

**ANGEL PLACE
LEVEL 8, 123 PITT STREET
SYDNEY NSW 2000**

URBIS.COM.AU
Urbis Ltd
ABN 50 105 256 228

28 February 2024

Planning Panels Secretariat
4PSQ 12 Darcy Street,
Parramatta NSW 2150

**RECEIVED
Waverley Council**

Application No: DA-455/2022

Date Received: 28/02/2024

Dear Planning Panel Secretariat

RESPONSE TO DEFERRAL - BRONTE SURF LIFE SAVING CLUB - DA-455/2022 - PPSSEC-239

Urbis has prepared this submission on behalf of Waverley Council (**the applicant**) with regard to DA-455/2022 (**the DA**) which was granted deferred commencement consent by the Sydney Eastern City Planning Panel (**SECPP**) on 5 February 2024 (PPSSEC-239). The deferred commencement consent approved the demolition of the existing Bronte Surf Life Saving Club (**SLSC**) and the construction of a new BSLSC including upgrades to the seawall and pathway access.

The proposal was discussed at the Sydney Eastern Planning Panel on 1 February 2024 whereby the consent was granted deferred commencement. The Panel sought additional information relating to the proposed seawall and as such, the determination is deferred until April 2024. The Record of Deferral is provided at **Appendix A**.

This letter discusses the following matters in response to the Record of Deferral and Conditions of Consent.

- Revised Concept Design and Coastal Engineering Assessment Report prepared by Royal HaskoningDHV (**RHDHV**)
 - Physical modelling of the seawall
 - Eastern Beaches CMP Stage 1 Scoping Study (pending finalisation, yet to be endorsed)
- Out-of-Scope Building Application
- Other Condition Amendments –
 - Indicative Temporary Facilities
 - Maintenance Management Plan
 - S7.12 Contributions Exemption

The Response to Deferral is supported by the following documents:

- **Appendix A:** Record of Deferral dated 5 February 2024
- **Appendix B:** Revised Concept Design and Coastal Engineering Assessment Report dated 28 February 2024
- **Appendix C:** Revised Building Operation Management Plan dated 27 February 2024
- **Appendix D:** Confirmation of Out-of-Scope Building Plan Submission dated 28 February 2024

1. REVISED COASTAL RISK ASSESSMENT

The Record of Deferral from the SECPP determined insufficient information had been provided with regard to the Coastal Risk Assessment. The SECPP requested further information relating to –

- Assessment of further information as required by the *Coastal Management Act 2016* (Section 27) (See **Section 1.3** of this letter)
- Assessment of further information as required by *State Environmental Planning Policy (Resilience and Hazards) 2021* (Clause 2.9 and Clause 2.12) (See **Section 1.4** of this letter)
- Analysis and reporting of the impacts of the proposed seawall structure on the beach and details as to how those impacts will be managed and mitigated over the life of the development (Refer **Appendix B**)
- Waverley Council's response to a wave overtopping and beach erosion (as identified in the Building Operational Management Plan (**BOMP**) at **Appendix C** and summarised in **Section 3** of this letter.

A revised Concept Design and Coastal Engineering Assessment Report (**CEAR**) is included at **Appendix B** to this letter, which responds to the queries raised by the panel. A summary is provided below.

1.1. COASTAL ASSESSMENT - EXECUTIVE SUMMARY

As per the SECPP's request, an executive summary has been provided at the front of the CEAR (provided at **Appendix B**). The Executive Summary addresses –

- Risks and coastal hazards applicable to the Bronte context
- High-level proposal of seawall design (as discussed in **Section 1.2** below)
- 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*, *State 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

1.2. PROPOSED SEAWALL

As outlined in the CEAR, the proposed seawall comprises a concrete structure and incorporates a secant pile design which alternates small-diameter reinforced and larger-diameter unreinforced concrete piles, overlapped in their plan position. The concrete piles act as a barrier to coastal erosion, retaining the promenade and SLSC.

Wave overtopping and loads

Due to its low crest level, the existing seawall is exposed to overtopping in storms. Based on observations and various assessments, the current promenade is unsafe for pedestrians during severe coastal storms.

The design of the proposed seawall includes a typical wave deflector (32-degree deflection from vertical, deflector length 0.9m) to reduce the risk posed by overtopping. The CEAR determines that overtopping quantities are estimated to reduce by approximately 80% with the inclusion of the wave deflector.

Location of Seawall

The size and location of the seawall have been subject to many iterations and have been informed through extensive consultation with the project experts and the panel. The proposed location of the seawall is determined by the functionality of the spaces and operational requirements.

An existing stormwater culvert runs parallel to the existing seawall. Accommodating the structure of the culvert in the seawall design requires careful consideration. The proposed seawall is built tight against the seaward side of the culvert. The seawall cannot be located atop the culvert nor on the western side of the culvert.

Locating the seawall on the western side of the culvert would reduce the size of the promenade and locate the seawall too close to the building. This would pose a threat to public safety and DDA access between the promenade and beach would not be achievable. The project seeks to create a public space accessible to all, with pedestrian movement a key consideration in the design process.

1.3. COASTAL MANAGEMENT ACT 2016

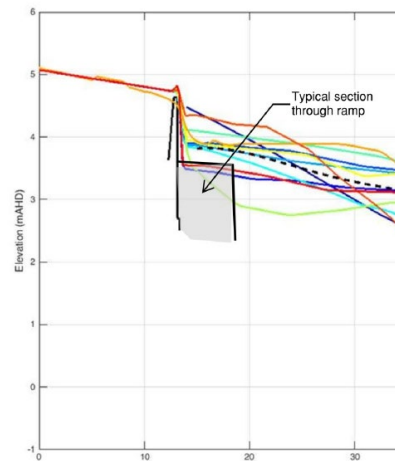
The *Coastal Management Act 2016* (CMA) promotes strategic and integrated management, use and development of the state's coast for the social, cultural and economic well-being of the people of NSW. Section 27 of the CMA outlines the matters the consent authority must consider when granting development consent relating to coastal protection works. The CEAR provides a comprehensive assessment of the proposed seawall against Section 27 of the CMA. The assessment has been reproduced in this letter for convenience at **Table 1**. Refer to **Appendix B** for further detail.

Table 1 Assessment against Section 27 of the CMP 2016

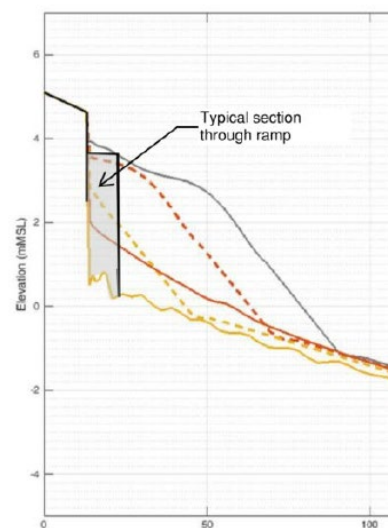
Resilience and Hazards SEPP	Assessment
1) Development consent must not be granted under the Environmental Planning and Assessment Act 1979 to development for the purpose of coastal protection works, unless the consent authority is satisfied that:	
(a) the works would not, over the life of the works:	

Resilience and Hazards SEPP	Assessment
(i) unreasonably limit or be likely to unreasonably limit public access to or the use of a beach or headland, or	The proposal would facilitate and enhance public and lifesaving access between the beach and the SLSC area and promenade, by providing a new ramp, steps, and bleachers. The new seawall and beach access facilities protrude up to 10.4m onto the beach from the face of the existing seawall, extending over a shoreline distance of 59m (average protrusion assessed to be 5.2m for a typical present-day accreted back-beach level of RL3.7m AHD). The reduction in sandy beach width as a result of these works can be assessed with reference to the SBEACH modelling undertaken by Baird, shown in the figures below. These capture the nominal beach state today (2016), and in 2050 and 2100, before and following a 100 year ARI storm. The local reduction in sandy beach width as a result of the seawall and associated beach access structures is up to 10% today (2016), increasing to 14% in 2050 and 33% in 2100. For a normal beach state not affected by storms, high tide beach width in 2050 would reduce from 45m to 38m, and in 2100 from 24m to 17m. These changes, which occur locally in front of the proposed SLSC seawall, the overall length of which is approximately 25% of the length of the beach, are considered acceptable given the public and lifesaving benefits that the works provide. While the width at other areas along Bronte Beach would remain unchanged, it is acknowledged that not all the beach is used to the same degree with user density greatest where the flags are typically placed. With respect to the suitability of the design for beach access over the life of the works, beach recovery following the severe storms would be initially relatively 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, scraping sand up to the proposed design toe level of 3m AHD. Refer to the BOMP at Appendix C which outlines Council's approach to managing beach erosion. 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. Sectional profiles developed from photogrammetry and SBEACH modelling, overlaid on a typical section through the new ramp, are shown below:

Resilience and Hazards SEPP Assessment



Typical section through the ramp shown to be mostly covered with sand, based on beach profiles between 1970 and 2016. (Section L01 from Baird 2016, 20m south of centre of SLSC buildings Coloured profiles show photogrammetric surveys of the beach between 1970 and 2016 with a black dash representing an average profile). Note that the ramp section here is simply overlaid onto the surveyed profiles. The influence of the ramp would have been minor on the profiles as surveyed.



Typical section through the middle portion of the ramp over the life of the works, showing the nominal existing (2016) average beach profile (grey), and model predicted profiles in 2050 and 2100 before (brown dash and yellow dash respectively) and following a 100-year ARI storm (brown full and yellow full respectively). (Section L00 from Baird 2016, 15m north of centre of SLSC buildings). Note that the ramp section here is simply

Resilience and Hazards SEPP

Assessment

overlaid onto the modelled profiles and is not included in the modelling. The influence of the ramp would result in the modelled profiles being slightly lower than those shown, particularly for the 2050 post-storm profile (brown full), and the 2100 pre-storm profile (yellow dash). Assuming a mass balance across the section, the adjustment would be expected to entail a lowering of up to 0.5m across the subaerial profile, from the face of the ramp out to the mid-tide waterline.

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

The proposed coastal protection works, over the life of the works, would not be expected to pose or be likely to pose a threat to public safety, in respect of the beach erosion/ shoreline recession hazard.

The existing seawall, which is beyond its design life, could not be relied upon to protect the SLSC building. The proposed coastal protection works comprising a secant pile wall, drop-down beam, slabs and discreet CFA piles, when fully detailed, would be capable of preventing undermining of the SLSC building.

The are rigorous operational methods outlined in the BOMP that would be activated should there be a coastal inundation hazard. The consent authority can be satisfied that a design solution, in combination with operational measures, could be found to ensure that the proposed works would not, over the life of the works, pose or be likely to pose a threat to public safety due to the coastal inundation hazard, but the design solution requires further development as part of the Detailed Design. 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. By implementing the proposed works, it would not be necessary to carry out emergency erosion protection works during and after storms, at which times staff of emergency agencies and volunteers would otherwise place themselves at some safety risk.

(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,

To make an assessment in this regard it is first necessary to consider whether any increased erosion of the beach or adjacent land would be caused by the presence of the works. This can be considered under three main topics:

- (i) additional scour/ erosion immediately seaward of the works;
- (ii) end effects on immediately adjacent land;
- (iii) consequences due to 'locking up' of sand behind the coastal protection works.

Additional scour/ erosion immediately seaward of the works.

Research has shown that concerns that seawalls cause additional scour/ erosion immediately seaward and greatly delay post-storm beach recovery are probably false, as there are no known data or physical arguments to support these concerns (U.S. Army Corps of Engineers, 2006). Furthermore, and more importantly in relation to Bronte Beach, there is an existing seawall that merges with an adjacent bedrock cliff to the north that

Resilience and Hazards SEPP Assessment

together, effectively protect the full beach compartment. As such, the proposed works which have the effect of shifting seawards by an average of approximately 5m a 60m sub-length of the 250m back beach shoreline seawall/ bedrock cliff would not be expected to cause any significant increase in scour/ erosion immediately seaward of the works compared to the existing situation.

At the time of finalising the Concept Design report an additional geotechnical site investigation had recently been completed. The fieldwork comprised boreholes, test pits, DCP tests and sub-ground seismic refraction. The investigation has yet to be fully reported on, however, preliminary findings have confirmed bedrock levels in the vicinity of the proposed new seawall between 0.0 and -0.9m AHD, limiting potential scour at the seawall toe.

End-effects on immediately adjacent land

Increased erosion of immediately adjacent land could potentially occur due to end-effects, caused by localised wave deflections and diffraction, due to the presence of seawall works.

However, no erosion of immediately adjacent land is expected as a result of the proposed coastal protection works, as the proposed works are located adjacent to, and at their ends merge with, the existing Bronte Beach seawall (to the south) and the stormwater culvert, bedrock cliff and headland (to the north). However, design consideration would need to be given to the potential additional localised scour adjacent to the works at times of storms that impact the works, subject to the location and elevation of bedrock.

Consequences due to 'locking up' of sand

There are two potential consequences of the 'locking up' of sand behind the coastal protection works:

- (i) additional localised erosion to meet the storm erosion demand; and
- (ii) impact on long-term shoreline recession.

The volume of sand, potentially 'locked up' behind the coastal protection works is found to be small and immaterial to this particular risk, as demonstrated below.

The estimated volume of sand potentially 'locked up' behind the coastal protection works as far landward as the 2070 coastal hazard line (refer Figure 5-9 of the CEAR), measured above 0m AHD, is approximately 200m³.

Distributing this volume over the depth of the active profile and the length of Bronte Beach would give an equivalent shoreline recession of less than 0.1m to 2070.

The above-underlying shoreline recession estimate due to a net sediment loss to 2093 may be compared to the expected shoreline recession to 2093 due to sea level rise, equal to 46m (Baird, 2016)^{xvi}, and is therefore less than 0.5% of the total estimated shoreline recession.

Notwithstanding the prediction for potential impoundment of beach sand behind the works to be of minimal impact to long-term recession, it is proposed that the existing sand that is potentially 'locked up' by the new works is removed and placed on the beach, and that suitable imported filling is placed and compacted to replace the native sand. It follows that for the

Resilience and Hazards SEPP Assessment

Bronte seawall project no sand would in fact be lost from the beach compartment immediately following the completion of the works.

Synthesis

The beach would be expected to naturally accrete and be restored seaward of the proposed works after storm events, and no differently to the existing situation, due to the closed system and availability of sand. Increased erosion on the beach (if any) would only be expected to be short term and not be significant. There are no end-effects expected as a result of the proposed works, as the proposed works merge with the existing seawall or bedrock cliff/ rocky headland, and there are no unprotected erodible materials behind the flanks of the works. Impoundment of sand behind the new coastal protection works are assessed to be minimal, or non-existent if sand is removed and replaced with imported fill (which is proposed), and therefore of no consequence to shoreline recession.

Notwithstanding the findings above, if any mechanical intervention is desired to accelerate beach recovery, Council has the means to undertake beach scraping. Council owns a posi-track and beach rake which regularly scrapes sand at its beaches to the levels required for beach cleaning, safety, access and after storm events. In large storm events and sand washouts, Council hires excavators to move sand and clean up debris.

(ii) the maintenance of the works.

Council would be responsible for maintaining the proposed works. To maintain the proposed works, it would be necessary for a suitably qualified and experienced coastal and maritime engineer to undertake an inspection after severe storms that expose the works and advise on any required remedial action.

Due to the basis of design, and the checking and governance processes employed throughout the design and construction of the works, the need for significant maintenance over the life of the works would not be expected. In the event significant maintenance was necessary, potential maintenance activities could include (adapted from Horton Coastal Engineering, 2023):

- Inspection of the seawall after significant coastal storms. This would include inspection of the seaward side of the wall for any damage to the concrete structure, gap formation in the secant piling (where visible), and integrity of weepholes. This would also include inspection of the landward side for evidence of the formation of any significant cracking of concrete slabs indicating possible migration of fill through the seawall and loss of fill compaction, and/ or wall movement, and assessment of any wave overtopping damage at the surface.
- Should a significant impact event cause localised damage to the concrete structure exposing reinforcement, the concrete should be locally scabbled and patched with an approved repair mortar. Significant concrete damage is unlikely, given that high strength

Resilience and Hazards SEPP Assessment

concrete and appropriate cover to reinforcement would be specified for the proposed 70 year life of the structures.

- Dealing with any gap formation in the piling through either shotcreting from the seaward side (after excavation of sand for access to the gaps as
- required), or from the landward side (with sand in this case left in place against the gap on the seaward side to act as a “formwork” for the
- grouting). That stated, the construction procedure would involve hold points to inspect the piling for gaps, to minimise the possibility of gaps occurring in
- the first place. The construction contract terms would be such that there is an incentive for the contractor to take care with the piling to minimise the potential for any gaps, as these defects would be their responsibility to correct and would be inspected during the course of the works by the project engineers.
- If any weepholes were found to be leaking soil they could be filled with concrete. All weepholes would not be necessary for structural integrity of the wall since the wall would be designed assuming limited drainage.

As a public authority, Council has a statutory responsibility to maintain both the asset and adjoining land, including the beach. These requirements may be specified in the conditions of consent, with the arrangements outlined in the BOMP and relevant asset management and maintenance plans. It is proposed that a draft condition would be prepared to ensure compliance by the Applicant with Section 27 (1)(b)(ii), hence the matter of maintenance of the works over the life of the works would be addressed. An engineered review of the sea wall is to be undertaken every 10 years in accordance with Condition 4.

(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:

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).

(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,

Refer above

Resilience and Hazards SEPP	Assessment
(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.	Refer above
(b) by payment to the relevant council of an annual charge for coastal protection services (within the meaning of the Local Government Act 1993).	Refer above
(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.	Not applicable

1.4. STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021

Chapter 2 of *State Environmental Planning Policy (Resilience and Hazards) 2021* (**Resilience and Hazards SEPP**) relates to the assessment of development proposals that are in a coastal zone. Clause 2.9 of the Resilience and Hazards SEPP relates to development on land within the coastal vulnerability area and Clause 2.12 states that development on coastal zones must not increase the risk of coastal hazards.

The CEAR (**Appendix B**) provides a comprehensive assessment of the proposed seawall against the Resilience and Hazards SEPP. As per the Panel's request, an assessment against Clause 2.9 and Clause 2.12 has been reproduced in this letter for convenience at **Table 2**.

Table 2 Assessment against Clause 2.9 and Clause 2.12 of the Resilience and Hazards SEPP

Resilience and Hazards SEPP	Assessment
Clause 2.9: 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	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.

Resilience and Hazards SEPP	Assessment
hazards for the design life of the building or works	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 commence in early March 2024 and be completed by late April 2024), and dedicated maritime structural design development for the coastal protection works.
(b) the proposed development: (i) is not likely to alter coastal processes to the detriment of the natural environment or other land	The proposed works are not expected to alter coastal processes in the future to the detriment of the natural environment or other land given the beach morphological responses described above. The condition of consent referred to above in relation to Section 27 (1)(b)(i) 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. It is noted here that the wording of sub-clause 2.9 (b)(i) in State Environmental Planning Policy (Resilience and Hazards) 2021 is somewhat at odds with sub-clause 27 (1)(b)(i) in the Coastal Management Act 2016 which specifically anticipates that coastal protection works may increase erosion but that this is only acceptable if conditions can be imposed to restore it. It is understood that if there is any inconsistency between the Policy and the Act, the Act would override the Policy.
(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	The proposal improves the public amenity of the Coastal Walk and Bronte Park in the immediate vicinity of the upgraded SLSC building. The promenade spaces to cater for longshore pedestrian access are slightly widened, assisting with through traffic. Importantly with respect to access, this is enhanced and direct between the beach and the SLSC area. With the north down ramp alignment and new steps and bleachers at the northern end, beach users are directed to the north and therefore improving access to the only and safest area on the beach for the lifeguards to put the flags up. The proposed seawall and related access structures would protrude an average of 5.2m and up to 10.4m seaward from the face of the existing seawall. For a typical back beach level of RL3.7m AHD, the proposed seawall and related access structures would reduce the high tide drying minimum back-beach widths in this area from 53m today (no new wall), to 19m in 70 years time (no new wall), or 10m in 70 years time with the proposed new seawall. The average high tide drying minimum back-beach width opposite the proposed new seawall in 70 years is assessed to be 11m. While there is a significant reduction in the available high tide drying minimum backbeach 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. Headlands and rock platforms are well removed from the proposed structures so access to these features would not be affected. 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.
(iii) incorporates appropriate measures to manage risk to life and public safety from coastal hazards	

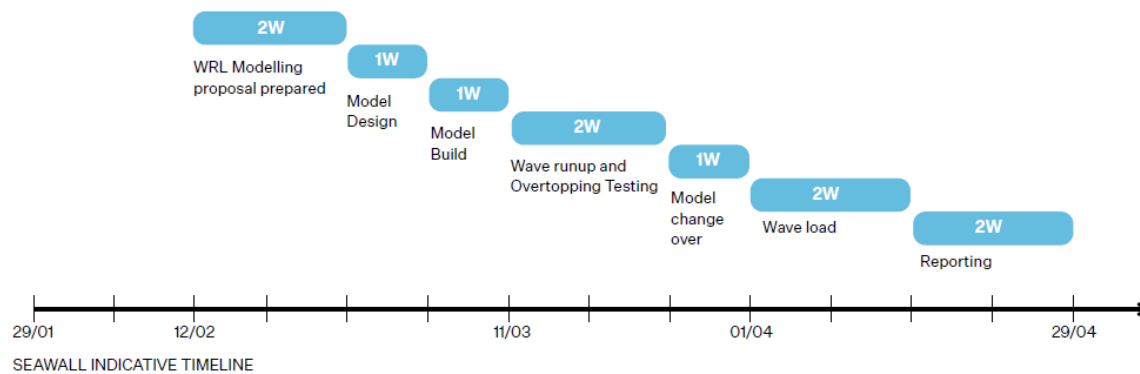
Resilience and Hazards SEPP	Assessment
c) measures are in place to ensure that there are appropriate responses to, and management of, anticipated coastal processes and current and future coastal hazards	The proposed seawall upgrade addresses the unacceptable condition of the existing seawall, restoring 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. To mitigate the risk to life and public safety from the effects of wave overtopping, it is provisionally recommended that pedestrians be excluded from the promenade area between the SLSC and the upgraded seawall as follows. These recommendations to be actioned in the BOMP would be reviewed and updated if necessary, following the completion of physical modelling. - For present-day sea level conditions, during storm events, no threat is predicted for storms up to 100 year ARI hence no exclusions need apply. - For sea level conditions predicted at 2093, at the end of the design working life of the new seawall, during storm events exceeding approximately 1 and 100yr ARI for some incident water depth conditions.
Clause 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	The proposed development significantly reduces the risk of coastal hazards, in particular from potential failure of the existing seawall fronting the SLSC and wave runoff 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.

1.5. PHYSICAL MODELLING

Physical modelling is proposed in the next phase of the seawall design, to provide further information for seawall design development. The physical modelling is proposed to enhance the quantification of wave overtopping flows, assess hydraulic loads, potential damage, and user safety. The work would involve 2D modelling, incorporating coastal profiles and boundary conditions developed for Bronte.

It is expected physical modelling would be a condition of development consent, to be undertaken to inform the detailed design. The indicative timeframe for seawall modelling is provided at **Figure 1**. The physical modelling will be undertaken by the UNSW Water Research Laboratory (WRL). The contract is currently being reviewed by WRL and following signature, the modelling will commence immediately. Useable data to inform seawall wave deflector design will be available in March and the final report will be completed in April.

Figure 1 Physical Modelling of Seawall – Indicative Timeframe



Source: Warren and Mahoney

On this basis, it is requested 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 for prior to the issue of the relevant construction certificate (i.e. prior to the main building works). 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.

Suggested condition wording is noted below. Additions are shown in 'red text' and deletions are shown by 'strike through'.

Proposed new Condition:

A Stage 2 Detailed Seawall Design and wave return walls, including all required physical modelling to be undertaken and findings submitted to Council for approval of Council's Executive Manager, Development Assessment or delegate prior to the issue of the relevant construction certificate for the main building works.

Modification of Condition 3

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 4 Condition X~~ (above) 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~~ of construction certificate for main building works.

2. EASTERN BEACHES CMP STAGE 1 SCOPING STUDY (BMT, 2020),

The Woollahra Municipal Council, Waverley Council, and Randwick City Council, in collaboration with the NSW Department of Planning, Industry and Environment (**DPIE**), are developing a Coastal Management Program (**CMP**) for Sydney's Eastern Beaches. The CMP, aligned with the Coastal Management Act 2016, aims to provide a long-term strategy for coordinated coastal zone management. The first stage, a Scoping Study, has been completed, outlining the strategic context, vision, objectives, geographic areas, priority issues, knowledge gaps, governance considerations, a preliminary business case, community engagement strategy, and a forward plan for the CMP. This study serves as the initial step in a five-stage process defined by the NSW Coastal Management Framework, setting the groundwork for subsequent stages in the comprehensive preparation of the Eastern Beaches CMP.

The CMP contains a vision statement and thirteen objectives relevant to local issues and conditions of the Eastern Beaches. The table below provides an overview of the proposed seawall design against the Vision and Objectives of the CMP.

Table 3 Assessment of the seawall against the Vision and Objectives of the CMP

CMP Reference	Consistency with seawall design
CMP Vision	
The iconic Eastern Beaches coastline of Sydney is resilient through integrated and coordinated planning and management that protects and improves its unique cultural, biodiverse and economic values now and for the communities, development and climate changes of the future	The SLSC is exposed to coastal hazards, primarily erosion and coastal inundation. A seawall is required to protect the facility. The seawall has been designed to balance the requirements of the location of the SLSC, promenade and beach access enhancements, erosion protection, and reduction of wave overtopping over a 70-year life.
Objectives	
to protect and preserve natural coastal processes and environmental values of the eastern beaches including scenic values, biological diversity and terrestrial and marine ecosystem integrity and resilience;	The proposed works are located as far landward as possible and comprise structural elements common for coastal protection works, e.g., secant pile wall and drop-down beam. The seawall has been designed to minimise impact and scale to the Bronte coastal area allowing for natural coastal processes to occur. The proposed works are not expected to alter coastal processes in the future.
to support the social and cultural values of the eastern beaches and maintain public access, amenity, use and safety;	The proposed seawall facilitates enhanced public and lifesaving access between the beach and the SLSC precinct and promenade, by providing a new ramp, steps, and bleachers.
to acknowledge and help enable the ongoing custodianship by the Cadigal / Gadigal and Bidjigal peoples including their spiritual, social, customary and economic use of the coastal zone.	A Designing with Country Integration Report was submitted with the DA application. The Designing with Country Principles that have guided the design of the Bronte SLSC include – - Working with Country - Revealing Country

CMP Reference	Consistency with seawall design
	▪ Amplifying Connection to Water ▪ Understanding the Forces of this Country The seawall seeks to maintain the Designing with Country Principles by maintaining the visual connection to the water and integration with the natural landscape. To minimise the impact on visual amenity, the proposed seawall is to include a deflector to reduce its crest level and seawall height. A deep drop-down beam is to be provided to limit the visible upper portion of the secant pile wall at times of low beach levels. The colour of the concrete is to integrate and match the beach sand.
to recognise the coastal zone as a vital economic zone and to support sustainable coastal economies;	The seawall has been strategically designed to both protect the proposed Bronte SLSC and maintain public access to the beach via the promenade, ramps, bleachers, and steps. The eastern beaches are a vital economic zone for tourists visiting Sydney and the seawall seeks to enhance public access to the beach.
to facilitate ecologically sustainable development in the coastal zone and promote sustainable land use planning and decision-making;	The existing seawall is beyond its design life and cannot be relied upon to protect the new SLSC building. The proposed coastal protection works comprising a secant pile wall, drop-down beam, slabs and discreet CFA piles, when fully detailed, will be capable of protecting the new SLSC building exhibiting sustainable land use planning.
to mitigate current and future risks from coastal hazards, taking into account the effects of climate change including scientific projections of Sea Level Rise, and seek potential opportunities;	The seawall has been designed to limit erosion into the Bronte Park reserve. The CEAR (Appendix B) accounts for design life, design storm events, and acceptable damage to develop a design philosophy for the seawall structure. The proposed coastal protection works, would not be expected to pose or be likely to pose a threat to public safety, in respect of the beach erosion/shoreline recession hazard.
to recognise that the local and regional scale effects of coastal processes, and the inherently ambulatory and dynamic nature of the shoreline, may result in the loss of coastal land to the sea (cliffs and headlands), and to manage coastal use and development accordingly;	The beach is expected to naturally accrete and be restored seaward of the seawall after storm events, as per the existing situation. Increased erosion on the beach (if any) would be only short-term and not measurable or significant. No end effects are expected as the works would merge with the existing seawall or bedrock cliff. No sand from the beach would be impounded behind the seawall, thus the structures would be of no consequence to shoreline recession.
to foster and guide integrated and co-ordinated coastal planning, management and reporting;	Council has a statutory responsibility to maintain both the asset and adjoining land, including the beach. These requirements may be specified in the conditions of consent, with the arrangements outlined in relevant asset management and maintenance plans.
to identify and promote plans, strategies and funding opportunities to improve the resilience of coastal assets to the impacts of dynamic and increasing climate change	The primary purpose of Stage 1 of a CMP is to determine the scope of the CMP and define a path for progressing further stages of the CMP. The Bronte SLSC will adhere to new coastal management policies as they emerge.

CMP Reference	Consistency with seawall design
risks including impacts of extreme storm events;	The project is progressing ahead of the finalised CMP. The Coastal Risk Assessment provides the due diligence to assess the Bronte coastal area and contribute to the future CMP.
to ensure co-ordination of the policies and activities of government and public authorities relating to the coastal zone and to facilitate effective integration of relevant management activities;	As above.
to support public participation in coastal management and planning and foster greater public awareness, education and understanding of coastal processes and risk management actions;	The layout for the redeveloped SLSC, promenade, and beach access has been carefully planned in consultation with users and the Council.
to identify land in the coastal zone which may be adversely affected by coastal processes or management actions, and or considered for acquisition by public or local authorities in order protect, enhance, maintain and/or restore the environment of the coastal zone; and	The Coastal Risk Assessment provides the due diligence to assess the Bronte coastal area and contribute to the future CMP. The Bronte SLSC will adhere to new coastal management policies as they emerge.
to support the objects of the Marine Estate Management Act 2014.	The proposed seawall works will not adversely impact water quality, provided appropriate construction management procedures are implemented. The proposed seawall maintains ecosystem integrity while facilitating the cultural, social and recreational use of Bronte Beach.

3. BUILDING OPERATION MANAGEMENT PLAN

A revised Building Operation Management Plan (**BOMP**) is submitted with this letter at **Appendix C**. the BOMP outlines the monitoring, excavation and maintenance requirements to detect early signs of structural stress or failure of the sea wall due to wave overtopping or erosion, to ensure any immediate threats are addressed. The strategies outlined in the BOMP include –

- **Real-time Monitoring:** Install real-time monitoring equipment (e.g., wave sensors, CCTV) to provide continuous data on sea conditions and structural integrity.
- **Response Procedures:** Establish a dedicated response team from BSLSC with clear protocols for immediate action upon detection of critical threshold breaches.
- **Infrastructure and Asset Protection Strategies:** Implementing specific measures to protect critical infrastructure, surf lifesaving equipment, and amenities from damage due to coastal hazards.
 - Identify and prioritise key infrastructure and assets for protection in the operational management plan in accordance with advice in the Bronte SLSC Redevelopment Seawall and Related Elements Detailed Design.

- Develop and implement protective measures, such as relocatable barriers or flood proofing, for critical assets.

4. OUT-OF-SCOPE BUILDING APPLICATION

Deferred Commencement Condition 2 'Sydney Water Requirements' requires an Out-of-Scope (OOS) Building Plan Approval be obtained via a Water Servicing Coordinator to ensure the development does not unreasonably impact the Sydney Water assets traversing the site.

Rose Atkins and Rimmer infrastructure (**RARi**) has been engaged as the Water Servicing Coordinator for the proposal. RARi have advised that obtaining a Building Plan approval is typically a requirement prior to obtaining a Construction Certificate, as Sydney Water require review and assessment of typical Construction Certificate level drawings.

RARi has advised the typical Sydney Water assessment period for this type of Building Plan Approval can take between 3 and 6 months. This is a complicated and time-consuming process that requires detailed input from specialist civil, geotechnical, and structural engineers.

The OOS Building Application was submitted on 28 February 2024 (CN210820) with confirmation is provided at **Appendix D**. Sydney Water's assessment and determination of the application is expected between June and September 2024.

On this basis, it is requested the Deferred Commencement Condition 2 be deleted and instead tied to a condition of consent which requires the Building Plan Approval be obtained prior to the issue of the relevant construction certificate. This is so that works unrelated to the Sydney Water asset are not unreasonably held up by the lengthy OOS Building Plan Approval assessment process. Suggested condition wording is noted below –

Proposed new Condition:

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 for approval of Council's Executive Manager, Development Assessment or delegate prior to the commencement of demolition and construction works (except for site preparation works including site setup, temporary life saving 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 (except for site preparation works including site setup, temporary life saving facilities, hoarding and coastal walk re-routing).

5. OTHER CONDITION AMENDMENTS

5.1. INDICATIVE TEMPORARY FACILITIES

As documented in the Construction Management Plan (dated 21 September 2022) submitted with the original DA documentation in October 2022, it is intended that temporary facilities will be constructed adjacent to the Southern portion of the site in Bronte Park in order to commence demolition of the existing SLSC building. These facilities will be designed to ensure that the critical functions of the Lifeguards and the SLSC are maintained through the construction process. In order to undertake

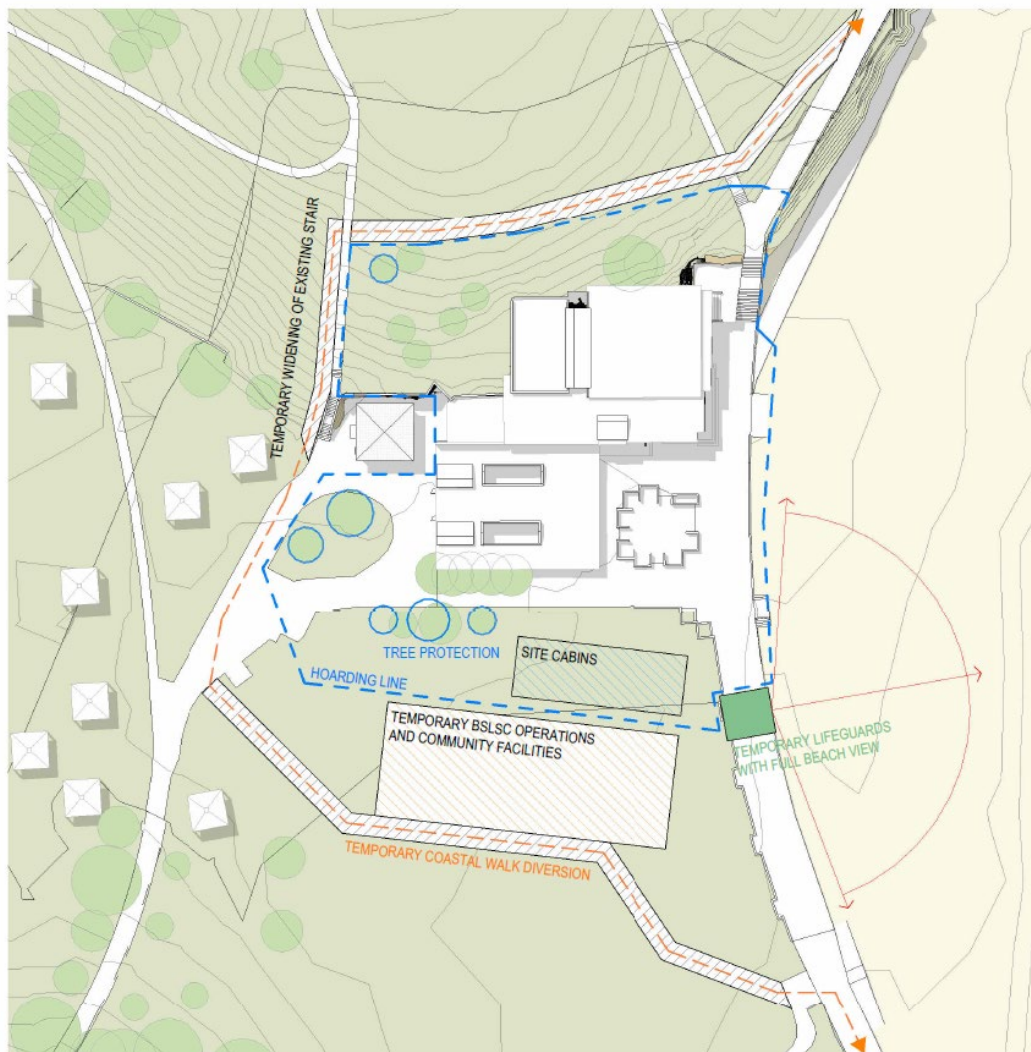
these works, the site will be enclosed with perimeter A Class fencing and all materials will be delivered to the site from the Bronte Rd accessway, under suitable traffic escort. **Figure 2** below shows the indicative temporary facilities layout.

We would like to request the insertion of a condition that reflects the intended provision of temporary facilities for the continued operation of the SLSC.

Suggested Condition Wording –

Prior to commencement of works, a Construction Management Plan needs 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.

Figure 2 Indicative Temporary Facilities Layout



Source: Warren and Mahoney

5.2. MAINTENANCE MANAGEMENT PLAN

Condition 4 relates to the requirement for 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. As requested by the SECPP, it is proposed Condition 4 be amended to require the review of the MMP be undertaken every 5 years, as opposed to 10 years. This is to ensure the stability and functionality of the costal works are more frequently monitored and any maintenance requirements are adequality identified, reducing the risk of costal deterioration. General monitoring of the sea wall will also be undertaken in accordance with the BOMP.

Proposed amendment to Condition 4

*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 10 year basis **and/or after any major 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.*

5.3. S7.12 CONTRIBUTIONS EXEMPTION

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. We seek that Condition 10 be deleted from the final Conditions of Consent.

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;

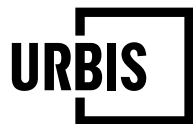
The above exemptions apply to the project as the proposal is a public-private partnership between Bronte SLSC and Waverley Council. Waverley Council is the official applicant for the DA and the proposal incorporates dedicated facilities for both SLSC and Council operations.

Importantly, 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 we request that Condition 10 be deleted as the proposal complies with the exemptions outlined in the *Waverley Council's Development Contributions Plan 2006*.

6. COMMUNITY CONTACT PHONE NUMBER

It is understood the SECPP were seeking a phone number to be provided, to resolve resident concerns relating to potential noise complaints. Residents can contact Council's customer service and after-hours number on **02 9083 8000** should any noise issues arise from the Bronte SLSC. This phone number connects to an on-call staff member.



We trust the above information adequately addresses the issues raised in the Record of Deferral and the matters raised at the SECPP meeting on 5 February 2024.

Please do not hesitate to contact me should you wish to discuss this Deferred Commencement response in greater detail.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Sm.", with a small dot at the end.

Sam McGough
Consultant
+61 2 8233 7692
smcgough@urbis.com.au