



## REQUEST FOR BID

CIDB

### Annexure C3.2

#### SCOPE OF WORK

**Important to note** – the successful supplier must submit a safety file and attend induction before the work commences.

#### DESCRIPTION OF THE WORKS

Supply, deliver and installation submersible pumps (Hidrostal or equivalent) at Rand Water Zuikerbosch

4 Inch submersible pumps for filter house No. 1

Discharge diameter = 102mm (4 inches) - The pump's discharge diameter is to be kept at 102mm, and the weight limited to 100Kg or less. Maximum pump weight restricted to 100kg stainless steel material

The pumps should also be able to drain excavation water as well as slurry solutions - This is water treatment residue commonly made of calcite deposits, sand grains, poly electrolyte deposits, colloidal matter

Suction head = 40 meters - The pumps will be used at different areas, our deepest sump is approximately 30m

Capacity = minimum 50 litres per second pumped in a 102mm diameter pipe, would result in a pipeline velocity of 306m/s.

Cable = 100 meters (50m from the pump to the stater box and 50m from the starter box to the power supply point).

The pumps should also include starter boxes per pump, voltage = 3 phase (380V to 400V) Frequency = 50Hz

Power: 0.55 – 400kW

300 meter of 102mm diameter layflat pipe rolls - The 300m Layflat should be in 30m lengths, as these are wear and tear items, some pipes would be used as spare.

3 x 30 meter of 102mm diameter heliflex pipe rolls

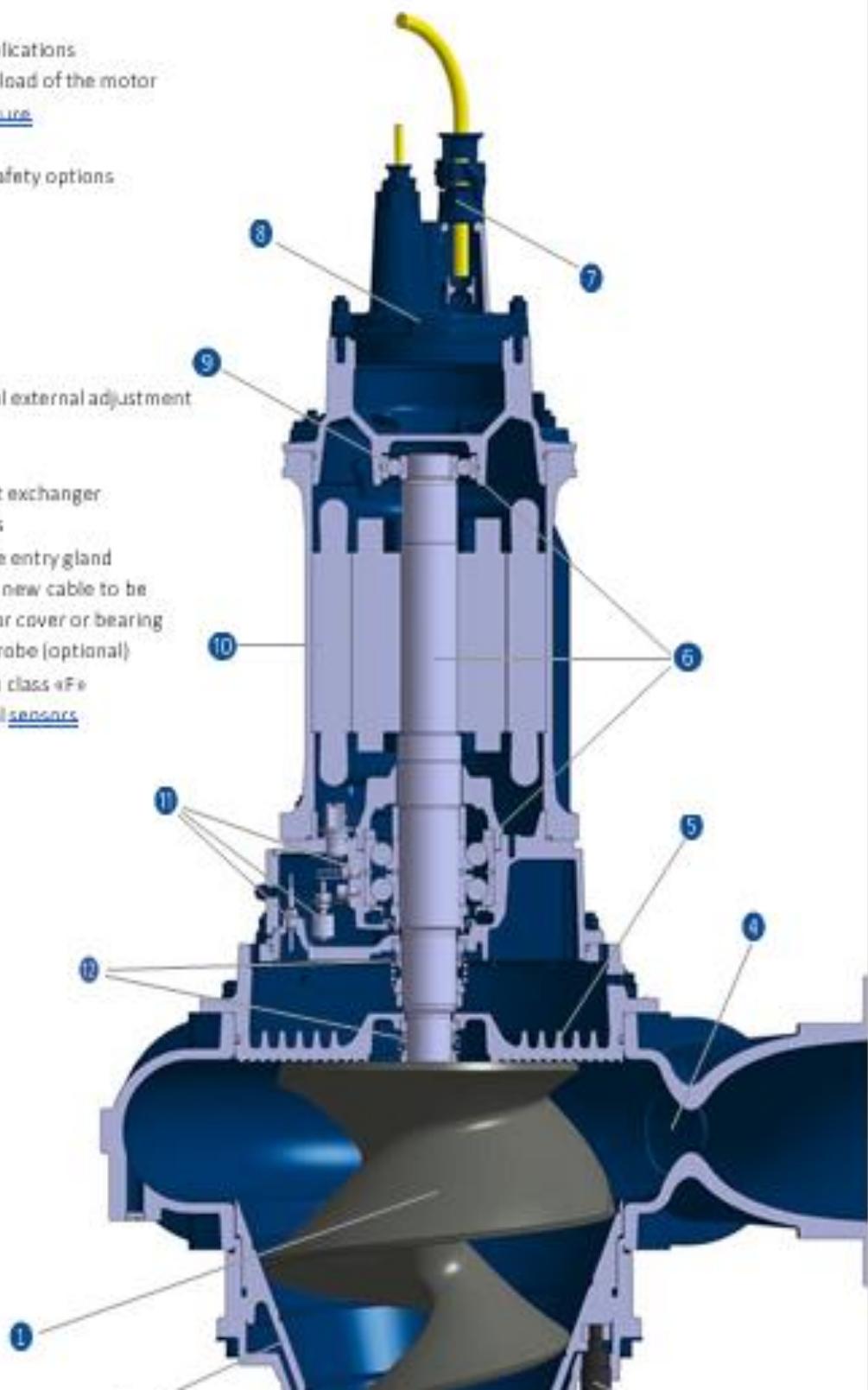
Pump should have hooks for ease of removal and installation.

Heavy duty 120kg chain, 10 meters long

# Product Highlights

- Compact integrated unit
- No exposed rotating shafts or couplings
- Quiet running
- Clog-free hydraulics
- Robust design for demanding applications
- Efficient cooling reduces thermal load of the motor and minimizes surface temperature
- Simple installation and retrieval
- Large variety of monitoring and safety options
- Vertical installation

- 1 Heavy duty impeller
- 2 Replaceable liner with optional external adjustment
- 3 External regulating nuts
- 4 Inspection port
- 5 Finned back cover acts as heat exchanger
- 6 Heavy duty shaft and bearings
- 7 High strength, leak proof cable entry gland
- 8 Separate cable cap permits a new cable to be fitted without disturbing motor cover or bearing
- 9 Upper bearing temperature probe (optional)
- 10 High efficiency dry motor with class F insulation with built in thermal sensors
- 11 Various monitoring options
- 12 Tandem mechanical seals



## C4 SITE INFORMATION

### **Non Compulsory Site Briefing 14.02.2024 @ 09:00**

We will meet at Rand Water Zuikerbosch, Risk Control Parking Area –

Vischgat Road, Three Rivers East, Vereeniging

S26 41 520 E28 00 061

Please bring along your ID for access purposes and wear safety shoes. You will not be allowed to enter the plant without safety shoes