



TERMS OF REFERENCE

INSTALLATION OF PRESSURE REDUCING VALVES (PRV) AND CONSTRUCTION OF PROTECTIVE BRICK CHAMBERS FOR ALFRED NZO DISTRICT MUNICIPALITY

EMPLOYER:

Alfred Nzo District Municipality
Ntsizwa street
Mount Ayliff
4735

MUNICIPAL MANAGER- **Z. H SIKHUNDLA**

CONTACT PERSON: **X MASIZA**

TEL: 039 254 5000

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1. INTRODUCTION

Bulk water meters play a critical role in measuring the quantity of raw water taken from water supply sources such as dams and boreholes as well as the quantity of water that flows in and out of the Waste Water Treatment Works (WWTW) and Water Treatment Works (WTW). Bulk water meters provide knowledge on how water is distributed within the water distribution system and finally how much water is delivered to individual consumers. Water metering plays a central role in water management and if water meters are properly managed they can have positive spin-offs to the municipality revenue or net income.

2. BACKGROUND

The Alfred Nzo District Municipality (ANDM) undertakes pro-active measures for the installation of pressure reducing valves to maintain lower pressure in branches of hydraulic systems and to control the downstream pressure. PRV's plays a vital role in water management and if PRV's are properly managed they can have positive spin-offs to the municipality.

to improve bulk water metering in an effort to address the critical issue:

- Water losses or non-revenue water and perform water balance calculations in all ANDM WTW.
- Manage and control flows (influent and effluent) in all ANDM WWTW.

The reliability of data and the efficient data collection system is an essential activity in process control of water treatment works. Consequently, an automated on-site data logging system is required which can store and transmit reliable data. The primary purpose of this project is to install inlet and outflow measuring devices equipped with automatic data logging system in the ANDM WWTW and WTW.

3. PROJECT NAME

Pressure Reducing Valves installation and Construction of protective brick chambers

4. PROJECT DESCRIPTION

4.1 AIMS AND OBJECTIVES OF THE PROJECT

The main objectives of the project are:

- Ensuring practical, safe working water pressures within ANDM.
- Pressure reducing valves maintains lower pressure in branches of hydraulic systems.
- Pressure reducing valves controls the downstream pressure or outlets.

4.2 SCOPE AND EXTENT OF WORK

In implementing the project, the service provider is expected to cover all aspects of the installation of PRV to comply with the following:

- Installation of 50 mm – 150 mm diameter hydraulic PRV
- Construction of Brick protection chamber.
- Valves shall control the downstream pressure, or pressure at valve outlet to a present maximum regardless of changing pipeline conditions.
- The valve shall be self-acting, hydraulically operated, diaphragm actuated valve.
- The pilot shall be a direct acting two –way/three-way diaphragm valve designed to throttle when the downstream pressure exceeds the adjustable spring setting.
- This pilot shall be designed specifically to be a direct acting pressure pilot (Bermad, Clayton or similar)
- Each valve body shall have four ball-o-stop valves connected to its pressure sensing ports, via 50 mm long copper spool pieces (threaded to fit)
- Two of the ball-o-stop valves, one on the upstream and one on the downstream shall have quick release couplings connected to them.
- The other ball-o-stops will act as the sensing upstream and downstream ports serving the bonnet and the pilot.

4.3 COMPONENTS OF THE PROPOSAL

The project proposal must amongst other contain the following:

- Comprehensive company profile and contact person to be responsible for the project and further indicate the names and CV of the professionals to form part of the consortium
- Clear timeframes for completion of said tasks/ activities
- Clear project budget aligned to the tasks or activities or deliverables.

5. PROJECT MANAGEMENT

In case where the appointed service provider appoints the services of other consultants or sub-contractors, the appointed service provider will take responsibility of the work of the sub-contractors. The project to be co-ordinated by the WCDM official from the Alfred Nzo District Municipality as well as the appointed service provider. A project team leader/ management will act as a liaison party between the service provider and the municipality.

6. EDUCATION AND CAPACITY BUILDING

The appointed service provider will be required to transfer skills and share knowledge on use and maintenance of pressure reducing valves to the technical officers of the institution during the project lifespan. For monitoring purpose it is advisable that during the site visits and other tasks the municipal officials be involved to ensure the credibility of the job.

7. REPORTING MECHANISM

It is expected that regular progress reports be presented to the Operational Team of the Infrastructure Department of ANDM. The Project Manager has the right to change frequency of reporting whenever necessary to do so. Reporting process will be in both written and presentation format.

8. EVALUATION CRITERIA

Alfred Nzo District Municipality's procurement policy will govern the tender process. In terms of this policy, the project will follow a full tender process. The evaluation of tenders will be done in accordance with 90/10 points procurement programme. In addition, the following criteria will be considered:

ITEM	WEIGHT
STAGE 1 OF EVALUATION- FUNCTIONALITY	
Functionality	100
<ul style="list-style-type: none"> • Previous experience 	50
<ul style="list-style-type: none"> • Qualification 	50
STAGE 2 OF EVALUATION -PRICE & PREFERENTIAL POINTS	
<ul style="list-style-type: none"> • BBBEE points 	20
<ul style="list-style-type: none"> • Pricing 	80
Total	100

50 points for company experience are spread as follows:

- Traceable records of experience for successful completed a minimum of 05 projects of similar nature of a value of at least R650 000.00 per project, maximum of 50 points may be awarded
- Traceable record of experience for successful completed 3-4 projects similar nature of a value of at least R650 000.00 per project, maximum of 30 points may be awarded
- Traceable record of experience for successful completed 1-2 projects similar nature of a value of at least R650 000.00 per project, maximum of 20 points may be awarded

NB: All the certificates/ letters of completion need to be attached in order to claim points above.

50 points for Qualifications

- Site agent with NQF Level 6 qualification in civil engineering and more than 5 years' experience in project of similar nature 50 points may be awarded.
- Site agent with NQF Level 6 qualification in civil engineering and more than 3-4 years' experience in project of similar nature 30 points may be awarded
- Site agent with NQF Level 6 qualification in civil engineering and more than 1-2 years' experience in project of similar nature 20 points may be awarded
- Site agent with NQF Level 6 qualification in civil engineering and more than 1-0 years' experience in project of similar nature 10 points may be awarded

NB: All the certificates/ letters of completion need to be attached in order to claim points above.

Upon request by the Employer, the Bidder undertakes to provide adequate documentation to fully justify his points claim. Failure to provide any justification shall result in the proposal being rejected.

The Employer may evaluate the justification documentation independently and shall in such cases, in his evaluation of the proposal, determine, at his sole discretion, the quality points applicable.

BID ENQUIRES

Enquiries should be directed to:

1. Ms Mjokane, 039 254 5033
2. Ms Chonco, 039 254 5072

Alfred Nzo district Municipality

Erf 1400 Ntsizwa Street

Mount Ayliff

4735

Mr. X Masiza

Senior Manager- IDMS

