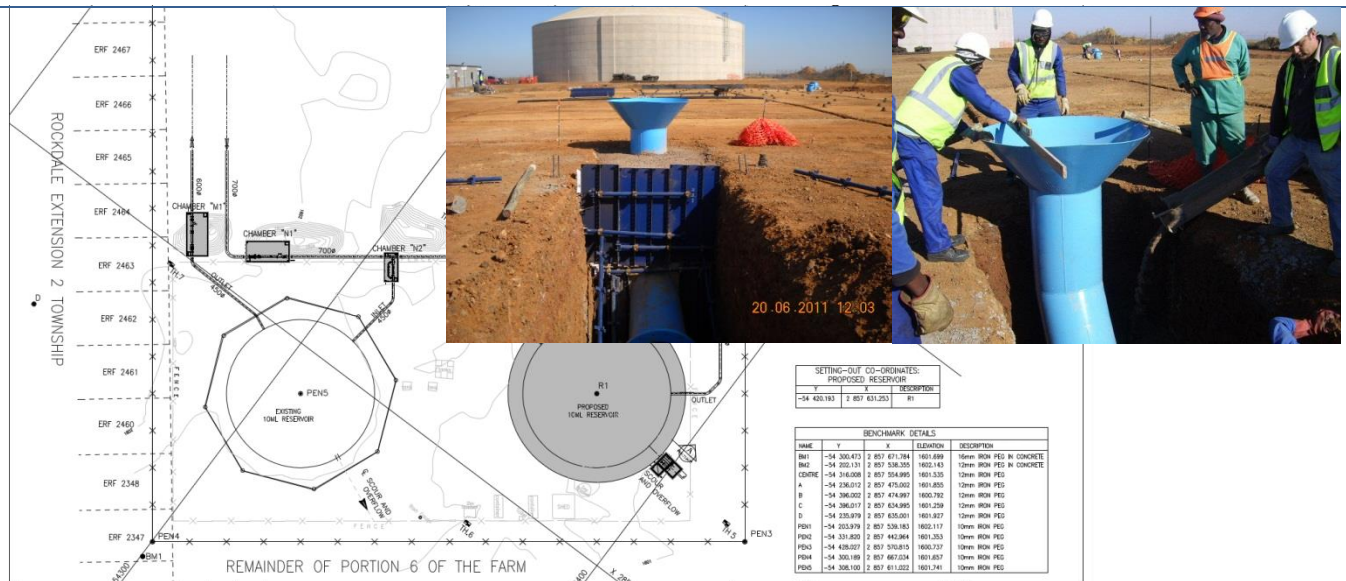


PROJECT DATA SHEET

Water Supply



CLIENT : **NKANGALA DISTRICT MUNICIPALITY**

PROJECT : **CONSTRUCTION OF 10 MEGALITRE RESERVOIR**

LOCATION : **MPUMULANGA, STEVE TSHWETE LOCAL MUNICIPALITY**

VALUE : **R14.,4 million**

COMPLETION : **DECEMBER 2011**

SCOPE OF SERVICE : **INVESTIGATION/ DESIGN/DOCUMENTATION/PROJECT MANAGEMENT & CONSTRUCTION MONITORING**

PROJECT DETAILS

Tlou Consulting (Pty) Ltd was appointed by the Nkangala District Municipality in September 2009 for the design and construction monitoring of a second service reservoir at Rockdale for the proposed new development in Middelburg in the Steve Tshwete Local Municipality. The project is the second phase of the bulk storage scheme implemented by the District.

The new development comprises approximately 17,951 stands and is planned for construction within the next 10-15 years. In accordance with these development plans and available budget the necessary bulk service infrastructure was prioritised.

The terms of reference and scope of work addressed in the project can be summarized as follows:

- (i) Confirm the service storage requirements for implementation in Phase 2. Preliminary estimates for Phase 2 storage requirements are that an additional 10 MI reservoir (minimum capacity) was be required. Consideration must also be given to the design of a larger storage facility that can be compartmentalised and brought into commission as development is planned. This was also to be considered in the proposed inlet/outlet piping and chamber configurations and layout designs.
- (ii) An assessment of the low pressure area of the site was evaluated to determine options available to meet the required average system pressures and flow rates. The options include the evaluation of the construction of a water tower or direct pressurised system.
- (iii) Preparation of a layout plan of the configuration of the service storage reservoirs for the full township development including the private development. This also included the layout of the pipelines interconnecting the service storage reservoirs.
- (iv) Undertake a detailed design of the inlet structure to ensure hydraulically equal distribution of the water from the bulk water supply main to the new storage facilities that are currently being constructed and proposed for later phases.