From:	Andrew Morrison
Sent:	29/10/2024 4:26:57 PM
То:	Council Northernbeaches Mailbox
Cc:	rodney childs
Subject:	TRIMMED: RE: DA Submission DA2024/1216 - Attention: Maxwell Duncan
Attachments:	Australian Standard AS3962.jpg; SIX MAPS AERIAL IMAGE & OVERLAY PLAN.pdf; NHM DA Concerns V3.pdf;

Dear Maxwell,

Apologies, two attachments were missing from my previous email today. Could you please add them to my submission earlier today regarding: DA2024/1216 for North Harbour Marina.

Yours faithfully,

Dr Andrew S Morrison RFD SC/KC 3 Bolingbroke Parade FAIRLIGHT NSW 2094

Liability limited by a scheme approved under Professional Standards Legislation

From: Andrew Morrison Sent: Wednesday, 16 October 2024 12:46 PM To: <u>council@northernbeaches.nsw.gov.au</u> Cc: rodney childs Subject: DA Submission DA2024/1216 - Attention: Maxwell Duncan

Dear Maxwell,

Please find attached my submission re: DA2024/1216 for North Harbour Marina.

Yours faithfully,

Dr Andrew S Morrison RFD SC/KC 3 Bolingbroke Parade FAIRLIGHT NSW 2094

Liability limited by a scheme approved under Professional Standards Legislation

SECTION 3 DIMENSIONAL CRITERIA

3.1 CHANNEL WIDTHS

3.1.1 Entrance channel

The width of the entrance channel to a marina is dependent on a number of factors, the majority of which are the following:

- Exposure to wind, wave and currents, which all reduce the manoeuvrability of boats. (a)
- Number of boats in the harbour and usage levels. (b)
- Type and size of boats. (c)

NOTE: Power boats are generally more manoeuvrable than sailing boats.

Extent of navigation aids provided. (d)

For an entrance channel, the minimum width should be the greatest of-

20 m; (a)

(L + 2) m, where L is overall length of longest boat in the marina, in metres; or (b)

5B m, where B is the beam of the broadest mono-hull boat in the marina, in metres. (c) The preferred width of an entrance channel is 30 m or 6B m; whichever is the minimum. Widening of the channel may be necessary where the channel changes direction.

Where benched breakwaters are used at a marina entrance such that the bench is submerged at higher tides, markers should be used to delineate the edge of the channel.

In order to minimize the penetration of waves into a boat harbour, it is permissible to narrow the width of the entrance channel over a short length at protecting breakwaters. The minimum width of this narrow section shall be the greater of 15 m and 3B m, where B is the beam of the broadest mono-hull boat in the marina, in metres.

3.1.2 Interior channels and fairways

The channels within the marina are not as greatly influenced by the wind, waves, and currents at any site, as they are by the size, number and type of boats, and the frequency of boat usage. Any non-motorized sailing vessel or multi-hull vessel using the harbour will need to be considered when determining the interior channel and fairway widths. In some locations, there may be climatic conditions, such as prevailing winds, which should be considered when interior channel and fairway widths are being determined.

The width of interior channels and fairways should be as follows (see also Figure 3.1):

- Interior channel: (a)
 - 20 m or 1.5L m, whichever is the greater, where L is Minimum width (i) overall length of the longest boat using the channel, in metres.
 - 25 m or 1.75L m, whichever is the greater. Preferred width

(ii)

(b) Fairways:

1.5L m, where L is the overall length of the longest boat Minimum width (i) using that fairway, in metres.

Preferred width 1.75L m. (ii)

C Standards Australia

www.standards.org.au



NORTH HARBOUR MARINA SIX MAPS AERIAL IMAGE & DA OVERLAY PLAN

SHEET TITLE: PRELIMINARY LAYOUT INTERNATIONAL MARINA CONSULTANTS DRAWING No: 6318-01/L DATED: 11/08/2023

 OCTOBER
 2 0 2 4

 SCALE
 1:500 @ A3

Dr Andrew Stewart Morrison RFD SC/KC 3 Bolingbroke Parade FAIRLIGHT NSW 2094

Attention: Maxwell Duncan Northern Beaches Council

29th October 2024

RE: DA2024/1216 - North Harbour Marina

Dear Maxwell,

Herewith please find my further supplementary submission on the proposed DA and a plan showing major defects in the proposal.

Yours faithfully,

Dr Andrew Stewart Morrison RFD SC/KC

NORTH HARBOUR MARINA – DA CONCERNS – FURTHER SUBMISSION

1. Accuracy of the Plan

I had previously expressed doubts as to the accuracy of the plan. Detailed analysis suggests the distance between the arms is shown accurately but confirms that it does not meet the Australian Standard (AS3962).

2. Inadequate distance for the interior channel between the arms for the proposed additional berths

As the attached plan shows the minimum 20 meter width is not met for almost all of the berths between the arms. The 25 metre preferred width is not met anywhere. Moreover, when the boats of the specified lengths are in their berths they almost all protrude into the interior channel further reducing the already drastically inadequate width.

3. Proposed vessel lengths exceed the leased area

As the plan shows most vessels of the size specified would protrude beyond the leased area line into the interior channel. Despite the fall-back document circulated by the applicant (which was previously provided in my supplementary submission on 28 October 2024), the applicant is seeking 18 additional berths, not 9 as suggested.

4. Safety

The proposal does not meet the Australian Standard for safe manoeuvring in the inner channel. It should be rejected as unsafe.