# 1. TERMS OF REFERENCE SCOPE OF WORK /SPECIFICATIONS OF GOODS REQUIRED/ TERMS OF REFERENCE

## 26.1 Background

Umgeni-uThukela Water is an organization whose core activities are to abstract raw water from natural water resources, treat the abstracted water, and transfer the treated water (potable water) to storage facilities for further distribution to her customers. To achieve this involves different types of engineering machinery, which require maintenance and repairs on daily basis.

## 26.2 Description of goods/ services required.

uMngeni uThukela Water (UUW) requires a Contractor to design, supply, deliver, set up, commission and handover equipment/machinery for a State of the Art workshop at Mkondeni, Midmar and Darvill workshops.

This state of the art workshop aims to:

- Modernize the day to day activities through the incorporation of advanced machinery.
- Improve human resource through skilling the trainers and the trainees at different qualification levels (SAQA) utilizing latest technology.
- Re-engineer equipment for the purposes of performance improvement and cost containment.

# 26.3 Description of the Service

The organization seeks for service providers to provide solutions and proposal towards establishing a technologically advanced (State of the Art) workshop at Mkondeni and satellite sites (Darvill WWW and Midmar WW) that will enable the following as detailed on section 12.3.2.1 (a) up to (e) above under method statement:

- Supports day-to-day maintenance functions of the workshops
- Enable the training of human resources
- Perform reverse engineering activities

# 26.3.1 Workshops to be established:

# 26.3.1.1 Machine shop

To be read with section 12.3.2.1(c) and (d)

- Processing of handling metal plates of different sizes and materials (stainless steel plates, mild steel plates, aluminium plates, galvanized plates)
- Processing of handling of steel products of different materials and sizes (flat bar, angle iron, round bars, steel channel, I-beams, square tube, pipe, rebar)
- Machining of steel items up to 3m length and 1.5m diameter
- Drilling of different materials and sizes (steel flanges up to 1.5m diameter, up to 30mm thickness)

# 26.3.1.2 Fitting shop

To be read with section 12.3.2.1(a) and (b)

- Measurement and markings
- Machinery and equipment repairs, installation and assembly
- Rotating machinery balancing

## 26.3.1.3 Fabrication and Welding shop

To be read with section 12.3.2.1(c) and (d)

- Cutting of steel products.
- Welding of steel and cast iron products
- Processing and handling steel pipes of different sizes up to 13m lengths and 1.5m diameter (mild steel, stainless steel, HDPE, PVC)

## 26.3.1.4 Reverse engineering work

This entails setting up an engineering workshop that will deal with the following:

- Machine software and hardware training integration
- Software license management
- Data extraction (re-measurement), remodeling and review (redesign)
- Industrial 3D /4D scanner and printing (Plastic, aluminum, steel up to 1m long x 500mm wide and 500mm)

#### 26 Deliverables/Key Outcomes.

Description	Indicative date for delivery
Layout concept report with drawings	One month from appointment date
Receipt of machinery at UUW	Quarterly delivery of machinery consignment after UUW approval of layout report.
Training and development of trainers	During and after commissioning.

#### 27 Contract term

We anticipate that the Contract will commence [September 2024]. The anticipated Contract term and options to extend are: 18 months with no options to extend.

### 28 Other information

- a) We estimate the quantity to be delivered as per concept proposal for the requirement of the State of the Art Workshop.
- b) We require the [goods / services] to be delivered at Mkondeni Workshop, Midmar Workshop, and Darvill Workshop.
- c) Payment will be on successful delivery of milestones (40% after FAT, additional 20% after site delivery, and then balance of 40% after commissioning)

### 29 Mandatory documentation

The following is mandatory:

- a) Concept layout report
- b) OEM Manuals
- c) Software/programme per each machine
- d) Three year maintenance contract for all machines
- e) Training material per machine
- f) Power load list
- g) Equipment list
- h) Ground load bearing report

# 30 Other documents (In addition to this Bid document, the documents listed below form part of this Bid:

Refer to section 29 above

## 31 Special conditions

a) The service providers will be required to make proposal presentations (First envelopment), provide further information or clarification to the evaluation committee.

## 32 Pricing

- a) The bidder shall provide the price proposal as detailed in SBD 3.1 (Second Envelope)
- b) The bidders's price must be fully inclusive, and each item must be clearly specified.
- c) All additional costs must be clearly specified and included in the total quotation price, (e.g. transport, labour, etc.).
- d) All prices must be VAT inclusive.
- e) The bidder is responsible for all the cost that they shall incur related to the preparation and submission of the quotation.