



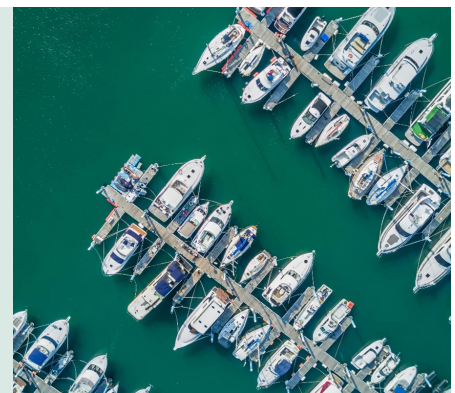
Small to Medium Facilities

Our holistic approach provides integrated solutions and combines engineering experience with sustainable environmental management and economic practicality.



From building jetties to prototyping new offshore communities, our expertise in designing and managing the construction of coastal structures can help overcome the complex technical challenges of such projects.

Our services include full project management from due diligence/conception to completion on marine, and coastal engineering projects. We apply this knowledge to provide related services such as concept and detailed design cost estimation, contract specification, approvals, construction staging as well as ongoing condition inspection and management of maintenance works.



Services and expertise provided

- + Marine structures - design and specification
- + Conceptual designs, layouts and cost estimates
- + Detailed design of rock armoured breakwaters, groynes and seawalls
- + Design of geotextile filters/sand filled containers
- + Detailed design of jetty/wharf structures for small boat facilities
- + Design, specification and supervision of physical modelling studies
- + Drawings, specifications and tender documents
- + Construction supervision of all on-site works
- + Inspection and maintenance management for coastal and maritime structures
- + Environmental studies, numerical modelling and impact assessment
- + Environmental approvals and environmental management plans
- + Condition assessment, inspections, maintenance management and compliance reporting

Our experience

Project 1

Bundeena Ferry Wharf Feasibility Study and Detailed Design



BMT were commissioned to undertake a feasibility study of Bundeena Wharf to investigate measures in which the ability engaged of the wharf to withstand damage from future storm surges and ferry operations is improved.

As part of the broader scope of works, BMT conducted a detailed condition assessment of the concrete ferry wharf to provide the asset manager with a risk assessment to identify and evaluate the level of risks for each concrete component of the wharf and determine the required action to mitigate or avoid the risk.

Services and expertise provided:

- Peer review of technical reports
- Visual condition inspections of concrete wharf structures
- Detailed NDT investigations of concrete structures
- Risk assessments

BMT has been subsequently engaged to undertake the detailed design.

This includes:

- Detailed investigations (survey, piles and materials testing)
- Detailed design (basis for design, structural assessments, detailed design drawings, safety register)
- Tender documentation
- Review of environmental factors (including seagrass survey)

Project 2

Rottnest Island Maritime Facilities Concept Design



Rottnest Island Authority (RIA) identified the need to develop maritime facilities in South Thompson Bay, Rottnest Island. There is currently a lack of contingency for ferry and barge operators on Rottnest Island during maintenance operations, and in conjunction, an increase in demand for commercial marine services on the island, which demands the need for additional marine facilities.

BMT was engaged to develop a base design, including a feasibility assessment of an alternative design. Our coastal engineers prepared a variety of concepts that achieved a varying level of functionality and operability at different cost levels, then evaluated them and selected two preferred design options for concept development.

Services and expertise provided:

- Basis of design including metocean data QA/QC
- Stakeholder consultation
- Options assessment and selection
- Concept development
- Concept design and documentation
- Cost estimation for quantitative assessment.
- Disposal and reclamation studies
- Feasibility assessment of marine and land-based facilities

Project 3

Cowes, Inverloch and Mahers Boating Facility Concept and Detailed Design



Better Boating Victoria (BBV) is a state government agency formed in 2019 to improve access to recreational boating across the state. BMT has been working with Better Boating since its beginning and has since become a key 'trusted advisor'. Establishing and trust with BBV, BMT has undertaken seven concept or detail boat ramp / facility designs and has also recently completed the Victorian boating facilities maintenance guidelines.

The detailed design of upgrades to boat ramp facilities at Cowes, Inverloch and Mahers. This project will critically review existing concept plans and develop these through preliminary and detailed design, with input from stakeholders and the community. BMT will deliver design documentation suitable for approvals, tendering for engaging contractors for construction. BMT's multi-disciplinary, innovative team have identified several areas where the previous concepts can be modified to deliver greater functionality with reduced cost and lower impact on the surrounding coastal environment.



For more information on our services or details of how BMT can help you improve your small to medium facilities - get in touch.

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