



New generation infrastructure

FOCUSED INVESTMENT in vital infrastructure projects has been the government's strategy to boost South Africa's economy and create employment and investment opportunities.

The past 17 years have seen billions of rands overhauling rail, road and port networks to create competitive, state-of-the-art facilities that ensure South Africa's position as one of the continent's economic leaders.

Its location on the southernmost tip of Africa means that it is perfectly positioned for access to SADC markets and as a trans-shipment point between the emerging markets of Central and South America and South and Far East Asia.

In keeping with the overarching national transport strategy, Transnet, South Africa's largest rail, port and pipeline company, has invested approximately R71,8 billion over the past five years to March 2010, with R28 billion earmarked for port-related projects.

MODERNISING CAPE TOWN'S PORT

The recent upgrade of the Cape Town Container Terminal, a R4,2 billion expansion project, aimed at the provision of a modern facility with doubled cargo capacity, will now be equipped to enable a new generation of vessels to enter and moor safely at the container facility.

As part of their two-year contract worth R35 million, Nelcor Civils were sub-contracted to carry out the civil works on sections of the container terminal, working with WBHO Construction, the principal building contractors, and HHO Africa, the consulting engineers on the project.

"This is the biggest project we have done to date," says Dale Meyer, Administration Manager and part owner of Nelcor Civils, sister company to Nelcor Earthworks and Demolition.

Nelcor's engineering expertise, combined with the appropriate software, was drawn from as part of a project that aimed at converting the terminal's container stacking yard from a straddle carrier operation to a rubber-tired gantry (RTG) operation.

According to Meyer, the functionality of Civil Designer, software developed and supplied by Knowledge Base, has been an invaluable tool. It also helped streamline the data exchange process because it was used across the consulting spectrum on the project.

"HHO use Civil Designer and so do we. What that means for us is that if they push out a design, we can work with it,

generate information and send it back in the same format. Having all the data on the same platform makes the process more streamlined.”

“Also from a measurement perspective, it is a valuable asset. For quantities and calculations of work done, it makes the whole quantity surveying process faster and more accurate.”

As Meyer has emphasised, the need for time-saving measures is a priority for consulting firms working to tight deadlines.

REVITALISING CAPE TOWN STATION

Also involved in the R418 million upgrade and expansion of the Cape Town station, Nelcor Civils were responsible for the upgrade of the station forecourt, an area that comprises three sections: the “Creative” Cape Town space, Station Square, and Station Corner.

The refurbishment and upgrade of the station, which was first constructed in the early 1960s, forms part of a broad vision to create a world-class transport hub with a retail and entertainment centre.

The key stakeholders involved in transforming the site into an incubator for small businesses and a destination in its own right are Metrorail, the Passenger Rail Agency of South Africa (PRASA), the City of Cape Town, the Central City Partnership, the provincial government and property management company Intersite.

Intersite’s regional manager, Lindelo Matya, says that this new-generation transport hub will result in improved operational efficiencies and a safer and more secure urban environment.

Within the broader framework of the renewal of the Cape Town Central Business district and the move towards establishing urban public spaces, the Cape Town station precinct plays an important role in the economic life of the city.

In the future the station will feature a transport museum, art gallery and travel agency, a bureau de change and Internet Café, a local crafters market, convenience stores, restaurants and fast food outlets in addition to a small conference centre and medical service facilities.

- ① Demolishing the concrete surface beds at the Cape Town Container Terminal
- ② Installing electrical ducts to the main substation at the Cape Town harbour
- ③ Stabilising the layerworks at the Cape Town Container Terminal

Using Civil Designer’s Survey and Terrain Module for this project, Meyer says that they were able to carry out calculations and basic design work for GIBB, the consulting engineers on the project. With both companies using the software, seamless interchange of information was facilitated.

Jayson Bester
Strategic Marketing Manager
Knowledge Base
jayson@knowbase.co.za

The past 17 years have seen billions of rands overhauling rail, road and port networks to create competitive, state-of-the-art facilities that ensure South Africa’s position as one of the continent’s economic leaders

