



## Key achievements

- A full scale test phase was implemented on site which verified the design and confirmed the production rates.
- Production work started on the first package in December 2016

## • The project

Franki Africa was requested to provide a foundation solution for the 368 000m<sup>2</sup> Clairwood Logistics Park located on the existing Clairwood Race Course in Durban South Africa. The site is strategically situated near the Durban Port. The project consist of seven Warehouse structures with high tolerance floors for stacking. The Warehouse footprints range from 25 000m<sup>2</sup> to 130 000m<sup>2</sup>.

## • The challenge

The area is underlain by the estuarine deposits known as Durban Harbour Beds and of highly compressible silty clay and clayey silts also known as Hippo muds, onto sandstone bedrock typically at 30-40m.

The design settlement is 50mm under the 40kPa load.

## • The solution

Due to the high compressibility and time-dependent settlement, it was proposed that the subsoil be treated to ensure that the acceptable settlement behaviour can be achieved. The solution consists of Controlled Stiffness Columns (CSCs) which support a soil mattress. The CSCs are 370mm in diameter and have 800mm diameter compacted stone heads. Columns are installed in grids of between 2.5 and 3.5m to depths of between 25 and 38m.

### Application

Soil Improvement

### Technique

CSC Rigid Inclusions

### Market

Warehouse Development

### Client

Capital Propfund

### Main contractor

Franki Africa

### Contract Value

TBC

### Keller companies

Franki Africa - Central Region  
- KZN