Magalies Water
RFQ - 10019720
NFQ = 10019720

DATE ISSUE: 08 MAY 2023

CLOSING DATE: 16 MAY 2023

PLACE OF DELIVERY: Vaalkop Water Treatment Plant

75 JQ Farm Bulhoek

Beestekraal

0255

For More information/query email: evansm@magalieswater.co.za or call 014 597 4636

Item No.	Description/Specific	cation		Quantity
1	DAFF 2 SOUTH PLO	CREPLACEMENT		
	AS PER BELOW SPEC			
	<u>Vaalkop</u> <u>Material:</u>	Plant 2 South PLC replacement/Up	grade_	
	Part No	Description	Quantity	
	BMXP342020	CPU340 - 20 Modbus Ethernet	1	
	ABL8RPS24100	240VAC/24VDC Power supply	1	
	BMEXBP 1200	12 Slot Ethernet backplane	1	
	BMXCPS3500	High Power AC Power Supply	1	
	BMXDDI3202K	DIG 321 24VDC Sink	2	
	BMXDRA1605	DIG 16Q Relays	3	
	BMXAMI0810	ANA 8 U/I IN isolated Fast	1	
	BMXFCW303	FCN 2 x20 Wire 3M Cable	2	
	BMXFTW301	FTB20 Wire 3M Cable	3	
	BMXFTW308S	28 Wire Preformed Shielded FTB	1	
	MCSEM103F2CU0	Modicon Managed Switch 8TX2FX-MM	1	
	MGWB0000184401	Panel Auxiliaries	1	
		PLC Drawings 2 sets 1 Hardcopy one Soft copy	1	
	Labour	Installation	1	

Requesting Office: Magalies Water Vaalkop Plant	
Contact Person: Evans Maluleke	
Contact Numbers: 012 277 1452/1290	Magalies Water
Facsimile:	RFQ – 10019720
E-mail address: evansm@magalieswater.co.za	NI Q - 10019120

Labour	Engineering (PLC Programing)	1
Labour	Commissioning of IO after hardware Installation	1
	and Software changes. Ensuring that both field	
	devices and SCADA corresponds and works well.	

Requirements:

1) Functionality = 100 points **70% threshold** must be achieved

In the case of a joint venture Functionality must still be achieved by partner company and a letter of good standing with partner company must be given.

Experience

Previous Experience	Proof must be given of previous experience by	30 points
upgrading PLC or	means of orders and/or completion letters. Not	
installation of new	older than 5 years.	
PLC on Clear water		
treatment Plants		
	No previous experience	0 points
	Two Projects completed successfully	10 points
	Three to Four projects completed successfully	15 points
	Five to 10 or more Projects completed successfully	30 points

Personnel Experience

Schneider PLC	Certified Certificate must be included	20 points
training and		
certification		
	No Certificate	0 points
	1 Person completed Schneider PLC ECO Structure	10 points
	Control Systems /Unity Pro training.	
	2 or more Persons Completed Schneider PLC ECO	20 points
	Structure Control Systems/Unity Pro training	

Schneider PLC	Certified Certificate must be included	20 points
Modernisation		
Training and		
Certification		

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	2 of more resons completed reciviodernisation	20 points
	training	
Valid Schneider PESS	Certified Certificate must be included still in	30 points
Training and	validation period	
Certification		
	No Certificate or no longer in validation Period	0 points
	1 Person in with valid Schneider PESS certificate	10 points
	2 or more Persons with valid Schneider PESS	30 points
	certificate	

1 Person completed PLC Modernisation training

2 or more Persons completed PLC Modernisation

0 points

10 points

20 points

- 2) A valid and up to date Safety File must be handed in to SHEQ department before work can commence.
- 3) Induction must be done (time must be allowed for in quotation)
- 4) All procurement requirements must be adhered to.

No Certificate

5) A letter of good standing with the OEM not older than a year must accompany RFQ

Scope of work to be done

- a) A new PLC CPU and cards must be prebuild and wired on a back plane. Ready to install in to the panel.
- b) Wiring must be wired ready to be connected to the terminals of drawings supplied.
- Modernization software must be used to convert the old program to the new PLC
 CPU in order to safe cost on engineering.
- d) Each flotation tank has three actuator valves. Inlet Valve suppling water to the flotation tank, an out let valve letting your water out of the flotation tank and a wash valve. The wash Valve washes the scum of your Flotation tank.
- e) In normal Operation you run your Inlet and outlet valves open taking descumed water from the flotation tank to your settling tank. From the settling tank to your filter.
- f) In wash operation you close the outlet valve and run both inlet and wash valve open, in order for the scum to dump into the Scum canal.
- g) The level sensor running at the back on the wash canal must give you an indication if you have enough water to push the scum over the edge. If not you have a wash failure.
- h) There must be a way to adjust the time of the wash for when the need arises to was it for a longer period.

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- i) A timer running on hours must be included to change the frequency of how often a Flotation tank must wash.
- j) The partner Flotation tank is part of the wash cycle. Al valves closes on the partner Flotation tank to enable the rise of the wash canal.
- k) There are 6 Flotation tanks or 3 pairs of partner Flotation tanks. Eg tank 1&2, 3&4, 5&6.
- The PLC also control the Saturator tank or Mixer tank where clear water and compressed air is mixed to get the "white water" effect that goes into the Flotation tanks.
- m) The Saturator process has a pump, pumping water into the saturator tank. At +/- 3.5 bar and compressed air running at +/- 6bar pressure and regulated with a solenoid valve. Knowing when to open or close using the Magnetic switches indicated on page 14 of the drawings.
- n) This PLC is part of a Network ring and might receive or send info to other PLC's in the Network. Hence the coping of the program using the modernization software not to lose vital info.

1. Submission of Quotations

RFQ Number must always be stated on the quotation.

Quotations should be submitted on or before the Request for Quotation Deadline Date by no later than 16h00 to the email below. Email: evansm@magalieswater.co.za

2. Selection of Qualifying Quotation

The selection of the qualifying quotation will be at Magalies water's sole discretion. Magalies Water does not bind itself to accept any particular Quotation

3. DOCUMENTS REQUIRED

The quotation will be verified for responsiveness according to the following **REQUIREMENTS**:

- Quotation must have CSD vendor number/ submit CSD Report
- Quotation must have RFQ reference number
- Completed and signed Declaration of Interest Form (SBD4)
- Quotation with validity period should be 30 days or more.

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Quotation with physical address, date, contact details and banking details

4. EVALUTION OF QUOTATION

Quotations will be evaluated in terms of the PPPFA using the 80:20 Preference point systems

5. TERMS & CONDITIONS

- 5.1. Quotations received after the closing date will not be accepted.
- 5.2. All costs to be included in the quotation.
- 5.3. Delivery must take place at the specified place.
- 5.4. Quotations to be valid for 30 days from date of issue.
- 5.5. The Government Procurement General Conditions of Contract shall apply.

^{*}NB All non-responsive bids will be rejected.