Report brief on the Tonkin Marine Engineering Review Submission Gladesville Bridge Marina Alteration and Additions Project Dated the 19th February 2020

My commentary on this report will deal with the navigation matters raised by Mr Howell from Tonkin consulting who is the author of the report.

It is important to note that the Tonkin report was prepared on the first submitted Development Application (DA). Due to a revision of the Australian Standard AS3962-2020 for Marinas during the first application process, this crossover required the proponent to slightly modify the design to conform to the new standard. That being the case the Tonkin report is now somewhat superseded.

My navigation assessment refers to specific elements of boating, chief of which are the Collision Regulations, followed by the competency of skippers, the value of vessels and the position of vessels on the Marina.

The Coll regs are the foundation of safe boating and apply in all circumstances on the water. The competency of skippers is fundamentally important in relation to the Marina in so far as being able to safely manoeuvrer a vessel into a berth whilst keeping the passengers safe and avoiding collisions with other vessels.

The navigation assessment safety operating procedures (SOPs) refer to the allocation of berths by marina management to ensure the safety overlay is applied. Gladesville Bridge Marina (GBM) will take great care to allocate berths to address the points mentioned above so as not to place crew and passengers in danger and to protect the vessel from damage. In many cases the value of vessels on the marina is in the hundreds of thousands stretching into millions of dollars. This being the case, GBM will allocate and arrange berths to suit skipper competency, draft both air and water and manoeuvrability via the Marina Management Assessment (MMA) in accord with the new standard.

The marina has been designed to accept a range of vessels, which are but not limited to small day boats to large yachts and cruisers. The marina also caters for deep draft and air drafted vessels of varying lengths. The marina has not been designed to be a one size fits all facility. Whilst the current proposed design shows maximum size vessels in berths this may not be the case and will be dependent on client demand. It is fair to say smaller vessels may occupy larger berths as is the case now.

I will address the points raised in the report, which refer to the navigation assessment. Engineering matters will be addressed by others. I will use the same

headings as the Tonkin report noting the design of the Marina has been slightly altered to conform with the new standard.

Marina layout and compliance

- 1. Water depths in A1 A3 may not be suitable for some yachts over 12 m however it will depend on the type of keel and draft of the vessel. Its not a one size fits all. A MMA according to the standard will be conducted to ensure vessels fit in all tides.
- 2. The berths referred to A6, A7, A8, B1, E27, E28, E29 in the revised layout will fall under the MMA. I note the Sydney 38 berthed on a private facility at no 378 clears this area in all tides drawing 2.7m. Currently this area is in demand for the slipway, which can handle large vessels of most types navigating through this space. This area now has the destination berth, which should provide additional navigation clearance, as it will not be occupied on a constant basis.
- 3. Motor vessels will be able to occupy these berths with good water under keel subject to an MMA according to the standard.
- 4. The port hand marker is an aid to navigation and is placed by RMS to indicate which side of the channel to use. The marker is primarily for river use. In berthing procedures vessels can get close to this marker without causing concerns however the area referred to in the plan has good depth and is particularly suited to smaller craft but will be subject to an MMA.
- 5. The area between the shoreline and E arm currently has large vessels in the berths. I refer to the Sydney 38 drawing 2.7m, which is kept at no 378 in the corner next to the Marina. This vessel moves through this area to exit the channel in all tides. This area, like the rest of the Marina will be subject to an MMA according to the standard.

Effect on adjacent private moorings.

1. A landowner can make application for a berthing area to RMS at any time. The approving authority will make a determination in relation to the application taking into account matters like the size and type of vessel, the protrusion of the structure into the access channel and if the berthing area with attendant vessel is likely to constitute a navigation hazard. The slightly revised layout provides good clearances for vessels attached to private shore facilities and should not present a problem for competent skippers. The repositioning of moorings is conducted with RMS as the landowner, the mooring licence holder and GBM. The marina will be involved as they are responsible for the cost of relocation and may be able to assist in final positions of the remaining commercial moorings.

Air draft under the Gladesville Bridge.

1. This comment refers to air draft and may impinge on some vessels berthed on E arm. At a meeting on the 2nd December 2018, RMS requested information in relation to the Gladesville bridge arch, specifically regarding air draft. GBM provided clarification on the arch of the bridge from original bridge drawings and how some vessels may have to leave E arm and head north to go under the bridge into the holding area in a similar manner described in the Tonkin submission. RMS were satisfied with this explanation. A MMA would alleviate this issue by repositioning high air drafted vessels on another arm with straight access to the holding area. This matter was also raised at a community session and the proceeding explanation was given. The relocation of swing moorings at the end of the marina and the provision of the holding area provides clear navigation access to the channel from any berth

Summary

The safety of crew, passengers and other users is a primary concern for GBM and attendant to this is the safe operating procedures, which have the MMA as an operational component of the marina. Proper skipper assessments will provide safer outcomes, mitigate damage to vessels and deliver better service to marina clients. Earth snapshots of marinas around the State indicate similar if not the same navigational clearances, water depths and navigational amenity. The slightly revised layout conforms to AS3962:2020 which will provide GBM with the most up to date standard in terms of Marina design and still deliver a significant management and safety overlay to the operation.

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