

“Where will our knowledge take you?”

Shire of Esperance Peer Review of Coastal Protection Design

Shire of Esperance



“ The Shire of Esperance engaged BMT JFA to perform a peer review of the design for the proposed new coastal structures which included the wave climate conditions at site. ”

The Shire of Esperance is planning to develop the Esperance Foreshore including the construction of coastal protection.

The foreshore has experienced erosion threatening infrastructure due to changes to the wave and sediment movement regime. The coastal works include reclamation of a headland, revetment construction at the headland, and seawall construction along the shore. The coastal protection works are proposed to span approximately 1 km in total length.

The Shire engaged BMT JFA to perform a peer review of the designs for the structures which included a review of the wave climate reported at site.

BMT JFA were also separately engaged by the Shire to undertake a wave transformation study and extreme value analysis for the site, to develop design conditions for the Esperance tanker jetty refurbishment works.

BMT JFA’s personnel have had significant experience in the area and were able to add value with their extensive site experience.

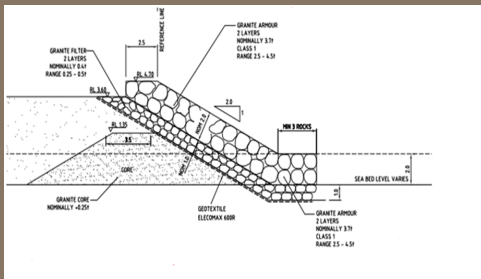
Ongoing engagement includes preparation of design documentation, R01 & RFT documents.

BMT JFA Role

- Critical technical review of the design wave report and design basis and calculations for the headland revetment and seawall
- Photogrammetric analysis and desktop yield estimation from available granite stockpiles
- Cost estimation based on updated local rates for granite supply and marine works construction
- Estimation of redesign quantities and elements.

Services & Expertise Provided

- Breakwater and seawall design
- Condition monitoring and asset management
- Quarry investigation
- Coastal process studies
- Peer review.



Location

Esperance, Western Australia

Date

2010