1 December 2016

The Interim General Manager Northern Beaches Council PO Box 882 MONA VALE NSW 1660

By email

Dear Sir

Objection to Development Application No. 0477/16 for Construction of Mooring Pens at 1 Kalinya Street, Newport

I have previously made an objection in relation to this development application. I submit this letter by way of further objection after having received preliminary legal and town planning comment on the merits of the proposal and having obtained the expert report of Peter Fielder, an expert in the field of marine, maritime and transport infrastructure planning, design and delivery, which I **attach**.

The proposed location for these mooring pens represents some of the last remaining undeveloped foreshore area in this section of Pittwater. The natural land water interface and foreshore vegetation has been maintained on this site for decades in accordance with Council's consistent planning approach to such areas, i.e. to protect their visual scenic and environmental importance. With large commercial marinas immediately to the north (Herron Cove Marina) and south (Newport Anchorage Marina) of the site the preservation of the scenic and natural qualities of this prominent foreshore area is critical. To infill this site with further man made structures and large boats would completely build out this area with man made structures.

In summary, I submit that the Northern Beaches Council should refuse consent to the development application for the reasons that follow.

Development contrary to objectives of W1 Natural Waterways Zone

The development fails to meet the objectives of the W1 Natural Waterway Zone as set out in the *Pittwater Local Environmental Plan 2014* (**PLEP 2014**).

Particulars:

- The development does not protect the ecological and scenic values of this section of the Pittwater waterway;
- (b) The development would have significant adverse effect on the natural value of this undeveloped area of the Pittwater water;
- (c) The development will increase boat traffic in the area which is likely to adversely impact on recreational fishing in the area;

(d) The development will adversely impact on the natural unbuilt quality of this prominent part of the Pittwater foreshore and is likely to obstruct the navigation of the waterway.

Development may be impermissible in the W1 Natural Waterways Zone

Although the development is described as 'mooring pens' which are relevantly permissible in the zone, the proposed floating pontoon berthing arrangement could more accurately be characterised as a 'marina'. A mooring pen is defined as an arrangement of freestanding piles or other restraining devices designed or used for the purpose of berthing a vessel. This is the kind of arrangement you might see out the front of a private waterfront dwelling and would normally provide a permanent berth for the adjoining owner, licensee or leasee. The proposed development in scale and construction goes well beyond the description of a mooring pen and is more akin to a floating marina despite questions of permanency of use.

Development fails to meet objectives of NSW Coastal Policy

It is submitted that the further development of this area would be inconsistent with the objectives of the coastal zone as set out in Part 5, clause 5.5 of the PLEP 2014, and contrary to the Council's development controls.

Particulars:

Development of the site would fail to achieve the objective of implementing the NSW Coastal Policy, in particular:

- the protection, enhancement, maintenance and restoration of the coastal environment, its associated ecosystems, ecological processes and biological diversity and its water quality - clause 5.5(1)(b)(i);
- (b) the protection and preservation of the natural attributes of the NSW coast clause 5.5(1)(b)(ii);
- (c) the protection of amenity and scenic quality of the foreshore area, particularly having regard to the fact that this site is uniquely untouched by development along the Pittwater foreshore clause 5.5(1)(b)(v);
- (d) the protection and preservation of native coastal vegetation, including the seagrass species mapped by the NSW DPI as well as the juvenile mangrove plants observed along the foreshore by Ocean Environmental Consulting who prepared the applicant's Marine Ecology Assessment clause 5.5(1)(b)(vii);
- (e) the protection and preservation of the marine environment, having regard to the direct and indirect impacts of the development on the water quality via waste generation and increased turbidity during construction and subsequently, as well as the ongoing potential risk of contamination from fuels and oils - clause 5.5(1)(b)(viii);
- (f) ensuring that the bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area, particularly as the site is directly visible from Rowland Reserve on the opposite side of the channel - clause 5.5(1)(b)(ix);

(g) ensuring that the decision in relation to new development consider the broader and cumulative impacts on the catchment, when the existing large commercial marina developments in the area are factored in - clause 5.5(1)(b)(x).

Development would hinder conservation efforts

The development of the site would permanently hinder any future conservation efforts focused on protected aquatic vegetation habitats and the various endangered, critically endangered and vulnerable species which are listed as potentially occurring in the area in the *Fisheries Management Act 1994* - clause 5.5(2)(e). The alienation of this area of public waterway/foreshore to private commercial use would be permanent and should be avoided.

Cumulative impacts of the expansion of development are unacceptable

The site is unsuitable for development having regard to the cumulative impacts of the development of this site and the existing commercial and public marina developments on the coastal catchment - clause 5.5(2)(f). The cumulative impacts of the development ought not to be broken down to a simple assessment of whether the number of moorings complies with the Council's development control plan (as is suggested in the applicant's Statement of Environmental Effects).

The commercial expansion of the Hotel use into the public waterway and the consequential alienation of a large area of well utilised public waterway is not justified, and is contrary to clause 7.8(1)(b) of PLEP 2014 requiring continuous public access along the foreshore area and to the waterway. The balance of the public and private interest in this matter should clearly weigh in favour of the public. The recent intensification of the Hotel use following its refurbishment should not be permitted to spill over into the publicly owned long term recreational asset of the waterway.

The scenic and amenity impacts are unacceptable

As previously noted, the development is unsuitable having regard to impacts on natural scenic quality.

The development of the site would be unsuitable having regard to its relationship with the surrounding area and its impact on the natural scenic quality, particularly when the cumulative impacts of the development are considered in combination with the existing marina developments on either side of the site.

The site currently serves as a critical source of visual relief from the built up nature of the surrounding development along the foreshore. The development of this site will lead to the loss of the natural scenic quality of the site and contribute to a sense of overdevelopment of the foreshore - clause 5.5(2)(b). The stair access details are somewhat vague though the structure will clearly be a visible intrusion into the natural foreshore escarpment.

The development is likely to impact on the amenity of the foreshore area contrary to the objectives of clause 7.8(1)(a) of PLEP 2014, and the requirements of clause 7.8(3)(a)-(g) having regard to the following comments:

(a) The development will affect the amenity of the area for the reasons previously discussed - clause 7.8(1)(a);

- (b) The development wont ensure continuous public access along the foreshore area and to the waterway clause 7.8(1)(b);
- (c) Council ought not to be satisfied that the development will contribute to achieving the objectives of the W1 Natural Waterways Zone (see previous discussion) - clause 7.8(3)(a);
- (d) Council ought not to be satisfied that the development will not cause environmental harm, having regard to the direct and indirect impacts of the development during both the construction and operation stages - clause 7.8(3)(c);
- (e) Council ought not to be satisfied that the development will not cause congestion or generate conflict between people using the waterway (having regard to the report of Peter Fielder which is attached) clause 7.8(3)(d);
- (f) Council ought not to be satisfied that the development does not compromise opportunities to provide continuous public access to the waterway clause 7.8(3)(e);
- (g) Council ought not to be satisfied that the natural and aesthetic significance of this undeveloped part of the Pittwater foreshore will be maintained if the Development were to be approved - clause 7.8(3)(f);
- (h) Council should conclude that the development will not encourage or reinforce the foreshore character and will not respect the existing environmental conditions - clause 7.8(4)(e).

The use of the marina by boaters as part of the Hotel's licenced premises is both likely and unacceptable. The physical separation of the marina site from the Hotel premises will make it hard to police and control unruly patron behaviour in the vicinity of the moorings.

In addition to the private amenity impacts I have previously raised, the development of the site would negatively impact upon public amenity as the development would effectively screen the natural foreshore area from view from the public Rowland Reserve. Rowland Reserve is a regionally significant public recreation asset of Pittwater, and the loss of views from that vantage point to the site would be contrary to clause 5.5(2)(c)(ii) of the PLEP 2014.

Further amenity impacts would be evident during the evening as a result of the intrusive mooring lighting which is proposed, as well as from the lights of patrons berthing boats at the moorings and boats picking up and dropping off patrons of the Hotel.

Conclusion

In summary I request that Council refuse this application. The balance should be struck in favour of the public and not in favour of private commercial interests on this occasion.

Peter Icklow Dominion Air Services Berth 26, Newport Anchorage Marina December 1st 2016

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REVISION 1 VERSION 1 30 November 2016

Engineering Report

Proposed Marina Development

"The Newport Hotel" 1 Kalinya Street Newport NSW 2106 Development Application No 477/16

for	Mr Peter Icklow, Director of Monarch Investments.
	c/- HWL Ebsworth
	Level 14, Australia Square
	264-278 George Street
	Sydney NSW 2000

by Peter Fielder FIE(Aust), MBA, BE(Civil) CP(Eng) Principal Eyre International Pty Ltd 306/28 Kingsway Cronulla NSW 2230

reference Development Application No 477/16

document # **P16-3501V1.0**

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Appendix A Résumé of Peter Rodney Fielder MIE Aust, CP Eng MBA BE Civil



1 Introduction

This engineering compliance report has been prepared on the instructions of HWL Ebsworth solicitors on behalf of Peter Icklow, Director of Monarch Investments. The purpose of this statement is to provide expert opinion on the design compliance relating to engineering and navigational issues associated with the proposed marina development fronting "The Newport", 1 Kalinya Street Newport.

This report is prepared by Peter Fielder who is the principal consultant of Eyre International Pty Ltd, a Fellow of the Institute of Engineers and an expert in the field of marine, maritime and transport infrastructure planning, design and delivery with over 30 years experience in the field. Peter Fielder's resume is included in Appendix A of this report.

2 Terms of Reference

Mr Peter Icklow, Director of Monarch Investments, has instructed us to prepare an expert report as a maritime engineering expert in relation to the compliance of the proposed development with respect to the Australian Standard and industry practice with respect to engineering and navigational matters.

My views expressed in this report are based on my experience as a maritime engineer, my experience in the design, construction and maintenance of marinas and marine structures and facilities, my long experience as a sailor and vessel operator, my knowledge of and experience in the design and operation of commercial wharves, marinas and maintenance facilities in accordance with Australian Standards environmental, maritime and safety laws, the documents made available to me, my site observations, and calculations and site analysis performed to date.

3 Documents Reviewed

The documents provided for consideration in preparing this report are listed below:

Public Application Documents	
1	Plan - Design Arrangement Revision A
2	Plan - Design Siting Revision A
3	Plan - Gangway Access Footings
4	Plan - Gangway Access
5	Plan - Indicative Lighting Specifications
6	Plan - Indicative Power Pedestal Specification
7	Plan - Location
8	Plan - Site Survey

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9	Plan - Site
10	Purchase Contract 7835 - Newport Arms Hotel - Mini Marina
10	Statement of Environmental Effects
12	
13	FEE FORM
14	Geotechnical Report and Form
15	LOC letter to Hemmes Trading - Crown's consent granted
16	Marine Ecology Report
17	Navigation Report
18	Owners Consent - Hemmes Property
Public	Submissions Perdriau - Submission
	Hay - Submission
	Advanced Marina Management Pty Ltd - Submission
	Cronly-Dillon - Submission
	Watson - Submission
	Latimer - Submission
	Cleary - Submission
	Watson - Submission
	O'Neil - Submission
	Horseshoe Cove Association Inc - Submission
	Payne - Submission
	Harper - Submission
	Cleary - Submission
	Bitova Pty Ltd - Submission

4 Discussion and Background

4.1 Site Description

The proposed marina is located adjacent to the land identified as 1 Kalinya Street Newport which fronts the eastern foreshore of Pittwater between Heron Cove to the north, and Old Mangrove Bay to the south and is directly opposite the Bayview Park sand spit.

The waterway fronting the site has a navigable width of approximately 50m and is the only navigable access channel between Pittwater and Old Mangrove Bay, Winji Jimmi Bay and Winnererremy Bay. The waterway is bounded to the west by a starboard navigational channel marker (all vessels to pass to the east) and the existing shore line to the east.

There is a 4 nautical mile per hour speed limit in this section of Pittwater.

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Aerial View of the existing site at January 2014

Upstream of the proposed development are Old Mangrove, Winji Jimmi and Winnererremy Bays. These bays are fronted by a mix of residential and commercial properties with a very high recreational craft capacity. In these three bays, there are over 50 vessels moored on swing moorings, over 120 marina berths and over 55 private waterfront facilities.

4.2 Accuracy

Australian Standard 3962 Guidelines for Design of Marinas at Section 2 prescribes the requirements for site investigations for proposed Marina Developments. At section 2.1.3, the standard prescribes that "All existing features such as jetties, ramps, seawalls, stormwater outfalls, drains, rock outcrops and the like should be clearly identified" by the site survey.

I have not sighted in my review of the application documentation, nor have I been provided with any form of survey or engineering drawing that accurately supports and describes the proposed development.



In determining channel widths, areas and clearance distances, I have relied on a combination of resources including the Pittwater Council's GIS map, Google Earth and NearMap images inserted and manipulated in graphical software applications.

In the absence of engineering survey drawings prepared to a conventional scale and showing the proposed structure and its geometric relationship to adjoining features and structures, the area calculations and clearance distances necessary to develop the analysis contained in this report cannot be of engineering or survey precision.

The areas, dimensions and clearance distances that I have calculated in the preparation of this report, however, have been cross checked against a number of independent sources and are considered adequate in the context that they are being used and relied upon.

5 Terms of Reference

The Australian Standards documents for the design of Marinas in Australia are: Standards Australia, AS 3962 - 2001 Guidelines for design of marinas. Standards Australia, AS 4997 - 2005 Guidelines for design of maritime structures.

There are a number of highly valued reference documents for developments in NSW. These are: NSW Maritime, Engineering Standards And Guidelines For Maritime Structures, dated March 2005 RMS Guidelines for Hydrographic and Geotechnical Data dated August 2010

5.1 Site Investigations

Site investigations are an essential part of the planning and design of maritime structures. As a result, detailed site investigations are required to provide sufficient information for the design and construction of a marina in terms of its compliance with the Australian Standard and its relationship to other marine infrastructure and users.

Australian Standard 3962 sets out in Section 2 the investigation requirements for:

- 2.1 Survey
- 2.2 Geotechnical and
- 2.3 Wind, Hydrodynamics and sediment movement assessments.

5.1.1 Survey

Hydrographic surveys are required in order to determine the available depth of water and location and the relationship of the proposed structure to the seabed, other navigational features and



adjacent facilities.

The application is supported by a survey plan prepared by True North Surveys of Belrose dated 21 September 2015. This is a terrestrial survey only and does not attempt, or purport, to be a hydrographic survey.

In the absence of a properly constructed hydrographic survey, completed in accordance with clauses 2.1.1 and 2.1.2 of Australian Standard 3962 and the RMS Guidelines for Hydrographic and Geotechnical Data, the information required to enable a competent assessment of the application is not provided.

Moreover, there is no measure available that can be accurately used, assessed or tested against the proximity of the proposed structure to other adjoining structures and the wet area leases that they legally occupy.

A crucial element of the design and location of a marine structure is the consideration of water depths. Clause 3.2 of Australian Standard 3962 prescribes the minimum water depths and under keel clearances. Without the appropriate survey data and an accurate survey positioning plan, the suitability of the water depths cannot be assessed.

A hydrographic survey is an essential component to both the design and assessment of a marina structure. Without this information, the Consent Authority does not have sufficient information to assess the suitability of the proposal and its compliance with Legislative and the relevant Australian Standards.

5.1.2 Geotechnical

Geotechnical Surveys are an essential component of the design of a marina structure particularly in reference to:

- a) the ability of the pile supports for the marina structure to sustain the loads imparted by the floating structure in times of high loading and;
- b) to establish the sea bed conditions to determine the under keel clearance requirements established in Australian Standard 3962.

The application is supported by Report On Geotechnical Site Investigation For Proposed Gangway To Boat Mooring Pens At The Newport, 1 Kalinya Street, Newport prepared by Crozier Geotechnical Consultants.

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Both the Australian Standard 3962 and The Engineering Standards and Guidelines for Maritime

Structures sets out the requirements of a marine structure geotechnical investigation:

"Geotechnical investigations are required in order to determine the properties and constituents of the seabed and underlying rock strata and the depths of the various layers comprising the seabed.

Information required from an investigation might include some or all of the following:

- a. soil, sediment and rock classification;
- b. grain size distributions and shape;
- c. in-situ soil density;
- d. stratigraphy;
- e. soil strength parameters;
- f. soil deformation parameters and;
- g. chemical composition of any sediments to be dredged.

Geotechnical investigations are generally performed under the direction of specialist geotechnical engineers and geologists."

The report by Crozier Geotechnical Consultants states at paragraph 2 page 5 "*The installation of pile footings to support the moorings is outside the scope of this assessment.*"

This is a terrestrial geotechnical report only, involves no physical investigation and does not attempt, or purport, to be a hydrographic geotechnical investigation.

A hydrographic geotechnical investigation is an essential component to both the design and assessment of a marina structure. Without this information, the Consent Authority does not have sufficient information to assess the suitability of the proposal and its compliance with Legislative and the relevant Australian Standards.

5.1.3 Wind, Hydrodynamics and Sediment Movement Assessments.

Both the Australian Standard 3962 and The Engineering Standards and Guidelines for Maritime Structures sets out the wind and hydrodynamic and sediment investigation requirements of a marina structure.

With respect to the Development Application No 477/16, wind and hydrodynamic (wave) data is a key design input relating to the structural design of the floating structure and the piling, the assessment of sitting and location particularly with respect to the water depths at the berths. In establishing the minimum water depth below floating structures and at berths, Australian Standard 3962 mandated the consideration of the wave heights and currents.

In this location where the open fetch to the north west is over 3.5km, the wave environment and the impact of the local geography on the wave height length and period is a critical input into the design considerations.



There is no data relating to Wind, Hydrodynamics and Sediment Movement submitted with the application. Without this information, the Consent Authority does not have sufficient information to assess the suitability of the proposal and its compliance with Legislative and the relevant Australian Standards.

5.1.4 Safety in Design

Section 274 of the NSW *Work Health and Safety Act* (the WHS Act) requires the design of 'structures' defined under the WHS Act to mean anything that is constructed, whether fixed or moveable, temporary or permanent to be subject to a safety in design review. A competent review of a marina structure must consider the aspects of navigation operation and safe berthing and use of the structure.

Absent a hydrographic survey and a competent geotechnical investigation a Safety in Design review cannot be undertaken nor proven to the Consent Authority.

5.2 Adequacy (accuracy) of Proposal Drawings

In addition to the absence of a suitable survey plan appropriately identifying the location and relevant features, the plans purporting to show the development are insufficient to enable a thorough and considered assessment of the proposal.

It is appropriate that an application for a marine structure (marina) accurately show in plan view the component parts of the permanent structure and their relationships with the high water mark, adjoining leasehold and real property boundaries, [DP1126560, DP 527172, DP72587 & DP1012071]. The drawing should identify the fixed and floating components of the structure, as well as the support pile locations and sizes and the sea bed levels to Indian Springs Low Water and reference to Australian Height Datum.

The drawing package should also provide sections through the proposal at high and low tides identifying the sea bed profile, geotechnical profiles, design vessel details, design vessel drafts, and under keel clearances. Compliance of ramp angles for disabled access should also form part of the sectional drawings which would constitute an appropriate drawing package submission seeking planning consent.

The drawing package in support of the development application is inadequate and does not meet the minimum industry standards.

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5.3 Navigation

5.3.1 Roads and Maritime Services

The Transport RMS letter dated 4 July is identified in the public documents and is acknowledged. The letter provides conditional assessment that there are no navigational concerns. However, the condition stipulated by the RMS officer is a condition over third parties and relates to the capacity and behavior of the vessel skippers and how they operate their craft.

The condition contained in the RMS letter: *"Vessels on the channel side of the mooring pen be berthed stern side too only.*" is simply unenforceable and an admission by the RMS that the channel is narrow and that the proposal will have an adverse impact on the existing circumstance,

The RMS Navigational chart for the region has a special navigation warning pertaining to the portion of Pittwater where the development is proposed. The chart warning states: *"CAUTION: Navigable channels in this area are narrow and congested. Please observe speed and wash restrictions and keep to starboard (right) when passing oncoming craft"*



Excerpt from RMS Pittwater Navigation Chart

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5.3.2 Australian Standard 3962

Australian Standard 3962 at clause 3.1.2 prescribes the minimum width of a channel of fairway with a marina environment as:

3.1.2(a) Interior Channel:

- *i) minimum width 20m or 1.5L m which ever is the greater where L is the overall length of the longest boat using the channel, in meters*
- *ii)* Preferred width 35m of 1.75L m, which ever is the greater.

A survey of vessels moored in the waterways identified as Old Mangrove, Winji Jimmi and Winnererremy Bays found that there are a number of vessels that are over 30m and thus the minimum channel width prescribed by the Australian Standard is 45m, and the preferred width is 52.5m.

The channel created by the physical presence of a vessel berthed at the proposed development and the western channel boundary, as defined by the RMS starboard channel marker has been calculated at 40m¹, and does not comply with the minimum width prescribed by the Australian Standard.



Image created from Applicants Google map image drawing inserted and scaled in AutoCad¹

Refer statement regarding accuracy at paragraph 4.2 of this report.

Whilst it is a matter of policy for the planners and consent authorities to consider the public versus private use of the waterway the development proposed to occupy, along with and its impacts on the broader community, it is respectfully submitted that in this circumstance where public enjoyment is being adversely effected by a private development over public land, the standard adopted would be the "preferred" channel width and not the "minimum" width articulated in the Australian Standard. In any event, the proposal does not comply with the minimum width.

The proposal should be refused on the basis that it creates a public access channel that does not comply with the minimum channel width requirements of Australian Standard 3962.

7 References

Standards Australia, AS 3962 - 2001 Guidelines for design of marinas
Standards Australia, AS 4997 - 2005 Guidelines for design of maritime structures
B.O Tobiasson, R C Kollmeyer, 1991 Marinas and Small Craft Harbours Van Nostrand Reinhold
New York

Appendix

Résumé of Peter Rodney Fielder MIE Aust, CP Eng, MBA BE Civil Principal Eyre International Pty Ltd