

Department of Planning & Environment
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Attention: Nicola Chisholm

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ABN 66 153 656 252

Re: Trinity Point Marina & Mixed Use Development Concept Approval (MP 06_0309) –

Response regarding minor shift (15m) in the location of the Floating Breakwater

Dear Nicola

This letter response has been prepared by Royal HaskoningDHV in relation to the Department's query related to the proposed revised extent of the Marina by 15m to the north.

Regarding the above query, it is noted that the main reasons for the shift in the floating breakwater offset were largely driven by design changes within the internal Marina Design layout since the Condition B1 Determination.

These changes related mainly to the following:

- (i) The desire to have casual public berths (from Stage 1b) provided on the inside of the floating breakwater, hence requiring additional space on the inside channels to comply with the minimum internal channel requirements of AS 3962.
- (ii) The desire to have 18m vessels also berthed on the southern side of Arm A, hence requiring a minimum internal channel dimension of 27m to enable compliance with AS 3962.
- (iii) Internal berth dimensions (widths) needed to be compliant with AS 3962 – more recent version of this Australian Standard indicate that for a mixed marina (i.e. sailing vessels and motor vessels), the minimum berth width for a double berth is based on 2 x the maximum vessel beam +1m (the maximum vessel beam relates to motor vessels).

All of the above changes (to meet AS 3962 requirements) meant that the outer breakwater needed to extend out another approximate 14.9m (15m).

We can confirm that the modified shift in the floating breakwater by 15m (and the concept marina design including internal layout) has been fully incorporated into the environmental impact assessment recently submitted to LMCC (DA 1503/2014). Specifically, it has been reflected in the hydrodynamic modelling (as required at DA stage under Condition C12), relating to current water flow and flushing characteristics, particle tracking and seagrass wrack modelling.

The impact assessment undertaken as part of the EIS indicates minimal impacts of the proposed marina design (inclusive of the 15m shift) from the perspective of hydrodynamics, relating to current water flow and flushing characteristics, particle tracking and seagrass wrack modelling. For that reason, we are confident in confirming that there would be no significant impact from the 15m shift in the breakwater location, and no reason for it not to be incorporated into the Concept Approval as an outcome of Modification 2.

We trust this letter response adequately clarifies the reasons for these design changes, and that the assessments undertaken in the EIS relate to the modified (including 15m extension) design.

Should you have any queries regarding this proposal, please do not hesitate to contact Ben Patterson on 4926 9503.

Yours faithfully
HASKONING AUSTRALIA



Ben Patterson
Director – Rivers, Deltas and Coasts – Australia