BURMEISTER & PARTNERS (PTY) LTD
CONSULTING ENGINEERS

SPECIAL PROJECTS

NEW CONTAINER TERMINAL, Walvis Bay

(Owner's Engineer : Civil & Electrical Works)

PROJECT STATS

Value NAD 4 billion
USD 246.28 million (ROE 16.24)
Location Walvis Bay, Namibia
Client Namibian Port Authority
Start 02/2012
Finish 08/2019

SERVICES

Project Management
Technical Specifications for EPC Contract
Contract Documentation
Risk Management
Management of Pre-Qualification Tender Process
Management of EPC Tender Process
Site Supervision – Assistant Resident Engineering Services, seconded to Client

Project Management

Civil

Electrical

Namport is expanding its port at Walvis Bay by the addition of a new container terminal. The expansion is to cater for vessels with capacity of 5 000 to 8 000 TEUs. The port development is taking place in three phases, through the reclamation of land into the bay, namely:

Phase 1 -40 hectares, 600 m quay length (commissioned 24 August 2019)
Phase 2 - 27.5 hectares, 550 m quay length (future)
Phase 3 - 60 hectares, 1200 m quay length (future)

The Phase 1 expansion adds a throughput capacity of at least 750 000 TEUs per annum to existing volumes. With a quay length of 600 m, this new berth will be able to accommodate a 5 000 TEU container vessel. The entrance channel, turning basin and the berthing bay had to be dredged to accommodate this vessel's draught, which averages around-12.5m.

The following container handling equipment was commissioned with Phase 1:

- Four Ship-to-Shore Cranes, post Panamax size, to handle vessels that stow containers up to 18 TEUs wide
- Rubber Tire Gantry cranes and miscellaneous smaller support equipment such as reach stackers, tractors and haulers and empty container handlers.

The new container terminal is constructed entirely on reclaimed land. For the facility, a total surface area of about 135 hectares will have to been reclaimed for Phases 1 to 3. This new facility shall be linked to existing port land with a 105 m wide access cause way near the existing Berth 8. The facility included various buildings and infrastructure, such an entrance building, administration centre, mechanical workshop, electrical, substation pump stations and a rail siding. Specifications were written for all mechanical and electrical utilities needed at the project.

Work scope included basic design & documentation of Bulk 11kV feeders (26MVA capacity), main intake substation (26MVA), 2x8MVA Bert substations, 11kV primary ring feeders and ancillary electrical equipment.

Ref. W1207

Burmeister & Partners (Pty) Ltd C/o Andimba Toivo Ya Toivo & Van Zyl Street, Windhoek, Namibia email bp@burmeister.com.na tel +264 61 379 000 fax +264 61 379 001 www.burmeister.com.na