



Office of Water



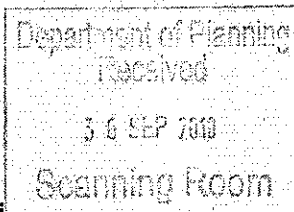
PCU015056

No. 10

Major Project Assessments
Department of Planning
GPO Box 39
SYDNEY NSW 2000

28 September 2010

Attention: Marek Cholinski



Contact: Jennifer Gerrard
Phone: 02 4904 2516
Fax: 02 4904 2501
Email: jennifer.gerrard@water.nsw.gov.au

Our ref: ER20246
Your ref: MP08_0045

Dear Mr Cholinski

Subject: Lake Macquarie Yacht Club Expansion 9 Ada Street, Belmont MP08_0045

NSW Office of Water (NOW) has completed its review of the Environmental Assessment (EA) for the Lake Macquarie Yacht Club Expansion at 9 Ada Street, Belmont. Comments and recommended conditions are provided below.

Appendix 14 (section 4.4.7) included detail on the Acid Sulfate Soils (ASS) assessment undertaken for the project. It was identified that all samples tested were potential ASS, but due to the filling and driven pile construction technique proposed there will not be a requirement to excavate lake bed sediments. The EA uses this as justification that an ASS Management Plan is not required, but also details that if excavation is required an ASS Management Plan would be developed. NOW is satisfied with this conclusion, but recommends the following condition:

1. Development and approval of an ASS Management Plan prior to construction activities for the pilings should the construction method be changed to require excavation.

Appendix 20 details the stormwater management for the Yacht Club car park and Foreshore works. NOW is satisfied with the bitumen extended car park design in terms of the treatment and disposal of stormwater, but has some concern over the treatment of stormwater for the Foreshore works which includes turf cell based car parking. The turf cells and the proposed underground rock surfaced infiltration trench do not have any gross pollutant trap (GPT) or associated filters proposed to remove rubbish and any hydrocarbon pollutants prior to infiltration to the groundwater or dispersed runoff. Additionally the EA does not describe how deep the proposed rock surface infiltration trench will be and no ASS sampling was done in the Foreshore Development area. NOW recommends the following conditions:

2. A Gross Pollutant Trap and associated filters similar to those proposed for the bitumen car park be installed to treat all runoff directed towards the infiltration trench.
3. The design of the infiltration trench is to be reviewed in regard to the potential interception and excavation of Acid Sulfate Soils.

Please contact Jennifer Gerrard on 4904 2516 if you require any further information regarding this matter.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'm. mignanelli', with a stylized flourish at the end.

Mark Mignanelli
Manager Major Projects and Assessment

6 October 2010



PCU015413



Mr Alan Bright
Acting Director, Regional Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Department of Planning
Received
12 OCT 2010
Scanning Room

Dear Mr Bright,

No. 11

**Subject: Submission regarding expansion of Lake Macquarie Yacht Club
at 9 Ada Street, Belmont – MP08_0045**

Thank you for your letter, reference 9043046, regarding the public exhibition of an Environmental Assessment (EA), prepared by de Witt Consulting, concerning the above-mentioned development at the Lake Macquarie Yacht Club.

An assessment has been made of the submitted EA, which has identified the following issues:

1. Scenic Values

In regards to Section 2.1.3 (Scenic Values) of Development Control Plan (DCP) No.1 – Principles of Development, Council's Landscape Architect has reviewed the EA and Visual Impact Assessment (VIA) (Appendix 10) and advised that the proposed development will be highly prominent from all directions.

It is considered that the submitted VIA has not adequately addressed all the potential impacts raised in the report, such as the impacts to Belmont Bay area. Accordingly, the following measures are recommended to ameliorate the visual impact from public land to the north and residential properties to the south of the development:

- (a) The applicant should consider minor amendments to the southern elevation of the clubhouse to improve the visual presentation of the development and break up the bulk of the building. It is recommended that this be achieved through a variety of building materials, colours and finishes.
- (b) Feature canopy trees or palms should be planted in the existing lawn / paved area to the north of the clubhouse to break up the bulk of the building as well as provide shade and landscape amenity to the recreational area.
- (c) All the existing trees within Cullen Park with good health conditions should be retained and protected during the construction stage. The landscape features in Cullen Park should be maintained and enhanced by tree surgery maintenance works and suitable shrub and groundcover planting at the feature areas including the entrance and perimeter of the proposed car park.

- (d) To soften the concrete feel of the main car park area, canopy trees in raised planter beds should be incorporated around the edge of the bitumen car park. When the trees are established, it will create a "green" link from Cullen Park to the clubhouse and when viewed from nearby foreshore areas north and south of the site.

2. Acid Sulphate Soils

In regards to Section 2.1.10 (Acid Sulphate Soils) of DCP No.1, the development site is identified as having potential Acid Sulphate Soils (ASS). The submitted Acid Sulphate Soils Report (Appendix 15) has confirmed that ASS are present on the site. The report indicates that due to the nature of construction, there will not be any soils exposed to the air and as such an Acid Sulphate Management Plan is not required. However, the report has not considered the construction of the car park area in Cullen Park, or the associated stormwater drainage system, which has the potential to expose ASS. Accordingly, it is recommended that any consent include a condition requiring the preparation and implementation of an Acid Sulphate Management Plan.

3. Heritage

In regards to Section 2.4 (Heritage) of DCP No.1, Council's Heritage Planner has reviewed the EA and Heritage and Archaeological Assessment (Appendix 13) and recommended the following:

- (a) **Aboriginal Heritage:** The recommendations contained within the Aboriginal Archaeological Management address Aboriginal stakeholder concerns and highlight requirements by the Department of Environment, Climate Change and Water (DECCW) for any disturbance of the site. The recommendations have been incorporated into the Draft Statement of Commitments, which should be conditioned as part of any development consent.
- (b) **European Heritage:** The recommendations contained within the Heritage and Archaeological Assessment should be expanded upon to include provision for heritage interpretation of the site. Interpretation should be based on best practice principles of the '*Heritage Interpretation Policy*' as endorsed by the Heritage Council of NSW in August 2005.

A proposal on the form and type of interpretation should be submitted to the Department of Planning and form part of the Statement of Commitments and the development consent. This may include but not be exclusive to historic photos in suitable prominent public spaces of the development such as the entrance / foyer area and should be installed prior to occupation.

4. Stormwater Management / On-Site Stormwater Harvesting

In regards to Section 2.5 (Stormwater Management, Infrastructure and On-site Services) of DCP No.1, a Stormwater Management Plan (Appendix 20) has been submitted, which identifies water quality and harvesting controls for the site. Council's Chief Development Engineer has reviewed this plan as acceptable.

The Stormwater Management Plan has identified flood levels at the site that take into account wave action and sea level rise. The applicant has designed the building for a 50 year design life with an adaptable floor level, which includes a new concrete slab placed inside the building to raise the floor level in the future.

It is proposed to construct the building with an initial floor level of 1.98m AHD, which is acceptable to Council. The adaptable floor level can be raised to 2.27m AHD in the future. The 2.27m AHD is in accordance with the level identified in Council's Sea Level Rise Policy. However, Council's Sea Level Rise Policy does not make provision for wave action and the Report has identified that expected wave height at the site is 0.4 metres. It is therefore recommended that the building should be designed so that the floor level is adaptable and can be raised to a height of 2.67m AHD in the future, to take account of sea level rise and wave action.

The proposed main car park has been designed at a level of around 0.8m AHD to 1.23m AHD. The car park area will be covered by stormwater in larger storm events including the 100 year flood. The occurrence of flooding will increase with expected sea level rise. A direct link between the Yacht Club and higher ground on shore will be located at a level of 1.23m AHD through the centre of the car park. This level is 0.15m below the current 100 year flood level of 1.38m AHD, so pedestrian access would still be achievable in a 100 year flood.

It is considered that the levels in the car park are satisfactory provided that a Flood Warning and Evacuation Plan is prepared and implemented. There should be no difficulty in raising the levels of the car park in the future to accommodate sea level rise.

The Department of Planning should give due consideration to the risk, liability, maintenance and duty of care associated with the adaptable floor levels within the clubhouse and how the adaptable floor levels will be enforced in the future.

5. Transport, Parking, Access and Servicing

Council's Traffic Engineer has reviewed the EA and Traffic and Parking Assessment Report (Appendix 16) and provided the following comments:

- (a) **Road Design:** Access to the Yacht Club is gained from Ada Street. Ada Street has a bitumen seal that is approximately 9 metres wide but does not have kerb and gutter other than at the intersection with Walter Street. It is considered that the road standard in Ada Street is not adequate for the proposed development and anticipated increase in traffic volumes. It is therefore recommended that a condition be placed on any consent requiring that kerb and gutter and associated stormwater drainage be provided on both sides of Ada Street to the standard identified in DCP No. 1.
- (b) **Pedestrians and Cyclists:** In regards to Section 2.6.4 (Pedestrians and Cyclists) of DCP No.1, a concrete footpath should be provided to the Highway.
- (c) **Public Transport:** Having regard to Section 2.6.5 (Public Transport) of DCP No.1, major bus routes service the Pacific Highway, which is located within close proximity of the site. As discussed in (b) above, the provision of a concrete footpath within Ada Street would better facilitate and link the development to public transport.

(d) **Vehicle Parking Provision:** Based on the information provided, the following has been calculated:

- The Gross Floor Area (GFA) of the proposed clubhouse is 1,598.6m². For a club with a GFA greater than 1,500m², 40 spaces plus one space per 25m² GFA is required. The parking requirement for the club is therefore 103.9 parking spaces.
- The parking for the marina berths, wet dry and swing moorings is obtained from the Traffic Impact Statement, with 72.3 spaces required. Council's Traffic Engineer concurs with the rationale behind how this figure was obtained.
- From DCP No.1, where more than 50 spaces are required, a courtesy bus is provided for clientele transfers in lieu of one car space in every 20 spaces required.
- The total car parking requirement is 176.2 spaces. With a courtesy bus provided, 8.8 spaces can be subtracted from this requirement equating to a total of 168.2 or 169 spaces.
- The site has provision for 151 car parking spaces, being 18 spaces deficient when the courtesy bus is provided. These 18 spaces could be provided on Ada Street by formalising the angle parking along the southern side of Ada Street fronting Cullen Park, within the existing road reserve, at no cost to Council. Whilst this is existing parking, formalising the parking area with pavement, line marking and wheel stops will allow a greater number of vehicles to park in the area. Based on Council's Traffic Engineers calculations, allowing 2.5 metres width per space, would allow the parking deficiency to be covered using this area.
- The distance between the Yacht Club building and the TAFE car park, using the pedestrian phase on the signals at Gen Street, is a minimum of 500 metres walk. This is a relatively far distance at night or with intoxicated persons. Providing parking closer (as discussed above) is strongly recommended.

(e) **Car Parking Areas and Structures:** In regards to Section 2.6.7 (Car Parking Areas and Structures) of DCP No.1, the proposed disabled parking spaces do not conform with AS2890.6:2009. The spaces are to be 2.4 metres wide, with a 2.4 metre shared area adjacent.

A condition should be placed on any consent that requires that all car parking areas be designed to satisfy the requirements of AS 2890.1.

(f) **Servicing Areas:** Having regard to Section 2.6.10 (Servicing) of DCP No.1, turning movements into and out of the loading area should be provided, as the dry berth spaces and adjacent disabled zone appear to make manoeuvring difficult.

(g) **On-Site Bicycle Facilities:** In regards to Section 2.6.11 (On-Site Bicycle Facilities) of DCP No.1, the proposed location of bicycle facilities should be shown on the submitted plans. Bicycle parking should be provided for at least 5 bikes.

6. **Crime Prevention Through Environmental Design (CPTED)**

Council's Community Planner (Youth and Safety) has reviewed the EA and submitted Safer by Design Report (Appendix 22) as acceptable subject to the following:

- (a) **Maintenance plan:** A long-term maintenance plan is to be developed. This is to cover maintenance of vegetation, graffiti management, litter control and malicious damage. Graffiti is to be removed within 24 hours, and lighting, if damaged or broken should be restored within 48 hours.
- (b) **Directional signage:** Directional signage is to be provided throughout the development. The signage is to be clear, legible and useful, to aid way finding throughout the area, particularly around the entry/car park, and marina access areas.
- (c) **CCTV:** The interior of the building is to have a quality CCTV monitoring and surveillance system fitted. Clarity of surveillance should have capacity to identify facial characteristics of potential offenders

Documents and plans submitted with the Construction Certificate will need to demonstrate that these above-mentioned security measures have been implemented.

7. **Disabled Access**

Council's Community Planner (Ageing and Disabilities Services) has reviewed the EA and submitted Disability Access Report (Appendix 26) as acceptable subject to the recommendations being implemented and demonstrated in Construction Certificate documentation.

8. **Community Land**

Council's Co-ordinator Recreation and Land Planning has reviewed the EA and raised the following concerns:

- (a) Clarification is sought regarding the number of car spaces proposed in Cullen Park. It is noted in the EA that 24 car parking spaces and 2 car/trailer parking spaces are to be provided. However, plan A10 revision B shows 22 car spaces with 2 trailer spaces but notates 24 car spaces with 2 trailer spaces. The submitted landscape plan numbered L01 also shows 22 car parking spaces and 2 car/trailer parking spaces.
- (b) It is proposed to use turf grass over structural cells as the construction type in the Cullen Park car park. Council previously indicated its acceptance of soft car parking construction, however, recent experience has revealed failure of this surface treatment system when subjected to use for car parking. Accordingly, this type of car park surface treatment is not supported.
- (c) The Cullen Park car park proposal excludes vehicular access to the adjoining private property to the south (No.658 Pacific Highway, Belmont), which is currently owned by the Lake Macquarie Yacht Club. The applicant needs to provide assurances that unauthorised vehicular access across public land to the private property will cease, and ensure that the

occupants gain vehicular access via the Pacific Highway frontage to the property.

9. Ecosystems and Biodiversity

Council's Catchment Management Officer has reviewed the EA and raised the following concerns:

- (a) **Impact on seagrass:** It is recommended that the proponent use a silt curtain to prevent any spills of silt or contaminated runoff entering the bay during construction works near the perimeter of the hardstand area.

The Flora and Fauna Impact Assessment Report (Appendix 11) assumes a likely increase in seagrass as a result of the development. However, this assumption is not adequately supported by scientific evidence. It is therefore recommended that a monitoring program be designed and implemented to test these assumptions. The monitoring should be designed to measure increase (or loss) in seagrass area. Appropriate compensation would then need to be considered, such as surrender of swing moorings or replacement with sea-grass friendly moorings, in the event that the seagrass areas were not increasing as assumed by the proponent.

It is noted that any impacts from shading on seagrass of the proposed two storey clubhouse (as shown on proponents shadow diagram) and cantilevered hard-stand extensions have not been considered. It is recommended that the effect of shading on seagrass be considered in the proponents calculations of likely seagrass loss/gain.

- (b) **Impact on threatened species:** *Posidonia australis* has recently been listed as an endangered population and of high risk of extinction in Lake Macquarie (Part 7A of the Fisheries Management Act 1994). *Posidonia australis* occurs within the area proposed for development. It is recommended that the Seagrass Management Plan and the 7-Part test be reviewed for consideration in light of this.

- (c) **Water Quality:** The EA indicates that concentrations of boron, cobalt, copper, selenium and zinc exceeded the trigger values adopted. It is stated that these levels may be a reflection of background water quality within Lake Macquarie. However, no data is provided to substantiate this assertion. Given that heavy metals such as copper are associated with anti-fouling agents, it is possible that the results are localised. The proponent should provide evidence that the increased levels are not localised to the marina OR provide strategies to reduce heavy metal contaminants to below the ANZECC guidelines at the site.

Other possible water contaminants identified within the study included kitchen waste, cooking oil and motor oil. No strategies were outlined to address these issues.

- (d) **Stormwater run-off:** The use of a biofiltration trench adjoining the carpark is supported. It is recommended that the proponent investigate porous paving options or ensure the biofiltration trench is sufficient to manage run-off, should this area be converted to hard-stand.

- (e) **Cumulative Impacts:** Any increase in boat numbers and subsequent boat movements will have a cumulative impact on water quality due to propeller wash, fuel waste and emissions. Hence, this proposal should not only be considered in regard to its individual impact but in light of the overall impact of increasing wet berths in Lake Macquarie.
- (f) **Slop-hopper:** The provision of a public access slop-hopper should be included within the marina. Whilst it is noted that a waste facility is included on the northern section of the marina, experience to date is that private marinas frequently lock these facilities. To ensure appropriate waste disposal and prevent water pollution it is requested that this waste facility be accessible to the public at all times.
- (g) **Swing moorings:** It is recommended that any swing moorings surrendered under the development, not be re-issued and therefore removed from the NSW Maritime Mooring Management Plan. If the moorings are re-issued, then the projected increases in seagrass regeneration are incorrect, as the damage to seagrass from these moorings may continue at their new location.

Thank you for the opportunity to comment on this major project. Should you wish to discuss the above-mentioned submission, please do not hesitate to contact the under signed on 02 4921 0256.

Yours faithfully



Georgie Williams
Senior Development Planner
Development Assessment and Compliance



Industry & Investment

08/6792
OUT10/15613

No. 12

The Director
Regional Projects
Planning NSW
GPO Box 39
SYDNEY NSW 2001

Dear Sir,

**Re: Lake Macquarie Yacht Club Expansion, 9 Ada Street, Belmont –
MP08_0045**

Thank you for your letter of 2 September 2010 concerning the proposed expansion of the Lake Macquarie Yacht Club at Belmont.

The responsibilities of Industry & Investment NSW (I&I NSW) include conserving fish stocks and key fish habitats, including threatened fish and marine vegetation. As such the Department is concerned about any potential impacts that the proposal may have on fish species and habitats in the vicinity. Please note that there are no forestry, agriculture or minerals issues associated with this proposal.

I&I NSW has reviewed the proposal and makes the following comments, based on the information and proposals contained in the documents relating to the above project.

The Department concurs with the view that:

- the open water areas of the existing marina contain relatively healthy beds of the seagrass *Posidonia australis*, now listed as an endangered population under the threatened species provisions of the *Fisheries Management Act 1994*.
- the expanded marina will potentially directly impact some small patches of sparse *Posidonia australis*, but it is expected that the new marina structure will assist in the expansion of the small patches that will be protected from surge and backwash from the structures.
- the existing *Posidonia australis* beds will be protected from further harm from deep keel vessels by better berthing management, with shallow keel vessels in the shallower water.
- that four commercial swing moorings will be removed and 8 others will be replaced with seagrass friendly moorings. *Posidonia australis* to be directly impacted by marina infrastructure is to be transplanted into swing mooring holes.

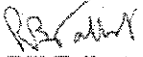
Division of Primary Industries, Fisheries Conservation & Aquaculture
Port Stephens Fisheries Institute
Locked Bag 1, NELSON BAY NSW 2315
Tel: 02 4982 1232 Fax: 02 4981 9074
ABN 72 189 919 072 www.industry.nsw.gov.au

The Department recommends that as a consent condition the Seagrass Management Plan be implemented in full and that the following conditions also be included in the final plan:

- seagrass warning buoys be placed and maintained by the yacht club along the edge of the *Posidonia australis* seagrass beds to the south.
- Information on the importance of seagrass be provided to club members and boat owners to raise awareness and ensure ongoing best environmental management of the seagrass beds is maintained.

For further information please contact Scott Carter, Senior Conservation Manager (Central), on 4916 3931.

Yours sincerely

 8/10/10

Bill Talbot
Director, Fisheries Conservation & Aquaculture

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10/1672
BK



No. 13

Director, Regional Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Department of Planning
Received
11 OCT 2010
Scanning Room

Attention: Mr Marek Cholinski

PACIFIC HIGHWAY (HW10): LAKE MACQUARIE YACHT CLUB EXPANSION, 9 ADA STREET, BELMONT (MP08_0045)

Dear Mr Cholinski

I refer to your letter dated 2 September 2010 (Your reference: MP08_0045), received on 8 September 2010, regarding the subject application forwarded to the Roads and Traffic Authority (RTA) for consideration.

RTA Responsibilities and Obligations

The RTA's primary interests are in the road network, traffic and broader transport issues, particularly in relation to the efficiency and safety of the classified road system, the security of property assets and the integration of land use and transport.

In accordance with the *Roads Act 1993*, the RTA has powers in relation to road works, traffic control facilities, connections to roads and other works on the classified road network. Council is the roads authority for all public roads in the area.

RTA Response and Requirements

The RTA has reviewed the information provided and has no objections to the proposed development, provided the following matters are addressed and included in the conditions of development consent:

- The right turn out of the intersection of the Pacific Highway and Ada Street shall be prohibited by undertaking the following works within Ada Street:
 - A painted median / island shall be provided.
 - A left turn only sign shall be installed.
 - Advanced warning signs of the turn restriction shall be provided.
- The developer shall submit a concept line marking / sign posting plan for RTA acceptance, through Council, prior to detailed design and undertaking the works under Council supervision.

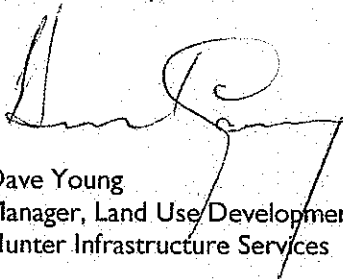
- All of the above shall be completed in accordance with the RTA's *Road Design Guide* and relevant Austroads Guidelines and Australian Standards, to RTA and Council requirements.
- All works associated with the development shall be at no cost to the RTA or Council and at full cost to the developer, to Council requirements.
- All works shall be completed before an occupation certificate (interim or final) is granted for the proposed development.

Comments should also be obtained from Lake Macquarie City Council regarding the proposed development.

On the Department of Planning's determination of this matter, it would be appreciated if a copy of the development consent were forwarded to the RTA for record purposes.

If further advice is required, please contact me on (02) 4924 0240.

Yours sincerely,



Dave Young
Manager, Land Use Development
Hunter Infrastructure Services

6 October 2010

Cc Mr Marc Desmond
Lake Macquarie City Council