



Transnet Capital Projects

Port of Durban: Reconstruction of
Maydon Wharf Berths 1 - 4, 13 and 14



Background

Project Value: R800m | Duration: Dec 2011-Dec 2016

The Port of Durban is Africa's largest shipping terminal and handles approximately 32 million tons of cargo per year. Constructed more than 65 years ago, Maydon Wharf is one of the first cargo terminals and the Port's largest

break and dry bulk handling area. The existing berths have exceeded their design lives and need to be reconstructed, widened and deepened to accommodate larger vessels, improve overall safety and increase port throughput.

Key Features

The project entails the design and reconstruction of six existing steel sheet pile quays. The objectives of the reconstructing of the berths include:

- + Replacing the existing steel sheet piled quay walls which have severely corroded
- + Increasing the load capacity of the quays
- + Increasing the berthing depth of the existing jetty from the current 9,9m to at least 14,5m

Services Provided

RCE Consultants provided the following professional services:

- + Design and execution of a test piling programme
- + Preliminary and detailed design of the new steel sheet pile berths
- + Design of all associated berthing and mooring facilities
- + Design of suitable paving and drainage structures to the backup area
- + Design of the deepening of the basin
- + Preparation of working drawings
- + Preparation of construction specifications
- + Preparation of schedules of quantities
- + Assisting the client during the tender evaluation and clarification period
- + Construction management for the duration of the construction period

Outcome

RCE Consultants successfully carried out the design of the reconstruction of the six existing steel sheet pile quays as well as the associated berth deepening.

An important aspect of the design has been to ensure business continuity in the Port during construction.

The use of conventional dead man anchor systems for the quay wall was not possible for various reasons.

Driven, inclined grouted anchor piles were used instead, a first in South Africa.