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Sent: Thursday, 21 September 2023 3:27 PM
To: Planning Panels - Northern Beaches
Subject: LPP DA 2021-1612
Attachments: DA Submission, Clarke st..pdf; SFNB Submission to 25092023 LPP DA2021_1612 .pdf
Categories: NBLPP

Please find attached Surfrider Foundation Australia submission highlighting concerns and Surfriders involvement in this highly contentious coastal management project over many years.

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NORTHERN BEACHES BRANCH

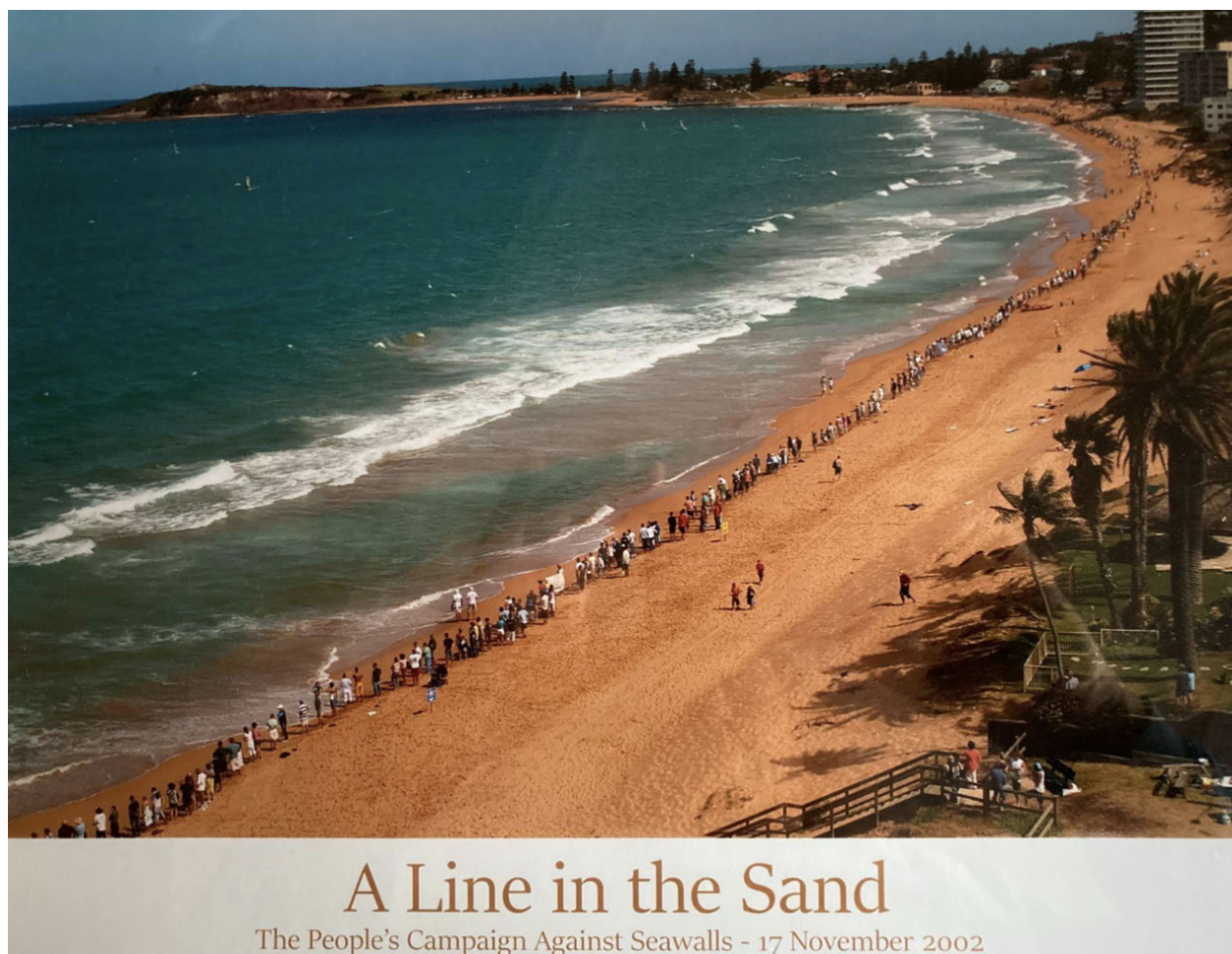
DA2021/1612 - 1196 PITTWATER ROAD, NARRABEEN - CONSTRUCTION OF COASTAL PROTECTION WORKS

HISTORIC CONTEXT FROM SURFRIDER PERSPECTIVE

Surfrider Foundation Northern Beaches Branch strongly objects to the above protection works as they are a continuation of the most loathed coastal development undertaken in NSW in decades and sit well outside what the Coastal Management Act 2016 (CMA) and associated SEPP would allow making them illegal.

The Executive summary opens “There is a long history of properties at Collaroy-Narrabeen Beach being impacted by coastal storms.”

Surfrider argues there has also been a long history of community abhorrence towards proposals such as this as evidenced by the photo below.



This image dates from November 2002 and so this November marks the 21st anniversary of community gathering to create an indelible image on its view of seawall construction.

This community view would appear to mesh happily with the initial two Objects of the CMA 2016

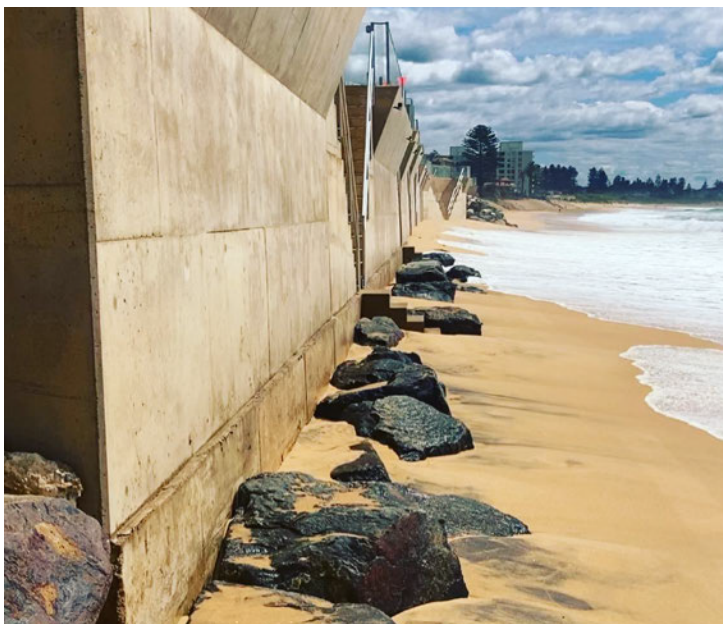
Objects of this Act

The objects of this Act are to manage the coastal environment of New South Wales in a manner consistent with the principles of ecologically sustainable development for the social, cultural and economic well-being of the people of the State, and in particular—

- (a) to protect and enhance natural coastal processes and coastal environmental values including natural character, scenic value, biological diversity and ecosystem integrity and resilience, and
- (b) to support the social and cultural values of the coastal zone and maintain public access, amenity, use and safety,

Clearly the images below from the previous wall development, undertaken with no broad social license given the acknowledged appalling “consultation”, show that the type of development currently under consideration has scant, if any regard in achieving the above.

The continuation of this extraordinarily imposing structure that detracts profoundly from the beach and the experience of all who use it for the sole purpose of private property protection is clearly not in the interests of the beach nor the public.



It is Surfrider's conviction that this DA should have never been allowed to proceed to DA stage, let alone be considered and possibly approved, as those who have assessed it to the DA submission stage have neither the credentials nor experience to be able to assess the claims made by the proponent's consultants and have simply relied on this advice to advance the proposal to the DA stage.

Surfrider comprehensively refutes claims made by council staff and consultants that MHL Review of Beach Width Impacts 2020 technical report endorses the vertical construction at all and in particular its location at the most seaward extent of perceived property boundaries.

It does not.

A reading of the 3 page Executive Summary will demonstrate this. How council staff have been able "to be satisfied" under the many provisions of the Act that this was acceptable remains a mystery but indicates their understandable inability to properly interpret the technical data given their lack of knowledge of a highly complex area of natural resource management.

That councils are unlikely to have such expertise within their staff pool is a major flaw of the revised CMA given that matters such as this have now devolved to LGAs for consideration.

Propositions such as the one being considered have historically been compulsorily considered by a state appointed coastal panel

of acknowledged expert coastal management professionals which explains why similar developments have been summarily refused on the NSW coast for decades - experts have dismissed them, and quickly, after all there is no new technology involved here, concrete and set squares have existed for millenia.



Surfrider has had an abiding interest in the erosion issues of Collaroy Narrabeen since Surfrider Northern Beaches Branch's inception in 1991. Members have discussed this issue at literally hundreds of meetings, have engaged with the public and sought their views, engaged wholeheartedly with the previous Warringah

Council and current NBC with a view to arriving at a solution that would satisfy the requirements of property owners, the broader community and beach at large.

It's our motto "Respect the Beach"

We were active and willing participants in the development of the Coastal Zone Management Plan for Collaroy/Narrabeen and Fisherman's Beach spending hundreds of volunteer hours to process suggestions that would ensure that "Respect the Beach" monika was delivered and were satisfied with the outcome in 2016.

Surfrider was identified as a primary stakeholder rightly so as we carried the desires of the roughly 3000 people who lined the beach in 2002 with us.

In 2016 the Collaroy Narrabeen Beach Coastal Protection Work Design Specifications (RHDHV) was produced and earned the Surfrider imprimatur.

NO MENTION OF VERTICAL SEAWALLS EXISTS in this document, rather the maximum slope of seaward face as stated on the first page of Criteria is "1 Vertical to 1.5 Horizontal (1V-1.5H) Refer Footnote 5"

Footnote 5 states "It is necessary to ensure slope stability, ie. overall sliding (rotational) to the entire rock structure. Temporary construction slopes may need to be flatter than 1V:1.5H to be stable."

The obvious abuse of this document, that was never publicly amended, to allow for what has occurred to date and what is currently being considered, needs to be explained.



Did Council resolve to amend these criteria, not just leave it up to staff recommendation, and if so at what Council Meeting did this occur and what public notice of it took place?

If so, this policy change, if adopted by Council, would fly in the face of the objects and many clauses of the CMA thus rendering it illegal.

If Council did resolve to allow a departure from the rock revetment walls;

When was this document amended, by whom, and under what authority.

It makes a total mockery of the CZMP consultation process that such a radically extreme departure from what was agreed was allowed to take place without ANY public input.

Council's firm commitment to fully inform all involved in the development of the CZMP and associated design specifications of any proposals in good time also needs to be addressed as not one of many people from Surfrider Foundation who participated in the CZMP was notified of the DA for any vertical wall at all, despite NBCs assurances that all legally required notice was achieved.

The inability for any NBC staff to contact any participants from Surfrider in the development of the CZMP (final meeting at Long Reef Golf Club in 2015/16 where at least 6 Surfrider committee members were in attendance) would appear to be more than an oversight (given we were all informed of the meeting where we signed in meaning NBC obviously had our details) but potentially a conscious decision as NBC staff knew we would vehemently oppose what has been built and on offer here.

A quick comparison of consultation feedback from Stuart to Wetherill Street DA...barely 10 submissions primarily in support of wall and primarily from those who would be protected by it to the current DA of 178 submissions overwhelmingly opposing a shorter length of wall protecting fewer properties in an area historically less affected by erosion indicates the total inadequacy of any real consultative desire by NBC in the first tranche of development possibly to create a precedent.



Clearly the tiny number of submissions in the Stuart to Wetherill Street DA should have been a red flag to any staff worth their salt that something was amiss, after all we are not talking car-ports we are referring to a major development affecting a much loved public precinct.

Significantly a DA which included a similar but much smaller concrete wall structure proposed to protect the Newport SLSC, progressed by many of the same Council staff and consultants involved here, was unanimously denied by a Sydney North Planning Panel populated with significant coastal management expertise.

All discussions involving protective structures in the development of the CZMP stated that protective structures would only be considered on a road end to road end basis to ensure alignment requirements would be met.

The DA before us has at its heart the South Narrabeen SLSC that should obviously, from any perspective, have prescribed the wall design and alignment for the block between Clarke and Mactier Streets given its location and length of beach frontage.

NBC have allowed the private owners to progress a DA without any plan for the SLSC being finalized . Surfrider only last week received a plan stamped “NOT FOR CONSTRUCTION - S3 REVIEW AND COMMENT” (in red type) despite requesting a design since discovering the DA for the vertical walls proposed in this DA in early 2021.

This document clearly shows a rock revetment wall extending onto the public beach despite repeated pronouncements by NBC staff and consultants that such was not possible.

Surfrider GIPA enquiries to Crown Lands revealed from their perspective no attempt could be found by NBC to facilitate such an encroachment on public beach in the DAs to date (although the SLSC plan may well postdate these enquiries). The point is that a great deal of the argument for vertical walls revolves around containment to private property as desired by the Act, but certainly not prescribed by it, and the choice between some small encroachment on to the public beach to facilitate a revetment wall has never been properly prosecuted by NBC.

Surfrider has no intention of watching the continued desecration of this the longest of Sydney's Northern Beaches, we have continuously met here since 1991 and have no intention of packing up our tent in the near future.

If more information is required about the public loathing for what is being considered and has sadly transpired we have reams of it.



We will continue to search for the real cost to the public of this outrageous private property protection exercise and seek to expose those culpable for it through media and other means...we have our beach to lose and we are not going to stand idly by and watch as the desecration continues and we, the public subsidise (by at least 20%) the vandalism not to mention the ongoing maintenance of sand before it in a vain attempt to minimise its impact.

What has transpired to date is a disgrace as far better alternatives exist and have always existed but were for reasons as yet unknown not pursued. The most loathed coastal development for

decades should be forthwith halted in the form proposed and best practice alternatives sought to provide the protection required to owners properties while respecting the beach and the thousands of public who have taken the time and lined up to show they love it.

Surfrider implores this panel to refuse this DA and in doing so properly respect the beach.

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Surfrider Foundation Australia [REDACTED]



SURFRIDER
FOUNDATION
AUSTRALIA

Surfrider Foundation

Northern Beaches Branch

21 September 2023

**SUBMISSION TO NORTHERN BEACHES LOCAL PLANNING PANEL (NBLPP) IN RESPECT
OF DEVELOPMENT APPLICATION (DA2021/1612) AT NARRABEEN/COLLAROY BEACH**

LEGAL CONSIDERATIONS

1. The panel should be aware that existing consents for vertical seawalls were given without the general public being aware that applications were being considered. They therefore represent a failure of process not a precedent for the current application. There is now significant opposition from the public.
2. Section 27 of the Coastal Management Act 2016 specifies that the Development Consent must not be granted in relation to coastal protection works unless the Consent Authority is satisfied the works will not unreasonably limit or be likely to unreasonably limit public access to or the use of the beach or headland or likely to pose a threat to public safety.
3. The word used is MUST. This also requires that the Consent Authority in itself must have expertise and skill to be able to make a reasonably informed decision. It is noted that this is standard practice for the State Planning Panels when considering “coastal works”.
4. State Environment Planning Policy (Coastal Management 2018) (SEPP) specifies that a Development Consent must not be granted to development within an area identified as coastal vulnerability area unless the Consent Authority is satisfied it is not likely to alter

coast processes to the detriment of the natural environment or to reduce the public amenity or access to a use of any beach. Section 15 of SEPP says Development Consent must not be granted unless the Consent Authority is satisfied the proposed development is not likely to cause increased risk of coastal hazards on that land or other land. Section 16 says that consent must not be given unless the Consent Authority has taken into account the relevant provisions of any certified coastal management program. The State has issued a Planning Circular that covers coastal areas not yet mapped as “vulnerable” which states that notwithstanding the lack of a defined coastal vulnerability area: “the Coastal Management SEPP requires all consent authorities, in the context of considering proposed development in the coastal zone generally, to be satisfied that the proposed development is not likely to cause increased risk of coastal hazards on that land or other land

5. The significant issue in this proposed development is the construction of vertical walls. Some existing consents have allowed vertical walls albeit without public consultation. It is well established that depending on the width of the beach and the power of surf and waves affecting the landward edge of a beach and where, across the beach and whether it is in an active beach area – a beach fluctuation zone (as defined in the Act), that a vertical wall does not respond to a working beach. Furthermore, the Coastal Zone Management Plan dated December 2016 on page 61 when dealing with Development Applications and area specific set back requirements says: -

"For the purposes of these provisions a reference to protection works means seawalls or revetments or works of a similar nature."

There is no mention there of a vertical wall. Furthermore, there was never any discussion in any meetings attended by Surfrider Foundation in the development of the CZMP of the possibility of vertical walls being considered. In statutory interpretation a vertical wall is not a seawall. There is significant material that a revetment wall or a sloping wall is similar to a sand dune situation where the level is lower at the water's edge and sloping

up to a sand dune. This dissipates the energy of waves. It is the natural environ. By contrast, a vertical wall is reflective and reflects the wave energy if the wall is in the active beach area. What requires to be done is to have a revetment wall instead of a vertical wall in respect of any ongoing development. Otherwise the beach will no longer exist as a beach on many occasions. There will be a loss of public beach amenity and importantly a danger for users as evidenced during the Christmas period of 2021/2022. The scouring and loss of sand will narrow the beach and mean that in time there is a headland on what has been for millennia a beach.

6. The Panel should not be concerned about claims for compensation by property owners. As a result of the High Court decision in 2001 of **Durham Holdings PL v the State of New South Wales [2001] HCA 7**, there is no right of compensation that exists for land owners to sue Council for alleged loss of value arising from approval or non-approval.
7. Likewise, in 1995 the New South Wales Court of Appeal in **Environmental Protection Authority v Leaghur Holdings Pty Ltd (1995) 87 LGERA 282** determined that land owners likewise have no rights to claim compensation if there is a change in boundary based upon erosion and the natural environ.
8. Put simply, land owners cannot sue Council for refusing this Application.
9. Certain documents and photographs, paginated, are **attached** to this submission. The recent photographs showing the appearance of the vertical wall, even though it will be partly covered by sand from time to time, is concerning. The early January 2022 north east swell showed how this rock wall will work with the beach. (See **attached** photographs 1, 2 & 3). As can be seen, there is no beach and there is a clear danger for people who wish to go along it. This circumstance has occurred several times in the short time since the wall was constructed and Council has erected signs warning of the danger of attempting to pass along the beach in front of the wall. Hence the existing consent is a clear breach of Section 27 of the Coastal Management Act and the credibility of the reports prepared previously, that Council relied on in issuing the consent have clearly

been demonstrated to be in error. It is noted that the present application relies on these discredited reports.

10. Comment has been made by Council officers about ad hoc or existing rock walls that have been constructed without approval. In 2018 the Land and Environment Court dealt with applications in relation to Belongil Beach near Byron Bay in the case of **Ralph Lauren Pty Ltd v the NSW Transitional Coastal Panel [2018] NSWLEC 207** the Chief Judge of that Court, Brian Preston SC said that the Court ignores any existing and unapproved self help and rock that may have been placed there by residents to protect their property. It refused consent to repair certain seawalls that had been constructed. In that case the Court found that public access along the beach would be adversely affected by the proposed development. Importantly it was stated that unlawful works cannot create "*an advantage*". Yet, throughout the documentation accompanying the current application significant reliance is placed on the "benefits" gained by removal of rocks that were placed without authorisation. The Belongil case found that there was the potential for adverse cumulative impacts and this provided grounds for refusal.
11. This case followed the 1981 decision in the Supreme Court by Justice Powell of **York Brothers (Trading) Pty Ltd and Commissioner of Main Roads (1983) 1 NSWLR 391** dealing with public nuisance on the Clarence River. It was there said that there is a tension between private rights and public rights. The Court said that where statutory provisions impose a duty or confer a power or authority in general terms then the legislature cannot be taken to have intended that the rights of others should be invaded as a consequence of the performance of the duty or the exercise of the power or authority and such an invasion may be justified only if it can be demonstrated that the work was reasonable necessary and that if it resulted in damage there was, in the light of the scientific knowledge then available, no reasonable way in which the end directed or permitted could have been achieved without that damage that in fact occurred.

12. Here established engineering and coastal data is to the effect that a revetment wall is as effective as a vertical wall but does not cause the damage that a vertical wall does.
13. Landowners are entitled to protect their property. That right is supported by the public at large. What is not supported is that their protection adversely affects the public area that has been enjoyed and is enjoyed by all members of the public. There is a better way to go about the process. The fact that there has been granted development consents is no precedent. A past bad decision should not be repeated.
14. This application with vertical walls should be refused. Council could have discussion with the applicants in relation to a revised application featuring revetment walls. Furthermore, if approval was given to any wall, the Council should impose conditions pursuant to section 27(1)(b)(i)(ii) whereby satisfactory arrangements by conditions imposed exist for the restoration of the beach if any increased erosion of the beach or adjacent land is caused by the presence of the works. There is insufficient information provided by the applicants consultants nor those of the Council to determine what would constitute "satisfactory arrangements" yet this is a vital component of any consent as if not accurately assessed, determined and imposed through any consent the broader community will end up having to pay for repair caused by the damage.
15. A beach works naturally as a result of dry sand. Waves, tides and wind blow that sand around. A wet sand beach does not work. Vertical walls will result in significant time periods of wet sand. A vertical wall works in a similar fashion to the coastal acacia planting carried out by Wollongong Council at Woonona Beach after the 1974 storms. Council planted coastal acacia which grew seaward up to 30 metres on the sand dunes. It adversely impacted on the beach processes and to resulted in scarping. Following agitation by the whole community, the Council has commenced removed the planting of the coastal acacia. The photographs herewith at pages 4 and 5 show the beach after the planting of the coastal acacia. The time photos also show how the beach was and then how it became denuded and reduced. The last photo at page 4 shows the beach now

since the coastal acacia has been removed. This is the similar effect that will occur as a result of approval of vertical walls.

Comparison with other rock walls

16. At Collaroy in the area just north of the Collaroy Hotel, this Council engaged the NSW Soil Conservation Service to advise and recommend and carry out construction of a “coastal works” to give protection to the car park between the beach and Pittwater Road. The work that was carried out, paid for by Council, involved a revetment wall, not a vertical wall. The email from Stephen Titus to the SES dated 30 March 2022 at page 6 and reply from Joss Hawling of the SES dated 6 April 2022 at page 10 are attached with this submission. Interestingly, the report and the email says – “We do not hold and did not develop any reports ‘dealing with the comparative position between a revetment wall and a vertical wall’”.
17. Council, as the applicant, determined that a revetment wall was appropriate.
18. At North Wollongong Beach, Wollongong Council determined that it wanted to provide protection to the area around the surf club and the grassy area. It determined to utilise a revetment wall. A photograph of the notice about the works being carried out is at page 11 behind this submission.
19. At Warilla Beach, Shellharbour Council determined that it needed to carry out repairs to an old wall that existed.
20. Contact with the Mayor of Shellharbour Council established that in 2021, Council decided to utilise a revetment wall as it was cost effective and minimised beach erosion. They determined that an engineered wall was found to exacerbate beach erosion.
21. Shellharbour Council engaged the services of Royal Haskoning DHV. In the report, the consultants said – “The rock revetment is intended to maintain current aesthetics and continuity along the beach rather than introducing a new foreshore treatment”. The consultants recommended the crushing of suitable rock and reusing it in the new

revetment wall. They noted the current structure, which was approaching the stage where it was no longer practical or possible to maintain in respect of integrity, was not an engineered structure. At pages 12 – 15 is material in relation to the sea wall. At page 13, one can clearly see the revetment wall that has been constructed. It is noted that the same consultants (RHD) have presented a notably different report in their advice to Council for the current application at Collaroy.

22. A photograph **attached** at page 16 taken in about March 2022 looking north along Collaroy Beach show the effect of the vertical retaining walls on the width of the beach and the ability of the beach to function as a continuing beach.
23. Clearly, there is precedent for a revetment wall. Also, noticeably at least 3 Councils have chosen to utilise a revetment wall on relevant beaches.
24. Mr Horton, the engineer whose report is supportive of the vertical walls addressed a meeting of unit owners of the Marquesas unit block on 1 March 2022. Mr Horton did not address why revetment walls could not be utilised. Local residents are entitled to object to inappropriate development where it would adversely affect the working and amenity of the beach which exists for the benefit of all residents, particularly when there can be a revetment wall built instead.
25. Historically, these properties have had a slope down to the beach which has been a feature of the visual amenity of the beach. Some have had rock tipped in the past in an unauthorised attempt to manage erosion threats by major storms but these works have not been properly constructed and engineered. The outcome they seek is to go to the edge of their boundary and to then have an imposed vertical wall to increase the useable area. They gain the effective use of all their property as defined by the land title. Historically, the slope down to the beach has facilitated sand to build up on the beach so it reflects the way that a beach naturally operates.

26. There is significant scientific debate about the merit of vertical walls on beaches. It is not an absolute black and white question. However there is concurrence in the literature that impact depends on the location of any structure in the region of the “beach fluctuation zone” with the minimum impact being for any structure as landward as possible. That is, dependent on the beach fluctuation zone, not the property boundaries.
27. In circumstances where the Council has rejected proposals at Newport Beach, there is a degree of precedent for Council to now be better informed about matters. The two approvals given occurred without Council fully considering the matter and without the community having input.

Response to some matters raised by Council in understanding the Collaroy Seawall challenge as set out on the sheet attached at pages 17 - 21

28. In paragraph 4 of the publication, Council states that a rock revetment style wall would encroach up to 10 metres onto the public beach. It further states that on the basis of independent expert coastal engineering analysis, a vertical wall is a better outcome. It is not established that a rock revetment wall would encroach up to 10 metres onto the public beach. Normally it runs down to the edge of private ownership of the property to the beach. Where the Council reports indicate matters have been considered and favourably commented on by Manly Hydraulic Laboratories, that is incorrect. There is no endorsement by MHL of these proposals. In point of fact the MHL report raises a number of matters it considered needed further attention.
- ~~29.~~ In paragraph 6, it is stated that extensive assessments have been carried out by independent coastal engineering experts. Questions need to be asked as to why the RHD opinions are so different for Shellharbour as compared to Collaroy when the issues are so similar. Questions also need to be asked as to why it is claimed the MHL written information differs so greatly to that claimed to be the MHL advice by the applicant's consultant, and not questioned by Council staff involved in the assessment. The Panel should closely read 'The Manly Hydraulics Laboratory' (MHL) reports including MHL

2491, 2016, the letter of MHL to Craig Morrison dated 21 December 2018 and the March 2020 addendum to the 2016 report. The 2016 and 2020 reports made reference to 3 alternative designs being considered – vertical sea wall, hybrid sea wall and rock rubble sea wall. The 2016 report referred to a rock rubble mound armoured sea wall. It stated that the effect of sea walls on fronting beaches remains somewhat unresolved.

30. There is reference to other local beaches such as Manly having vertical walls. This is used as an example of why vertical walls should be allowed here. The engineering approaches to many matters have changed over the past 100 years since these historic walls were constructed and so seeking to use works initially constructed over 100 years ago has no merit. Further, those beaches are, in the main, much wider than the Collaroy Narabeen Beach. They are less affected by storm events. They are not a good precedent or comparison. Manly Beach has a combination of a vertical wall and revetment walls initially constructed over 100 years ago. The offshore bombora and coastal features mean that Manly gets much less wave action than Narrabeen. At pages 22 and 23 are photographs taken of Manly Beach showing a revetment wall and also a vertical wall. Interestingly areas of the Manly wall have failed on more than 9 occasions in the past due to storm wave attack.
31. On page 19 is the comment that other local beaches have vertical walls. Most of those walls are very old, considered to be “brutalist engineering”, and a mistake. They represent the knowledge that then existed. Furthermore, it is whether they are in the active beach area, ~~also called~~ defined in the Act as the beach fluctuation zone as to whether they have an adverse effect on the working of the beach. If at the very rear of a beach they are often buried under sand and cause no detriment to the beach. They are not an appropriate example. Furthermore, at Collaroy Council has put in a revetment wall for the carpark north of the Collaroy Hotel and Club. Any vertical wall that otherwise exists there was constructed long ago. Furthermore, Collaroy has much less wave action than further along the beach at Narrabeen.

32. In paragraph 7 it is said that the community was 'comprehensively' consulted. Council need to acknowledge this is incorrect. Council states that: "There was comprehensive community consultation in both 2014 and 2016 in relation to Council's coastal zone management plan(certified by the Minister) and Council's policy in respect of Collaroy Beach, as well as more recently for each of the DAs in line with our normal notification process." The above statement from Council is misleading. Participants at the consultation sessions for the Coastal Zone Management Plan were given no indication of the likelihood of any of the coastal protection options presented actually being considered for implementation. High level options were presented at these sessions, along with an assurance from Council that participants would be kept informed of which options would be implemented via the Development Approval (DA) process. This simply did not occur. The public were blindsided in the DA process for the existing vertical walls to the south of the present proposal. Council did the barest minimum of notifications, notwithstanding this was a matter impacting the beach zone and therefore of enormous public interest. Essentially, Council did not keep good faith with those who attended the above public consultation sessions. Only immediate neighbours were notified about proposed DAs for vertical seawalls (along with minimal public notices). Consequently, there were very few submissions on these DAs (eg. 10 submissions for DA 2018/1289) and most these were supportive. The first that the wider public found out about the vertical walls was when construction started on these walls, which had the appearance of something constructed towards the end of World War 2 to prevent the allies landing in France. The whole exercise by Council represents an appalling breach of public trust. By contrast, the wider public have become aware of the current DA (DA2021/1612) via social media and community activism (such as the 'Line in the Sand' protest). Consequently 178 written submissions have been made in respect of this DA, with the vast majority being vehemently against the proposed vertical seawall.

33. In paragraph 8, there is a visualisation, an artist impression of how the walls will look. We believe that artist impression is completely misleading as clearly demonstrated by similar artist impressions for the existing vertical wall to the south versus the actual outcome as demonstrated in the photographs in the attachment.

Response to matters raised by Peter Horton Engineer and Craig Morrison of Council when addressing meeting of residents of Marquesas on 1 March 2022 and response to matters raised in Statement of Environmental Effects issued by Horton Coastal Engineering dated 13 July 2021 in respect of owners of 1190 – 1196 and 1204 Pittwater Road Narrabeen

34. A Statement of Environmental Effects has been lodged by Horton Coastal Engineering in support of the development application. At page 15 of that report, Mr Horton says that MHL in 2016 considered the upgraded protection works south of Devitt Street and in 2020 considered the vertical wall designs and found that potential impacts of such works were mostly dependant on the cross-shore alignment within the active beach profile. He said the report stated there were no significant long-term effects found. This is not in accordance with the actual written word provided by MHL. Importantly MHL indicated that storms like that of 2016 could result in a loss of beach in front of a vertical wall for periods of up to 6 months. However, that was for current situations and the MHL report made it clear that climate change effects needed further consideration. There was consideration of 3 alternative designs: -

1. Vertical seawalls.
2. Hybrid seawalls.
3. Rock/rubble seawalls.

They discussed ways to minimise potential impacts on beach width, amenity and encroachment on active beach processes. They recommended the new seawall be aligned: -

- a) As far landward as is practical
- b) With preference to alignment closer to the crest rather than to the tow

- c) That existing rock protection be removed.

They did not, as stated by Horton, consider vertical walls alone.

- 35. On 1 March 2022, Mr Horton and Craig Morrison of Council addressed unit owners of the Marquesas unit block. Mr Horton said that his views were supported by a “definitive” 1996 paper from the Journal of Coastal resources. This was a paper by Kraus and McDougal. Importantly the paper referred to makes the point that at the time there was no “definitive” information and listed the studies the author recommended be undertaken in a quest to gain a better understanding of the impacts of seawalls. Also of interest, the paper concludes with a finding that seawalls protect property, not beaches.
- 36. Mr Morrison said that Council had obtained advice from MHL, Water Research and Royal Haskoning DHV in relation to the applications. The Panel need to consider the following matters. There is no reference in the report from Mr Horton as to why revetment walls are not appropriate. Mr Morrison stated to the meeting that south of Stuart street, protection had been done by rock revetments. He said that moving north, that could not be done because it was not physically possible. Yet somehow Council has achieved this at the “roadheads”, demonstrating that a suitable rock revetment can be constructed in this region. He also said that the offset of a 2 metre high wall, a vertical wall, needed to be compared with a revetment wall which would encroach 10 metres onto the beach. However the “beach encroachment” argument is not supported by factual information.
- 37. Mr Horton said that all rocks would be removed from the beach in front of the wall. With respect, that is a given. No matter what is done, Council or residents will be required to remove existing rock on the beach as they are a legacy of unauthorised works and a danger to the public.
- 38. There is reference in the report to a “do nothing” position. Surfrider and residents do not oppose the need for owners to protect their property. Surfrider is not made up of idealistic greenies or people with ideology and misinformation in relation to the effect of vertical

walls. What they seek is that any solution not be detrimental to the beach. As stated in the coastal engineering literature seawalls are shore protection structures and not beach protection structures.

39. Mr Horton says that about 3 metres of the wall would be exposed (on average). The credibility of this statement has to be compared to the actual performance of the existing wall which, at the time the DA was being considered was supported by the same argument.
40. Mr Horton says that the proposed wall will be 5-10 metres landward of the existing wall. The statement should be subject to real critical review as there is no actual “existing wall” simply tipped rocks that do not constitute, nor represent, the likely profile and location of a well-engineered, and constructed rock revetment.
41. In a report dated 21 December 2018 by MHL to Council, they were asked to provide an interim qualitative assessment of the relative impacts on coastal processes proposed in respect of upgrades. They did a comparison, in fact, to the existing situation. That is, a “do nothing” position. They stated – “The overall finding of this interim qualitative assessment is that no discernible adverse impacts have been identified on existing coastal processes and beach width compared to the existing situation (status quo) as the structure footprint is proposed to be placed at or landward of the present rock protection. It is recommended that proposed coastal protection upgrades be aligned as far landward as is practicable. Removal of existing rock protections seaward of the structure is supported. With regard to visual amenity and public safety, there is concern about the height of the seawall being visually deterring and imposing public safety risks. We would consider that Council (or the developer) consider a stepped (two tier) wall to reduce the vertical relief and improve beach access along the structure”.
42. In March 2020, MHL published a review of beach width impacts of alternative coastal protection works. An addendum to the 2016 report. That MHL 2020 report in the executive summary stated – “It is recommended that the new sea wall design also be

The Sydney Morning Herald

Environment Climate change [Planning](#)

Collaroy Beach a 'hellscape' as sand in front of seawall washed away: residents



By [Laura Chung](#)

January 5, 2022 — 3.30pm

Northern beaches residents have been worried about how their beloved beach would fare when large swells and high tides hit the controversial Collaroy seawall. They were concerned the sand directly in front of the seawall would be washed away, eroding their beach, and, on Tuesday, that's exactly what happened.

The erosion event at Collaroy Beach is far from an isolated occurrence. Other beaches along the eastern coastline have also experienced heavy erosion and scientists fear climate change will only make these events more frequent and more intense.



King tides and the after-effects of ex-tropical cyclone Seth have caused erosion at Collaroy Beach. **BROOK MITCHELL**

Senior lecturer at the University of NSW Water Research Laboratory Mitchell Harley said annual king tides had combined with ex-tropical cyclone Seth to create north-easterly waves that had resulted in coastal erosion along Collaroy and other beaches along the east coast.

“Collaroy normally gets waves from the south and has a big headland that protects the beach from waves, but the combination of large tides and unusually north-east waves make beaches that would normally be protected, exposed,” he said.

He said more research would be needed to determine the extent the seawall played in Tuesday’s erosion event, but that north-easterly waves were certainly a key driver in drawing sand off the beach.

University of Sydney coastal geomorphologist Professor Andrew Short said coastal erosion events were likely to become more frequent as climate change increased the likelihood of tropical cyclones and east coast lows.

“They are predicted to be more likely and more intense. It’s a double whammy,” he said.

“Most communities are built on the southern end of beaches but they will be more exposed to the impacts of erosion because of easterly storms. Governments and coastal managers need to be aware and plan for those coming changes.”

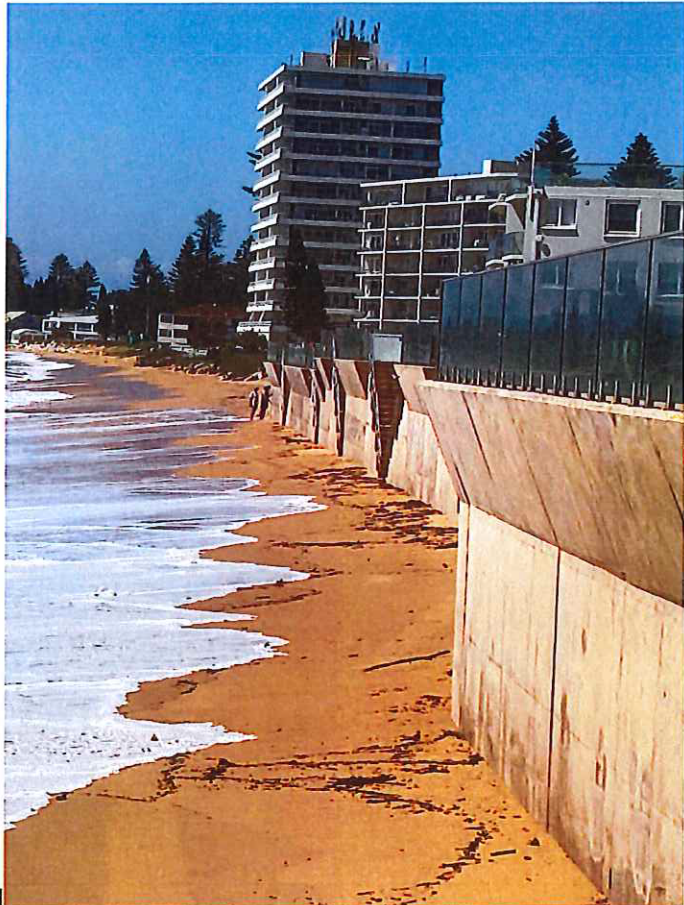


President of the northern beaches branch of the Surfrider Foundation, Brendan Donohue, surveys the damage on Tuesday. BROOK MITCHELL

President of the northern beaches branch of the Surfrider Foundation, Brendan Donohue, said Tuesday’s conditions had been treacherous to beachgoers, leaving Collaroy Beach a “hellscape”.

Stephen Titus

From: Brendan Donohoe <bdonohoe@surfrider.org.au>
Sent: Monday, 26 June 2023 4:08 PM
To: Paul Maddock; Stephen Titus; Angus Gordon; Rowan Hanley; Drew McPherson; Andrew Short; Terry Fitzgerald
Subject: Request to Minister for meeting to have Coastal Panel reinstated and the photo I enclosed...b
Attachments: Hon Paul Scully Coastal Panel.pdf; Hon Paul Scully Coastal Panel.docx





PDF and Word doc attached and a shot i enclosed

--
Brendan Donohoe
President Northern Beaches Branch
Surfrider Foundation Australia
Mob: 0422 900 501

Topic	Details	Legislative reference	Who
13.			

4

Topic					
Topic		Details	Legislative reference	Who	
		 <p data-bbox="550 728 598 1561">Figure 1. Photographs showing the dune restoration works carried out at Woonona Beach in 1986.</p>			
		 <p data-bbox="1326 741 1374 1561">Figure 2. Aerial photographs of Woonona Beach showing vegetation spread over time (not georectified; for illustrative purposes only)</p>			

Stephen Titus

From: Stephen Titus
Sent: Wednesday, 30 March 2022 4:49 PM
To: scs.enquiries@scs.nsw.gov.au
Cc: Brendan Donohoe
Subject: Collaroy beachfront works done for Northern Beaches Council the subject of 14 February 2020 U-tube video involving Joss Hawling and Raj Vitakuri

Follow Up Flag: Copied to Worldox (Client Files\7862\2219475\00527406.MSG)

Attention Joss Hawlings, I am an objector personally to current development applications being considered by the Council to place vertical walls along the beachfront on Narrabeen Beach. I called the Department two days ago and left a message for someone to call me but no one has. I have been provided with the video done seemingly by your Service with the consent of the Council which shows a revetment or sloping wall used to protect the car park north of Collaroy club and shops at Collaroy.

Current development applications are going to a Planning Panel. There had been consent given to other applications which because of covid and non-publication by Council slipped through without the public being aware and having the right to object. There are a great many objections by members of the public because of the adverse effect a vertical wall has on the operation of a beach. An engineer, a Mr Horton, has provided reports in respect of the vertical wall effectively saying it is more effective than a revetment wall and causes no harm to the beach. It seems somewhat surprising that the Council has constructed through you and with your expertise and recommendations a revetment wall as opposed to a vertical wall.

I request that Mr Hawlings give me a phone call or alternatively provide to me any reports that you prepared dealing with the comparative position between a revetment wall and a vertical wall.

Members of the public including Surfrider Foundation and experienced coastal engineers whom it is consulting with strongly believe that the construction of further vertical walls will end the effective use of Narrabeen Beach as a beach and will breach relevant legislation.

I look forward to speaking with you or establishing email contact. I am told that Raj Vitakuri is no longer employed by the Service. You were featured in the video.

Regards,

Stephen Titus
Partner, Specialist in Commercial Litigation
CARNEYS LAWYERS

T: (02) 8226 5555 F: (02) 8226 5556
Level 2, 99 Elizabeth Street, Sydney NSW 2000

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Our specialist team and contractor network mean we can manage and implement your large scale marine and coastal rehabilitation projects.

Soil Conservation Service's track record in marine rehabilitation

Australia's east coast is one of the world's most beautiful and sensitive environments.

However it is readily and often severely impacted by development, stormwater, violent storms and recreational pressures.

The Soil Conservation Service has spent decades working in this fragile environment, developing and implementing programs involving:

- beachhead erosion rehabilitation and mitigation
- vegetation restoration
- dune formation and shaping works
- repair of blow outs
- working with land managers to sustain public use.

Coastal erosion rehabilitation

Coastal erosion control requires a long term plan, a systematic approach and a combination of both soft and heavy engineering solutions. Our team will work with you, designers and the community to develop and implement practical solutions.

The Soil Conservation Service specialises in all of these aspects and has a proven track record in successful beach reclamation. We also work with all various stakeholders in these areas of environmental sensitivity.

We have successfully addressed severe erosion issues in areas with a long history of failed stabilisation attempts. These projects have seen erosion addressed to protect the natural environment, infrastructure and community assets. These projects build areas of high amenity for the community to enjoy.

Coastal dune and vegetation management

Where development along the coast has encroached onto beach dunes, the natural protective vegetation is often destroyed, resulting in erosion of the dunes.

We have been involved in many programs, typically involving filling in blow outs and reshaping eroded dunes.

This work prepares the dune for planting with a native cover crop to provide initial cover while more permanent species establish.

Projects such as the [40-year Kurnell Dune Program](#) highlight our capacity to successfully manage dune stabilisation projects for the benefit of our community and natural environment.

Contact us

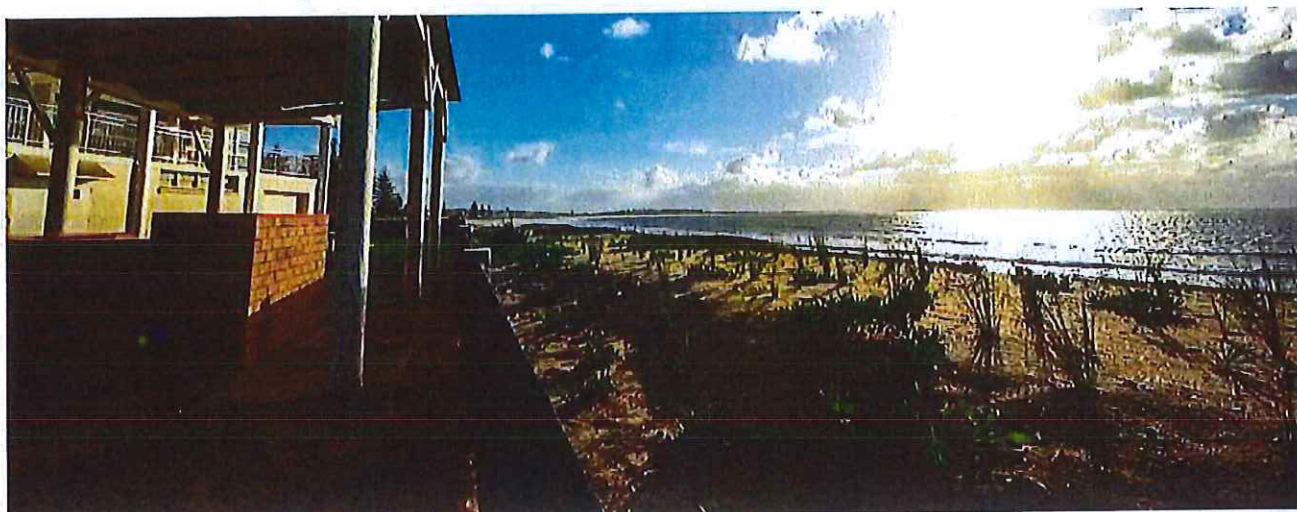
Please contact us to find out more about our marine and coastal rehabilitation services.

[Look up your local office.](#)

Email: scs.enquiries@scs.nsw.gov.au

Phone: 02 9842 8300

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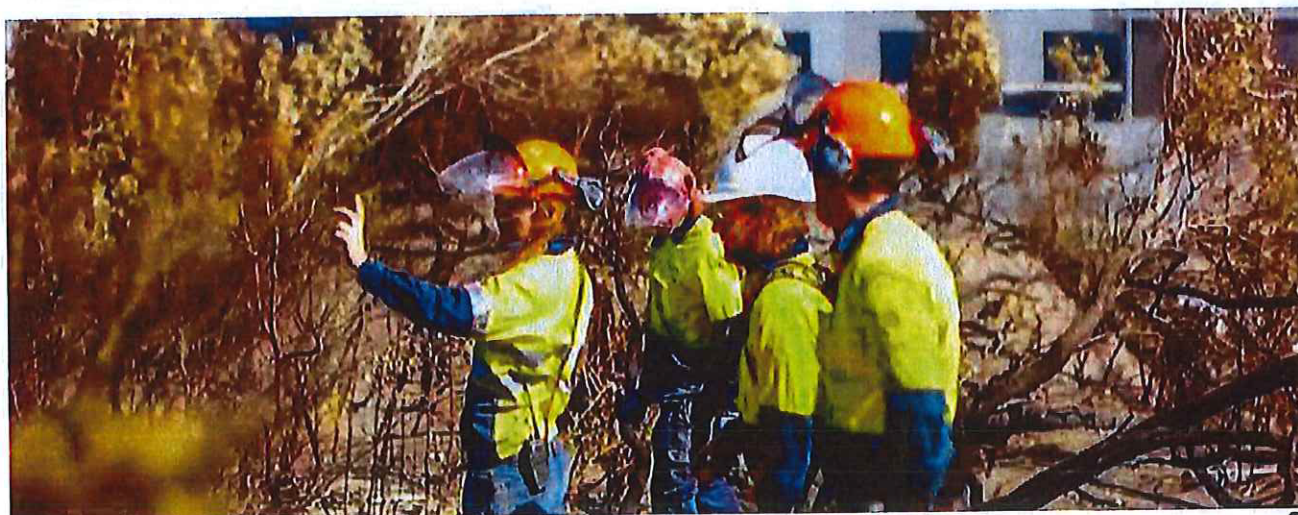
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We acknowledge the traditional custodians of the land, and pay respect to Elders past, present and future. We also recognise the strong ongoing connection of First Nations peoples to the lands and water where the Soil Conservation Service works and their ongoing commitment to care for Country.

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Your Feedback

Stephen Titus

From: Joss Hawling <joss.hawling@scs.nsw.gov.au>
Sent: Wednesday, 6 April 2022 9:14 AM
To: Stephen Titus
Subject: Soil Conservation Service - Collaroy

Hi Stephen,

Thanks for the email.

For the work undertaken at Collaroy by the Soil Conservation Service (SCS), we were engaged by Northern Beaches Council (NBC) to provide construction services. All enquiries relating to this work should be directed to NBC.

We do not hold and did not develop any reports "dealing with the comparative position between a revetment wall and a vertical wall."

SCS provides design services for some projects, but generally not in coastal environments such as this. We did not undertake design services for any structures at Collaroy. The provider/s of the design services for the structures in question should be directed to NBC or the other landholders.

Regards
Joss

Soil Conservation Service



Joss Hawling
Area Manager | Greater Sydney

Dharug Country
Level 30, 4 Parramatta Square, 12 Darcy Street, Parramatta NSW 2150
Locked Bag 5123, Parramatta NSW 2124
T: 0457 509 204
E: Joss.Hawling@scs.nsw.gov.au



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SCS is committed to providing excellent customer service. Your feedback is welcomed and anonymous. Should you wish to provide positive or constructive feedback of the SCS Sydney Area please [click here](#).

COVID-19 is changing the way we work but not our progress. [Read more here](#).

We acknowledge the traditional custodians of the land, and pay respect to Elders past, present and future. We also recognise the strong ongoing connection of First Nations peoples to the lands and water where the Soil Conservation Service works and their ongoing commitment to care for Country.

Seawall works include:

- Replacement of existing crib lock seawall with new tiered seating precast concrete seawall incorporating rock mattress protection below sand level.
- New pathways and ramps to the beach improving accessible access.
- New seating, fencing, landscaping, lighting and stormwater upgrades.

The North Wollongong seawall works have been partly funded by a \$4.2M grant from the NSW Government's NSW Coastal and Estuary Grants program.

NEWS



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New Warilla Beach seawall designed to withstand nature's impact

8 July 2023 | Jen White

Start the conversation





The recently completed Bucknell St beach ramp is part of the Warilla Beach seawall renewal project. Photos: Shellharbour City Council.

The \$10 million Warilla Beach seawall renewal project has reached a significant milestone with the completion of the Bucknell Street beach ramp.

Shellharbour City Council started work on the project in late 2022 after it determined the 1960s seawall was eroded and unstable.

The foreshore land along the southern section of Warilla Beach was developed in the early 1950s and the 930-metre wall built in response to

storm events in 1966 that threatened private properties and sewerage infrastructure.

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wall.

Shellharbour Mayor Chris Homer said the new seawall had been meticulously designed to withstand the forces of nature and provide long-lasting protection.

"The Warilla Beach seawall reconstruction project is an essential response to the erosion and instability of the existing 930-metre seawall," he said.

"The construction, carried out in phases, is progressing well, with a third of the project already completed from the southern end of the beach. Our goal is to complete the works early in the new year, demonstrating our commitment to safeguarding our coastline."



An artist's impression of the completed project.

The new seawall is more than 3 metres thick, with boulders averaging 3.65 tonnes in weight to ensure resilience against the waves.

Part of the wall will be backfilled with sand and part will be exposed rocks. The amount of exposed rock will vary depending on the surf conditions and will change over time.

"Council's commitment to sustainability has seen the project recycle original seawall boulders which are being incorporated into the new structure, minimising waste from the project," Cr Homer said.



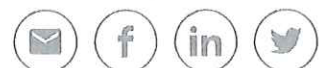
READ ALSO Bumper season for beautiful 'beasts' heading north to warmer waters

"Furthermore, we are supplementing these recycled boulders with new and larger ones sourced from local quarries. This approach ensures the responsible use of resources while maintaining the structural integrity of the seawall.

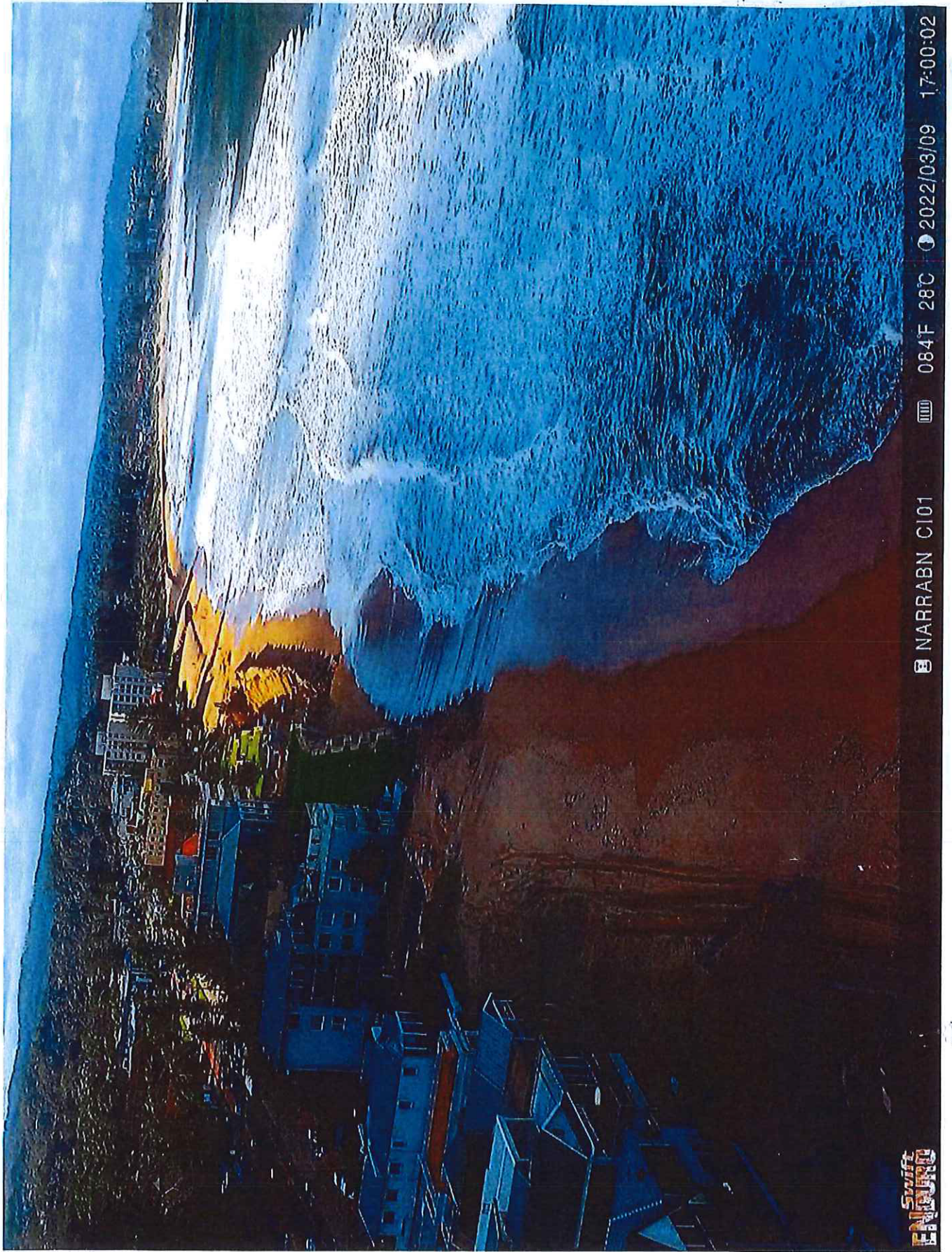
"In addition to addressing erosion concerns, the seawall upgrades will now provide four formalised beach access points, based on valuable feedback received during the community consultation process. These access points will be located at the southern end near the lifeguard tower, Bucknell Street, Leggett Park, and Strong Reserve towards the northern end.

"We plan to incorporate more plants, seating areas, and landscaping elements, creating an inviting and aesthetically pleasing environment for all."

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Home / Council / News / Latest news / **Understanding the Collaroy seawall challenge**

Understanding the Collaroy seawall challenge

Friday, 26 November 2021

The 2016 east coast low showed the devastating impacts for Collaroy Beach that significant storm events can have. Here are answers to some of the questions being asked about the coastal management at Collaroy:

1. What is the issue at Collaroy-Narrabeen Beach?



There has been a risk to properties along the beachfront at Collaroy almost since they were built back in the early 1900's. Our challenge, and that faced by many coastal areas around Australia, is to manage the impact of planning decisions made a century ago and minimise threats to coastal processes and public beaches.

The 2016 storms showed the devastating impacts for Collaroy Beach and beach residents that significant coastal erosion events can have. Extensive consultation was undertaken in both 2014 and following the 2016 storms, with new coastal management mechanisms put in place.

2. What about a buy-back scheme for the properties affected?

To purchase all the beachfront property just at Collaroy would run to the many hundreds of millions of dollars - outside the budget of a local council.

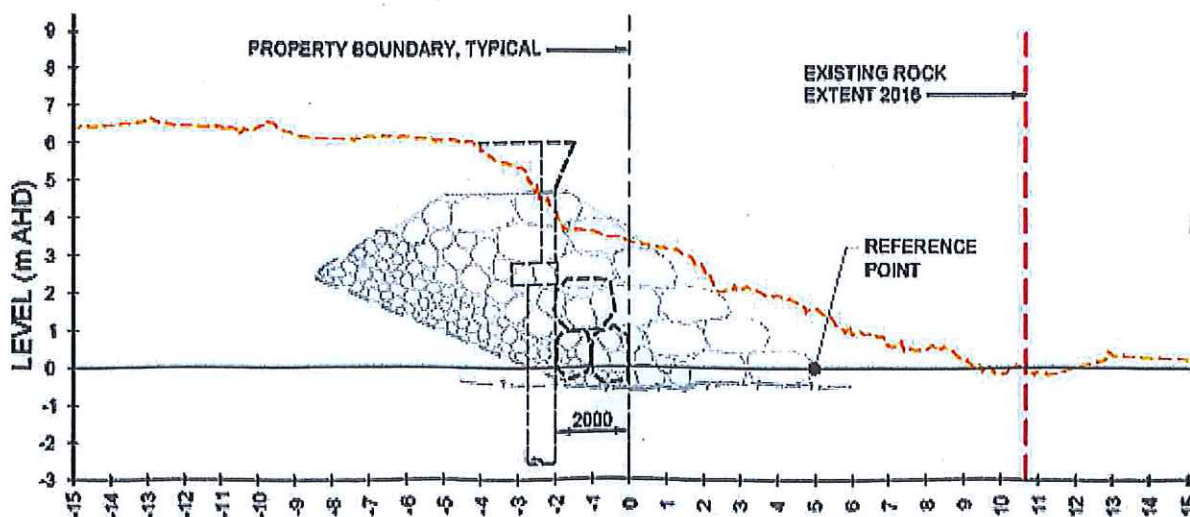
Given the numbers of affected properties around the country, there are no state or federal government plans to use taxpayer dollars for a buy back scheme either.

3. How are applications for seawalls considered?

The legal regime that governs coastal protection in NSW comprises State legislation which allows individual residents to submit development applications for sea walls.

Development applications received are required to be assessed in accordance with the relevant legal requirements, including the relevant provisions of the Environmental Planning and Assessment Act 1979 and the Coastal Management Act 2016. The majority of the current works have been approved by an independent Local Planning Panel.

4. Why are some sections of the seawall vertical and not a rock revetment?



Rock revetment-style works have been approved at certain areas of the beach. However, the works currently under construction are for a vertical wall which will be located entirely on private property. Due to space constraints on some private properties, a rock revetment-style wall with a uniform alignment would encroach up to 10m onto the public beach.

On the basis of independent expert coastal engineering analysis it was concluded that a vertical wall located on the private property is a better outcome to rock revetment encroaching on to the public beach.

This figure above provides an example of the footprint and location of different designs of seawalls relative to the private property boundary. The orange line depicts the shoreline following the June 2016 east coast low.

5. Isn't there already rock protection on Collaroy Beach?

There is a long history of informal seawalls being in place at Collaroy-Narrabeen Beach. During historic storms as far back as the 1930's rocks and other material were placed on the beach to manage the impacts of erosion.

Over time this has created an almost continuous informal seawall from Collaroy to South Narrabeen. The footage in video above was taken in 2016 and shows the damage this wall suffered in the 2016 storm and how much rock there is on the public beach. The ability for the community to access the beach and enjoy it safely is impacted when this informally placed rock is exposed following storms. Building properly designed seawalls within private property where possible,

enables most of this rock on the public beach to be removed.

6. Will the wall cause damage to the beach?

Extensive assessments by independent coastal engineering experts have been undertaken as part of the DA process for the current works. As every beach operates differently, the assessments considered potential impacts on Collaroy-Narrabeen specifically.

For works undertaken consistent with these independent assessments it was concluded that there would not be any significant impacts on coastal processes or the beach.

The informal rocks and seawalls have been in place for many decades without any significant changes being observed.

The works being constructed at the moment will result in most of the informal rock walls being removed from this location. This has significant benefits for the beach, public access and public safety.

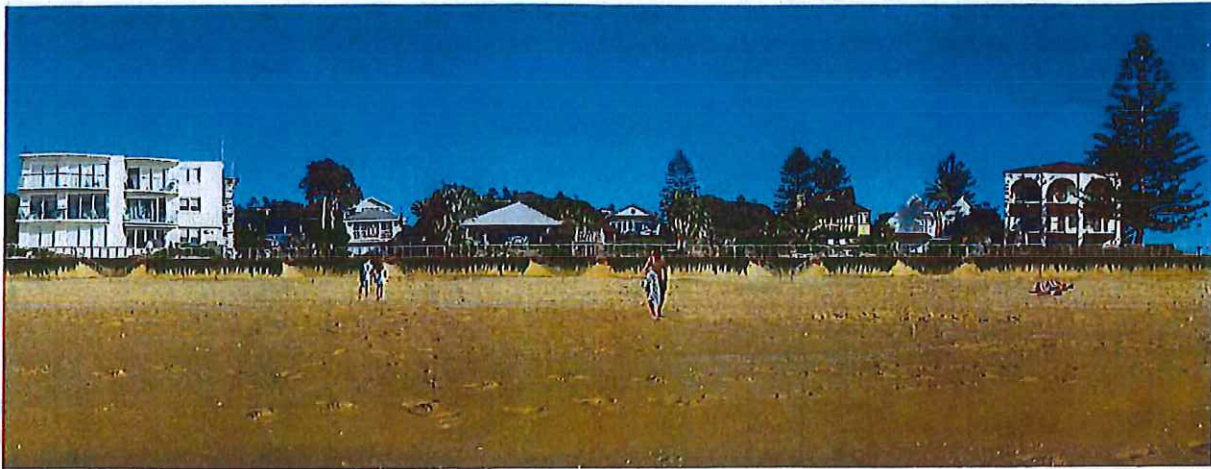
Other local beaches such as Manly, Curl Curl, Dee Why, Collaroy, Bilgola and Basin Beach (Mona Vale) have vertical walls and these beaches recover naturally following erosion events and continue to be enjoyed by beach users.

7. Was the community consulted?

Protection at Collaroy has been the subject of conversations and consultation with the community for many years.

There was comprehensive community consultation in both 2014 and 2016 in relation to Council's coastal zone management plan (certified by the Minister) and Council's policy in respect of Collaroy Beach, as well as more recently for each of the DAs in line with our normal notification process.

8. It seems pretty imposing now. What will it look like when finished?



The owners are mid-construction. Once this wall is complete, most of the structure will be covered by sand outside of storm events. The works will also be landscaped and integrated with the surrounding landscape, like the artist's impression above.

9. Who is funding the wall?



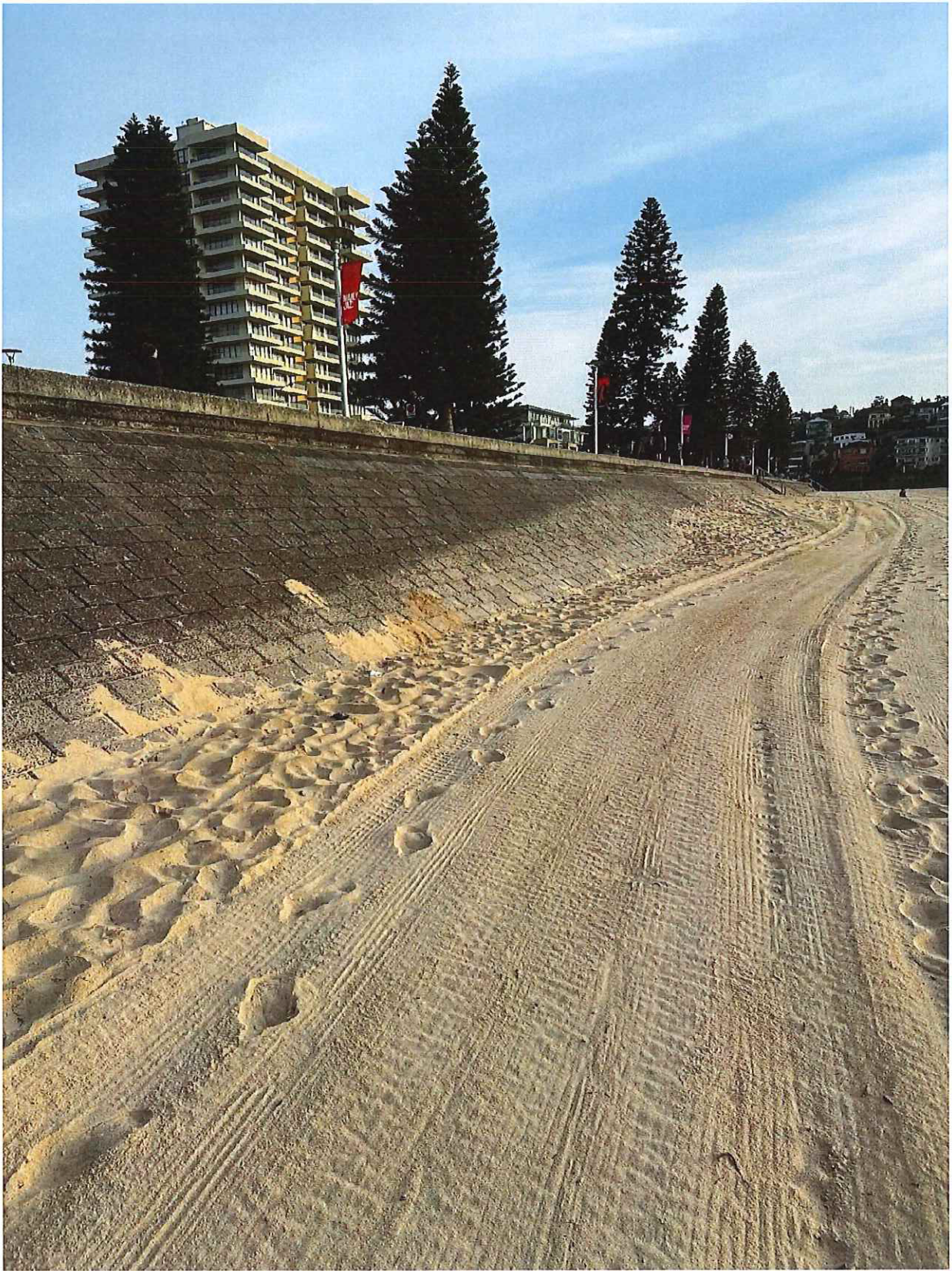
Private works at Collaroy are funded 80% by residents and 10% each by Council and the state government.

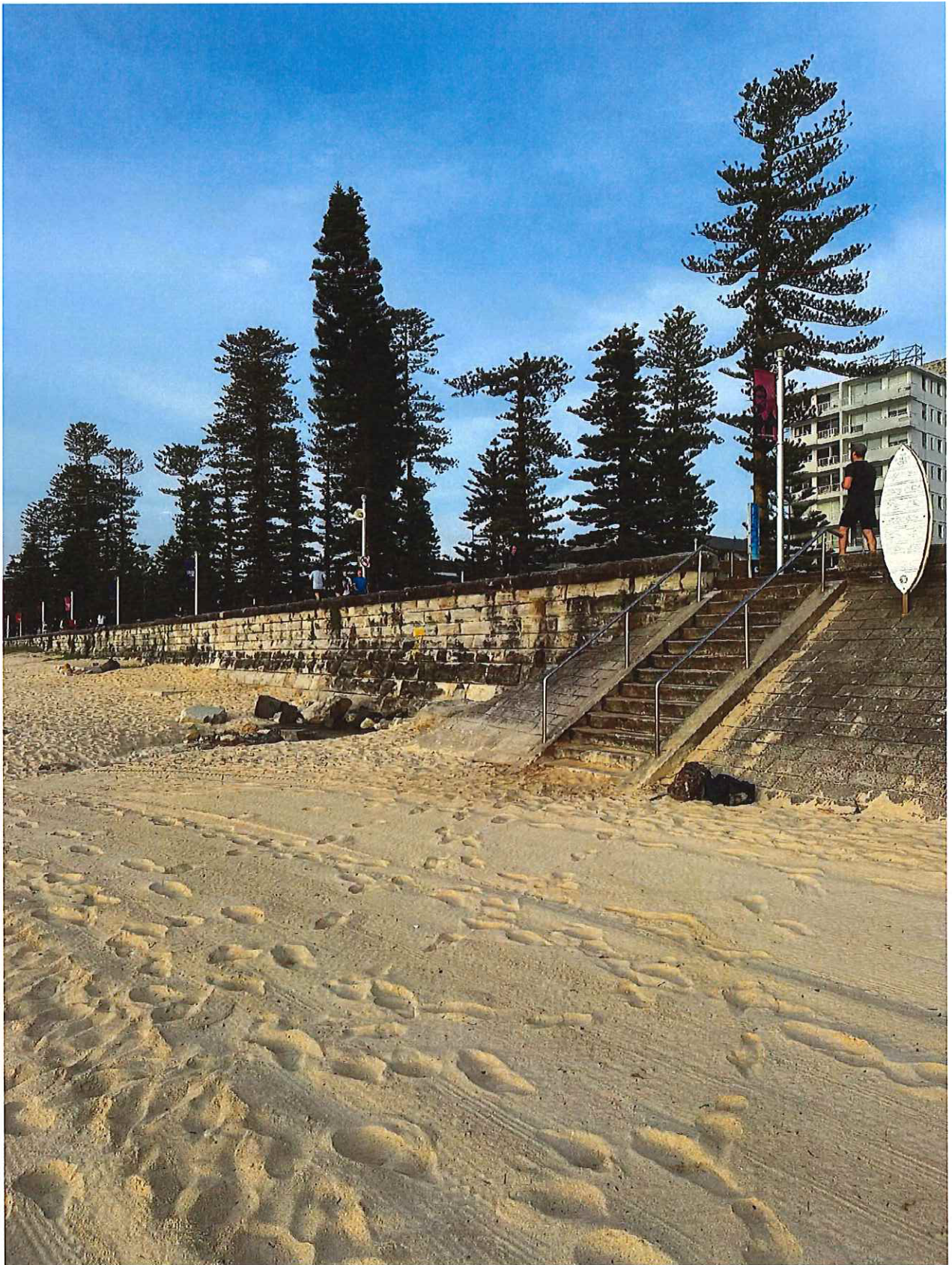
Council and the NSW Government are also joint funding the works on public land such as in front of the Collaroy carpark. (pictured above).

10. What else?

A Development Application for another section of private protection works further north is currently being considered and will be assessed on its merit and determined by the independent Local Planning Panel. All community submissions will be considered in the assessment.

Read more about the various legislative requirements for coastal protection works, Council's role and see a timeline for the protection works: <https://www.northernbeaches.nsw.gov.au/environment/coast-and-waterways/coastal-erosion/collaroy-narrabeen-beach>















reviewed regarding other potential impacts such as visual amenity, public safety, beach access and serviceability. With regard to visual amenity and public safety, there is concern about the height of a new hybrid or vertical sea wall, being approximately 6-8m in a single rise following erosion events and 3 metres with an accreted berm. Such heights are likely to be visually imposing and could invoke public safety concerns. It is recommended that Council (or the developer) consider a stepped/terraced (two-tier) wall to reduce to vertical relief and improve beach access along the structure". That report included rock rubble seawall concept design drawings in appendix B. This is in complete contrast to Mr Horton's statements that MHL "endorsed" the proposed vertical wall.

43. MHL also stated "Council may also wish to consider undertaking a community consultation and education program addressing the findings of this addendum report and the relative impacts of proposed sea walls on natural processes and beach user amenity. In particular, that beach width is most affected by the relative cross-shore position of a seawall within the active beach profile and that the seawall makeup does not by comparison significantly impact the time that the beach width is impacted following storms".
44. In respect of the 1996 Kraus and McDougal paper – the Effects of Seawalls on the Beach part 1, what must be appreciated is that this paper is now over 25 years old and has been superseded by further works. Further, it deals with a range of walls, not just vertical concrete walls and in a range of situations and locations across the beach. But it does not differentiate the results based on these differences. Rather, it seems to try to average them.
45. This 1996 paper can hardly be claimed as being a definitive work, both at that time and through the passage of time since. This is borne by the Conclusions and Recommendations at the end of the paper which demonstrate that far more work is required to answer the questions regarding issues such as: -
 - (a) Maximum depth of scour

- (b) Beach profile shape and change
- (c) Beach plan form shape and change
- (d) Beach erosion and recovery
- (e) Waves and water level
- (f) Horizontal and vertical circulation patterns

All of these topics are touched upon in the paper, but often from perspectives of the time, namely up to 1996.

- 46. Selected quotes from the paper illustrate the uncertainty surrounding the seawall issue – *“a seawall is a shore, parallel structure constructed to prevent landward retreat of the shoreline and inundation”*. In this review, seawalls include revetments and bulkheads under the heading of seawalls. Some parts of the report were obviously correct at that time – *“an important and perhaps self-evident property of seawalls is that they may prevent long-term recovery or building of the backbeach by prohibiting berm formation by way of uprush and dune formation by wind.”*
- 47. The paper commented that the location on the beach with respect to the shoreline is a key parameter in respect of a seawall. Namely, the effect on a beach is dependent on the location of the wall.
- 48. It referred to model tests in relation to the paper as definitive saying – *“prediction methods for the majority of scour problems experienced at coastal structures are still lacking”*. Much uncertainty remains in understanding of a central engineering quantity – scour – at a wall.
- 49. *“It is clear that much of the controversy regarding the effectiveness and impacts of seawalls can be eliminated by applying 2 sets of basic terminology. The first is the recognition that sea walls are shore protection structures and not beach protection*

structures. The second is to separate the passive erosion which would occur in the absence of the seawall and the active erosion which is directly attributed to the sea wall."

That is, reported observations are confused because the complexity of the various situations and types of seawall / revetment have not been adequately investigated in terms of their location and design.

50. Neither the conclusions nor the recommendations suggest that this is a definitive paper and the content of the paper provides an environment of uncertainty.
51. Reliance on it by Mr Horton has no credible basis. Relying on this being "*the most significant literature*" as stated by Mr Horton is not justified. The panel should read the paper and form their own view.
52. In 2011, the Department of Environment, Climate Change and Water published draft guidelines for assessing the impacts of seawalls. Under the heading of 'Potential Erosion Impacts and Recommended Assessment Approach, they made reference to Carley et al 2010'. This is a reference to a report by Carley, Shand, and Mariani. In summary, it said that a beach is mobile and dynamic and a seawall is static and unyielding. That robust and widely accepted methods of predicting the magnitude and extent of beach response remains deficient. There are too many variables. That the effect of seawalls remains somewhat unresolved. That research shows they can play a role in the disruption of natural processes that lead to erosion of sand sediment from beaches.
53. The Government said: -

"Physical impacts are likely to differ between different seawall construction types and slopes (e.g. vertical vs sloping, smooth vs rubble, overtopping vs non-overtopping). This is in part due to different wave absorption and reflection characteristics..."
54. Amongst mitigating erosion impacts were the seawall's location and the seawall's design with the statement "seawalls constructed with a vertical face are likely to have more erosion impacts than those with a sloping face".

Royal Haskoning DHV

55. On 21 April 2021, Royal Haskoning DHV (RHD) provided a report to Bonus & Associates in respect of properties at 1184 – 1186 Pittwater Road, Narrabeen. We assume that Mr Morrison was referring to this report, plus possible other Royal Haskoning reports in relation to Council having obtained advice in relation to their position. That report at page 2 referred to the fact that in January 2014, RHD had prepared a report in relation to a proposed revetment which would most likely reduce the likelihood of erosion to the subject properties and also adjacent properties. In 2014, development consent was given to those works, but they were not carried out. The June 2016 East Coast Low intervened.
56. RHD were then asked to advise in relation to a vertical continuous pile wall located entirely within private property. The report at page 5 stated that the proposed works were consistent with the relevant Principles of the Coastal Erosion Policy. There would be maintenance of public amenity and surf quality resulting in removal of past rock protection from the beach. It also states that property owners are responsible for protecting their property from the impacts of coastal processes and are responsible for ensuring their property does not adversely impact on adjoining properties or coastal processes.
57. The report at page 6 stated that – *“The requirement that the proposed works are only visible temporarily during and after significant erosion events is not fully met. This is a difficult requirement to satisfy at Collaroy – Narrabeen Beach.”*
58. The report said that the proposed works would not impact adversely on the beach and coastal processes compared to the existing situation or status quo. That is, they are comparing the position to doing nothing. They have not commented on the relevant position for a revetment wall.

59. The Planning Panel should look closely at all aspects of this proposal to see whether it is in conformity with the Coastal Zone Management Plan dated December 2016 that was prepared for Council by RHD.
60. Council has shown by refusal of the application at Newport Beach that it is aware of its obligation to protect a beach for members of the public.
61. Here, individual property owners, who are entitled to protect their property, are proposing a vertical wall which will either adversely affect the operation of the beach or that has very significant possibilities that it will. Property owners can put in a properly engineered revetment wall sloping down to the beach which will provide them with protection and not adversely affect the operation of the beach. For this reason, the application should be refused.
62. There would be significant jurisdictional error if Council approved this development consent. That could be challenged through the Land and Environment Court.

Summary

63. The fact that a number of other coastal Councils, including this Council, have recently placed revetment walls on beaches should cause the Panel to closely consider that precedent. Relevant Councils, who should be expected to have full researched the matter, determined not to put in a vertical wall but a revetment wall. The Council and the Soil Conservation Service or the engineers engaged by Council should be requested to provide information and reports relied on in support of a revetment wall at Collarory.
64. After the 1967 storm, Flight Deck put in a revetment wall. After the 1974 storm, Marquesas put in a revetment wall. They have worked. The toe is on the beach and is usually buried in the sand. The area is often covered in grass. It has resulted in restoring

the beach to its natural form. The public is generally unaware those revetment walls are present.

65. If a vertical wall is constructed and is in the active beach area or beach fluctuation zone, then it is a new element in the working beach. In high tides, storms and big waves, the wall is reflective. By contrast, a revetment wall is dissipative of the energy coming from the water and still provides protection for landward properties. Properly engineered revetment walls will give protection to landowners and will reflect the historical position they have had of a slope down to the beach.
66. The material stated by Horton and others as definitive that a vertical wall does no harm, does not support that finding. The form of the beach should not be adversely changed by a non-natural vertical wall. However, the diagrams in the report clearly show the proposed wall within the active beach fluctuation zone and hence adversely impacting on the natural coastal processes which evokes Section 15 of the SEPP and again calls on the Consent Authority to NOT issue a consent under these circumstances.
67. It should be noted that at South Narrabeen Surf Club, between the current two vertical wall proposals the Council proposes to put in a revetment wall.