ANNEXURE 3.2

MAIN PUMP 18 - PLINTH ANCHOR REPLACEMENT AND CONCRETE REPAIRS

SUMMARY

The objective of the works is to repair a pump plinth that was damaged during the removal of a pump, where an anchor bolt was dislodged and subsequently caused the concrete to spall (Figure 1).

The scope of work therefore includes the removal of three existing anchors and replacement with three correctly positioned 260 mm mechanical heavy-duty (HD) anchors. The scope also covers the repair of the spalled concrete.

The works aim to restore the structural integrity and geometry of the plinth, and to provide a durable, long-term solution, with performance monitoring planned over a six-month period following reinstatement.

The successful supplier must before work commences submit a safety file and attend induction

Figure 1: Spalled Concrete and Dislodged Anchor Bolt

SCOPE OF WORK

The Contractor shall perform, as a minimum, the following tasks:

Removal of Existing Anchors

- Carefully remove the anchors bolts from their current position without causing further damage to the pump baseplate or surrounding concrete.
- Clean out the damaged anchor pockets and surrounding cone-shaped void, removing all loose and friable material to expose sound concrete.
- Prepare the area for drilling and reinstallation of a new anchors.

Drilling and Installation of an Anchor

- Drill a new hole to ensure adequate embedment of the anchor.
- Install the new mechanical anchor, with a diameter that will allow easy placement through the existing baseplate holes.
- Anchor installation shall follow the manufacturer's installation guidelines and relevant standards for cleaning, insertion, and torque tightening.

Concrete Repair

- Prepare the spalled concrete by roughening/scabbling the surface and removing loose material to ensure a sound substrate that is free from grease.
- Form up and reinstate the damaged area using non-shrink grout with a compressive strength of at least 30 MPa or higher.
- Finish the surface flush with the surrounding plinth such that no grout encroaches on moving pump components.

Post-Installation Monitoring

- After reinstatement, the Contractor shall allow sufficient curing time before recommissioning the pump set (28days).
- The performance of the new anchor shall be monitored by the Client over a period of six (6) months to assess stability and check for any signs of recurrence of movement or spalling.
- The Contractor shall provide as-built records and photographic documentation of the works for future reference.

7. ANCHOR SPECIFICATION

The replacement anchor for Pump Set 18 shall be a Hilti HST4 M20x260 Stud Anchor (or a Engineer-approved equivalent), suitable for dynamic loading and retrofit installation:

2. GENERAL REQUIREMENTS

The Contractor shall:

- Provide all labour, materials, plant, equipment, supervision, and temporary works necessary to safely execute the works.
- Carry out the works in accordance with specifications, applicable codes of practice, and the Client's HSE standards.
- Coordinate closely with the Client to minimise disruption to pumping operations.

- Install the new anchor as per the manufacturer's specification.
- Ensure proper curing, protection, and reinstatement of the repaired plinth prior to recommissioning the pump.
- Maintain a clean working area and dispose of waste material in accordance with site regulations.

5. HEALTH, SAFETY & ENVIRONMENTAL

- All works shall comply with site-specific HSE protocols and applicable statutory requirements.
- Adequate temporary supports and isolation of the pump set shall be provided to ensure safe working conditions.
- All drilling, grout mixing, and anchor installation works shall be performed by trained personnel using appropriate PPE.
- Waste material and spoil from drilling shall be collected and disposed of in accordance with environmental regulations.

6. COMPLETION & HANDOVER

Upon completion, the Contractor shall:

- Conduct a joint inspection with the Client to verify compliance with this Scope of Work.
- Address any identified defects or snags promptly.
- Submit a handover package, including:
    - Anchor installation records (depth, type, torque)
    - Repair material certificates and test data
    - Photographic records (before, during, after works)
    - Method statement and quality control documentation.

ANNEXURE C4: SITE INFORMATION

Rand water Zuikerbosch

Vischagat Road, Three Rivers East
Vereeniging, 1939
GPS Coordinates: S 26° 41.520 and E 28° 00.061

THE IMPORTANCE OF WEARING PPE

Everyone accessing the plant will be expected to wear safety shoes, failure to which no access will be granted.

THE IMPORTANCE OF CARRYING YOUR DRIVER'S LICENSE

Everyone accessing the site using personal or company vehicles is requested to always carry their valid driver's license.

VALID CAR DISCS ARE ESSENTIAL

Every company or personal vehicle accessing the site must have a valid car disc. The biometric system will scan and cross-reference these discs to ensure compliance with local regulations. Failure to have a valid car disc may result in the vehicle being refused entry.

DATA SECURITY

The site complies with the principle of Personal Access to Information Act (PAIA) and as such all data collected will be treated with the utmost confidentiality and used solely for security and access control purposes.