



## SAPPI SAICCOR – PROJECT VULINDLELA

KwaZulu-Natal, South Africa



### Project Facts

#### Product

Franki (DCIS) Piles

#### Market

Industrial

#### Client

Sappi Southern Africa LTD - Saiccor Mill Umkomaas

#### Main Contractor

Working directly for the Client's Project Managers - **AF Wood**

### Achievements

- Deepest recorded depth for Franki DCIS piles in South Africa - 24m.
- Meeting all project key milestones and completing the project before final completion date.
- No anomalies on all Integrity tests conducted, all piles installed within the allowable tolerances and concrete cube tests results met the required minimum compressive strength.

#### About the project

Project Vulindlela is a 2.7 billion expansion project of Umkomaas Sappi Saiccor Mill to increase the plant capacity, decrease production costs by conducting maintenance on some parts of the old plant, introduce new technology, optimize processes and improve environmental emissions by reducing SO2 emissions by 35%, landfills emissions by 48% and improving water use efficiency increase by 17%.

#### Challenges

Large variation in founding depths (by up to 15m).

Backpressure due to high water table.

Stringent settlement criteria, high compression and tension loads.

Presence of boulders across some parts of the site.

#### The solution

Installation of 2 022 No. DCIS Piles where the base of the piles enhances both compression and tension capabilities of the pile.

