COUNCIL ASSESSMENT BRIEFING REPORT TO PANEL

SYDNEY EASTERN CITY PLANNING PANEL

PANEL REFERENCE & DA NUMBER	PPSSEC-239 – DA-455/2022
PROPOSAL	Demolition of Bronte Surf Club building and construction of a new Bronte Surf Life Saving Club building and associated community facility upgrades including pathway access upgrades
ADDRESS	Lot 7102 DP 1058385 Bronte Road, Bronte
APPLICANT	Waverley Council (Ms. S Cassidy)
OWNER	Crown Lands (Managed by Waverley Council)
DA LODGEMENT DATE	18 October 2022
APPLICATION TYPE	Development Application
REGIONALLY SIGNIFICANT CRITERIA	Schedule 6, Clause 3 of *State Environmental Planning Policy (Planning Systems) 2021* – Council Related Development over $5 million and Clause 5 Community Facility over $5 million
CIV	$13,541,725.00 (excluding GST)
CLAUSE 4.6 REQUESTS	N/A
LIST OF ALL RELEVANT PLANNING CONTROLS (S4.15(1)(A) OF EP&A ACT)	• Coastal Management Act 2016 • State Environmental Planning Policy (Biodiversity and Conservation) 2021 • State Environmental Planning Policy (Planning Systems) 2021 • State Environmental Planning Policy (Resilience and Hazards) 2021 • Waverley Local Environmental Plan 2012 (WLEP); • Waverley Development Control Plan 2012 (WDCP).
AGENCY REFERRALS	Crown Lands
TOTAL & UNIQUE SUBMISSIONS	Original scheme (Nov 2022): 25; 19 in support, 6 against; Amended scheme (March 2023): 22; 1 in support, 21 against or supporting amendments but raising further design changes; Amended scheme (August 2023): 48; 30 in support, 18 against.
KEY ISSUES	Coastal management
DOCUMENTS SUBMITTED FOR CONSIDERATION	Response to Deferral prepared by Urbis dated 28 February 2024; Record of Deferral dated 5 February 2024 (Appendix A of Urbis response); Revised Concept Design and Coastal Engineering Assessment Report prepared by Royal Haskoning DHV dated 28 February 2024 (Appendix B of Urbis response);

	Peer Review by UNSW Water Research Laboratory dated 19 March 2024 of Royal Haskoning DHV Revision 4 report; Building Operation Management Plan prepared by Waverley Council in collaboration with Bronte SLSC dated 27 February 2024, Version E (Appendix C of Urbis response); and Confirmation of Out-of-Scope Building Plan Submission dated 28 February 2024 (Appendix D of Urbis response).
PREVIOUS BRIEFINGS	1 December 2022 (Kick-Off Briefing) 30 March 2023 (Site Inspection and Briefing) 28 September 2023 (Second Site Inspection and Briefing) 1 February 2024 (Determination meeting)
PLAN VERSION	11 January 2024
ASSESSMENT STATUS	Determination
PREPARED BY	Margaret Roberts, GAT & Associates (Consultant Planner)
DATE OF REPORT	22 March 2024

EXECUTIVE SUMMARY

The development application (DA-455/2022) was reported to the SECPP determination meeting on 1 February 2024, with the matter deferred as follows:

> *"The Panel agreed to defer the determination of the matter until April. The matter was deferred to allow for the provision and assessment of further information as required by the Coastal Management Act, 2016 (Section 27) and the State Environmental Planning Policy (Resilience and Hazards) 2021 (particularly, Clause 2.9 and 2.12) as insufficient information has been provided to make an informed decision.*
>
> *In particular, an analysis and reporting of the impacts of the proposed structure on the beach and details as to how those impacts will be managed and mitigated over the life of the development, are required."*

The applicant was directed by the Panel to provide the analysis and report of the impacts of the proposed structure on the beach by 28 February 2024, to allow Council to undertake an assessment and prepare a final briefing report.

The following additional information from the applicant was uploaded to the NSW Planning Portal and Council's DA Tracking on 29 February 2024:

- Response to Deferral Letter prepared by Urbis dated 28 February 2024 (refer to Attachment B);
- Record of Deferral dated 5 February 2024 (refer to Attachment C);
- Revised Concept Design and Coastal Engineering Assessment Report dated 28 February 2024 (refer to Attachment D);
- Revised Building Operation Management Plan dated 27 February 2024 (refer to Attachment F); and
- Confirmation of Out-of-Scope Building Plan Submission dated 28 February 2024 (refer to Attachment G).

The additional information has been reviewed by the assessing officer and was also referred to Council's external Coastal Consultant, James Carley from the UNSW Water Research Laboratory, who undertook the peer review of the coastal engineering reports prepared by Horton Coastal Engineering Pty Ltd and Royal Haskoning DHV. Refer to Attachment E for a copy of the peer review.

The additional information is found to satisfactorily address the reasons for deferral.

As a result of this additional information, the recommendation made in the Council Assessment Report dated 19 January 2024 and presented to the Panel at the Determination Meeting held on 1 February 2024 is amended as follows:

- The recommendation for a deferred commencement consent is amended to be a recommendation for an operational consent. The Deferred Commencement Matters numbered 1 and 2 are to be deleted.
- Condition 1 is to be amended to include the documents submitted by the applicant listed above and received by Council on 29 February 2024.
- Deferred Commencement Matter number 1 relating to the Stage 2 Detailed Seawall Design is to be re-worded as a new condition, to be required prior to the issue of a construction certificate (condition 10).

- Condition 3 is to be amended to remove reference to “Deferred Commencement Matter 1” and include reference to the new condition referring to the Stage 2 Detailed Seawall Design required prior to the issue of a construction certificate.
- Condition 4 is to be amended to replace “10 year basis” with “5 year basis and/or following a major storm event”.
- Deferred Commencement Matter number 2 relating to the Out-of-Scope Building Plan Approval is to be re-worded as a new condition, to be required prior to the issue of a construction certificate (condition 31).
- Condition 10 relating to section 7.12 Contributions is to be deleted.
- A new condition relating to the need for a construction management plan for the temporary facilities intended to be used for surf lifesaving operations during the construction of the new SLSC (condition 41).
- A new condition relating to the need for a final Building Operational Management Plan to be submitted prior to the issue of an Occupation Certificate (condition 69).
- Condition 74 is to be amended to include subclause (e) requiring the Plan of Management to include a complaint handling system, including the requirement to provide a complaints hotline phone number that is not voicemail reliant and which is to be displayed in a prominent location at the BSLSC, within the Plan of Management, and on the BSLSC website.

Provided in Attachment A is an updated set of Conditions of Consent.

1. SUBMISSION OF ADDITIONAL INFORMATION

1.1 Revised Coastal Risk Assessment

A Revised Concept Design and Coastal Engineering Assessment Report (CEAR) dated 28 February 2024 has been prepared by Royal Haskoning DHV (RHDHV), following the Panel's deferral of the determination.

The purpose of this revised report is to provide an analysis and report of the impacts of the proposed seawall structure on the beach and details on how those impacts will be managed and mitigated over the life of the development.

An Executive Summary has been provided at the start of the CEAR which addresses:

- Risks and coastal hazards applicable to the Bronte context
- High-level proposal of seawall design
- Wave overtopping and loads
- The proposed physical modelling process
- High-level coastal assessment in response to the requirements of the relevant statutory planning instruments including the – *Coastal Management Act 2016*, S*tate Environmental Planning Policy (Resilience and Hazards) 2021*, *Waverley Local Environmental Plan 2012* and *Waverley Development Control Plan 2022*.
- Peer review information and outline of consultant inputs
- Synthesis and conclusion

RHDHV states in their report that the constrained space at Bronte Beach rules out the feasibility of rock revetments, making a new concrete seawall the only practical choice. RHDHV's design proposal involves constructing a new seawall structure around the outer perimeter of planned access elements, including the promenade, ramps, bleachers, and steps.

The recommended seawall structure incorporates a secant pile design which involves alternating small diameter reinforced and larger diameter unreinforced concrete piles, overlapped in their plan position, acting as a barrier to coastal erosion and retaining the promenade and SLSC building. RHDHV note that over the past 15 years, secant pile seawalls have been successfully used in NSW for stabilising sandy beach shorelines including at North Steyne (Manly), South Curl Curl, Trial Bay (Arakoon) and Kingscliff (Tweed Shire).

The RHDHV report states that overtopping quantities are estimated to reduce by approximately 80% with the inclusion of a typical wave deflector (32-degree deflection from vertical, deflector length 0.9m). This indicates that for a 70 year life span, with the inclusion of a wave deflector, overtopping for the 1-year ARI event would not be hazardous to pedestrians, and under a 100-year ARI event, would not cause structural damage to the promenade but potentially still lead to damage to the SLSC building. Mitigation for the SLSC building damage would involve strengthened building construction methods such as the use of reinforced concrete external walls at promenade level.

Physical modelling is proposed in the next phase of the seawall design, to provide further information for seawall design development. RHDHV advises that the following would be achieved from physical modelling:

(i) Review and refinement of the incident wave and water level conditions at the seawall.

(ii) Review and refinement of the wave deflector configuration.
(iii) Review and refinement of wave runup and overtopping rates and volumes, to consider the safety of overtopping flows, and drainage requirements for overtopped flows.
(iv) Review and refinement of wave loads to achieve an optimised structural design to the seawall and its deflector elements. Uplift loads on the deflector would be of particular interest.
(v) By inspection and video in the flume, to gauge wave overtopping trajectories and water bore behaviour with respect to potential loading of the walls and windows/door openings at the new SLSC building.

Recommendations in the Coastal Assessment involving quantification of wave overtopping would be reviewed and updated if necessary, following the completion of physical modelling. RHDHV advises that it is common for physical models to yield optimisations on desk-top evaluations, such as reduced wall crest levels and reconfigured deflectors to achieve overtopping thresholds and reduced reinforced concrete member sizes in accordance with measured wave loads.

The applicant has confirmed that physical modelling has commenced and is expected to be completed by late April 2024.

On this basis, the applicant has requested that the Deferred Commencement Condition 1 be deleted and instead tied to a condition of consent which requires a Stage 2 Detailed Seawall Design and wave return walls, including all required physical modelling, to be undertaken and findings submitted to Council prior to the issue of the construction certificate for the SLSC building.

Additionally, a minor amendment to Condition 3 is requested to allow for site preparation works to occur prior to satisfaction of the seawall design condition listed below.

The proposed new and modified conditions are provided below (amended wording to Condition 3 is shown in '**bold**' and deletions are shown by 'strike through').

Proposed new Condition (to be included under 'Before Issue of a Construction Certificate'):

"A Stage 2 Detailed Seawall Design and wave return walls, including all required physical modelling, is to be undertaken by a suitably qualified Coastal Engineering Consultant and findings submitted to Council for the approval of Council's Executive Manager, Development Assessment or delegate prior to the issue of the Construction Certificate for the Bronte SLSC building."

Modification of Condition 3 – Seawall Design

"The seawall design is to be as per the details shown on Approved Drawings SK.123 Revision B and SK.124 Revision A prepared by 'Warren and Mahoney Architects Australia Pty Ltd' dated 20.12.2023. Should the Stage 2 Detailed Seawall Design referred to in ~~Deferred Commencement Matter 1~~ ***Condition 10*** *require any changes to the seawall design, including but not limited to height or length, then a s4.55 modification application will be required to be submitted to, and approved by, the consent authority prior to the issue of ~~any Construction Certificate.~~* ***a Construction Certificate for the BSLSC building****."*

A copy of the CEAR is included as Attachment D of this Briefing Report.

1.2 Revised Building Operational Management Plan

A Plan of Management for the Bronte SLSC, prepared by Arcanary (the original project architect and applicant) was included with the original DA submission.

This document has since been amended by Waverley Council's Facilities and Property Team, in collaboration with Bronte SLSC, to include the following additional information in response to the Bronte SLSC Redevelopment Seawall and Related Elements Detailed Design, prepared by Royal Haskoning DHV, dated 28 February 2024:

- Monitoring and Evacuation Practices for a Significant Weather Event
    - Emergency building shut down
    - Enhanced monitoring and response protocols for wave overtopping and coastal erosion
    - Safety and emergency preparedness for coastal and weather hazards
    - Operational coordination with BSLSC, Waverley Council and emergency services
    - Community engagement, communications and signage, including during beach closures.
- Maintenance and Infrastructure future proofing

The amended version, now titled "Bronte Surf Life Saving (BSLSC) Operational Management Plan dated 27 February 2024, Version E", will continue to be updated in consultation with Waverley Council as the project evolves. The applicant has stated in the Building Operational Management Plan (BOMP) that a final BOMP will be submitted for approval to Council's Director, Planning, Environment and Regulatory (this should be Council's Executive Manager, Development Assessment or delegate) prior to the issue of an Occupation Certificate.

A new condition is therefore required to be included under the section titled "Before Issue of an Occupation Certificate", as follows:

> **Proposed Condition 69 (to be included under 'Before Issue of an Occupation Certificate'):**
>
> *Prior to the issue of an occupation certificate, a final Building Operational Management Plan is to be submitted to* ***Council's Executive Manager, Development Assessment or delegate*** *for approval. This must reflect the final seawall design and active management for high sea level rise scenarios or significant weather events.*

A copy of the BOMP is included as Attachment F of this Briefing Report.

1.3 Confirmation of Out-of-Scope Building Plan Submission

Deferred Commencement Condition 2 of the recommendation made to the Panel at the meeting on 1 February 2024 required the applicant to obtain an Out-of-Scope Building Plan Approval from Sydney Water prior to the consent becoming operational. This was to ensure that the development does not unreasonably impact the Sydney Water assets traversing the site.

The applicant has provided Council with confirmation that the Out-of-Scope Building Plan Application was lodged with Sydney Water on 28 February 2024 (case number 210820).

The applicant has engaged Rose Atkins and Rimmer infrastructure (RARi) as the Water Servicing Coordinator who have advised that the assessment period can take between 3 and 6 months, as input is required from civil, geotechnical, and structural engineers. RARi also advised the applicant that the requirement for a building plan approval is typically a requirement prior to obtaining a Construction Certificate.

The applicant has subsequently requested that the following condition be included prior to the issue of a Construction Certificate, so that works unrelated to the Sydney Water asset are not unreasonably delayed:

> **Proposed Condition 31 (to be included under 'Before Issue of a Construction Certificate'):**
>
> *"An Out of Scope Building Plan approval is to be obtained via a Water Servicing Coordinator that ensures the development does not unreasonably impact the Sydney Water assets transversing the site. A copy of the approval from Sydney Water is to be provided to Council's Executive Manager, Development Assessment or delegate prior to the issue of a relevant Construction Certificate for demolition and construction works to the SLSC building (excluding site preparation works including site setup, temporary lifesaving facilities, hoarding and coastal walk re-routing).*
>
> *On receipt of the Sydney Water Building Plan approval, if there are any changes required to the approved design, a s4.55 modification application will be required to be submitted to, and approved by, the consent authority prior to the issue of a relevant Construction Certificate for demolition and construction works to the SLSC building (excluding site preparation works including site setup, temporary lifesaving facilities, hoarding and coastal walk re-routing)."*

The request for this amended condition is considered reasonable and has been included in the revised conditions of consent recommended to the Panel.

A copy of the confirmation of lodgement of the Out-of-Scope Building Plan is included as Attachment G of this Briefing Report.

1.4 Other Condition Amendments

The Response to Deferral prepared by Urbis and included as Attachment B of this Briefing Report includes a request to either amend, delete or add the following conditions:

- *Amend Condition 4 – Maintenance Plan for Coastal Protection Works*

Condition 4 requires a Maintenance Management Plan (MMP) to be prepared for the maintenance of the coastal protection works for their intended design life which is to be reviewed on a 10-year basis.

At the Determination Meeting held on 1 February 2024, the Panel recommended that this condition be amended to require the review of the MMP be undertaken <u>every 5 years, and/or following a major storm event</u>. This is to ensure the stability and functionality of the coastal works are more frequently monitored and any maintenance requirements are adequately identified, reducing the risk of costal deterioration. General monitoring of the sea wall will also be undertaken in accordance with the BOMP.

It is therefore proposed to amend Condition 4 as follows **(changes in bold):**

"4. MAINTENANCE PLAN FOR COASTAL PROTECTION WORKS

A Maintenance Management Plan (MMP) is to be prepared for the maintenance of the coastal protection works for their intended design life and shall be reviewed on a ***5 year basis and/or after any major storm event (to be commenced within three (3) months of the storm event).*** *The MMP is to be prepared by a suitably qualified coastal engineer and is to be approved by Council's Executive Manager, Development Assessment (or delegate) in writing prior to issue of the relevant construction certificate. The MMP must be complied with at all times.*

The Building Operational Management Plan is to be updated to reflect the requirement to review the MMP on a 5 year basis and/or after any major storm event."

- *Delete Condition 10 – Section 7.12 Contributions*

Condition 10 of the Draft Conditions of Consent requires a Section 7.12 development contribution be paid to Waverley Council in accordance with the rates specified in the Waverley Council Development Contributions Plan.

The applicant is seeking to have Condition 10 deleted from the final Conditions of Consent on the basis that Section 11 of *Waverley Council's Development Contributions Plan 2006* (Amendment 9, 2018) outlines circumstances where the Section 7.12 levy may be waived. Section 11(b) states that the following development is exempt from paying a development levy:

- *The operation provides a public benefit and is in the public interest;*
- *Applications submitted by or on behalf of Waverley Council;*

The applicant states that the above exemptions apply to the project as the proposal is a public-private partnership between Bronte SLSC and Waverley Council. Waverley Council is the official applicant for the DA and the proposal incorporates dedicated facilities for both SLSC and Council operations.

The applicant argues that Bronte SLSC operations provide public benefit to the community. The SLSC is a volunteer non-profit organisation that patrols the beach, undertakes aquatic rescues, provides first aid and emergency care and surf safety information to the public. SLSC members play a vital role in keeping the public safe at Bronte Beach, without any direct cost to the public.

On this basis the applicant has requested that Condition 10 be deleted as the proposal complies with the exemptions outlined in the *Waverley Council's Development Contributions Plan 2006.*

Given that Waverley Council is the applicant, and the development proposal will result in a public benefit to the community by way of an upgraded SLSC, it is considered reasonable to have Condition 10 deleted.

It is noted that the requirement for Section 7.12 development contributions was removed by the Panel on the approval issued for the Bondi SLSC in May 2022. Therefore, the removal of Condition 10 is consistent with this previous approval for a similar proposal.

- Add condition relating to temporary facilities

In order to commence demolition of the existing SLSC building, temporary facilities will be constructed adjacent to the southern portion of the site in Bronte Park, to allow the lifeguard and SLSC functions

to be maintained during construction. This was documented in the Construction Management Plan dated 21 September 2022 and submitted with the original DA documentation.

In order to undertake these works, the site will need to be enclosed with perimeter fencing and all materials will be delivered (by escort) to the site from the Bronte Road accessway. The applicant has provided the figure below to show the indicative temporary facilities layout.

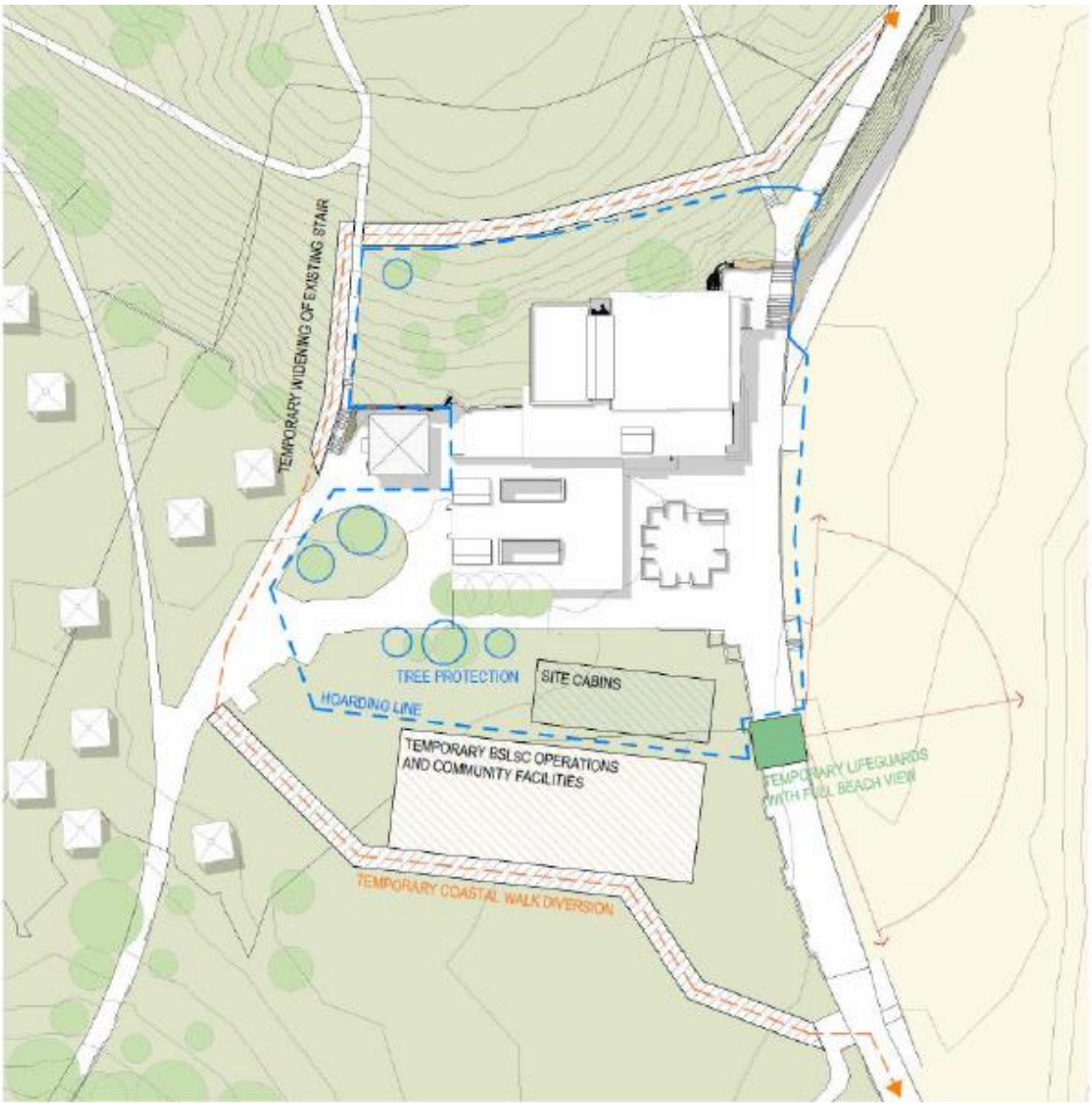

Figure 1: Indicative temporary facilities layout plan prepared by Warren and Mahoney Architects

The applicant has requested that the following condition be included in any consent:

> **Proposed Condition 41 (to be included under 'Before Building Work Commences'):**
>
> *Prior to the commencement of works, a Construction Management Plan is to be prepared and submitted to Council for approval. The Construction Management Plan should provide building and operational details of the temporary facilities intended to be used for surf lifesaving operations during the construction of the Bronte Surf Life Saving Club.*

The inclusion of this recommended condition is supported.

- Amend Condition 74 relating to the BSLSC Plan of Management to include a complaint handling system

The Panel recommended that a condition of consent be included, providing a contact telephone number to allow members of the public to contact a representative of the Bronte SLSC for any potential noise complaints.

While the applicant has proposed that the general contact number for Waverley Council be provided for noise complaints associated with the BSLSC use, which connects to an on-call staff member, it is recommended that Condition 74 relating to the preparation of a Plan of Management be amended to include a process for a complaint handling system, including the requirement to provide a complaints hotline phone number that is not voicemail reliant. This number is to be displayed in a prominent location at the BSLSC, within the Plan of Management, and on the BSLSC website.

It is recommended that subclause (e) to Condition 74 be included (as shown in **bold**), to read as follows:

74. PLAN OF MANAGEMENT

A Plan of Management (PoM) (or amended Plan of Management) is to be submitted and is to include details of all operational and management procedures of the premises, including;

(a) Venue Management Plan (relating to patron capacity, approved hours of operation, any trial periods, noise conditions, handling of complaints, staffing roles and responsibilities);

(b) Security Management Plan (relating to tasking and deployment of security personnel, patrons within the premises and their exit and dispersal from the area, and other such operational matters to ensure compliance with relevant regulatory requirements) for any licensed area;

(c) Alcohol Management Plan (relating to the behavior of patrons, liquor practices, including the responsible service of alcohol) for any licensed area;

(d) Any other such operational matters to ensure compliance with relevant regulatory requirements.

(e) Process for complaint handling system, including the receipt and recording of complaints, process for handling and remedying of complaints. In this regard, a complaints hotline phone number shall be made available (not voicemail reliant, particularly when events are held) that is displayed in a prominent location of the BSLSC, in the PoM and on the BSLSC website. Complaints are to be referred to the Board of Management of the BSLSC for review on a quarterly basis, so procedures can be put in place to mitigate and minimise future complaints.

The PoM shall be submitted to and approved by ***Council's Executive Manager, Development Assessment (or delegate)*** *prior to the issue of any Occupation Certificate. Once the PoM has been approved by Council, a copy is to be provided to the Licensing Police of the Local Area Command prior to the commencement of operations.*

2. ASSESSMENT OF ADDITIONAL INFORMATION

2.1 Coastal Management Act 2016

The Revised Concept Design and Coastal Engineering Assessment Report dated 28 February 2024 prepared by Royal Haskoning DHV includes consideration of the *Coastal Management Act 2016*, specifically *Section 27 – Granting of development consent relating to coastal protection works*.

Provided below is a copy of Section 27 and a summary of the applicant's responses:

> *(1) Development consent must not be granted under the Environmental Planning and Assessment Act 1979 to development for the purpose of coastal protection works, unless the consent authority is satisfied that—*
> *(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, and*
> *(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.*

Applicant's response:
The proposal will facilitate and enhance public lifesaving access between the beach and the SLSC area and promenade, by providing a new ramp, steps and bleachers. The proposed access to and from the beach is a substantial improvement over the existing situation. It is considered that the works would not, over the life of the works, unreasonably limit public access to or the use of the beach.

Beach recovery following severe storms would be initially very rapid and expected to mostly occur over a period of days to weeks. Immediately following these storms, Council may need to assist in reinstating the eroded beach at the base of the ramp and steps. The BOMP at Appendix F provides an outline of Council's approach to managing beach erosion.

The proposed works would pose no significant threat to public safety, as they would be designed to withstand an acceptably rare storm over a 70-year design life and are less of a threat to public safety than the do-nothing scenario. The proposed works also substantially reduce public safety risks due to wave overtopping of the seawall compared to the existing situation.

Recommended conditions of consent address the need for a maintenance management plan to be prepared and reviewed every five (5) years and/or following a major storm event (condition 4). The CEAR and BOMP, which include the management and maintenance plans for the seawall, SLSC building and beach, are included in the approved documentation (Condition 1).

> *(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,

Note—

The Environmental Planning and Assessment Act 1979, section 4.17(6) provides that a development consent may be granted subject to a condition, or a consent authority may enter into an agreement with an applicant, that the applicant must provide security for the payment of the cost of making good any damage caused to any property of the consent authority as a consequence of the doing of anything to which the consent relates.

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

Applicant's response:
It is understood a draft condition would be prepared to satisfactorily address Section 27(2). Funding arrangements are not strictly a coastal engineering matter, although it is noted that calculation of the dollar amount to ensure adequate funding may require coastal engineering input (Horton Coastal Engineering, 2023).

The specifics of the funding required to satisfy Section 27(2) is not known at this stage. Therefore, it is recommended that Condition 27 requiring an updated coastal risk assessment prior to the issue of an construction certificate be amended to include subclause (g) which states:

(g) Include details of satisfying Section 27(2) of the Coastal Management Act, 2016 relating to the securement of adequate funding for the carrying out of any restoration and maintenance works, and the payment of an annual charge for coastal protection services. This will require consultation with Waverley Council.

(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.

Applicant's response:
Not applicable, as there is one landowner.

RHDHV's response to section 27 of the Coastal Management Act 2016 can be found in Attachment D.

2.2 State Environmental Planning Policy (Resilience and Hazards) 2021

The Revised Concept Design and Coastal Engineering Assessment Report dated 28 February 2024 prepared by Royal Haskoning DHV includes consideration of *State Environmental Planning Policy (Resilience and Hazards) 2021*, specifically clause 2.9 and 2.12.

RHDHV's response to *State Environmental Planning Policy (Resilience and Hazards) 2021*, specifically clause 2.9 and 2.12, can be found in Attachment D.

Provided below is a copy of clauses 2.9 and 2.12 and a summary of the applicant's responses:

2.9 Development on land within the coastal vulnerability area

Development consent must not be granted to development on land that is within the area identified as "coastal vulnerability area" on the Coastal Vulnerability Area Map unless the consent authority 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.

Applicant's response:

The consent authority can be satisfied that the proposed works would be engineered to withstand the current and projected beach erosion/ shoreline recession for the design life of the works (70 years), having regard to the basis of design set out in Section 4, the peer review (commenced but to be completed), and the coastal engineering advice based on Baird (2016), and further developed by Horton (2023) and RHDHV for this report.

The Detailed Design will be completed in due course, having regard to the full results of the additional geotechnical investigation (expected in March 2024), physical modelling investigation (expected to be completed by late April 2024), and dedicated maritime structural design development for the coastal protection works.

The proposed works are not expected to alter coastal processes into the future to the detriment of the natural environment or other land. Condition 21 in relation to Section 27 of the *Coastal Management Act 2016* would be triggered to restore the land as a result of any increased erosion caused by the presence of the works.

The proposal improves the public amenity of the Coastal Walk and Bronte Park in the immediate vicinity of the upgraded SLSC building. The new ramp alignment, steps and bleachers at the northern end provide beach users direct access to the safest area on the beach where lifeguards put the flags up.

While RHDHV acknowledges that there is a significant reduction in the available high tide drying minimum back beach width which would apply at the end of the 70 year life, it is assessed that the sandy beach fronting the SLSC would remain fully accessible to longshore pedestrian movements over the life of the upgraded facility.

The net impact on amenity and access is considered to be modest and acceptable in relation to the overall outcome of the seawall upgrade for the SLSC redevelopment.

The proposed seawall upgrade addresses the unacceptable condition of the existing seawall, restoring stability to the shoreline and protecting the new SLSC from coastal erosion over the design working life of the seawall (70 years). The crest level of the existing seawall would be raised by between 0.5 and 1.1m (average 0.8m), predicted to significantly reduce the threat to public safety from the effects of wave overtopping.

The submitted BOMP provides monitoring and evacuation practices for a significant weather event.

2.12 Development in coastal zone generally—development not to increase risk of coastal hazards

Development consent must not be granted to 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.

Applicant's response:
The proposed development significantly reduces the risk of coastal hazards, in particular from potential failure of the existing seawall fronting the SLSC and wave runup on that land, and is unlikely to cause any increased risk of coastal hazards on any other land, with adjacent areas already having seawalls or protected by natural bedrock features. The potential for increased localised scour adjacent to the works would be addressed by design, subject to the level of bedrock which would provide natural scour protection.

3. REFERRALS

The additional information received was referred to James Carley, Principal Coastal Engineer from UNSW Water Research Laboratory, who undertook the peer review of the coastal management documents submitted with the application. The following comments have been provided (refer to Attachment E):

"The proposed upgraded seawall and likely reinforced concrete construction of the proposed new SLSC building is likely to better serve the function of surf life saving at Bronte.

The works proposed are likely to be able to manage coastal hazards for appropriate and foreseeable design events and sea level rise over the next 50 to 70 years subject to additional engineering design – predominantly physical modelling and minor revisions of the calculations made to date. The predominant hazard to be managed will be coastal inundation and wave forces through wave overtopping. For the existing and proposed new SLSC building, the hazards of erosion and recession are/will be managed through the presence of a seawall, provided that the seawall does not fail.
Substantial calculations regarding overtopping have been undertaken in RHDHV (2024), including for 500 year ARI events. These calculations appear to be predominantly sound, with the following caveats.

The extreme wave heights for events having an ARI of 1 to 100 years are well studied and have been published in several credible papers. RHDHV (2024) have used these studies. However, RHDHV (2024) used an unconventional extrapolation to determine the 500 year ARI extreme wave height, and this is likely a major overestimate compared with the more conventional log-linear extrapolations. This overestimate is still only of minor consequence nearshore, due to the depth limitation of wave height there, but may result in an overestimate of the nearshore wave setup. Furthermore, longer wave periods have been adopted in some parts of RHDHV (2024) compared with previous studies of the Sydney wave climate.

RHDHV (2024) undertook wave overtopping and wave force measurements predominantly in accordance with best desktop practice. These are largely sound, but estimate zero wave overtopping of the existing seawall in present day events of up to 100 year ARI. Reliable observations have noted wave overtopping of the existing seawall and minor damage to the present SLSC building on several occasions, in ARI events of approximately 20 to 40 years. This

discrepancy (between RHDHV 2024 calculations and observations) is likely due to some ambiguity in how to account for wave setup within the EurOtop (2018) document. It may require professional engineering judgement from RHDHV to rectify this, however, the completion of physical modelling will provide the most reliable answers.

As noted in RHDHV (2024), physical modelling will be required for detailed design to progress, with the calculations presented informing preliminary and concept design. Physical modelling reduces the risk of both underdesign (unanticipated failure) and overdesign (excessive capital cost).

Based on the reviewer's experience in comparable locations, it is likely that an appropriate certifiable detailed design can be developed within the presented concept design if additional design work is undertaken.

For high sea level rise scenarios, the future of a sandy beach at Bronte may require active management, noting that the present SLSC proposal does not significantly change the status quo, except for extending the life of the present situation/seawall alignment."

Mr Carley states that the responses by RHDHV are credible, however they are based on professional opinion, with divergent opinions likely to be held by some others.

Based on the review, it is the opinion that an appropriate design can be developed within the current concept design, subject to additional design work, namely the physical modelling.

It is considered that the recommended conditions of consent, specifically Conditions 4, 5, and 10, adequately address the need for the additional design work to be undertaken prior to the issue of any relevant construction certificate.

4. RECOMMENDATION

The additional information submitted by the applicant has been reviewed by the assessing officer and Council's external Coastal Consultant and is found to satisfactorily address the reasons for deferral.

It is recommended that Development Application [DA-455/2022] for *Demolition of Bronte Surf Life Saving Club Building (BSLSC) and associated structures, and the construction of a new Bronte Surf Life Saving Club and associated community facility upgrades, including upgrades to seawall and pathway access* at *Bronte Surf Life Saving Club, Bronte Marine Drive, Bronte NSW 2024* be **APPROVED** pursuant to Section 4.16(1) of the *Environmental Planning and Assessment Act 1979* subject to the conditions of consent attached to this report at Attachment A.

5. ATTACHMENTS

The following attachments are provided:

- Attachment A: Conditions of Consent
- Attachment B: Response to Deferral prepared by Urbis dated 28 February 2024
- Attachment C: Record of Deferral dated 5 February 2024
- Attachment D: Revised Concept Design and Coastal Engineering Assessment Report dated 28 February 2024
- Attachment E: Peer review by UNSW Water Research Laboratory dated 19 March 2024 of RHDHV (2024) Revision 4 Report.
- Attachment F: Revised Building Operation Management Plan dated 27 February 2024
- Attachment G: Confirmation of Out-of-Scope Building Plan Submission dated 28 February 2024