key areas of bushland habitat and establishing and maintaining interconnecting linkages and corridors.

The subject site is identified as a Greenweb core area. Having regard for the nature of the proposed development, which actively seeks to protect existing vegetation from coastal erosion, additional Greenweb plantings are deemed unnecessary.

#### **10.16. Threatened Species**

Threatened species are particular plants and animals that are at risk of extinction and include threatened populations and endangered ecological communities. Threatened species, populations and ecological communities are protected by the Biodiversity Conservation Act 2016, NSW Fisheries Management Act 1994 and the Commonwealth Environmental Protection and Conservation of Biodiversity Act 1999.

Council has mapped the known threatened species, populations and endangered ecological communities. Following a review of this information and an inspection of the site it is concluded that the proposed development will not result in any significant impact on threatened species, populations and endangered ecological communities.

### **11.0 DEVELOPMENT CONTRIBUTIONS**

Whilst the proposed development has a value of greater than \$100,000, a S7.12 levy is not incurred, as the proposed revetment wall is considered to be works by a Public Authority for the purposes of community infrastructure as stipulated by Council's adopted Section 7.12 Development Contribution Plan 2016.

### **12.0 DECLARATIONS OF AFFILIATION, GIFTS AND POLITICAL DONATIONS**

Section 10.4 of the Environmental Planning and Assessment Act, 1979 requires the declaration of donations/gifts in excess of \$1000. In addition, Council's development application form requires a general declaration of affiliation. In relation to this development application a declaration has been made that there is no affiliation.

### **13.0 CONCLUSION**

The subject land is located within Zone C1 National Parks and Nature Reserves pursuant to the provisions of Sutherland Shire Local Environmental Plan 2015. The relevant zoning table indicates that there are no development types permissible with consent in the zone, however, the area of development is mapped as being within the 'coastal zone' as per the provisions of Chapter 2 Coastal Management, in the State Environmental Planning Policy (Resilience and Hazards), 2021. The proposed works, being coastal protection works, are permissible with consent in the coastal zone under the same policy.

In response to the public notification, no submissions were received.

The application is for the construction of a sandstone revetment wall, comprising a series of stepped blocks sited above the mean high-water mark (MHW) of Botany Bay, on the north-western beachfront of the Kamay Botany Bay National Park. The proposal also includes the construction of an access pathway and stairs, seating and areas for public artwork. The proposed works do not alter existing coastal processes in the area or surrounding areas, have a minimal impact on built and environmental heritage and improve upon public amenity in an area of high cultural and environmental significance.

The application has been assessed having regard to the matters for consideration under Section 4.15 of the Environmental Planning and Assessment Act 1979. The application will not result in any significant impact on the environment or the amenity of nearby residents. Following assessment, Development Application No. DA24/0290 may be supported for the reasons outlined in this report.

The undersigned declare, to the best of their knowledge that they have no interest, pecuniary or otherwise, in this application or persons associated with it and have provided an impartial assessment.

Prepared by:



Timothy Jennings  
Development Planner

Determined by:



TL/Manager Signature  
Sue McMahon

Senior Manager Development Services

Determination Date: