DEVELOPMENT APPLICATION ASSESSMENT REPORT

Daniel Milliken
Lot A DP 167490, 1128 Pittwater Road COLLAROY NSW 2097
Lot 1 DP 121939, 1130 Pittwater Road COLLAROY NSW 2097
Lot 5 DP 10757, 1132 Pittwater Road COLLAROY NSW 2097
Lot 4 DP 10757, 1134 Pittwater Road COLLAROY NSW 2097
Lot 3 DP 10757, 1136 Pittwater Road COLLAROY NSW 2097
Lot 2 DP 10757, 1138 Pittwater Road COLLAROY NSW 2097
Lot 1 DP 10757, 1140 Pittwater Road COLLAROY NSW 2097
Lot 6 DP 111254, 1142 Pittwater Road COLLAROY NSW 2097
Lot 7 DP 111254, 1144 Pittwater Road COLLAROY NSW 2097
Lot 7351 DP 1166942, Pittwater Road COLLAROY NSW 2097
Lot 1 DP 170202, 1126 Pittwater Road COLLAROY NSW 2097
Construction of Coastal Protection Works
Warringah LEP2011 - Land zoned R2 Low Density
Residential Warringah LEP2011 - Land zoned R2 Low Density
Residential
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Warringah LEP2011 - Land zoned R2 Low Density Residential

	Warringah LEP2011 - Land zoned RE1 Public Recreation	
Development Permissible:	Yes, under State Environmental Planning Policy (Infrastructure) 2007	
Existing Use Rights:	No	
Consent Authority:	Northern Beaches Council	
Land and Environment Court Action:	No	
Owner:	Mark Victor Paul Greville Sarah Anne Silk Scott John Markich Judith May Juliana Markich Malcolm Alexander McGuinness Department Of Lands Donald Peter D'Aoust Carol Sandra D'Aoust Allan Thomas Davy Richard Anthony Harris Tasko Cagorski Zora Cagorski Zhaohui Shao Ce Wang Lynnette Joan Mann	
Applicant:	Horton Coastal Engineering Pty Ltd	

Application lodged:	20/06/2017
Integrated Development:	No
Designated Development:	No
State Reporting Category:	Other
Notified:	30/06/2017 to 18/07/2017
Advertised:	01/07/2017
Submissions Received:	46
Recommendation:	Approval

\$ 1,708,739.00

ASSESSMENT INTRODUCTION

Estimated Cost of Works:

The application has been assessed in accordance with the requirements of the Environmental Planning and Assessment Act 1979 and the associated Regulations. In this regard:

- An assessment report and recommendation has been prepared (the subject of this report) taking into account all relevant provisions of the Environmental Planning and Assessment Act 1979, and the associated regulations;
- A site inspection was conducted and consideration has been given to the impacts of the development upon the subject site and adjoining, surrounding and nearby properties;
- Notification to adjoining and surrounding properties, advertisement (where required) and referral to relevant internal and external bodies in accordance with the Act, Regulations and relevant Development Control Plan;

- A review and consideration of all submissions made by the public and community interest groups in relation to the application;
- A review and consideration of all documentation provided with the application (up to the time of determination);
- A review and consideration of all referral comments provided by the relevant Council Officers, State Government Authorities/Agencies and Federal Government Authorities/Agencies on the proposal.

SUMMARY OF ASSESSMENT ISSUES

Warringah Local Environmental Plan 2011 - 5.5 Development within the coastal zone Warringah Local Environmental Plan 2011 - 6.5 Coastline hazards Warringah Development Control Plan - B5 Side Boundary Setbacks Warringah Development Control Plan - B7 Front Boundary Setbacks Warringah Development Control Plan - B9 Rear Boundary Setbacks Warringah Development Control Plan - C9 Waste Management Warringah Development Control Plan - D1 Landscaped Open Space and Bushland Setting Warringah Development Control Plan - E7 Development on land adjoining public open space Warringah Development Control Plan - E9 Coastline Hazard

SITE DESCRIPTION

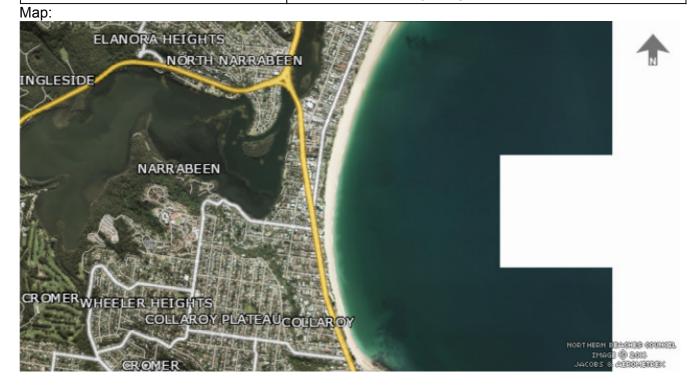
Property Description:	Lot A DP 167490, 1128 Pittwater Road COLLAROY NSW 2097
	Lot 1 DP 121939 , 1130 Pittwater Road COLLAROY NSW 2097
	Lot 5 DP 10757 , 1132 Pittwater Road COLLAROY NSW 2097
	Lot 4 DP 10757 , 1134 Pittwater Road COLLAROY NSW 2097
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	Lot 7351 DP 1166942 , Pittwater Road COLLAROY NSW 2097
	Lot 1 DP 170202 , 1126 Pittwater Road COLLAROY NSW 2097
Detailed Site Description:	The subject site consists of Nos. 1126, 1128, 1130, 1132, 1134, 1136, 1138, 1140, 1142 and 1144 Pittwater Road, and a portion of the adjacent crown land to the east, known as Lot 7351 DP 1166942 (the beach under the care and control of Northern Beaches Council).
	The site is located on the eastern side of Pittwater Road and is surrounded by a public reserve to the north, Collaroy

Beach to the east, a Council road reserve to the south (Ramsay Street) and Pittwater Road to the west.

Each of the residential lots contain a dwelling and other ancillary structures. All of the ten residential lots lost land and structures in some form to the ocean during the large storms in June 2016.

No. 1126 Pittwater Road obtains driveway access from Ramsay Street, all other properties have vehicular access from Pittwater Road.

The proposed development takes place across all 10 residential lots and the crown land due to the need to link the wall to future coastal protection works along the eastern boundaries of the adjoining public land.



SITE HISTORY

In June 2016 a large storm caused severe coastal erosion to the eastern sides (i.e. the beach sides) of the subject sites and damage to the dwellings and structures. These particular properties did not have any existing coastal protection works to provide protection at the time of the storms and were the most severely affected of all land along Collaroy/Narrabeen Beach as a result.

For the subject sites, the following matters are relevant to the current application:

PLM2017/0015

A prelodgement meeting was held on 20 March 2017 to discuss the construction of coastal protection works.

Relevant comments provided in the minutes included:

"Council is supportive of the proposal in concept. Fully detailed plans and reports, as listed above, will need to be submitted for assessment.

It is likely that this application may attract a large amount of public interest. As such, please ensure that all plans and supporting documentation include sufficient detail so that any member of the public can clearly understand the design and characteristics of the proposal (particularly as it relates to being designed as a predominantly sand covered structure).

As mentioned above, it is strongly recommended that discussions with the Crown occur soon to obtain owners consent to avoid delays in any determination."

Amended Plans

Amended plans were lodged under the current application on 26 July 2018. The amendments involved moving the works seaward approximately 700mm, along with other very minor technical design changes and the addition of a number of notes to the plans. The works still have a portion of their footprint on private land with the majority on public land. Given the relatively minor changes and the lack of any objections to the wall, re-advertisement/notification was not necessary.

This report is based on these amended plans.

PROPOSED DEVELOPMENT IN DETAIL

The proposal involves the construction of coastal protection works on the eastern side of the site. The works will be located only partly on private land with the majority of the structure on the adjoining crown land. This is necessary as these protection works must link up with similar works on public land to the north and south to provide a single protective structure along the vulnerable section of Collaroy/Narrabeen Beach.

The reason so much of these works are located on public land (compared to all of the other coastal protection works along this stretch of Collaroy and Narrabeen Beach) is the shape of the lots relative to the other properties to the north and south.

For an unknown reason, these 10 properties have eastern boundaries that are approximately 15m further landward than any of the properties to the north or south. Partly because of the relatively short length of the lots, no erosion protection (in the form of a rubble wall, similar to what existed to the north and south prior to the June 2016 storms) was ever constructed to protect these properties. As a result, these 10 properties suffered substantially more damage than any other properties along Collaroy and Narrabeen beach (with the exception of the Beach Club building in Collaroy).

In detail the proposal includes:

- Site preparation works.
- The construction of an engineered coastal protection wall on the eastern side of the sites and on the adjoining crown land.
- The back filling of the coastal protection wall to restore the subject properties to their natural ground level.
- The covering of the coastal protection wall with sand and vegetation.
- Associated landscaping works on the remainder of the site.

Note: The development is prohibited under the Warringah Local Environment Plan 2011 but is

permitted with consent under the State Environmental Planning Policy (Infrastructure) 2007.

In consideration of the application a review of (but not limited) documents as provided by the applicant in support of the application was taken into account detail provided within Attachment C.

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979 (EPAA)

The relevant matters for consideration under the Environmental Planning and Assessment Act, 1979, are:

Section 4.15 'Matters for Consideration'	Comments	
Section 4.15 (1) (a)(i) – Provisions of any environmental planning instrument	See discussion on "Environmental Planning Instruments" ir this report.	
Section 4.15 (1) (a)(ii) – Provisions of any draft environmental planning instrument	At the time of lodgement, the draft <i>State Environmental</i> <i>Planning Policy (Coastal Management) 2016</i> applied to this development. This SEPP has since come into force, however, it included savings provisions to allow this DA to be assessed under the legislation in place at the time of lodgement.	
Section 4.15 (1) (a)(iii) – Provisions of any development control plan	Warringah Development Control Plan applies to this proposal.	
Section 4.15 (1) (a)(iiia) – Provisions of any planning agreement	None applicable.	
Section 4.15 (1) (a)(iv) – Provisions of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation 2000)	Division 8A of the EP&A Regulation 2000 requires the consent authority to consider "Prescribed conditions" of development consent. These matters have been addressed via a condition of consent.	
	<u>Clauses 54 and 109</u> of the EP&A Regulation 2000, Council requested additional information and has therefore considered the number of days taken in this assessment in light of this clause within the Regulations.	
	<u>Clause 92</u> of the EP&A Regulation 2000 requires the consent authority to consider AS 2601 - 1991: The Demolition of Structures. This matter has been addressed via a condition of consent.	
	<u>Clauses 93 and/or 94</u> of the EP&A Regulation 2000 requires the consent authority to consider the upgrading of a building (including fire safety upgrade of development). This matter has been addressed via a condition of consent.	
	<u>Clause 98</u> of the EP&A Regulation 2000 requires the consent authority to consider insurance requirements under the Home Building Act 1989. This matter has been addressed via a condition of consent.	
	<u>Clause 98</u> of the EP&A Regulation 2000 requires the consent authority to consider the provisions of the Building Code of Australia (BCA). This matter has been addressed	

Section 4.15 'Matters for Consideration'	Comments
	via a condition of consent.
Section 4.15 (1) (b) – the likely impacts of the development, including environmental impacts on the natural and built environment and social and economic impacts in the locality	 (i) The environmental impacts of the proposed development on the natural and built environment are addressed under the Warringah Development Control Plan section in this report. (ii) The proposed development will not have a detrimental social impact in the locality considering the character of the proposal. (iii) The proposed development will not have a detrimental economic impact on the locality considering the nature of the existing and proposed land use.
Section 4.15 (1) (c) – the suitability of the site for the development	These sites are located on the fore dune and suffered significant erosion during storms in June 2016. In order to protect the most vulnerable stretch of Collaroy and Narrabeen Beach (a stretch that includes these sites), a series of connected coastal protection walls will need to be constructed. This proposal will form part of this larger contiguous wall. The site is therefore considered suitable for the proposed development.
Section 4.15 (1) (d) – any submissions	See discussion on "Public Exhibition" in this report.
made in accordance with the EPA Act or EPA Regs	In summary, all submissions received in relation to this application are supportive of the proposal.
Section 4.15 (1) (e) – the public interest	The proposed coastal protection works are permitted with consent under <i>State Environmental Planning Policy</i> <i>(Infrastructure) 2007</i> and, once covered in sand and vegetation, will not be visible from the public beach. Public access to the beach will not be impeded by the works and natural coastal processes will not be significantly adversely affected.
	The works will assist in the protection of public infrastructure and private property. This will be achieved by the construction of the proposal and other similar coastal protection works, and will have an overall public benefit.
	In this regard, no matters have arisen in this assessment that would justify the refusal of the application in the public interest.

COASTAL PROTECTION ACT 1979

Section 55M of the Coastal Protection Act 1979 states:

(1) 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.

(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. Section 80A (6) of the Environmental Planning and Assessment Act 1979 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).

(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.

Comment:

The design, construction and proposed on-going maintenance of the coastal protection works will not unreasonably limit public access to, or the use of, the beach. The works will also not pose a threat to public safety.

Conditions of consent have been recommended to ensure the restoration of the beach and/or land adjacent to the beach if any increased erosion of the beach or adjacent land is caused by the presence of the works. Conditions have also been recommended to ensure the on-going maintenance of the works.

The recommended conditions can be viewed at the end of this report.

Note: The *Coastal Protection Act* 1979 was repealed on 3 April 2018 and was replaced by the *Coastal Management Act* 2016. The new act included the following relevant savings provisions:

5 General saving

Subject to this Schedule and the regulations:

(a) anything begun before the repeal date under a provision of the former Act for which there is a corresponding provision in this Act may be continued and completed under the former Act as if this Act had not been enacted, and

The DA was lodged prior to 3 April 2018. The new act has a provision (Clause 27) that corresponds to Section 55M in the former act and in this regard, the development has been assessed under the

Coastal Protection Act 1979.

EXISTING USE RIGHTS

Existing Use Rights are not applicable to this application.

BUSHFIRE PRONE LAND

The site is not classified as bush fire prone land.

NOTIFICATION & SUBMISSIONS RECEIVED

The subject development application has been publicly exhibited in accordance with the Environmental Planning and Assessment Act 1979, Environmental Planning and Assessment Regulation 2000 and the relevant Development Control Plan.

As a result of the public exhibition process council is in receipt of 46 submission/s from:

Name: Address:		
Rebecca Hall	9 / 32 Campbell Avenue CROMER NSW 2099	
Reece Anthony Crawford	18 Idaline Street COLLAROY PLATEAU NSW 2097	
Rebecca Villarreal		
Mrs Susan Claire Cummins	6 / 91 - 93 Old Pittwater Road BROOKVALE NSW 2100	
Mr David Bain	4 Wilga Street ELANORA HEIGHTS NSW 2101	
Dr Robert Alexander Orth	9/1150 Pittwater Road COLLAROY BEACH NSW 2097	
Mrs Helen Zielinski	13 / 1211 Pittwater Road COLLAROY NSW 2097	
Selena Conna	1166 A Pittwater Road COLLAROY NSW 2097	
Ms Margaret McVay Murray	7 / 1 - 5 Collaroy Street COLLAROY NSW 2097	
Mr Robert Speirs-Ferrari	188 Warringah Road BEACON HILL NSW 2100	
lan Parker	42 Bower Street MANLY NSW 2095	
Mrs Agnes Pamela Hulme	12 / 12 - 14 Wetherill Street NARRABEEN NSW 2101	
Kim D'Aoust		
Scott Verrall		
Sally Martin		
Wayne Borthwick	14 / 27 Seabeach Avenue MONA VALE NSW 2103	
Lisa Beresford	21 Woolgoolga Street NORTH BALGOWLAH NSW 2093	
Mr Ryan Collins	8 Monash Road GLADESVILLE NSW 2111	
Paul Brewster	5 / 28 Kooloora Avenue FRESHWATER NSW 2096	
Carl Taylor	44 Arthur Street DEE WHY NSW 2099	
Mrs Daniella McBride	1 / 35 Richmond Avenue DEE WHY NSW 2099	
Lorraine Bond		
Mr Marcel Andrew Melo	91 / 0 Thuddungra Road DUFFYS FOREST NSW 2084	
Margaret Mary Page	56 Suffolk Avenue COLLAROY NSW 2097	
Dianne King	63 / 26 Macpherson Street WARRIEWOOD NSW 2102	
Mr John David Dwyer	1 Kurara Close TERREY HILLS NSW 2084	

Name:	Address:	
Mr Daniel Lawrence Vidoni	13 / 1150 Pittwater Road COLLAROY NSW 2097	
Ms Christiane Raffler	9 / 36 Park Street NARRABEEN NSW 2101	
Mr Nicholas Amoroso	7 Bullara Crescent NARRAWEENA NSW 2099	
Ms Rebecca Lea Carapet	6 Nursery Place BELROSE NSW 2085	
Mr Stefan Belic	121 Crescent Road NEWPORT NSW 2106	
Mr Travis John Winter	23 / 2 - 10 Jenkins Street COLLAROY NSW 2097	
David Patrick Nolan	11 / 1 Ramsay Street COLLAROY NSW 2097	
Mr Michael George Hopkins Ms Deborah Roseman Hopkins	C/- Tomasy Planning Level 1, 1073 Pittwater Road COLLAROY NSW 2097	
Mr James Steele	11 Kywong Road ELANORA HEIGHTS NSW 2101	
Clay Elliot	1 / 26 Wetherill Street NARRABEEN NSW 2101	
Anna Craig	33 Hendy Avenue COLLAROY NSW 2097	
Mr Evan Godbee	1138 Pittwater Road COLLAROY NSW 2097	
Mitzi Caroline Martin	7 / 17 Clarke Street NARRABEEN NSW 2101	
Mr Alexey Dubrovin		
Mrs Lisa Morris	12 Kuttabul Place ELANORA HEIGHTS NSW 2101	
Stephen Paddison	19 Jackson Street BALGOWLAH NSW 2093	
Ms Jacqueline Ann Jones	33 / 1259 - 1263 Pittwater Road NARRABEEN NSW 2101	
Ms Suzanne Degiorgio	12 / 52 - 58 Howard Avenue DEE WHY NSW 2099	
Gregory Philip Mullins	101 Grover Avenue CROMER NSW 2099	
Mr Thomas Roger Cutting	Po Box 691 MONA VALE NSW 1660	

All 46 submissions received in relation to this application were in support of the proposal.

No matters were raised in the submissions that require assessment or need to be addressed by conditions.

MEDIATION

No requests for mediation have been made in relation to this application.

REFERRALS

Internal Referral Body	Comments
Environmental Health (Acid Sulphate)	The seaward margin of the excavations is not expected to extend any lower than about RL -0.3m AHD (the top surface of the gently sloping cemented sand layer). Works are being proposed to be undertaken in Class 5 acid sulphate soils. An Acid Sulphate Soil Management Plan is not required because it is not likely that the proposed works will disturb acid sulphate soils or the associated watertable.
	No objections to the proposal.

Internal Referral Body	Comments		
Landscape Officer	The proposed landscape species and re-vegetation plan are satisfactory. No objections to approval.		
NECC (Bushland and Biodiversity)	The location of the Sea Wall is may Wildlife Corridor and re-vegetation species (as proposed) is consisten (Part E4 Wildlife Corridors) and an	in this area usi t with the object improvement of	ng local native stives of the DCP on the status quo.
	Natural Environment, Biodiversity r subject to conditions as recommen		ons to the proposal
NECC (Coast and	Matters for consideration		Comments
Catchments)	Are the proposed works located in an area considered to be generally suitable for coastal protection as identified in:		
	The Coastal Zone Management Plan for Collaroy-Narrabeen Beach and Fishermen's Beach.	YES	
	The Northern Beaches Coastal Erosion Policy	YES	
	Landowners Consent		
	Is Landowner's consent from the Department of Primary Industries required for any private protection works that extend onto or under Crown Land.	YES	
	Has Landowner's consent from the Department of Primary Industries been granted for any private protection works that extend onto or under Crown Land.	NO	Request for landowners consent submitted. Application to be finalised once decision on landowners consent is provided.
	Northern Beaches Coastal Eros	ion Policy	
	Pursuant to Section 4.15(a)(i) of the Environmental Planning and Assessment Act 1979, the requirements of the Northern Beaches Coastal Erosion Policy are to be satisfied as follows:		
	Supporting information: Is the application accompanied by sufficient information to address the requirements of this policy, the CZMP, the Collaroy-Narrabeen Beach Coastal Protection Works Design Specifications and the Collaroy-Narrabeen Protection Works Assessment Checklist.		
	Survey identifying the Yes location of all relevant	Addres Statem	sed in both ent of

nternal Referral Body	Comments		
	property boundaries with respect to the proposed works including the location of the eastern boundary having regard to any erosion and accretion processes.		Environmental Effects and Plans as submitted with application documentation.
	Certification that the works set out in the application are supported by appropriately experienced and qualified specialists in the field of coastal engineering.	Yes	Qualifications of specialist who prepared documentation outlined in Statement of Environmental Effects.
	In the case of an application dealing with multiple properties, that an enforceable agreement from all owners has been obtained to fund and construct the works as a single contiguous project.	No	To be addressed as a condition of consent.
	A mechanism to ensure appropriate protections for Council and the public in the event that the applicant cannot complete the works in a timely professional; manner (e.g. bank guarantee in favour of Council in the event of non-compliance or failure to complete the works).	No	To be addressed as a condition of consent.
	Appropriate mechanisms that allow for the efficient maintenance, funding of offsets for any adverse impacts on adjacent properties and/or the public beach and any renewal of the works as required by or on behalf of the benefiting property owner/s.	No	To be addressed as a condition of consent.
	An assessment demonstrating that the development does not have a long-term impact on coastal processes in the Collaroy-Narrabeen	Yes	Addressed in the Statement of Environmental Effects and consistent with Collaroy- Narrabeen Beach Coastal Protection Assessment

ernal Referral Body	Comments			
	embayment.		(Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016)	
	An assessment demonstrating that the development does not have a long-term impact on public access to or along the beach.	Yes	Addressed in the Statement of Environmental Effects and consistent with Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016)	
	An assessment of the impact of climate change and sea level rise on the development and the adjoining beach environment.	Yes	Addressed in the Statement of Environmental Effects and design of the works. Findings consistent with the CZMP for Collaroy- Narrabeen beach and Fishermans Beach (2016) and Northern beaches Coastal Erosion Policy.	
	Demonstration that the works are consistent with the CZMP and the Northern Beaches Coastal Erosion Policy	Yes	Addressed in the Statement of Environmental Effects and design of the works. Findings consistent with the CZMP for Collaroy- Narrabeen beach and Fishermans Beach (2016) and Northern beaches Coastal Erosion Policy.	
	Design and construction:			
	Are the works designed and	Constructed:	Addressed in the	
	To ensure the long-term coastal processes of the Collaroy-Narrabeen Beach embayment are maintained.		Statement of Environmental Effects and consistent with Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016)	
	To ensure that the presence of the works will not adversely impact on adjoining private and	Yes	Addressed in the Statement of Environmental Effects. Plans submitted allow	

nternal Referral Body	Comments		
	public properties, or adversely affect the long- term amenity of the adjoining beach and surf zone.		alternative options for works undertaken concurrently with council works on adjoining lands or before if not coordinated with council works.
	Such that the works are only visible temporarily during and after significant erosion events.	Yes	As addressed in the Statement of Environmental Effects the works are only expected to be visible after significant erosion events. This finding is consistent with Collaroy-Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016)
	To be contiguous, similar and integrated with adjoining protection works constructed in the embayment.	Yes	Details outlined in submitted plans are consistent with councils intent for adjoining works.
	To a consistent design standard that provides an appropriate level of protection from coastal erosion for affected properties.	Yes	Works consistent with Collaroy-Narrabeen Beach Coastal Protection Works Design Specifications.
	To ensure public access is not adversely impacted by any new protection works.	Yes	Addressed in the Statement of Environmental Effects and consistent with Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016)
	To ensure access for ongoing maintenance of the works.	Yes subject to condition	Addressed in the Statement of Environmental Effects and to be conditioned.
	In accordance with the minimum criteria outlined in the Collaroy-Narrabeen Beach Coastal Protection Works Design	Yes	Addressed in coastal engineering report.

Internal Referral Body	Comments		
	Specifications.		
	Maintenance Coastal protection works ar ensures the ongoing level of maintenance consideration	of design perfo	rmance. Have the following
	Undertaking a routine series of inspections.	to condition	To be conditioned that inspections are undertaken when wall is exposed following a storm.
	Ensuring works are renewed in a timely manner such that the design level of protection is not threatened.	-	Addressed and to be conditioned
	Ensuring works are upgraded as required in response to changes in impacts associated with frequency or intensity of storm events or sea level rise associated with climate change.	-	Addressed and to be conditioned
	Ensuring suitable access is retained to the works so that ongoing maintenance can be implemented by private and/or public owners.	,	Addressed and to be conditioned
	Existing protection works (e.g. loose rock or geobags) that are not incorporated into permanent protection works shall be removed by the Principal Asset Owner for the permanent works.	-	Addressed and to be conditioned
	WLEP 2011 requirements Pursuant to Section 4.15(a) Assessment Act 1979, the c Environmental Plan 2011 (V are considered as follows:	(i) of the Enviro bjectives of th VLEP 2011) re	onmental Planning and e Warringah Local levant to coastal protection
	Assessment Consideration	Assessment Acceptability	Further Assessment Comment
	Does the development maintain existing public access to and along the coastal foreshore?	Yes	As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy-

Internal Referral Body	Comments		
			Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Is the development suitable in relation to the surrounding area and its impact on the natural scenic qualities?	Yes	Addressed in the Statement of Environmental Effects. Design and footprint of proposed works is suitable.
	Is the development suitable in relation to the surrounding area and its impact on the amenity of the coastal foreshore?	Yes	As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Is the development suitable in relation to its cumulative impacts and other development in the coastal catchment?	No	As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Will the development adversely affect coastal process significantly?	No	As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Will the development increase the impacts of coastal hazards to other development or properties significantly?	No	As addressed in the Statement of Environmental Effects and design for proposed works, findings are

Internal Referral Body	Comments		
			consistent with the Collaroy-Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Will the development increase the impacts of coastal hazards to the detriment of the environment?	Yes	As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Does the development incorporate appropriate measures to minimise exposure to coastal hazards?	Yes	Yes, works consistent with Collaroy-Narrabeen Beach Coastal Protection Works Design Specifications.
	Does the development incorporate appropriate for modification in response to sea level rise.	Yes	Yes, works consistent with Collaroy-Narrabeen Beach Coastal Protection Works Design Specifications.
	WDCP 2011 requirements Pursuant to Section 4.15(a) Assessment Act 1979, the Control Plan 2011 (WDCP 2	(i) of the Enviro	onmental Planning and le Warringah Development
	Assessment Consideration	Assessment Acceptability	Further Assessment Comment
	Does the proposal provide protection from coastal processes and coastline hazards for proposed buildings and works along Collaroy Beach, Narrabeen Beach and Fisherman's Beach?	Yes	Yes, works consistent with Collaroy-Narrabeen Beach Coastal Protection Works Design Specifications
	Does the development mitigate any adverse impact on the scenic quality of Collaroy, Narrabeen and Fisherman's Beaches?	Yes	As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal

Internal Referral Body	Comments		
			Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Does the development mitigate any adverse impact on the coastal processes affecting adjacent land?	Yes	As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Does the development retain the area's regional role for public recreation and amenity?	Yes	As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).
	Requirements under SEPP 71 – Coastal Protection; and Clause 55 - Development within the coastal zone [compulsor land to which Plan applies includes land in the coastal zone] The proposal has been identified as being located within a Sensi Coastal Location as identified on the Coastline Hazard Map. Accordingly, pursuant to Section 4.15(a)(i) of the Environmental Planning and Assessment Act 1979, the provisions of State Environmental Planning Policy No.71 – Coastal Protection are to considered.		
	Following the lodgement of this DA, SEPP 71 was repealed and replaced by the <i>State Environmental Planning Policy (Coastal Management) 2018</i> .		•
	Clause 21 of SEPP (Coasta "The former planning provis does not apply) to a develo determined, immediately be relation to land to which this	sions continue pment applica efore the comr	to apply (and this Policy tion lodged, but not finally mencement of this Policy in
	In this regard, SEPP 71 ap	plies to this ap	plication.

al Referral Body	Comments		
	Assessment	Assessment	Further
	Consideration	Acceptability	Assessment Comment
	Is the development acceptable with regard to the SEPP 71:	Yes	As addressed in the Statement of Environmental Effects.
	(a) to protect and manage the natural, cultural, recreational and economic		
	attributes of the New South Wales coast, and		
	(f) to protect and preserve beach environments and beach amenity, and		
	(g) to protect and preserve native coastal vegetation,		
	and (h) to protect and preserve the marine		
	environment of New South Wales, and (i) to protect and preserve rock		
	<i>preserve rock</i> platforms, and (j) to manage the coastal zone in		
	accordance with the principles of ecologically		
	sustainable development (within the meaning of		
	section 6 (2) of the Protection of the Environment		
	Administration Act 1991), and… (I) to encourage a strategic approach		
	to coastal management.		
	Does the development implement measures to conserve animals (within the meaning of the	Not Applicable	No further comment
	Threatened Species Conservation Act 1995) and plants (within the		

processes and coastal hazards acceptable?Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).Are the likely impacts of development on the water quality of coastal waterbodies acceptable?Not ApplicableNo further commentIs the development acceptable with regard to: (i) the cumulative impacts of the proposed development on the environment, andYesAs addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment	Internal Referral Body	Comments		
implement measures to conserve fish (within the meaning of Part 7A of the Fisheries Management Act 1994) and marine vegetation (within the meaning of that Part), and their habitats?ApplicableDoes the development take into consideration existing wildlife corridors and the impact of development on these corridors?Not ApplicableNo further commentAre the likely impact of coastal processes and coesses and coastal processes and coastal hazards oceptable?YesAs addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory, 2016).Are the likely impacts of development on the water quality of coastal waterbodies acceptable?Not YesNo further commentAre the likely impacts of development on the water quality of coastal waterbodies acceptable?Not YesNot As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory, 2016).Are the likely impacts of development on the water quality of coastal waterbodies acceptable?Not As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection AssessmentIs the development acceptable with regard to: (i) the cumulative impacts of the proposed development on the environment, andYes As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment <th></th> <th>-</th> <th></th> <th></th>		-		
take into consideration existing wildlife corridors and the impact of development on these corridors?Not ApplicableAre the likely impact of coastal processes and coastal hazards on the development and any likely impacts of the development on coastal processes and coastal hazards acceptable?YesAs addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory, 2016).Are the likely impacts of development on the water quality of coastal waterbodies acceptable?Not ApplicableAre the likely impacts of development on the water quality of coastal waterbodies acceptable?Not As addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment of the proposed development on the environment, and		implement measures to conserve fish (within the meaning of Part 7A of the Fisheries Management Act 1994) and marine vegetation (within the meaning of that Part), and		No further comment
coastal processes and coastal hazards on the development and any likely impacts of the development on coastal processes and coastal hazards acceptable?Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016).Are the likely impacts of development on the water quality of coastal waterbodies acceptable?Not 		take into consideration existing wildlife corridors and the impact of development on these		No further comment
development on the water quality of coastal waterbodies acceptable?ApplicableIs the development acceptable with regard to:YesAs addressed in the Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coasta Protection Assessment		coastal processes and coastal hazards on the development and any likely impacts of the development on coastal processes and coastal	Yes	Statement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research
acceptable with regard to:Statement of Environmental Effects, findings are consistent with the Collaroy- development on the environment, andStatement of Environmental Effects, findings are consistent with the Collaroy- Narrabeen Beach Coasta Protection Assessment		development on the water quality of coastal		No further comment
of the proposedwith the Collaroy-development on theNarrabeen Beach Coastaenvironment, andProtection Assessment		acceptable with regard to:	Yes	Statement of Environmental Effects,
		of the proposed development on the		with the Collaroy- Narrabeen Beach Coastal
(ii) measures to ensure that water and energy usage by the proposed development is efficient		that water and energy usage by the proposed		Laboratory and UNSW Water Research

Has Section 55M of the Coastal Protection Act 1979 been satisfied in the conditions of consent for the proposed coastal protection works? Yes

Conclusion / General Comments

Internal Referral Body	Comments
	The proposal is supported subject to conditions. The information provided has been peer reviewed and is considered to be consistent with:
	 The Northern Beaches Coastal Erosion Policy The CZMP for Collaroy-Narrabeen Beach and Fishermans Beach Collaroy-Narrabeen Beach Coastal Protection Assessment Collaroy-Narrabeen Beach Coastal Protection Works Design Specifications
	To assist with the assessment of this application Northern Beaches Council has sought a peer review of the documentation submitted with the DA. In summary this review found that the design of the proposed works is considered to be consistent with the Collaroy-Narrabeen Coastal Protection Works Design Specifications.
	Based on the advice provided in the peer review the following matters relevant to the drawings (S.01 to S.08) submitted with the application will be conditioned to be completed prior to certification of the construction certificate.
	 Approval is granted for the design as specified in drawing S.03 allowing for the works at the road ends of Ramsay Street and Stuart Street to proceed concurrently with the works at 1126-1144. Drawing S.03 be amended to describe where the pool located at 1142 Pittwater Road will be relocated to in the event that relocation is adopted. Drawing S.04 be removed Drawing S.06 a note be added to the drawing outlining the temporary protective works that would be employed in the event there is insufficient sand on the beach at the time of construction to create an effective sand bund. Drawing S.06 Note 7 be expanded to include the requirement for sand that is placed over the revetment at the completion of rock works to be washed into the voids in the revetment to avoid sink holes forming in the reinstated beach surface. Drawings S.07 and S.08 the text within the drawing beginning "cover revetment with sand" be expanded to include the requirement for sand that is placed over the revetment at the completion of surface. Drawings S.07 and S.08 notes be added to both drawings specifying what the backfill material shall comprise, that sand sized material for backfill shall not be sourced from the beach, and that backfill material imported to the site shall be classified as Virgin Excavated Natural Material (VENM). Drawings S.07 and S.08 a note be added to both drawings to clarify that any sand material (free of deleterious materials) excavated to accommodate the rock revetment should be

Internal Referral Body	Comments		
	 placed on the beach seaward of the revetment and shaped to a natural profile. Drawings S.07 and S.08 a note be added to detail the action the ensure backfill material is not lost through voids of the armour layers in the vicinity of the revetment crest where there is no apparent filtration design. Drawings S.07 and S.08 a note be added identifying that it may be difficult to maintain a temporary excavation batter at 1V: 1.5H in sand below the groundwater level. Therefore, temporary support of the excavation and/or use of suitable rock to form a batter of 1V:1.5H may be required. 		
	<u>Updated comments:</u> The above dot points have been satisfied by the amended plans and are no longer required to be conditioned.		
	Recommendation		
	No objections to approval.Unlikely Significant Impact - Subject to conditions		
NECC (Development Engineering)	The proposed inter allotment drainage would require easements to be created over adjoining properties to Council's drainage system. A deferred commencement conditions has been recommended in order to legalise the proposed drainage system. No Development Engineering objection is raised to the proposed development subject to conditions.		
Parks, reserves, beaches, foreshore	No objections raised and no conditions recommended.		
Property Management and Commercial	If the proposed rock wall has to be built on public land rather than private land, it is suggested that any development consent be conditioned so that appropriate Positive Covenants are registered on all titles to the private properties benefiting from this wall which passes all ongoing responsibilities for the rock wall to the private properties (including indemnities and insurance) (i.e. the public land owner or manager will not be responsible for any loss of damage to any public or private property) and if any necessary work is not done by the private property owners, this can be done by the public land owner or manager and can be recovered from the private property owners. This proposed condition should also be verified by Crown Lands which may also have other conditions. The cost of preparing the necessary Positive Covenants and registration costs etc must also be funded by the private property owners. Planners comment:		

Internal Referral Body	Comments	
	Appropriate conditions of consent are included in the recommenda of this report.	ation
Road Reserve	The proposed protection wall has no significant impact to Council's assets on the road reserve. As such, Roads Asset has no objection the application.	
	If any road closure may be required during construction, a traffic management report/ plan shall be submitted to Council for approva	al.
Strategic and Place Planning (Heritage Officer)	Discussion of reason for referral	
(nemage emeer)	This application does not apply to a heritage item or conservation area listed in Schedule 5 of Warringah Local Environmental Plan 2011, nor are the works located within the vicinity of any listed heritage items or conservation areas.	
	It is understood that this application has been referred due to the presence of WWII Tank Traps on Collaroy Beach, which were uncovered during the recent storms. These structures may be of heritage significance, but they have not been assessed and are no currently listed as a heritage item.	ot
	Details of heritage items affected	
	No listed heritage items or conservation areas are affected.	
	The WWII Tank Traps are concrete pyramid structures which were uncovered at the end of Frazer Street, during the storms in June 2016. These tetrahedron structures were used during WWII to imp invasion. On the Northern Beaches they were placed along beach fronts to stop enemy sea invasion. As mentioned, these Tank Trap have not undergone a heritage assessment. Research has revealed that tank traps were placed on the Collaroy beachfront in February 1946 to protect properties that had been affected by a major storm June 1945.	ede os ed
	Therefore the Tank Traps uncovered at the end of Frazer Street by the 2016 storm, may not be in-situ, as they would have been origin been placed during WWII. It is likely that they were more separated along the beachfront, but relocated into one spot in 1946 to protect certain properties. The storm of 1946 appears to have affected an area to the south of the most recently affected area, and therefore south of the area where this new seawall is proposed. This correla with the uncovering of the Tank Trap concrete structures at the end Frazer Street.	nally d t
	Other relevant heritage listings	
	Sydney Regional Environmental Plan (Sydney Harbour	NO

Internal Referral Body	Comments	
	Australian Heritage Register	NO
	NSW State Heritage Register	NO
	National Trust of Aust (NSW) Register	NO
	RAIA Register of 20th Century Buildings of Significance	NO
	Other	No
	Consideration of Application	
	This application proposes the construction of a seawall between Ramsay Street and Stuart Street, Collaroy, on the seaward side residential properties, to provide protection from storms.	
	As outlined, there are no known heritage items in the area affect the proposed works, nor are there any listed heritage items withivicinity of the proposed works. The Tank Traps uncovered in the 2016 storm were located at the end of Frazer Street, some 140 metres south of these proposed works. While no assessment has been undertaken of these structures, it is likely that they may be local heritage significance.	n the June s
	It is considered unlikely that the proposed seawall construction wimpact upon these concrete WWII Tank Trap structures, given the location. It is also considered unlikely that any Tank Traps will be uncovered in the area subject to the proposed works, given that the area was exposed during the June 2016 storms, no such structures were uncovered.	neir Ə
	Therefore, no heritage objections are raised to this application however, it might be prudent to add a condition to the effect that should any concrete WWII Tank Trap structures be uncovered d construction, that work stop so that the structures can be assess an appropriately qualified heritage specialist.	at uring
	Consider against the provisions of CL5.10 of WLEP.	
	Is a Conservation Management Plan (CMP) Required? NO Has CMP been provided? N/A Is a Heritage Impact Statement required? NO Has a Heritage In Statement been provided? N/A	

External Referral Body	Comments
Ausgrid: (SEPP Infra.)	The proposal was referred to Ausgrid. No response has been received within the 21 day statutory period and therefore, it is assumed that no objections are raised and no conditions are recommended.
NSW Department of Lands - Lands and Property	The Department of Industry - Lands, granted unconditional owners consent on 26 June 2018, stating:

External Referral Body	Comments
Management Authority	
	"It has been identified that the Land Owners Consent provided to applications DA2017/0591 and DA2017/0947 were provided without prejudice. I can confirm that Land Owners Consent for 0A2017/0591 and DA2017/0947 have been issued and can be relied upon by Council, without qualification to determine the applications."
	Additional comments from the department included:
	"Coastal Zone Management Plan The requirements of the CZMP, more specifically the issues raise in Kylie Hargreaves letter of the 13 October 2016 will be addressed as part of the tenure approval process.
	Reserve Purpose I note Council's submission and support for the additional purpose of Coastal protection to be added to Reserve 79606. The department supports the premise for Council seeking a qualification of the additional reserve purpose, however, this isn't something that is available to be implemented through the gazettal process. Council as Reserve Trust manager and also the planning consent authority have legislative functions that can ensure this is the case with any future proposed developments."

ENVIRONMENTAL PLANNING INSTRUMENTS (EPIs)*

All, Environmental Planning Instruments (SEPPs, REPs and LEPs), Development Controls Plans and Council Policies have been considered in the merit assessment of this application.

In this regard, whilst all provisions of each Environmental Planning Instruments (SEPPs, REPs and LEPs), Development Controls Plans and Council Policies have been considered in the assessment, many provisions contained within the document are not relevant or are enacting, definitions and operational provisions which the proposal is considered to be acceptable against.

As such, an assessment is provided against the controls relevant to the merit consideration of the application hereunder.

State Environmental Planning Policies (SEPPs) and State Regional Environmental Plans (SREPs)

SEPP 55 - Remediation of Land

Clause 7 (1) (a) of SEPP 55 requires the Consent Authority to consider whether land is contaminated. Council records indicate that the subject site has been used for residential and public recreation purposes for a significant period of time with no prior land uses. In this regard it is considered that the site poses no risk of contamination and therefore, no further consideration is required under Clause 7 (1) (b) and (c) of SEPP 55 and the land is considered to be suitable for the residential and public recreation land use. Following the lodgement of this DA, SEPP 71 has been repealed and replaced by the State Environmental Planning Policy (Coastal Management) 2018.

Clause 21 of SEPP (Coastal Management) 2018 states:

"The former planning provisions continue to apply (and this Policy does not apply) to a development application lodged, but not finally determined, immediately before the commencement of this Policy in relation to land to which this Policy applies."

In this regard, SEPP 71 applies to this application.

The application has been assessed against the relevant sections of SEPP 71, below.

Matters for Consideration		
Is the development located in an area identified as being within:		
100m of the coastline mean high water mark?	Yes	
A Sensitive Coastal Location under SEPP 71?	Yes	
A Zone of Wave Impact under WLEP 2011?	Yes	
A Zone of Slope Adjustment under WLEP 2011?	Yes	
A Reduced Foundation Capacity under WLEP	Yes	
2011?		

Requirements under SEPP 71 – Coastal Protection

The proposal has been identified as being located within a Sensitive Coastal Location as identified on the Coastal Zone map gazetted on the 18 November 2005. Accordingly, pursuant to Section 4.15 (a)(i) of the Environmental Planning and Assessment Act 1979, the provisions of State Environmental Planning Policy No.71 – Coastal Protection are to be considered.

Only the relevant sections of State Environmental Planning Policy No.71 – Coastal Protection are identified below.

Assessment Consideration	Answer	Further Assessment Comment
Is the development acceptable with regard to the SEPP 71 Policy aims detailed as follows: (a) to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast, and (f) to protect and preserve beach environments and beach amenity, and (g) to protect and preserve native coastal vegetation, and (h) to protect and preserve the marine environment of New South Wales, and (i) to protect and preserve rock platforms, and (j) to manage the coastal zone in	Yes (subject to conditions)	The proposal is for coastal protection works (a seawall). The wall has been designed in a way to allow the natural processes and functions of the beach to continue. The wall will only come into effect (and be able to be seen) during and after large coastal storms that cause significant erosion. At all other times, the wall has been designed to be covered with sand and vegetation. The wall will have a minimal effect on coastal vegetation, will serve to protect life and property (including public infrastructure) and therefore

Assessment Consideration	Answer	Further Assessment Comment
accordance with the principles of ecologically sustainable development (within the meaning of section 6 (2) of the Protection of the Environment Administration Act 1991), and (I) to encourage a strategic approach to coastal management.		is consistent with the aims of this policy.
Does the development implement measures to conserve animals (within the meaning of the <i>Threatened Species Conservation</i> <i>Act 1995</i>) and plants (within the meaning of that Act), and their habitats?	Νο	The development is of such a nature that no measures to conserve animals, plants and their habitats are necessary.
Does the development implement measures to conserve fish (within the meaning of Part 7A of the <i>Fisheries Management Act 1994</i>) and marine vegetation (within the meaning of that Part), and their habitats?	No	The development is of such a nature that no measures to conserve fish, marine vegetation and their habitats are necessary.
Does the development take into consideration existing wildlife corridors and the impact of development on these corridors?	Yes	The wall has been designed in a way to allow the natural processes and functions of the beach to continue. The wall will only come into effect (and be able to be seen) during and after large coastal storms that cause significant erosion. At all other times, the wall has been designed to be covered with sand and vegetation.
Are the likely impact of coastal processes and coastal hazards on the development and any likely impacts of the development on coastal processes and coastal hazards acceptable?	Yes (subject to condition)	The impacts from and on the development are acceptable. Conditions have been recommended by Council's Natural Environment - Coastal Officers to ensure impacts are managed during the life of the works.
Are the likely impacts of development on the water quality of coastal waterbodies acceptable?	Yes	N/A
Is the development acceptable with regard to: (i) the cumulative impacts of the	Yes	Council's Natural Environment - Coastal Officers and the applicants experts have assessed the cumulative impacts of the proposed development on the

Assessment Consideration	Answer	Further Assessment Comment
proposed development on the environment, and		environment. These impacts are acceptable.
(ii) measures to ensure that water and energy usage by the proposed development is efficient		
Does the development, include a non-reticulated system? Yes/No	No, the development does not propose a non-reticulated system.	N/A
If Yes:		
Will the system, or is likely to, result in a negative effect on the water quality of the sea or any nearby beach, or an estuary, a coastal lake, a coastal creek or other similar body of water, or a rock platform?		
Does the development seek consent, or result in, untreated stormwater being discharged into the sea, a beach, or an estuary, a coastal lake, a coastal creek or other similar body of water, or onto a rock platform?	No	N/A

SEPP (Infrastructure) 2007

Ausgrid

Clause 45 of the SEPP requires the Consent Authority to consider any development application (or an application for modification of consent) for any development carried out:

- within or immediately adjacent to an easement for electricity purposes (whether or not the electricity infrastructure exists).
- immediately adjacent to an electricity substation.
- within 5.0m of an overhead power line.
- includes installation of a swimming pool any part of which is: within 30m of a structure supporting an overhead electricity transmission line and/or within 5.0m of an overhead electricity power line.

Comment:

The proposal was referred to Ausgrid. No response has been received within the 21 day statutory period and therefore, it is assumed that no objections are raised and no conditions are recommended.

Coastal Protection Works

Division 25 Waterway or foreshore management activities

Following the lodgement of this application, SEPP 71 was repealed and replaced by SEPP (Coastal Management) 2018. This caused the repeal of Clause 129A of SEPP (Infrastructure) 2007 (due to Clause 19 within SEPP (Coastal Management) 2018 now permitting coastal protection works with consent). However, the savings provisions within SEPP (Coastal Management) 2018 state:

"The former planning provisions continue to apply (and this Policy does not apply) to a development application lodged, but not finally determined, immediately before the commencement of this Policy in relation to land to which this Policy applies."

In this regard, Clause 129A of SEPP (Infrastructure) 2007 continues to apply to this application.

Clause 129A of the SEPP lists developments permitted with consent and matters for consideration. Each are addressed below.

(1) Development for the purposes of a sea wall or beach nourishment may be carried out by any person with consent on the open coast or entrance to a coastal lake.

Comment:

The proposal is for a seawall on the open coast of Collaroy Beach.

(2) If a coastal zone management plan does not apply to the land on which any such development is to be carried out, the Coastal Panel has the function of determining a development application for development to which this clause applies.

Comment:

A Coastal Zone Management Plan for Collaroy-Narrabeen Beach applies to the land and therefore, the consent authority is the Northern Beaches Council.

(3) Before determining a development application for development to which this clause applies, the consent authority must take the following matters into consideration:

(a) the provisions of any coastal zone management plan applying to the land,

(b) the matters set out in clause 8 of State Environmental Planning Policy No 71—Coastal Protection,

(c) any guidelines for assessing and managing the impacts of coastal protection works that are issued by the Director-General for the purposes of this clause and published in the Gazette.

Note. Section 55M of the Coastal Protection Act 1979 sets out preconditions to the granting of development consent relating to coastal protection works.

Comment:

(a) Council's Natural Environment - Coastal Officers have assessed the proposal against the coastal zone management plan applying to the land and raised no objection to approval, subject to conditions.

(b) An assessment of the proposal against SEPP 71 has been undertaken above, in this report.

(c) There are draft guidelines titled "*Draft Guidelines for Assessing the Impacts of Seawalls*" that were put out for consultation in 2011. These guidelines have not been issued by the Director-General or published in the Gazette. Notwithstanding, the matters within the draft guidelines have been either

assessed in other sections of this report or incorporated into the recommended conditions of consent.

Note. The *Coastal Protection Act 1979* was repealed and replaced by the *Coastal Management Act 2016* following the lodgement of this DA. However, the savings provisions within the new act allow the DA to be assessed under the former act.

Warringah Local Environmental Plan 2011

Is the development permissible?	Yes
After consideration of the merits of the proposal, is the development consistent with:	
aims of the LEP? Yes	
zone objectives of the LEP?	Yes

Principal Development Standards

Standard	Requirement	Proposed	Complies
Height of	8.5m	The coastal protection wall will sit at or below natural ground	Yes
Buildings:		level and will form part of the foredune of the beach.	

Compliance Assessment

Clause	Compliance with Requirements
4.3 Height of buildings	Yes
5.5 Development within the coastal zone	Yes
6.1 Acid sulfate soils	Yes
6.2 Earthworks	Yes
6.4 Development on sloping land	Yes
6.5 Coastline hazards	Yes

Detailed Assessment

5.5 Development within the coastal zone

Clause 5.5 of the Warringah Local Environmental Plan 2011 states:

(2) Development consent must not be granted to development on land that is wholly or partly within the coastal zone unless the consent authority has considered:

(a) existing public access to and along the coastal foreshore for pedestrians (including persons with a disability) with a view to:

- (i) maintaining existing public access and, where possible, improving that access, and
- (ii) identifying opportunities for new public access, and

Comment:

The proposal will not impede existing public access to the beach. By reinforcing the protection of private land, the public beach will more easily accessible for longer periods of time during the storm season.

(b) the suitability of the proposed development, its relationship with the surrounding area and its impact on the natural scenic quality, taking into account:

(i) the type of the proposed development and any associated land uses or activities (including compatibility of any land-based and water-based coastal activities), and

(ii) the location, and

(iii) the bulk, scale, size and overall built form design of any building or work involved, and

Comment:

The proposed coastal protection works are suitable for the site and will be consistent with the network of coastal protection works along Collaroy and Narrabeen beaches.

The coastal protection works on the subject site are designed to be at or below ground level and will be covered in sand and vegetation. In this regard, the bulk of the works will be largely hidden and the development will therefore not unreasonably impact the scenic quality of the beach front and will not impact on land uses and activities associated with the coast.

- (c) the impact of the proposed development on the amenity of the coastal foreshore including:
- (i) any significant overshadowing of the coastal foreshore, and
- (ii) any loss of views from a public place to the coastal foreshore, and

Comment:

The coastal protection works on the subject site are designed to be at or below ground level and will not result in any unreasonable overshadowing or loss of views to or from the coastal foreshore.

(d) how the visual amenity and scenic qualities of the coast, including coastal headlands, can be protected, and

Comment:

The visual amenity and the scenic quality of the coast will be reasonably protected due to the coastal protection works being located at or below ground level and covered in sand and vegetation.

- (e) how biodiversity and ecosystems, including:
- (i) native coastal vegetation and existing wildlife corridors, and
- (ii) rock platforms, and
- (iii) water quality of coastal waterbodies, and
- *(iv)* native fauna and native flora, and their habitats, can be conserved, and

Comment:

The area that will be the location of the coastal protection wall was heavily damaged and eroded during the storms in June 2016. There are no rock platforms in the area and limited coastal vegetation or habitats for native fauna and flora remained after these storms.

(f) the cumulative impacts of the proposed development and other development on the coastal catchment.

Comment:

The proposed development individually and combined with the eventual line of future coastal protection walls along Collaroy and Narrabeen beaches are necessary to protect private land, public land and critical infrastructure. The nature and location of the proposal and other future similar proposals will not have unacceptable impacts on the coastal catchment.

(3) Development consent must not be granted to development on land that is wholly or partly within the coastal zone unless the consent authority is satisfied that:

(a) the proposed development will not impede or diminish, where practicable, the physical, land-based right of access of the public to or along the coastal foreshore, and

Comment:

The proposed development is located mainly on public land. However, the works will strengthen coastal protection, particularly during large storms. By reinforcing the protection of private and public land, the public beach will more easily accessible for longer periods of time during the storm season. In this regard, the works will not unreasonably impede or diminish, the physical, land-based right of access of the public to or along the coastal foreshore.

(b) if effluent from the development is disposed of by a non-reticulated system, it will not have a negative effect on the water quality of the sea, or any beach, estuary, coastal lake, coastal creek or other similar body of water, or a rock platform, and

Comment:

The development does not involve the disposal of effluent.

(c) the proposed development will not discharge untreated stormwater into the sea, or any beach, estuary, coastal lake, coastal creek or other similar body of water, or a rock platform, and

Comment:

The development does not involve the discharge of stormwater.

- (d) the proposed development will not:
- (i) be significantly affected by coastal hazards, or
- (ii) have a significant impact on coastal hazards, or
- (iii) increase the risk of coastal hazards in relation to any other land.

Comment:

The proposed coastal protection works will be affected by coastal hazards, however, the purpose of the development (in conjunction with other coastal protection works to the north and south) is to protect private land, public land and critical infrastructure.

Overall, the development will not have a significant impact on coastal hazards and, once constructed in conjunction with other neighbouring coastal protection works, will not increase the risk of coastal hazards on any other land.

6.5 Coastline hazards

The objectives of Clause 6.5 - 'Coastline Hazards' require development to:

(a) avoid significant adverse impacts from coastal hazards, and

(b) enable evacuation of coastal risk areas in an emergency, and

(c) ensure uses are compatible with coastal risks, and

(d) preserve and protect Collaroy Beach, Narrabeen Beach and Fishermans Beach as national assets for public recreation and amenity.

In this regard, before granting development consent for earthworks, Council must consider the following matters:

Clause 6.5 - 'Matters for Consideration'	Comments			
Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:				
(a) will not significantly adversely affect coastal hazards	Consistent with the findings of Collaroy-Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016), the proposal will not significantly adversely affect coastal hazards.			
(b) will not result in significant detrimental increases in coastal risks to other development or properties.	Conditions to ensure appropriate integration with adjoining council land have been included in the recommendation. As such, the proposal will not result in significant detrimental increases in coastal risks to other development or properties.			
(c) will not significantly alter coastal hazards to the detriment of the environment.	Consistent with the findings of Collaroy-Narrabeen Beach Coastal Protection Assessment (Manly Hydraulics Laboratory and UNSW Water Research Laboratory, 2016), the proposal will not significantly alter coastal hazards to the detriment of the environment.			
(d) incorporates appropriate measures to manage risk to life from coastal risks.	The works are consistent with the Collaroy-Narrabeen Beach Coastal Protection Works Specifications and will therefore incorporate appropriate measures to manage risk to life from coastal risks.			
(e) avoids or minimises exposure to coastal hazards.	The coastal protection works will minimise exposure to coastal hazards through the design and by covering the wall in sand and vegetation for the majority of the life of its use. The wall is designed to only come into effect during large coastal storms.			
(f) makes provision for relocation, modification or removal of the development to adapt to coastal hazards and NSW sea level rise planning benchmarks.	Actions required to retrofit works have been identified. These actions are recommended to be conditioned as part of a maintenance plan.			

Having regard to the above assessment, it is concluded that the proposed development is consistent with the aims and objectives of WLEP 2011, WDCP and the objectives specified in s.5(a)(i) and (ii) of the Environmental Planning and Assessment Act, 1979. Accordingly, this assessment finds that the proposal is supported, in this particular circumstance.

Warringah Development Control Plan

Built Form Controls

The proposed coastal protection works will sit across Nos. 1126 to 1144 Pittwater Road. For the purposes of the built form control table below, the proposal has been assessed as a single structure.

Built Form Control	Requirement	Proposed	% Variation*	Complies
B1 Wall height	7.2m	The coastal protection wall will sit at or below natural ground level	N/A	Yes
B3 Side Boundary	North - 4m	No encroachments	N/A	Yes
Envelope	South - 4m	No encroachments	N/A	Yes
B5 Side Boundary Setbacks	North - 0.9m	Public reserve - Nil	100%	No
B7 Front Boundary Setbacks	West - 6.5m	Pittwater Road - Minimum of approximately 37m	N/A	Yes
B7 Secondary Front Boundary Setback	South - 3.5m	South (Ramsay Street) - Nil	100%	No
B9 Rear Boundary Setbacks	East - 6m	The coastal protection wall is proposed across the rear boundary and onto adjacent crown land.	100%	No
D1 Landscaped Open Space (LOS) and Bushland Setting	40%	Approximately 31% (1,230sqm)	22.5%	No change

Compliance Assessment

Clause	Compliance with Requirements	Consistency Aims/Objectives
A.5 Objectives	Yes	Yes
B1 Wall Heights	Yes	Yes
B3 Side Boundary Envelope	Yes	Yes
B5 Side Boundary Setbacks	No	Yes
B7 Front Boundary Setbacks	No	Yes
B9 Rear Boundary Setbacks	No	Yes
C2 Traffic, Access and Safety	Yes	Yes
C4 Stormwater	Yes	Yes
C5 Erosion and Sedimentation	Yes	Yes
C6 Building over or adjacent to Constructed Council Drainage Easements	Yes	Yes
C7 Excavation and Landfill	Yes	Yes
C8 Demolition and Construction	Yes	Yes
C9 Waste Management	Yes	Yes
D1 Landscaped Open Space and Bushland Setting	No	Yes
D2 Private Open Space	Yes	Yes
D3 Noise	Yes	Yes
D6 Access to Sunlight	Yes	Yes
D7 Views	Yes	Yes
D8 Privacy	Yes	Yes

Clause	Compliance with Requirements	Consistency Aims/Objectives
D9 Building Bulk	Yes	Yes
D10 Building Colours and Materials	Yes	Yes
D12 Glare and Reflection	Yes	Yes
D14 Site Facilities	Yes	Yes
D20 Safety and Security	Yes	Yes
E1 Preservation of Trees or Bushland Vegetation	Yes	Yes
E4 Wildlife Corridors	Yes	Yes
E7 Development on land adjoining public open space	Yes	Yes
E9 Coastline Hazard	Yes	Yes
E10 Landslip Risk	Yes	Yes

Detailed Assessment

B5 Side Boundary Setbacks

Description of non-compliance

The coastal protection wall is proposed with nil setbacks to all side boundaries.

The control requires a minimum of 0.9m.

Merit consideration

With regard to the consideration for a variation, the development is considered against the underlying Objectives of the Control as follows:

• To provide opportunities for deep soil landscape areas.

Comment:

Only a very small portion of the works are located on the subject sites and the entire structure is designed to be covered in sand and low lying vegetation, post construction. This will mean that sufficient space for deep soil landscape areas will remain on the subject sites.

• To ensure that development does not become visually dominant.

Comment:

The coastal protection wall will sit at or below ground level and will be covered by sand and vegetation. For the majority of the year the coastal protection wall will not be visible. During the autumn and winter seasons, large storm events may reveal the wall, however, it has been designed in a way that sand and vegetation will recover it.

In this regard, the proposal will not become visually dominant in the context of the beach/ocean interface and its intended purpose.

• To ensure that the scale and bulk of buildings is minimised.

Comment:

As above, the coastal protection wall will sit at or below ground level and will be covered by sand and vegetation. In this regard, the scale and bulk of the development will be minimised.

• To provide adequate separation between buildings to ensure a reasonable level of privacy, amenity and solar access is maintained.

Comment:

The wall must be located on the boundary as it needs to link up with adjacent Council walls on the public reserve to the north and the road reserve to the south. As the wall is at or below ground level and on the eastern side of the site (and on crown land), adequate separation between nearby buildings has been achieved and there will be no unreasonable privacy, amenity or solar access impacts caused by the development.

• To provide reasonable sharing of views to and from public and private properties.

Comment:

The coastal protection wall will be at or below ground level and will not result in any unreasonable impacts to views. Public access to the beach will not be affected by the proposal.

Having regard to the above assessment, it is concluded that the proposed development is consistent with the relevant objectives of WLEP 2011, WDCP and the objectives specified in section 5(a) of the Environmental Planning and Assessment Act, 1979. Accordingly, this assessment finds that the proposal is supported, in this particular circumstance.

B7 Front Boundary Setbacks

Description of non-compliance

The coastal protection works have a nil setback to the southern boundary with the Ramsay Street road reserve.

The control allows secondary street setbacks to be a minimum of 3.5m.

Merit consideration:

With regard to the consideration for a variation, the development is considered against the underlying Objectives of the Control as follows:

• To create a sense of openness.

Comment:

The wall must be located on the southern boundary as it needs to link up with the adjacent Council coastal protection works on the Ramsay Street road reserve. As the wall is at or below ground level and has been designed to be covered with sand and vegetation, a reasonable sense of openness will be created. • To maintain the visual continuity and pattern of buildings and landscape elements.

Comment:

The eastern boundaries of all properties and Council land along this section of Collaroy beach will eventually contain coastal protection works. In this regard, the proposal will be consistent with the future visual continuity and pattern of buildings and landscape elements in the area.

• To protect and enhance the visual quality of streetscapes and public spaces.

Comment:

The wall is located at the eastern most edge of the subject site and on crown land and will link up with a future Council constructed wall protecting the Ramsay Street road reserve. Public access to the beach will not be impeded by the proposal and the wall has been designed to be covered with sand and vegetation. In this regard, the visual quality of the public space will be protected.

• To achieve reasonable view sharing.

Comment:

The coastal protection wall will be at or below ground level and will not result in any unreasonable impacts to views. Public access to the beach will not be affected by the proposal.

Having regard to the above assessment, it is concluded that the proposed development is consistent with the relevant objectives of WLEP 2011, WDCP and the objectives specified in section 5(a) of the Environmental Planning and Assessment Act, 1979. Accordingly, this assessment finds that the proposal is supported, in this particular circumstance.

B9 Rear Boundary Setbacks

Description of non-compliance

The coastal protection wall is located across the rear boundary of the site and onto the adjacent beach which is Crown land.

The control requires a minimum rear setback of 6.0m.

The reason so much of these works are located on public land (compared to all of the other coastal protection works along this stretch of Collaroy and Narrabeen Beach) is the shape of the group of properties. For an unknown reason, these 10 properties have eastern boundaries that are approximately 15m further landward than any of the properties to the north or south.

Merit consideration:

With regard to the consideration for a variation, the development is considered against the underlying Objectives of the Control as follows:

• To ensure opportunities for deep soil landscape areas are maintained.

Comment:

The proposal will not result in a significant loss of landscaped open space on the subject sites due to the location of the works (on the boundary of the site and across crown land) and the covering of the wall with sand and vegetation, post construction.

• To create a sense of openness in rear yards.

Comment:

The coastal protection wall will sit at or below ground level and will be covered by sand and vegetation. In this regard, a reasonable sense of openness will be created and maintained. In addition, public access to the beach will not be affected by the proposal.

• To preserve the amenity of adjacent land, particularly relating to privacy between buildings.

Comment:

It is appropriate to locate the wall on and over the eastern boundary due to the need to protect the subject sites and the requirement for the works to link up with adjacent Council walls on the public reserve to the north and the road reserve to the south. As the wall is at or below ground level and the land to the east consists of the beach and ocean, there will be no unreasonable privacy or amenity impacts caused by the development. Public access to the beach will not be affected by the proposal.

• To maintain the existing visual continuity and pattern of buildings, rear gardens and landscape elements.

Comment:

The proposed coastal protection wall will link up with adjacent Council walls on the public reserve to the south and the road reserve to the north. The wall will also be consistent with likely future walls along the majority of the public and private land along Collaroy and Narrabeen beaches.

The coastal protection works are intended to be covered by sand and vegetation. In this regard, the existing visual continuity and pattern of buildings, rear gardens and landscape elements will be maintained.

• To provide opportunities to maintain privacy between dwellings.

Comment:

As the wall is at or below ground level and the land to the east consists of the beach and ocean, there will be no unreasonable privacy or amenity impacts as a result of the development.

Having regard to the above assessment, it is concluded that the proposed development is consistent with the relevant objectives of WLEP 2011 / WDCP and the objectives specified in section 5(a) of the

Environmental Planning and Assessment Act, 1979. Accordingly, this assessment finds that the proposal is supported, in this particular circumstance.

C9 Waste Management

A detailed waste management plan has not been submitted with the application. To ensure proper disposal of waste, a condition has been included in the consent requiring details prior to the issue of a construction certificate.

D1 Landscaped Open Space and Bushland Setting

Description of non-compliance

The sites will provide approximately 31% landscaped open space across the combined area.

The control requires a minimum of 40%

Merit consideration

With regard to the consideration for a variation, the development is considered against the underlying Objectives of the Control as follows:

• To enable planting to maintain and enhance the streetscape.

Comment:

The works are located at the rear of the site and will require no changes to the streetscape.

• To conserve and enhance indigenous vegetation, topographical features and habitat for wildlife.

Comment:

The works are designed to be covered in sand and vegetation post construction. This will enhance indigenous vegetation, the shape of the fore dune and habitat for wildlife.

• To provide for landscaped open space with dimensions that are sufficient to enable the establishment of low lying shrubs, medium high shrubs and canopy trees of a size and density to mitigate the height, bulk and scale of the building.

Comment:

Only a very small portion of the works are located on the subject sites and the entire structure is designed to be covered in sand and low lying vegetation, post construction. Low lying shrubs is appropriate for a beach-side location. Medium high shrubs and canopy trees are not suitable for this project.

To enhance privacy between buildings.

Comment:

The works will have no impact on privacy and will not prevent vegetation being planted on other parts of the site to assist with privacy between the buildings.

• To accommodate appropriate outdoor recreational opportunities that meet the needs of the occupants.

Comment:

The works will help enhance the rear yards of the subject properties and will increase their outdoor recreational opportunities compared to the current situation.

• To provide space for service functions, including clothes drying.

Comment:

Sufficient space for service functions will remain.

• To facilitate water management, including on-site detention and infiltration of stormwater.

Comment:

All water that falls on the works will drain to the beach. The remainder of the site will also continue to drain to the beach. As such, stormwater management will continue to be.

Having regard to the above assessment, it is concluded that the proposed development is consistent with the relevant objectives of WLEP 2011 / WDCP and the objectives specified in s1.3 of the Environmental Planning and Assessment Act, 1979. Accordingly, this assessment finds that the proposal is supported, in this particular circumstance.

E7 Development on land adjoining public open space

Merit consideration:

The development is considered against the underlying Objectives of the Control as follows:

• To protect and preserve bushland adjoining parks, bushland reserves and other public open spaces.

Comment:

The coastal protection works will assist in preserving the public beach and will link with other neighbouring public coastal protection works to form a network of coastal protection.

• To ensure that development responds to its adjacent surroundings to preserve and enhance the natural qualities of the environment.

Comment:

The coastal protection works will link with other neighbouring public coastal protection works. In totality, these works will form part of the fore dune and will be mostly covered in sand and vegetation.

From a coastal engineering and processes perspective, this is the ideal outcome in these circumstances, given the demolition of all development on the fore dune is not a reasonable proposition.

In this regard, the proposed works will be the best option to rebuild and enhance the natural qualities of this environment.

 Development on land adjoining open space is to complement the landscape character and public use and enjoyment of the adjoining parks, bushland reserves and other public open spaces.

Comment:

As previously discussed the works will complement neighbouring protection works, help preserve private and public land and ensure the beach is usable for longer periods of time (due to less damage during large coastal storms).

Having regard to the above assessment, it is concluded that the proposed development is consistent with the relevant objectives of WLEP 2011 / WDCP and the objectives specified in section 5(a) of the Environmental Planning and Assessment Act, 1979. Accordingly, this assessment finds that the proposal is supported, in this particular circumstance.

E9 Coastline Hazard

Merit consideration:

The development is considered against the underlying Objectives of the Control as follows:

• To minimise the risk of damage from coastal processes and coastline hazards for proposed buildings and works along Collaroy Beach, Narrabeen Beach and Fisherman's Beach.

Comment:

The coastal protection works will serve to minimise the risk of damage for the existing buildings on the subject sites. The works will form part of a longer contiguous protection wall along Collaroy and Narrabeen Beach.

Without these works, the 10 subject properties will have no suitable protection against erosion and storm damage and will eventually be washed into the sea. This will destabilise the neighbouring public land and road reserves, resulting in exponentially more damage.

To ensure that development does not have any adverse impact on the scenic quality of Collaroy, Narrabeen and Fisherman's Beaches.

Comment:

The structure is designed to be covered in sand and vegetation post construction and post any storm that exposes the works. In this regard, the scenic quality of Collaroy and Narrabeen Beaches will be reasonably maintained.

 To ensure that development does not adversely impact on the coastal processes affecting adjacent land.

Comment:

When combined with the walls that will be constructed to the north and south of the site, the development will not adversely impact on the coastal processes.

• To retain the area's regional role for public recreation and amenity.

Comment:

The works will not limit public access to the beach and will help maintain the beach after any storm so that it is usable for longer periods for public recreation and amenity.

• To maximise the use of existing infrastructure.

Comment:

The works will assist in the long term protection of Pittwater Road and will, in conjunction with neighbouring coastal protection works, protect public land, public infrastructure and private properties.

Having regard to the above assessment, it is concluded that the proposed development is consistent with the relevant objectives of WLEP 2011 / WDCP and the objectives specified in s1.3 of the Environmental Planning and Assessment Act, 1979. Accordingly, this assessment finds that the proposal is supported, in this particular circumstance.

THREATENED SPECIES, POPULATIONS OR ECOLOGICAL COMMUNITIES

The proposal will not significantly effect threatened species, populations or ecological communities, or their habitats.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The proposal is consistent with the principles of Crime Prevention Through Environmental Design.

POLICY CONTROLS

Northern Beaches Council Contributions Plan 2018

The proposal is subject to the application of Council's Section 7.12 Development Contributions Plan.

The following monetary contributions are applicable:

Northern Beaches Council Contributions Plan 2018		
Contribution based on a total development cost of \$ 1,708,739		
Contributions	Levy Rate	Payable
Total Section 7.12 Levy	0.95%	\$ 16,233
Section 7.12 Planning and Administration	0.05%	\$ 854
Total	1%	\$ 17,087

CONCLUSION

The site has been inspected and the application assessed having regard to all documentation submitted by the applicant and the provisions of:

- Environmental Planning and Assessment Act 1979;
- Environmental Planning and Assessment Regulation 2000;
- All relevant and draft Environmental Planning Instruments;
- Warringah Local Environment Plan;
- Warringah Development Control Plan; and
- Codes and Policies of Council.

This assessment has taken into consideration the submitted plans, Statement of Environmental Effects, all other documentation supporting the application and public submissions, and does not result in any unreasonable impacts on surrounding, adjoining, adjacent and nearby properties subject to the conditions contained within the recommendation.

In consideration of the proposal and the merit consideration of the development, the proposal is considered to be:

- Consistent with the objectives of the DCP
- Consistent with the zone objectives of the LEP
- Consistent with the aims of the LEP
- Consistent with the objectives of the relevant EPIs
- Consistent with the objects of the Environmental Planning and Assessment Act 1979

It is considered that the proposed development satisfies the appropriate controls and that all processes and assessments have been satisfactorily addressed.

RECOMMENDATION

THAT Council as the consent authority grant Development Consent to DA2017/0591 for Construction of Coastal Protection Works on land at Lot A DP 167490, 1128 Pittwater Road, COLLAROY, Lot 1 DP 121939, 1130 Pittwater Road, COLLAROY, Lot 5 DP 10757, 1132 Pittwater Road, COLLAROY, Lot 4 DP 10757, 1134 Pittwater Road, COLLAROY, Lot 3 DP 10757, 1136 Pittwater Road, COLLAROY, Lot 2 DP 10757, 1138 Pittwater Road, COLLAROY, Lot 1 DP 10757, 1140 Pittwater Road, COLLAROY, Lot 6 DP 111254, 1142 Pittwater Road, COLLAROY, Lot 7 DP 111254, 1144 Pittwater Road, COLLAROY, Lot 7 OLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, Lot 1 DP 170202, 1126 Pittwater Road, COLLAROY, Lot 7 COLLAROY, COLLAROY, Subject to the conditions printed below:

DEFERRED COMMENCEMENT CONDITIONS

1. Stormwater Drainage Easement

As the natural fall of the land is towards the rear of the site, the disposal of stormwater drainage is proposed via an inter allotment drainage system which requires easements through the downstream properties to be created in favour of the respective lots. The easement is to be created under Sections 88B, and/or 88K of the Conveyancing Act 1919 or the Real Property Act 1900. The applicant must provide Council with evidence of the creation of the easement in order to activate the consent.

Reason: To ensure adequate provision is made for stormwater drainage from the site in a proper manner that protects adjoining properties.

2. Demonstration of agreement between multiple properties

The applicant is to provide evidence to the consent authority to the satisfaction of the consent authority of an enforceable agreement that all owners will fund and construct the new rock revetment and ancillary works ('coastal protection works') as a single contiguous project to be completed within 12 months of the on-site commencement of the construction works. The agreement must restrain transfer, assignment or novation by any owner unless the transferee/assignee enters into an agreement in similar terms. If the owners create a trust or corporate entity for the purposes of construction of the works, such entity is to be bound by the terms of the agreement. The agreement may provide that it will cease to operate upon the issue of a final occupation certificate.

Reason: To ensure satisfactory completion of the coastal protection works.

3. Easements for construction, support and maintenance

The applicant is to provide evidence to the consent authority to the satisfaction to the consent authority that:

a) An easement has been registered over so much of Lot 1 DP 170202, Lot A DP 167490, Lot 1 DP 121939, Lot 5 DP 10757, Lot 4 DP 10757, Lot 3 DP 10757, Lot 2 DP 10757, Lot 1 DP 10757, Lot 6 Sec 13 DP 111254 and Lot 7 Sec 13 DP 111254 as necessary for construction, support and maintenance in favour of each of the owners to allow each owner to carry out its obligations under this consent and otherwise burdening the owners of the properties and their successors in title to maintain the coastal protection works to the standard approved by the Development Consent, approved plans and specifications in the Consent. The easement may provide that it shall be released if the coastal protection works are removed.

b) An easement for support has been registered in relation to the part of the coastal protection

works on the Crown Land. The easement is to:

i. Burden Lot 1 DP 170202, Lot A DP 167490, Lot 1 DP 121939, Lot 5 DP 10757, Lot 4 DP 10757, Lot 3 DP 10757, Lot 2 DP 10757, Lot 1 DP 10757, Lot 6 Sec 13 DP 111254 and Lot 7 Sec 13 DP 111254; and ii. Benefit the Crown Land; and

iii. To be on terms satisfactory to the Crown.

c) The easement referred to in deferred commencement condition 3.a) shall also provide that:

i. if reasonably required by Council by notice in writing, the coastal protection works located within the easement site shall be maintained to the standard approved by the Development Consent, approved plans and specifications in the Consent if any damage occurs that impacts the support or performance of the works; and

ii. the owners of the lot burdened must not place any improvements or structures that cannot be easily relocated or removed within the easement site or interfere with the coastal protection works within the easement site or the support they offer.

d) The easement referred to in deferred commencement condition 3.a) shall be to the reasonable satisfaction of Council's solicitors and all costs associated with the preparation and execution of the easement shall be borne by the owners.

Reason: To create long term (i.e. 60 years) support and maintenance of the coastal protection works for the benefit of all owners (currently and in the future), to maintain the coastal protection works, to ensure the protection of all affected properties and to ensure any requirements for the occupation of adjoining public land are satisfied and maintained.

4. Lawful occupation of the works on Crown Land

The applicant is to produce evidence to the consent authority to the satisfaction of the consent authority of the registration on title of the Crown Land of any instrument required by the Crown and on terms satisfactory to the Crown for the lawful entitlement for the works to be constructed and maintained by the owners of the properties 1126 (Lot 1 DP 170202), 1128 (Lot A DP 167490), 1130 (Lot 1 DP 121939), 1132 (Lot 5 DP 10757), 1134 (Lot 4 DP 10757), 1136 (Lot 3 DP 10757), 1138 (Lot 2 DP 10757), 1140 (Lot 1 DP 10757), 1142 (Lot 6 Sec 13 DP 111254), 1144 (Lot 7 Sec 13 DP 111254) Pittwater Road, Collaroy ('the owners') on the Crown Land and to remain on the Crown Land.

Reason: To ensure the lawful occupation of the works on public land.

Evidence required to satisfy the deferred commencement condition/s must be submitted to Council within five (5) years of the date of this consent, or the consent will lapse in accordance with Section 95 of the Environmental Planning and Assessment Regulation 2000.

Upon satisfaction of the deferred commencement condition/s, the following conditions apply:

DEVELOPMENT CONSENT OPERATIONAL CONDITIONS

5. Approved Plans and Supporting Documentation

The development must be carried out in compliance (except as amended by any other condition of consent) with the following:

a) Approved Plans

Architectural Plans - Endorsed with Council's stamp				
Drawing No.	Dated	Prepared By		
S.01 Revision B	27 July 2018	Horton Coastal Engineering Pty Ltd		
S.02 Revision B	27 July 2018	Horton Coastal Engineering Pty Ltd		
S.03 Revision B	27 July 2018	Horton Coastal Engineering Pty Ltd		
S.05 Revision B	27 July 2018	Horton Coastal Engineering Pty Ltd		
S.06 Revision B	27 July 2018	Horton Coastal Engineering Pty Ltd		
S.07 Revision B	27 July 2018	Horton Coastal Engineering Pty Ltd		
S.08 Revision B	27 July 2018	Horton Coastal Engineering Pty Ltd		

Reports / Documentation – All recommendations and requirements contained within:

Report No. / Page No. / Section No.	Dated	Prepared By		
Geotechnical Assessment	19 June 2017	JK Geotechnics		
Coastal Engineering Report		Horton Coastal Engineering Pty Ltd		
Revegetation Report	6 June 2017	Diane Wiesner		

b) Any plans and / or documentation submitted to satisfy the Deferred Commencement Conditions of this consent as approved in writing by Council.

c) Any plans and / or documentation submitted to satisfy the Conditions of this consent.

d) No construction works (including excavation) shall be undertaken prior to the release of the Construction Certificate.

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent will prevail.

Reason: To ensure the work is carried out in accordance with the determination of Council and approved plans.

6. **Prescribed Conditions**

(a) All building works must be carried out in accordance with the requirements of the Building Code of Australia (BCA).

(b) A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:

(i) showing the name, address and telephone number of the Principal Certifying Authority for the work, and

(ii) showing the name of the principal contractor (if any) for any building work and a

telephone number on which that person may be contacted outside working hours, and (iii) stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

(c) Development that involves an excavation that extends below the level of the base of the footings of a building, structure or work (including any structure within a road corridor) on adjoining land, the person having the benefit of the development consent must, at the person's own expense:

(i) protect and support the building, structure or work from possible damage from the excavation, and

(ii) where necessary, underpin the building, structure or work to prevent any such damage.

In this clause, allotment of land includes a public road and any other public place.

Reason: Legislative Requirement.

7. General Requirements

(a) Unless authorised by Council: Building construction and delivery of material hours are restricted to:

- o 7.00 am to 5.00 pm inclusive Monday to Friday,
- 8.00 am to 1.00 pm inclusive on Saturday,
- No work on Sundays and Public Holidays.

Demolition and excavation works (other than in sand) are restricted to:

• 8.00 am to 5.00 pm Monday to Friday only.

(Excavation work includes the use of any excavation machinery and the use of jackhammers, rock breakers, excavators, loaders and the like, regardless of whether the activities disturb or alter the natural state of the existing ground stratum or are breaking up/removing materials from the site).

(b) At all times after the submission the Notice of Commencement to Council, a copy of the Development Consent and Construction Certificate is to remain onsite at all times until the issue of a final Occupation Certificate. The consent shall be available for perusal of any Authorised Officer.

(c) Where demolition works have been completed and new construction works have not commenced within 4 weeks of the completion of the demolition works that area affected by the demolition works shall be fully stabilised and the site must be maintained in a safe and clean state until such time as new construction works commence.

(d) Onsite toilet facilities (being either connected to the sewer or an accredited sewer management facility) for workers are to be provided for construction sites at a rate of 1 per 20 persons.

(e) Prior to the release of the Construction Certificate payment of the Long Service Levy is required. This payment can be made at Council or to the Long Services Payments Corporation. Payment is not required where the value of the works is less than \$25,000. The Long Service

Levy is calculated on 0.35% of the building and construction work. The levy rate and level in which it applies is subject to legislative change. The applicable fee at the time of payment of the Long Service Levy will apply.

(f) The applicant shall bear the cost of all works associated with the development that occurs on Council's property.

(g) No building, demolition, excavation or material of any nature and no hoist, plant and machinery (crane, concrete pump or lift) shall be placed on Council's footpaths, roadways, parks or grass verges without Council Approval.

(h) Demolition materials and builders' wastes are to be removed to approved waste/recycling centres. These materials may alternatively remain as backfill, subject to a waste classification undertaken by a suitably qualified environmental consultant (who is a member of the Australian Contaminated Land Consultants Association Inc) and to the satisfaction of the geotechnical engineer. This material must be consistent with Council's Coastal Erosion Policy 2016 9(d).

(i) All sound producing plant, equipment, machinery or fittings and the use will not exceed more than 5dB (A) above the background level when measured from any property boundary and/or habitable room(s) consistent with the Environment Protection Authority's NSW Industrial Noise Policy and/or Protection of the Environment Operations Act 1997.

(j) No trees or native shrubs or understorey vegetation on public property (footpaths, roads, reserves, etc.) or on the land to be developed shall be removed or damaged during construction unless specifically approved in this consent including for the erection of any fences, hoardings or other temporary works.

(k) Prior to the commencement of any development onsite for:

- i) Building/s that are to be erected
- ii) Building/s that are situated in the immediate vicinity of a public place and is dangerous
- to persons or property on or in the public place
- iii) Building/s that are to be demolished
- iv) For any work/s that is to be carried out
- v) For any work/s that is to be demolished

The person responsible for the development site is to erect or install on or around the development area such temporary structures or appliances (wholly within the development site) as are necessary to protect persons or property and to prevent unauthorised access to the site in order for the land or premises to be maintained in a safe or healthy condition. Upon completion of the development, such temporary structures or appliances are to be removed within 7 days.

Reason: To ensure that works do not interfere with reasonable amenity expectations of residents and the community.

FEES / CHARGES / CONTRIBUTIONS

8. Policy Controls

Northern Beaches Council Contributions Plan 2018

The proposal is subject to the application of Council's Section 7.12 Development Contributions Plan.

The following monetary contributions are applicable:

Northern Beaches Council Contributions Plan 2018		
Contribution based on a total development cost of \$ 1,708,739.00		
Contributions	Levy Rate	Payable
Total Section 7.12 Levy	0.95%	\$ 16,233.02
Section 7.12 Planning and Administration	0.05%	\$ 854.37
Total	1%	\$ 17,087.39

The amount will be adjusted at the time of payment according to the quarterly CPI (Sydney - All Groups Index). Please ensure that you provide details of this Consent when paying contributions so that they can be easily recalculated.

This fee must be paid prior to the issue of the Construction Certificate. Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

Reason: To provide for contributions in accordance with Northern Beaches Council Contributions Plan 2018.

9. Security Bond

A bond (determined from cost of works) of \$10,000 and an inspection fee in accordance with Council's Fees and Charges paid as security to ensure the rectification of any damage that may occur to the Council infrastructure contained within the road reserve adjoining the site as a result of construction or the transportation of materials and equipment to and from the development site.

An inspection fee in accordance with Council adopted fees and charges (at the time of payment) is payable for each kerb inspection as determined by Council (minimum (1) one inspection).

All bonds and fees shall be deposited with Council prior to Construction Certificate or demolition work commencing, details demonstrating payment are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

To process the inspection fee and bond payment a Bond Lodgement Form must be completed with the payments (a copy of the form is attached to this consent and alternatively a copy is located on Council's website at www.northernbeaches.nsw.gov.au).

Reason: To ensure adequate protection of Council's infrastructure.

10. Works Bonds

Construction, Excavation and Associated Works Bond (Drainage) A Bond of \$5000.00 as security against any damage or failure to complete the construction of stormwater drainage works as part of this consent.

An inspection fee in accordance with Council adopted fees and charges (at the time of payment)

is payable for each kerb inspection as determined by Council (minimum (1) one inspection)

All bonds and fees shall be deposited with Council prior to Construction Certificate or demolition work commencing, details demonstrating payment are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

To process the inspection fee and bond payment a Bond Lodgement Form must be completed with the payments (a copy of the form is attached to this consent and alternatively a copy is located on Council's website at www.warringah.nsw.gov.au/your-council/forms).

Reason: To ensure adequate protection of Councils infrastructure.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

11. Application for stormwater drainage approval for connection to Council pipe drainage system

An application for approval to connect into Council pipe drainage under Sections 68 of the Local Government Act 1993 is to be submitted to Council.

The proposed inter-allotment drainage pipe shall be connected with a pit to Council's drainage pipe line. Standard Engineering plans are to be submitted to the Certifying Authority for approval. The submission is to include four (4) copies of Civil Engineering plans for the design of connection into Council drainage system which are to be generally in accordance with the civil design approved with the Development Application and Council's specification for engineering works - AUS-SPEC #1 and or Council's Minor Works Policy.

Details demonstrating compliance are to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure compliance with Council's specification for engineering works. (DACENC08)

12. **Pre-Construction Dilapidation Survey**

A pre-construction / demolition Dilapidation Survey of Council's Stormwater Assets is to be prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset, to record the existing condition of the asset prior to the commencement of works. Council's Guidelines are available at https://www.warringah.nsw.gov.au/sites/default/files/documents/general-information/stormwater-and-development/2014-119050-guidelines-preparing-dilapidation-survey-council-stormwater-assets-april-2014.pdf

The pre-construction / demolition dilapidation report must be submitted to Council for approval and the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Protection of Council's Infrastructure.

13. Access for construction and maintenance of works

The works are to be designed and constructed in accordance with the access requirements outlined in the Collaroy-Narrabeen Beach Coastal Protection Works Design Specifications 2016. Details demonstrating compliance with this requirement are to be prepared by a suitably qualified coastal engineer and submitted to the certifying authority for approval prior to issue of the Construction Certificate.

Reason: To ensure suitable access for construction and maintenance of coastal protection

works.

14. Maintenance Management Plan for Coastal Protection Works

A management plan is to be prepared for the maintenance of the coastal protection works and adaptation of the works to changed conditions which may occur as a result of future climate change. The maintenance management plan is to be prepared by a suitably qualified coastal engineer and is to be approved by Council in writing prior to issue of the construction certificate. The maintenance management plan must be complied with at all times.

Reason: To ensure a plan is in place for the on-going maintenance and adaptation of the works prior to the start of construction.

15. Maintenance Obligations and Public Safety

The owners of 1126 (Lot 1 DP 170202), 1128 (Lot A DP 167490), 1130 (Lot 1 DP 121939), 1132 (Lot 5 DP 10757), 1134 (Lot 4 DP 10757), 1136 (Lot 3 DP 10757), 1138 (Lot 2 DP 10757), 1140 (Lot 1 DP 10757), 1142 (Lot 6 Sec 13 DP 111254), 1144 (Lot 7 Sec 13 DP 111254) Pittwater Road, Collaroy must provide an irrevocable bank guarantee (or other suitable legally binding obligation) to Council prior to the issue of any construction certificate in the amount of \$1000 per lineal metre of work (based on the length of the seaward property boundary) to undertake maintenance of the coastal protection works in the event that they are damaged as a result of coastal storm, including to undertake any works required to remove any threat to public safety arising from the coastal protection works including the removal of rocks or debris, that have become dislodged from the works, from the public beach and adjacent public land.

In this condition "maintenance" means the restoration of the works to a standard in accordance with the approved plans and specifications following any damage caused by a coastal storm.

The bank guarantee (or other suitable legally binding obligation) is to be replenished if drawn upon and increased to allow for Consumer Price Index (CPI) every 10 years from the date of establishment.

The bank guarantee (or other suitable legally binding obligation) is to be in the favour of Council. The funds may be accessed by one or more owners, for the undertaking of works referred to in this condition, with the written consent of Council.

Reason: To satisfy the requirements of 55M of the Coastal Protection Act 1979 and to ensure that the coastal protection works will not pose any significant threat to public safety.

16. Interaction with adjoining works

In the event that the coastal protection works have been constructed and completed on the adjoining land, the coastal protection works approved under this consent are to be contiguous and integrated with adjoining protection works. Details demonstrating the actions required to ensure compliance with this requirement are to be prepared by a suitably qualified coastal engineer and submitted to Northern Beaches Council for approval prior to issue of the construction certificate.

Reason: To avoid damage to adjoining properties from the coastal protection works.

17. Compliance with Standards

The development is required to be carried out in accordance with all relevant Australian Standards.

Details demonstrating compliance with the relevant Australian Standard are to be submitted to

the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure the development is constructed in accordance with appropriate standards.

18. Sewer / Water "Tap-in" Check

The approved plans must be submitted to Sydney Water's "Tap-In" service prior to works commencing to determine whether the development will affect any Sydney Water asset's sewer and water mains, stormwater drains and/or easement, and if further requirements need to be met. Plans will be appropriately stamped.

Please refer to the website <u>www.sydneywater.com.au</u> for further details.

Reason: To ensure compliance with the statutory requirements of Sydney Water.

19. Waste Management Plan

A Waste Management Plan must be prepared for this development. The Plan must be in accordance with Parts C8 and C9 of the WDCP 2011 and Council's Waste Management Guidelines (that apply to land covered by the WLEP 2011).

Details demonstrating compliance must be provided to the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure that any demolition and construction waste, including excavated material, is reused, recycled or disposed of in an environmentally friendly manner.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

20. Confirmation of construction site storage location

The applicant is to provide detail on where imported material, construction machinery and material to be disposed of is to be located. If these items are to be stored on the adjacent public reserve, a Working on and Access to Reserves permit will be required.

Reason: To clarify impact of the works on Council's reserves.

21. Working on and Access to Reserves Permit

A Working on and Access to Reserves Permit is required for vehicular access over land under Council care, control and management for the delivery and/or removal of materials, waste or equipment where there is no other reasonable route of access and activities are carried out without direct Council supervision. Applications can be obtained from Council's website or Parks and Recreation business unit.

Reason: Public Safety and the protection of Council infrastructure.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

22. Maintenance of Road Reserve

The public footways and roadways adjacent to the site shall be maintained in a safe condition at all times during the course of the work.

Reason: Public Safety.

23. Waste Management During Development

The reuse, recycling or disposal of waste during works must be done generally in accordance with the Waste Management Plan for this development.

Details demonstrating compliance must be submitted to the Principal Certifying Authority.

Reason: To ensure demolition and construction waste is recycled or reused and to limit landfill.

24. Requirement to notify about new contamination evidence

Any new information revealed during demolition works that has the potential to alter previous conclusions about site contamination (acid sulphates) or hazardous materials shall be immediately notified to the Council and the Principal Certifying Authority.

Reason: To protect human health and the environment.

25. Safety requirements under storm conditions

Works are not to be placed during storm conditions unless the owner/s obtains a written opinion from a suitably qualified coastal engineer that the placement of the works under these conditions does not present a significant safety risk to any person or will result in damage to the beach. This opinion is to be kept by the landowner until the works are completed. If adverse weather conditions are forecast, the works site is to be made safe (where practical) to avoid the dispersal of equipment and debris onto the beach and into the surf zone.

Reason: To ensure the safety of workers and the public during construction.

26. **Removal of unsuitable material**

Any existing rock or material encountered in the works area during construction of the works not incorporated into permanent protection works shall be removed by the owner/s, or used as backfill consistent with Item 3(g) of the Development Consent Operational Conditions herein and consistent with Council's Coastal Erosion Policy Section 9(d). This shall include the area excavated within a line extending from either longitudinal property boundary to the mean low water mark. Confirmation of this requirement is to be provided to Council by the engineer supervising the works.

Reason: To ensure that all unsuitable material is removed from the beach.

27. Sand

No sand excavated from the beach seaward of the subject properties to construct the works is to be placed landward of or buried under the protection works before, during or after construction. All such sand shall be placed seaward of or over the works. The sand shall be screened to remove unsuitable material as required.

Reason: To avoid damage to the beach.

28. Site Supervision

A suitably qualified coastal engineer is to be employed to supervise construction for the duration of the approved works.

Reason: To ensure appropriate construction of the coastal protection works.

29. Historic Artefacts and Aboriginal relics

If any World War Two era tank traps or any Aboriginal objects (or other historic artefacts) are uncovered during the works, Council is to be notified immediately. In the event of any Aboriginal object being uncovered, all requirements (including the duty to notify) under the National Parks and Wildlife Act 1974 must be met.

Reason: To protect historic heritage and ensure any artefacts and Aboriginal objects are safely removed/dealt with.

30. Completion of Construction Works

All construction works must be completed within 12 months of the on-site commencement of the construction works.

Reason: To ensure the works are completed in a timely manner.

31. Removal of All Temporary Structures/Material and Construction Rubbish (crown land only)

Once construction has been completed all silt and sediment fences, silt, rubbish, building debris, straw bales and temporary fences are to be removed from the site.

Details demonstrating compliance are to be submitted to Council.

Reason: To ensure bushland management. (DACPLE01)

32. Installation and Maintenance of Sediment Control

Measures used for erosion and sediment control on building sites are to be adequately maintained at all times and must be installed in accordance with Warringah Council Specifications for Erosion and Sediment Control. All measures shall remain in proper operation until all development activities have been completed and the site fully stabilised.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority.

Reason: To protect the environment from the effects of sedimentation and erosion from development sites. (DACPLE02)

33. Site fencing requirements

Construction site safety fencing and/or hoarding is to be provided in accordance with Workcover requirements. Such fencing and/or hoarding is to be erected wholly within the works area unless prior approval from Council is obtained.

Reason: For safety purposes.

34. Damage

Any damage or injury caused to a public road, beach, council reserve or associated structures including footpaths, drains, kerb and gutter utility services as a consequence of the development works is to be made good at the cost of the landowners.

Reason: To make good any damage to public roads and other public assets.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

35. **Post-Construction Dilapidation Survey**

A post-construction Dilapidation Survey of Council's Stormwater Assets is to be prepared by a suitably qualified person in accordance with Council's Guidelines for Preparing a Dilapidation Survey of Council Stormwater Asset in order to determine if the asset has been damaged by the works. Council's Guidelines are available at

https://www.warringah.nsw.gov.au/sites/default/files/documents/general-information/stormwaterand-development/2014-119050-guidelines-preparing-dilapidation-survey-council-stormwaterassets-april-2014.pdf

The post construction dilapidation report must be submitted to the Council for review and the Certifying Authority prior to the issue of the Occupation Certificate. Any damaged to Council's stormwater infrastructure is to be rectified in accordance with Council's technical specifications prior to the release of the security bond.

Reason: Protection of Council's Infrastructure.

36. Certification of works

The constructed coastal protection works are to be certified by a suitably qualified coastal engineer as being constructed in accordance with the approved design and performance criteria. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to approval of an occupation certificate. This certification is to be provided to Council on issue of the Occupation Certificate.

Reason: To ensure appropriate design and construction of coastal protection works.

37. **Restoration of sand and vegetation**

The coastal protection works are to be covered in sand and vegetation (local native species as per Revegetation Report (Wiesner 2017) or other native species known to occur locally in the area and should be planted at recommended density of 4 plants per square metre) upon completion of the rock works.

Details are to be provided to the Principal Certifying Authority prior to the issue of the Occupation Certificate. These details are to be provided to Council on issue of the Occupation Certificate.

Reason: To limit the impact of the works on the visual quality of the beach.

38. Surveys During Works and Post completion survey

A declaration by a registered surveyor is required as evidence that all construction has been effected in accordance with the Development Consent, approved plans and specifications in the Consent. Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to approval of an occupation certificate. Survey plans and a declaration are to be provided to Council on issue of the Occupation Certificate.

Reason: To ensure accurate location of coastal protection works.

39. Waste Management Confirmation

Prior to the issue of a Final Occupation Certificate, evidence / documentation must be submitted to the Principal Certifying Authority that all waste material from the development site arising from demolition and/or construction works has been appropriately recycled, reused or disposed of generally in accordance with the approved Waste Management Plan.

Reason: To ensure demolition and construction waste is recycled or reused and to limit landfill.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

40. Ongoing maintenance of the Coastal Protection Works and beach amenity

The coastal protection works must be maintained in accordance with the Development Consent,

conditions, approved plans and specifications as outlined in this consent. The maintenance must be to a standard that does not compromise the protection or integrity of the adjoining land.

Sufficient access for the maintenance of the coastal protection works is to be maintained landward of the coastal protection works in accordance with the easement for construction, support and maintenance identified in Deferred Commencement Condition 3.

Any debris on the beach resulting from damage or failure of the coastal protection works must be rectified by the owner or owners of the works that are the source of the damage, as part of maintaining the works as per condition 33 of this consent. If required the financial arrangements established in condition 7 of this consent may be utilised in accordance with any written consent that may be issued by Council.

Reason: To satisfy the requirements of Section 55M of the Coastal Protection Act 1979 and to ensure that the coastal protection works will not pose any significant threat to public safety.

41. Compliance with the requirements of the Department of Industry – Crown Land for occupation of public land

The applicant shall at all times comply with any requirements of the Department of Industry – Crown Land for the lawful occupation for the works on public land.

Reason: To enforce any terms of occupation of the adjoining public land subject of this development consent as required by the owner of that land.

42. **Post storm inspection**

After any storm event that exposes any part of the coastal protection works to damage, that impacts the support or performance on the works (including if directed by Council in writing that such an event has occurred), the owners are to procure, at their cost, inspections by a suitably qualified coastal engineer of the coastal protection works. A detailed report is to be provided by this coastal engineer and any recommendations within the report are to be undertaken as soon as reasonably practicable after necessary approvals are obtained.

Reason: To ensure the coastal protection works are maintained after a storm event.

43. Removal of debris

The owners must obtain all necessary approvals and then remove debris from any adjoining public land if part of the coastal protection works is dispersed onto that land, with such removal to be done as soon as reasonably practicable to the satisfaction of Council and, if necessary, the Crown, at no cost to Council. If required the financial arrangements established in condition 7 of this consent may be utilised in accordance with any written consent that may be issued by Council.

Note: Debris will be taken to have been deposited from the coastal protection works seaward of Lot 1 DP 170202, Lot A DP 167490, Lot 1 DP 121939, Lot 5 DP 10757, Lot 4 DP 10757, Lot 3 DP 10757, Lot 2 DP 10757, Lot 1 DP 10757, Lot 6 Sec 13 DP 111254 and Lot 7 Sec 13 DP 111254, if rocks of the same type and dimensions as those on the coastal protection works at and seaward of Lot 1 DP 170202, Lot A DP 167490, Lot 1 DP 121939, Lot 5 DP 10757, Lot 5 DP 10757, Lot 4 DP 10757, Lot 4 DP 10757, Lot 3 DP 10757, Lot 2 DP 10757, Lot 1 DP 167490, Lot 1 DP 121939, Lot 5 DP 10757, Lot 4 DP 10757, Lot 3 DP 10757, Lot 2 DP 10757, Lot 1 DP 10757, Lot 6 Sec 13 DP 111254 and Lot 7 Sec 13 DP 111254 are found on public land within a line extending from either longitudinal boundary to the mean low water mark.

Reason: To ensure the safety of the public beach.

44. Time limited consent

The consent operates for 60 calendar years from the date of the issue of the occupation certificate and such other period as may be extended with the written approval of Council in accordance with the following.

A minimum of three (3) years prior to the date of 60 years after the issue of the occupation certificate for the works, the owners shall, jointly and severally procure, at no cost to Council, a report, by a suitably qualified independent coastal engineer, which reviews the performance of the works to ensure it provides the necessary protection ('Review Report').

The Review Report shall be submitted to the Council for consideration not later than twelve (12) months prior to the date of 60 years after the issue of the occupation certificate.

If appropriate, the Review Report may recommend an extension to the 60 year design life for an extra period of time consistent with evidence and coastal hazard predictions at that time. Similarly, if appropriate, the Review Report may recommend actions to upgrade the works to extend the design life for an extra period of time consistent with evidence and coastal hazard predictions at that time.

If the Review Report recommends demolition and removal of the coastal protection works in the interest of public safety, such removal will be undertaken by the owners at their expense.

If the Review Report recommends removal and replacement of the structure with an alternative design, the replacement structure will be the subject of a further development application for consent to Council.

If the Review report concludes that the structure is satisfactory (or renewed to be satisfactory) the Council may, in writing, approve an extension of the term of the development consent for the period recommended in the report, or such lesser time as the Council considers appropriate.

Any written approval from the Council extending the consent is to be recorded on the 149 Certificate for the land and Council's register of development consents.

A further Review Report will be provided a minimum of three (3) years prior to the end of the extended design life, on each extension.

Reason: The development application indicates that the coastal protection works have a design life of 60 years.