

TENDER NO: 2022/033

Overhaul Service for Spring Grove Pump Station and Mearns Pump Station

VOLUME 1 – Tendering Procedures and Returnable Documents

Issued by:	Tender Queries:
Umgeni Water 310 Burger Street Pietermaritzburg	Contact Name: Londeka Dladla Telephone: 033 341 1034.
Name of Tenderer:	<u>'(O')</u>
National Treasury CSD Number:	

Tip-Offs Anonymous Hotline:	Appeals/Objections
Report unethical conduct at Umgeni Water on: Toll Free Number: 0800 864 463 Email: umgeniwater@whistleblowing.co.za Toll Free Fax: 0800 212 689 Postal: Freepost KZN665, Musgrave, 4062 SMS: 33490 Online: www.whistleblowing.co.za Stop theft / fraud / dishonesty / bribery /blackmail / intimidation, and remain anonymous.	Persons aggrieved by tender award decisions taken by Umgeni Water, may lodge an appeal within <u>7 days</u> of the date of the intention to award advertisement. UW shall only consider written appeals/objections clearly stating reasons for appeal directed to: The Supply Chain Management Office, Attention: Supply Chain Management Email: appeals@umgeni.co.za

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UMGENI WATER TENDER NO. 2022/033 T1: TENDERING PROCEDURES

T1.1.

Tender Number: 2022/033

Tender Title: OVERHAUL SERVICE FOR SPRING GROVE PUMP STATION AND MEARNS PUMP STATION

T1.1 TENDER NOTICE AND INVITATION TO TENDER

Umgeni Water is a state owned business enterprise and it operates within the South African legislative parameters of the Water Services Act 108 of 1997, Public Finance Management Act 1 of 1999 and Public Audit Act 25 of 2004.

Competent and experienced service providers are invited to tender for the following:

Umgeni Water requires a contractor to do overhaul services at Spring Grove and Mearns pump stations.

This will include overhauling of high-lift and low-lift pumps at Spring Grove pump station, overhauling of high-lift and low-lift pumps at Mearns pump station including the DN 900 ball valve and hydraulic power packs, supply of telemetry equipment for Mearns pump station, supply and installation of online condition monitoring and performance data collection equipment for Spring Grove and Mearns pump stations. The duration of the contract will be three (3) months.

In addition to the Eligibility Criteria specified in Clause F2.1 of the tender document, tenderers are required to fulfil the following:

Tenderers are required to achieve at least 35% Contract Participation Goals (CPG) including a minimum 10% Black Women participation and another 10% for Local participation of the value of goods, services and works paid to one or more targeted enterprises to comply with Umgeni Water's BBBEE policy initiative.

Evaluation method:

The tender will firstly be evaluated on eligibility. If found to be eligible, it will be further evaluated in two stages i.e.

- Functionality shall be assessed. A minimum functionality score of 70 points is required for the tender to be considered further.
- Price & Preference using the 80/20 Preference Point Scoring System in terms of PPPFA

The physical address for collection and submission of tender documents and the submission of tenders is:

Umgeni Water, 310 Burger Street, Pietermaritzburg.

Documents must be collected during working hours from 09h00 to 15h00 from 28 February 2022 to 11 March 2022.

Tender documents shall only be sold during the said period and hours.

A non-refundable tender fee of R 200.00 payable by Electronic Fund Transfer is required before collecting the Tender Document. Proof of EFT payment is to be provided on collection. The said transfers may be made to:

BANK NAME; NEDBANK LIMITED

ACCOUNT NAME: UMGENI WATER BOARD – MAIN ACCOUNT

ACCOUNT NUMBER: 1196366594

REFERENCE: TENDER NO. INSERT and Company Name.

NOTE: 1 TENDER DOCUMENTS SHALL NOT BE ISSUED IF INCORRECTLY REFERENCED. 2 TENDERER TO FORWARD NOTIFICATION OF PAYMENT BY E-MAIL TO Londeka Dladla AT Londeka.Dladla@umgeni.co.za

NOTE: NO CASH PAYMENT WILL BE ACCEPTED WHEN ISSUING TENDER DOCUMENTS

T1.2.

Queries relating to the issue of these documents shall be addressed to: Ms Londeka Dladla, Tel No.: 033 341 1034 Fax No.033 341 1101: e-mail: Londeka.Dladla@umgeni.co.za

A compulsory clarification meeting with representatives of Umgeni Water shall take place at Mearns Pump station on 14 March 2022starting at10;00.

No tender documents will be issued at the clarification meeting. Therefore, if tenderers pay during the collection period, they must ensure collection before the meeting.

Tenderers must ensure that they bring their documents to the clarification meeting for signing purposes. No concessions will be made for tenderers who do not have their tender documents in their possession.

The closing time for submission of tenders is 12h00 on 07 April 2022.

Tenders are to be deposited in the tender box located outside the main entrance at **Umgeni Water**, **310 Burger Street**, **Pietermaritzburg**.

Persons aggrieved by decisions or actions taken by Umgeni Water, may lodge an appeal within 7 days of the date of the intention to award advertisement appearing in the relevant print media.

The appeal (clearly stating reasons for appeal) and queries with regard to the decision of award are to be directed, in writing only to the Supply Chain Management Office,

Attention: Supply Chain Management

Email: appeals@umgeni.co.za

Note that appeals not addressed to the abovementioned email will not be considered.

Umgeni Water's standard conditions of tender are available on Umgeni Water's website www.umgeni.co.za/sustainable_development/sud.asp

For any other tender adverts, please visit this website.

Umgeni Water Reserves the Right to Award the Contract In Whole or In Part

T1.2 TENDER DATA (INCLUDING SPECIAL CONDITIONS OF TENDER)

The conditions of tender are the Umgeni Water Standard Conditions of Tender (document number: SCM009, a copy of which may be obtained from Umgeni Water Supply Chain Management office or can be downloaded from the following web site:

www.umgeni.co.za/sustainable_development/sud.asp

For purposes of this Contract the following Special Condition of Tender shall apply:

F.3.8 Test for responsiveness

Sub-Clause F.3.8.1 Add the following new sub-clause:

"d) Meets the minimum Functionality requirement stated in the Tender Data."

F3.11.5 Method 4: Financial offer, quality and preferences

Delete this Clause in its entirety and substitute with:

"F.3.11.5 Functionality

Each member of the Employer's tender evaluation committee is to independently score each tender in respect of functionality offered in accordance with the provisions of F.3.11.9. The committee is then to calculate the final score for each tender as the average of the score from each committee member, rejecting all tender offers that fail to score the minimum number of points stated in the tender data, if any."

Clause F.3.11.9 Scoring Quality

Substitute the word 'quality' wherever it appears with the word 'functionality'.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

Clause number	Tender Data
	F.1.1 Actions
F.1.1	The Employer is Umgeni Water
	F.1.2 Tender Documents
F.1.2	The Tender Documents issued by the Employer comprise the following documents:
/,(VOLUME 1 – Tendering Procedures and Returnable Documents Part T1: Tendering procedures Part T2: Returnable documents
	VOLUME 2 – Offer, Contract, Price, Scope of Work and Site Information Part C1: Agreements and Contract data Part C2: Pricing data
	Part C3: Scope of work Part C4: Site information
	•
	F.1.4 Communication and Employer's agent
F.1.4	The Employer's agent is :
	Tender Queries

UMGENI WATER TENDER NO. 2022/033 T1: TENDERING PROCEDURES

T1.4.

	Name: Londeka Dladla				
	Address: 310 Burger, Pietermaritzburg				
	Tel: 033 341 1034				
	Fax: 033 341 1034				
	E-mail: Londeka.Dladla2umgeni.co.za				
	•				
	F.1.5 The Purchaser's right to accept or reject any tender offer				
F.1.5.2	The minimum period will be 3 months				
	F.2.1 Eligibility				
F.2.1	Umgeni Water will only consider submissions from tenderers who satisfy the following				
	 a) the Tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; b) the Tenderer has not: abused the Employer's Supply Chain Management System; or failed to perform on any previous contract and has been given a written notice to this effect; the Tenderer has completed and signed the Declaration of Interest and there are no conflicts of interest which may impact on the Tenderer's ability to perform the contract in the best interests of the Purchaser or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract; the Tenderer has completed and signed the Declaration of Independent Tender Determination and has arrived at the accompanying tender independently from, and without consultation, communication, agreement or arrangement with any competitor. Tenderers are required to achieve at least 35% Contract Participation Goals (CPG) including a minimum 10% Black Women participation and another 10% for Local 				
	participation of the value of goods, services and works paid to one or more targeted enterprises to comply with Umgeni Water's BBBEE policy initiative.				
	F.2.7 Clarification meeting				
F,2.7	There shall be a compulsory clarification meeting. The details for which are stated in the Tender Notice and Invitation to Tender.				
	Tenderers must sign the attendance list in the name of the tendering entity				
	F.2.12 Alternative tender offers				
F.2.12	No alternative tender offers shall be considered				
F.2.12	If Tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.				
	Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender				

T1.5.

	offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.
	Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It shall be an obligation of the contract for the Tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.
	The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs in confirming the acceptability of the detailed design.
	F.2.13 Submitting a tender offer
F.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original plus one(1) copy
F.2.13.5 and F.2.13.7	The Employer's details and address for delivery of tender offers are stated in T1.1 Tender Notice and Invitation to Tender.
	Identification details The identification details which must be stated in the tender offer outer package are: Tender Number Title of Tender Closing Date Closing Time Tenderer's Name Tenderer's Address
	Tenders issued in more than one volume shall be returned in the same manner and bound separately as per the tender volumes issued. The tender box is available to the public 24 hours per day and 7 days per week. It is the Tenderers sole responsibility to ensure that tenders are placed in the tender box and only Tenders that have been placed in the tender box before the stipulated closing date and time shall be considered.
F.2.13.6	A two-envelope system is not applicable
	F.2.15 Closing time
F.2.15	The closing time for submission of tender offers is as stated in T.1.1 Tender Notice and Invitation to Tender.
	F.2.16 Tender offer validity
F.2.16.1	The tender offer validity period is 90 days from the closing date.
	F.2.19 Inspections, tests and analysis
F.2.19	Access shall be provided for the following inspections, tests and analysis:
	 Pump performance test. The test shall be conducted from a speed of 0 until full speed of the pump
	F.2.20 Submit securities, bonds, policies, etc.

T1.6.

F.2.20	The Tenderer is required to submit with his Tender a letter of intent from an approved Financial Services Provider registered with the Financial Services Board to provide the Insurances to the format included in Part T2.2 of this procurement document.
	F.2.23 Certificates
F.2.23	The Tenderer is required to submit with his tender: 1) A Tax Compliance Status (TCS) letter (with pin) issued by the South African Revenue Services. 2) A valid affidavit or a certified copy B-BBEE Status Level Certificate or sufficient evidence to confirm status as a qualifying EME 3) Central Supplier Database (CSD) Report 4) Proof of good standing in terms of the COID Act 5) Certificate of Independent Bid Determination 6) Company Registration Certificate.
	F.3.4 Opening of tender submissions
F.3.4	Tenders shall be opened immediately after the closing time for tenders as stipulated in T1.1 Tender Notice and Invitation to Tender.
	F3.8 Test for responsiveness
F.3.8	The minimum qualifying Functionality Evaluation Score shall be 70. (Seventy) points
	F.3.11 Evaluation of tender offers
F.3.11.3 F.3.11.7 F.3.11.8	The procedure for the evaluation of responsive tenders is Method 2 (Financial Offer and Preference) in accordance with F.3.11.3 using formula 2 in F.3.11.7
F.3.11.9	The table below lists the returnable schedules that set out the scoring criteria and sub-criteria, and the percentage weighting for the score achieved against the relevant schedule:
	Returnable Schedule Weighting %
	T2.2.09 Tenderer's Experience 30 T2.2.11 Experience of Key Personnel 30 T2.2.14 Quality Assurance and Environmental Management 10 T2.2.15 Method Statement 30
<-C	Failure to score a single point in any of the criteria listed above will deem the bid to be non-responsive and the bidder will be disqualified.
	The score allocated by each Bid Evaluation Committee member for a tender shall be the sum, of the scores relevant to each of the above listed returnable schedules multiplied by the percentage weighting for each as shown above.
	F.3.17 Provide copies of the contracts
F.3.17	The number of paper copies of the signed contract to be provided by the Employer is one.
	F3.18 Provide written reasons for actions taken
F3.18	Refer to Section 39 of the Supply Chain Management Policy.

T1.2.

T2.1.

T2.1 LIST OF ALL RETURNABLE DOCUMENTS AND SCHEDULES

The Tenderer shall complete and submit the following returnable schedules and documents:

T2.2.2 Declaration of Interest T2.3 Declaration of Tenderer's Past Supply Chain Management Practices` T2.2.4 Tax Compliance Status Letter Requirements T2. T2.2.5 Proof of Attendance at the Compulsory Clarification/Site Meeting T2.2.6 Certificate of Independent Bid Determination T2.7 T2.2.7 Contract Participation Goals (CPG) T2.2.8 Local Production and Content Declaration Certificate (SBD 6.2) T2.2.9 Tenderer's Experience T2.2.10 Key Personnel Assigned to the Work T2.2.11 Experience of Key Personnel T2.2.12 Proposed Organization and Staffing T2.2.13 Tenderer's Schedule of Plant and Equipment T2.2.14 Quality Assurance and Environmental Management T2.2.15 Method Statement T2.2.16 Preliminary Programme N/A T2.2.17 Registration Certificate / Agreement / ID Document T2.2.18 Amendments, Qualifications and Alternatives N/A T2.2.19 Record of Addenda to Tender Documents T2.2.2.20 VAT Registration Certificate T2.2.2.20 VAT Registration Certificate			Tenderer's Check List	Page No.
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T2.2.32 Central Supplier Database (CSD) Report		T2.69

T2.3.

T2.2.1 AUTHORITY FOR SIGNATORY

Fill in the relevant portion applicable to the type of organization

A. COMPANIES

If a Tenderer is a company, a certified copy of the resolution by the board of directors, personally signed by the chairperson of the board, authorizing the person who signs this Tender to do so, as well as to sign any contract resulting from this Tender and any other documents and correspondence in connection with this Tender and/or contract on behalf of the company must be submitted with this Tender, that is before the closing time and date of the Tender

AUTHORITY BY BOARD OF DIRECTORS

By resolution passed by the Board of Directors on	20
Mr/Mrs	
appears below) has been duly authorized to sign all documents in conr of	nection with this Tender on behalf
(Name of Company)	
IN HIS/HER CAPACITY AS:	
SIGNED ON BEHALF OF COMPANY:(PRINT NAME)	
SIGNATURE OF SIGNATORY:	DATE:
WITNESSES:	

T2.4.

В.	SOLE PROPRIETOR (ONE - PERSON BUSINESS)	
I, the u	ndersigned		
hereby	confirm that I am the sole owner of the business trad	ling as	
SIGNA	TURE	DATE	

T2.5.

		JER	

The f	followi	ng par	ticulars	in	respect	of	every pa	rtner	must	be	furnis	hec	l and	l sigr	ned	by	every	[,] part	tner:
-------	---------	--------	----------	----	---------	----	----------	-------	------	----	--------	-----	-------	--------	-----	----	-------	-------------------	-------

Full name of Partner	Residential Address	Signature
We, the partners in the business tra	ding as	
hereby authorize		
to sign this Tender as well as any correspondence in connection with t	•	
Signature Si		ignature
Date Date		nate

T2.6.

D. CLOSE CORPORATION

In the case of a close corporation submitting a Tender, a certified copy of the Founding Statement of such corporation shall be included with the Tender, together with the resolution by its members authorizing a member or other official of the corporation to sign the documents on their behalf.

By resolution of members at a meeting on	20
at	
Mr/Ms	, whose signature appears below, has been
authorized to sign all documents in connection with Corporation)	this Tender on behalf of (Name of Close
	O'
SIGNED ON BEHALF OF CLOSE CORPORATION:	
(PRINT NAME)	
IN HIS/HER CAPACITY AS	DATE:
SIGNATURE OF SIGNATORY	
SIGNATURE OF SIGNATORY:	
WITNESSES: 1	
2	

T2.7.

E. CO-OPERATIVE

A certified copy of the Constitution of the co-operative must be included with the Tender, together with the resolution by its members authoring a member or other official of the co-operative to sign the Tender documents on their behalf.

By resolution of	of members at a meeting on	20
at		
authorized to s	whose sign all documents in connection with this Tender on b	behalf of (Name of Co-Operative)
	OF AUTHORIZED REPRESENTATIVE/SIGNATORY	
(PRINT NAME)	
IN HIS/HER C	APACITY AS	
DATE:		
SIGNED ON B	SEHALF OF CO-OPERATIVE:	
NAME IN BLO	CK LETTERS:	
WITNESSES:	1	
	2	

T2.8.

F. JOINT VENTURES

If a tenderer is a joint venture, a certified copy of the resolution/agreement passed/reached signed by the duly authorised representatives of the enterprises, authorising the representatives who sign this tender to do so, as well as to sign any contract resulting from this tender and any other documents and correspondence in connection with the tender and/or contract on behalf of the joint venture must be submitted with this tender, before the closing time and date of the tender.

Authority to sign on behalf of the Joint Venture:

By resolution/agreement passed/reached b	y the joint venture partners on
Mr/Mrs	, Mr/Mrs
	and Mr/Mrsen duly authorised to sign all documents in connection with
(Name of Joint Venture)	
In his/her capacity as:	
(PRINT NAME)	
Signature	Date:
In his/her capacity as:	
Signed on behalf of (COMPANY NAME): (PRINT NAME)	
Signature	Date:
In his/her capacity as:	
Signed on behalf of (COMPANY NAME): (PRINT NAME)	
Signature	Date:
In his/her capacity as:	
Signed on behalf of (COMPANY NAME): (PRINT NAME)	
Signature	Date:

T2.9.

G. CONSORTIUM

If a tenderer is a consortium, a certified copy of the resolution/agreement passed/reached signed by the duly authorised representatives of the enterprises, authorising the representatives who sigh this tender to do so, as well as to sign any contract resulting from this tender and any other documents and correspondence in connection with the tender and/or contract on behalf of the consortium must be submitted with this tender, before the closing time and date of the tender.

Authority to sign on behalf of the consortium:	
By resolution/agreement passed/reached by the consortium	partners on20
Mr/Mrs	,
(whose signature appear below) have been duly authorise	d to sign all documents in connection with
this tender on behalf of:	O,
(Name of Consortium)	<u> </u>
In his/her capacity as:	.60
minorities capability acti	
Signature	Date:

T2.10.

T2.2.2 DECLARATION OF INTEREST

- 1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-
 - the bidder is employed by the state; and/or
 - the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

	persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.
2.	In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.
2.1	Full Name of bidder or his or her representative:
2.2	Identity Number:
2.3	Position occupied in the Company (director, trustee, shareholder²):
2.4	Company Registration Number:
2.5	Tax Reference Number:
2.6	VAT Registration Number:
2.6.1	The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 3 below.
1"State" n	 (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999); (b) any municipality or municipal entity; (c) provincial legislature; (d) national Assembly or the national Council of provinces; or (e) Parliament.
	older" means a person who owns shares in the company and is actively involved in the ement of the enterprise or business and exercises control over the enterprise.
2.7	Are you or any person connected with the bidder presently employed by the state? YES / NO
2.7.1	If so, furnish the following particulars: Name of person / director / trustee / shareholder/ member: Name of state institution at which you or the person connected to the bidder is employed: Position occupied in the state institution: Any other particulars:

T2.11.

2.7.2	If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector?	YES / NO
2.7.2.1	If yes, did you attached proof of such authority to the bid document?	YES / NO
	(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.	
2.7.2.2	If no, furnish reasons for non-submission of such proof:	14
2.8	Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months?	YES/NO
2.8.1	If so, furnish particulars:	
2.9	Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid?	YES / NO
2.9.1	If so, furnish particulars.	
2.10	Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid?	YES / NO
2.10.1	If so, furnish particulars.	
2.11	Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract?	YES / NO
2.11.1	If so, furnish particulars:	

Signature

Position

T2.12.

3 Full details of directors / trustees / members / shareholders

Full Name	Identity Number	Personal Tax Reference Number	State Employee Number / Persal Number		
			3)		
		(5)			
4 DECLARATION					
I, THE UNDERSIGNED (NAME)					
CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 A CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN T PARAGRAPH 23 OF THE GENERAL CONDITIONS OF CONTRACT SHOUDECLARATION PROVE TO BE FALSE.					

BSC 496 Item no.7.8 SCM 052 Ver 25

Date

Name of bidder

.....

T2.13.

T2.2.3 DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (To be completed by Tenderer)

- 1 This Section must form part of all Tenders invited.
- It serves as a declaration to be used by Umgeni Water in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The Tender of any Tenderer may be disregarded if such Tenderer, or any of its directors have
 - a. abused Umgeni Water 's supply chain management system;
 - b. committed fraud or any other improper conduct in relation to such system; or
 - c. failed to perform on any previous contract.

4 <u>In order to give effect to the above, the following questionnaire must be completed and submitted with the Tender.</u>

Item	Question	Yes	No
4.1	Is the Tenderer or any of its directors listed on the National Treasury/Umgeni Water's database as companies or persons prohibited from doing business with the public sector?	Yes	No
4.1. 1	If so, furnish particulars		
4.2	Is the Tenderer or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?	Yes	No
4.2. 1	If so, furnish particulars		
4.3	Was the Tenderer or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes	No
4.3.	If so, furnish particulars		
4.4	Was any contract between the Tenderer and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes	No
4.4. 1	If so, furnish particulars		

T2.14.

	CERTIFICATION	
I, THE UNDERSIGNED		
(FULL NAME)		
CERTIFY THAT THE INFORMATION CORRECT. I ACCEPT THAT, IN ADD BE TAKEN AGAINST ME SHOULD TH	DITION TO CANCELLATION OF A C	ONTRACT, ACTION MAY
Signature	Date	
Position		
Name of Tenderer		

T2.15.

T2.2.4 TAX COMPLIANCE STATUS LETTER REQUIREMENTS

It is a condition of a Tender that the taxes of the successful Tenderer <u>must</u> be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the Tenderer's tax obligations.

- Bidders must ensure compliance with their tax obligations.
- Bidders are required to submit their unique personal identification number (pin) issued by SARS
 to enable the organ of state to verify the taxpayer's profile and tax status.
- Application for Tax Compliance Status (TCS) pin may be made via e-filing through the SARS website www.sars.gov.za.
- Bidders may also submit a printed TCS certificate together with the bid.
- In bids where consortia / joint ventures / sub-contractors are involved, each party must submit a separate TCS certificate / pin / CSD number.
- Where no TCS is available but the bidder is registered on the Central Supplier Database (CSD), a CSD number must be provided.
- No bids will be considered from persons in the service of the state, companies with directors
 who are persons in the service of the state, or close corporations with members in the service
 of the state.

T2.16.

T2.2.4 TAX COMPLIANCE STATUS LETTER REQUIREMENTS (Continued......)

[Tax Compliance Status (TCS) Letter obtained from SARS to be inserted here]

T2.17.

T2.2.5 PROOF OF ATTENDANCE AT THE COMPULSORY CLARIFICATION / SITE MEETING CERTIFICATE OF ATTENDANCE

TENDER No. 2022/033

This is to certify that	
(Tenderer)	
of (address)	
	at the compulsory meeting held for all Tenderers at
(location)	
	on (date)
starting at (time)	
	0,
the works and / or matters incidental to doing th	ting was to acquaint myself / ourselves with the site of e work specified in the Tender documents in order for y when compiling our rates and prices included in the
Particulars of person(s) attending the meetin	g:
Name:	Signature:
Capacity:	
Name:	Signature:
Capacity:	
Attendance of the above person(s) at the merepresentative, namely:	eting is confirmed by the Purchaser's
Name:	Signature:
Canacity:	Date and Time:

T2.18.

T2.2.6 CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

- 1 This section must form part of all tenders¹ invited.
- Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive tendering (or tender rigging).² Collusive tendering is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - disregard the tender of any tenderer if that tenderer, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the tendering process or the execution of that contract.
- This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when tenders are considered, reasonable steps are taken to prevent any form of tender-rigging.
- In order to give effect to the above, the attached Certificate of Tender Determination (SBD 9) must be completed and submitted with the tender:
- ¹ Includes price quotations, advertised competitive tenders, limited tenders and proposals.

² Tender rigging (or collusive tendering) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a tendering process. Tender rigging is, therefore, an agreement between competitors not to compete.

T2.19.

T2.2.6 CERTIFICATE OF INDEPENDENT TENDER DETERMINATION (continued)

I, the undersigned, in submitting the accompanyi	ng tender:
(Tender Number and Description)	
in response to the invitation for the tender made	by:
(Name of Institution)	
do hereby make the following statements that I o	ertify to be true and complete in every respect:
I certify, on behalf of:	that

- 1. I have read and I understand the contents of this Certificate;
- 2. I understand that the accompanying tender will be disqualified if this Certificate is found not to be true and complete in every respect;
- 3. I am authorized by the tenderer to sign this Certificate, and to submit the accompanying tender, on behalf of the tenderer;
- 4. Each person whose signature appears on the accompanying tender has been authorized by the tenderer to determine the terms of, and to sign the tender, on behalf of the tenderer;
- 5. For the purposes of this Certificate and the accompanying tender, I understand that the word "competitor" shall include any individual or organization, other than the tenderer, whether or not affiliated with the tenderer, who:
 - (a) has been requested to submit a tender in response to this tender invitation;
 - (b) could potentially submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the tenderer and/or is in the same line of business as the tenderer
- 6. The tenderer has arrived at the accompanying tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive tendering.
- 7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a tender;
 - (e) the submission of a tender which does not meet the specifications and conditions of the tender; or
 - (f) tendering with the intention not to win the tender.
- 8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this tender invitation relates.
- 9. The terms of the accompanying tender have not been, and will not be, disclosed by the tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.

T2.20.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

Signature	Date
Position	Name of Tenderer

T2.21.

T2.2.7 CONTRACT PARTICIPATION GOALS

Objective

The objective of Umgeni Water's empowerment initiative is to bring about meaningful transformation in all procurement projects and in particular in the built environment / construction and consulting industry through achieving one or more of the following objectives:

- Meaningful Economic Participation;
- Local Economic Development;
- Transfer of Technical, Management and Entrepreneurial Skills; and
- Creation of sustainable Black Enterprises

Contract Participation Goals

Contract Participation Goal (CPG) – the **final** value of services paid to the CPG Partner/s based on the **final** contract value.

At the time of awarding the contract the 35% minimum CPG amount will be based on the contract award value exclusive of the following:

VAT, CPA and Contingencies.

During contract implementation, adjustments relating to Provisional Sums and Contingencies linked to the CPG allocation will be agreed upon between the parties to the contract, as and when the need arises.

CPG Partner/s – Service provider/s selected from Umgeni Water's Supply Chain Management (SCM) Enterprise Development Database. However, should the database not contain suitable CPG Partner/s, the tenderer may propose suitable CPG Partner/s for Umgeni Water's consideration.

Tenderers (the main supplier irrespective of BBBEE classification) who are on Umgeni Water's SCM Enterprise Development Database are not exempt from this requirement and are still required to have a CPG Partner.

Tenderers are required to achieve at least 35% Contract Participation Goals (CPG) including a minimum 10% Black Women participation and another 10% for Local participation of the value of goods, services and Works paid to one or more enterprises (CPG Partner/s)

- 35% includes any special materials
- 35% excludes VAT, CPA and Contingencies.
- The tenderer will be required to achieve the actual Rand value committed for CPG, adjusted according to the following:
 - Variation Orders Each VO will be evaluated by the Employer's Agent and the Project Manager to determine whether it should be counted, in its entirety or partially, as part of CPG or not.
 - Re-measureable Items (including CPA, and provisional sums) Each re-measureable item change will be evaluated by the Employer's Agent and the Project Manager to determine whether it should be counted as part of CPG or not.

Within 2 weeks of the award of contract, the tenderer will be required to submit a cash flow projection for the main contractor and the CPG Partner/s

Applicability

The CPG target is applicable to all contracts to be adjudicated through the Umgeni Water procurement process and shall be achieved through the following mechanisms:-

- CPG Partner/s selection is concluded after adjudication of tenders and before contract award is made
- The CPG Partner/s shall be selected according to the following criteria:

T2.22.

- CPG Partner/s are to be obtained from Umgeni Water's database of suppliers specifically earmarked for CPG purposes.
- In the event of services where Umgeni Water does not have an applicable service provider on its database, the tenderer may propose a suitable CPG Partner/s for consideration by Umgeni Water.
- Main service provider may propose a suitable CPG Partner/s, but Umgeni Water reserves the right to provide or arrange a CPG Partner/s to work with the successful company.
- Sub-contracting of the CPG Partner/s at the same rate / price that the tenderer would have
 offered to Umgeni Water whilst making profit margins consistent to the profit margins that the
 main supplier would have made under normal trading processes.
- Value of the work to be sub contracted shall be at least 35% (minimum of 10% shall be due to Black Women participation and another 10% for Local participation) of the total contract value excluding VAT, CPA and Contingencies.
- CPA is payable to the CPG Partner/s as per the indices stipulated in the contract document.
- The work allocated to the CPG Partner shall be performed by the CPG Partner directly and may not be allocated or sub-contracted out to other contractors/consultants/service providers.
- The main supplier shall not substitute any CPG Partner/s without the written approval of Umgeni Water.
- The working capital arrangements between the main supplier and the CPG Partner/s must be agreed upon between the two parties prior to commencement of works to ensure that the CPG Partner does not have cash flow challenges during contract implementation.

Invoicing and Payment

The monthly measurement and payment will be according to the following guideline:

- Submission of payment certificate by the Supplier
 by 25th of each month, or the nearest previous working day. The submission from the supplier shall include the signature of the CPG Partner indicating agreement with the measurements and rates applicable to the work undertaken by the CPG Partner.
- Payment to the Supplier on the last day of the following month;
- The CPG Partner must be paid within reasonable time but no later than 3 working days after the Main Supplier has been paid by Umgeni Water; and
- The submission from the Supplier must include a schedule that clearly shows the following:
 - Total Contract Sum
 - Total amount payable to CPG Partner/s excluding current month
 - Amount payable to CPG Partner for current month
 - o % split of Total amount payable to Main supplier and CPG Partner/s

Monitoring and Reporting on CPG

- Umgeni Water will monitor CPG implementation on site. This may include direct contact with CPG Partner/s on site for verification purposes.
- The CPG Partner shall be in agreement with the measurement and payment for work completed, for the purposes of submitting payment certificates, as determined by the supplier. Should disagreements arise, Umgeni Water reserves the right to intervene to resolve the disagreement.
- CPG Partner/s shall attend all contractual meetings relevant to their scope of work including contract award negotiations, monthly contract site meetings and technical meetings where applicable.

Eligibility Criteria

For tenders where the CPG target is applicable, those that do not offer a **minimum** CPG participation of **35%** (including minimum 10% Black Women participation and another 10% for Local participation) according to the requirements mentioned above, will be deemed **ineligible**.

UMGENI WATER TENDER NO. <mark>2022/033</mark> T2: RETURNABLE DOCUMENTS

T2.23.

DECLARATION REGARDING CONTRACT PARTICIPATION GOALS

	(Bid Number and Description)	
n response to the invitation for thus the second water.	ne bid made by:	
do hereby make the following de complete in every respect:	eclaration and certify the statements	s contained herein to be true and
certify, on behalf of:		that:
(Name of Bidder)		
 I have read and I underst document accompanying 	tand the contents of this Declaration this declaration;	and the fully completed bid
	that the accompanying bid will, and to be true and complete in every res	·
 3. I understand and declare shall, fully implement the the Bidder's contract part portion of the contract to commitments as outlined and or failure to provide the Letter of Intention to consideration and the Enhighest ranked bidder; ar recourse against Umgen 4. I am authorized by the bion behalf of the bidder; 5. Each person whose signibidder to determine the total portion. 	e that in the event that this bid is successful to commitments that are submitted witicipation goals and commitments to small and emerging entities. Failure in the bid document (in particular, at the relevant information within the particular of the Bid, shall automatically deployer has the right to, and must, the das a result I or the bidder or any commitment.	cessful, I will be required to, and the this bid, in particular regarding owards the allocation of certain e to implement such as detailed in the bill of quantities rescribed period as determined in isqualify this bid from further then award the bid to the next of its directors shall have no a submit the accompanying bid, g bid has been authorized by the alf of the bidder;
Umgeni Water in the eve non-fulfillment amounts to and/or empowerment obj sanctions as agreed to in restricting me and or my	ont that the commitments made here o abuse of Umgeni Water's supply of jectives which must be penalized, on line with the contract signed with U company (the bidder) and or any of ater for a period not exceeding ten (in are not fulfilled and that such chain policies and procedures wer and above the contractual Imgeni Water, with a sanction of its directors from conducting
the CPG objectives as ag arrangement between the shall have the right to ter	company (the Bidder) deviate from greed to, shall amount to a repudiati e two parties (Umgeni Water and the minate the contract with immediate or notice to remedy the breach.	on of the contractual e Bidder); and Umgeni Water
Full Names & Surname	Signature	Date

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Name of Bidder

Position

T2.24.

T2.2.8 DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (LOCAL CONTENT) – NOT APPLICABLE

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.
- 1.2. Regulation 8(2) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial development/ip.isp at no cost.

1.6 A bid may be disqualified if -

T2.25.

- (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
- (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

2. Definitions

- 2.1. "bid" includes written price quotations, advertised competitive bids or proposals;
- 2.2. "bid price" price offered by the bidder, excluding value added tax (VAT);
- 2.3. "**contract**" means the agreement that results from the acceptance of a bid by an organ of state;
- 2.4. "designated sector" means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;
- 2.5. "duly sign" means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
- 2.6. "imported content" means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour or intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. "**local content**" means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
- 2.8. "stipulated minimum threshold" means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. "**sub-contract**" means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.
- 3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

Description of services, works or goods	Stipulated minimum threshold
	%
	%
	%

T2.26.

4.	Does any portion of the services, wo have any imported content? (Tick applicable box)	orks or goods offered			
	YES NO				
4.1	If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.				
The re	elevant rates of exchange information	is accessible on www.reservebank.co.za.			
	te the rate(s) of exchange against the A of SATS 1286:2011):	e appropriate currency in the table below (refer to			
Curr	ency	Rates of exchange			
	Dollar				
	nd Sterling				
Euro					
Yen		. 6			
Othe	Pr				
NB: B	idders must submit proof of the SARE	3 rate (s) of exchange used.			
5.	Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?				
	(Tick applicable box)				
	YES NO				
5.1. If yes, provide the following particulars:					
(a) Full name of auditor: (b) Practice number: (c) Telephone and cell number: (d) Email address:					
	(Documentary proof regarding the d the satisfaction of the Accounting Of	eclaration will, when required, be submitted to fficer / Accounting Authority)			
m	ninimum threshold for local content the	enges are experienced in meeting the stipulated edti must be informed accordingly in order for the AO/AA provide directives in this regard.			

T2.27.

LOCAL CONTENT DECLARATION (NOT APPLICABLE) (REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)			
IN RESPECT OF BID NO.			
ISSUED BY: (Procurement Authority / Name of Institution):			
NB			
1 The obligation to complete, duly sign and submit this declaration ca to an external authorized representative, auditor or any other third party the bidder.			
Guidance on the Calculation of Local Content together with Local Calculates (Annex C, D and E) is accessible on http://www.the.development/ip.jsp . Bidders should first complete Declaration D. Declaration D, bidders should complete Declaration E and then consolid on Declaration C. Declaration C should be submitted with the bid the closing date and time of the bid in order to substantiate the deparagraph (c) below. Declarations D and E should be kept by the bid purposes for a period of at least 5 years. The successful bidder is required at the Declarations C, D and E with the actual values for the duration of the difference of the duration of the d	After completing date the information at eclaration made in lders for verification ired to continuously		
I, the undersigned,do hereby declare, in my capacity asofentity), the following:			
(a) The facts contained herein are within my own personal knowledge.			
(b) I have satisfied myself that:			
 (i) the goods/services/works to be delivered in terms of the bid comply with the minimum local content requirements as bid, and as measured in terms of SATS 1286:2011; and the declaration templates have been audited and certification. 	specified in the		
(c) The local content percentage (%) indicated below has been cateformula given in clause 3 of SATS 1286:2011, the rates of exchange ind 4.1 above and the information contained in Declaration D and Econsolidated in Declaration C:	licated in paragraph		
Bid price, excluding VAT (y)	R		
Imported content (x), as calculated in terms of SATS 1286:2011	R		
Stipulated minimum threshold for local content (paragraph 3 above)			
Local content %, as calculated in terms of SATS 1286:2011			

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

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The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE:	DATE:
WITNESS No. 1	DATE:
WITNESS No. 2	DATE:

In terms of the guideline document for calculating local content, Annexure C (attached) must be submitted with the tender. Please add it here.

T2.29.

T2.2.8 DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (Continued...)

	JESI	GN.	ΑI	ΕŊ	SI	⊏Ŭ	I C	ιK) (C	0	nti	nu	ea)												1		
																		(C7)	(66)	(C5)	(C4)	(C3)	(22)	(C1)				
Date:			Signature of ter										(C8)	nos	Tender item			Specified local content %	Tender Exchange Rate:	Tendering Entity name:	Tender Authority:	Designated product(s)	Tender description:	Tender No.				
			Signature of tenderer from Annex B										(C9)		List of items			content %	ge Rate:	y name:	ty:	duct(s)	tion:				1	
													(C10)	(excl VAT)	- each	Tender price			Pula									
													(C11)	value		Fxempted	Ca		Ė	C					Local (
													(C12)	imported content	exempted	Tender value	Calculation of local content)					Local Content Declaration - Summary Schedule			
		(0											(C13)	Value	-		cal content		GBP						claration -		Annex C	
		22) Total Ten		ſι									(C14)		Local value										Summary		C	
		der value net o	(C21) Tot	(C20) Total tender value									(C15)	(per item)	content %	local									Schedule			
(22)		of exempt i	al Exempt i	der value									(C16)	Ę	Tender													
5) Average local c	(C23) Tota (C24)	(C22) Total Tender value net of exempt imported content	(C21) Total Exempt imported content	R 0									(C17)	value	Total tender		Tend											
(C25) Average local content % of tender	(C23) Total Imported content (C24) Total local content	RO	R O										(C18)	imported content	Total exempted		Tender summary						calculations	Note: VAT to be excluded from all				
	RO												(C19)	content	ᅙ									xcluded from all				SATS 1286.2011
	+-	_									_	+											-			-		-

T2.30.

T2.2.9 TENDERER'S EXPERIENCE

The experience of the Tenderer or joint venture partners in the case of an unincorporated joint venture or consortium will be evaluated on the basis of experience in similar projects or similar areas and conditions in relation to the scope of work.

The evaluation will consider experience in relation to the management of programmes and projects and the provision of cost consulting services in relation to programmes of work as opposed to projects where bills of quantities have been used.

Tenderers should very briefly describe his or her experience in this regard relevant to the scope of work and attach this to this schedule.

The description should be put in tabular form with the following headings: The information below shall be used for evaluation.

Description of work (service)	Period / Year	Value of work (i.e. the service provided) inclusive of VAT (Rand)	Company (Where the Service was provided)	Contact details
	000			
٠.(
7,0				

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Scoring of the Tenderer's experience will be as follows: 30

DESCRIPTION	MAX POSSIBLE SCORE
Company experience in services comprising; Overhauling and refurbishing of vertical pumps and horizontal split casing pumps. Completion certificate to be submitted as proof of previous experience.	100
 1 projects – 40 points 2 projects – 60 points 3 projects – 80 points 10 additional points for every project more than 3 projects to a maximum of 100 points 	

T2.32.

T2.2.9 TENDERER'S EXPERIENCE (Continued)

INSERT HERE

T2.33.

T2.2.10 KEY PERSONNEL ASSIGNED TO THE WORK

Insert in the table below the key personnel and their proposed function

KEY PERSONNEL SCHEDULE

No.	Proposed Function	Key Person Name
1.	Instrumentation/ Electrical Technician	
2.	Engineer (Mechanical/Electrical)	
3.	Mechanical Technician/ Artisan	
4.		
5.		

T2.34.

T2.2.11 EXPERIENCE OF KEY PERSONNEL

Provide relevant information as prescribed below for the following Key Persons proposed in the tender to fulfil the following positions:

Key Person Positions

- A. Mechanical Technician/ Artisan
- B. Engineer (Mechanical /Electrical)
- C. Instrumentation/ Electrical Technician

The experience of each key person, relevant to the scope of work, will be evaluated from the following:

- 1) General experience (total duration of activity), level of education and training and positions held by the key person.
- 2) The education, training and experience of the person, in the specific sector, field, subject, etc which is directly linked to the scope of work.

A CV of each key person of not more than 3 pages should be attached to this schedule.

Each CV should be structured under the following headings:

- 1. Personal particulars
 - name
 - date and place of birth
 - place (s) of tertiary education and dates associated therewith
- 2. Trade relevant qualifications
- 2. Qualifications
- 3. Name of current employer and position in enterprise
- 4. Overview last 10 years of experience (year, organization, position and projects
- 5. Outline of recent assignments / experience that is relevant to the scope of work

The scoring of the experience of key staff will be as follows: 30

Qualifications of Engineer (BSc/ BEng/BTech/NDip degree in Electrical or Mechanical Engineering) 100

• 10 points for qualification

Experience of Engineer (Experience in Mechanical maintenance, Project Management and or experience in Electrical MV maintenance/ installation)

- 1 year 5 points
- 2 years 10 points
- 3 years 15 points
- 5 additional point for every year more than 3 years to a maximum of 30 points

Qualifications of Instrumentation/ Electrical Technician (ND in Instrumentation/ Electrical Engineering)

• 10 points for qualification

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Experience of Instrumentation/ Electrical Technician (in installation and maintenance of instrumentation equipment, PLC Programing and SCADA configuration)

- 1 year 5 points
- 2 years 10 points
- 3 years 14 points

3 additional point for every year more than 3 years to a maximum of 20 points

Qualifications of Mechanical Technician (ND in Mechanical Engineering)

10 points for qualification

Experience of Mechanical Technician (in installation, maintenance and service of rotating equipment)

- 1 year 5 points
- 2 years 10 points
- 3 years 14 points
- 3 additional point for every year more than 3 years to a maximum of 20 points.

T2.36.

T2.2.11 EXPERIENCE OF KEY PERSONNEL (Continued)

INSERT KEY PERSONNEL CVs HERE

T2.37.

T2.2.12 PROPOSED ORGANIZATION AND STAFFING - NOT APPLICABLE

The Tenderer should propose the structure and composition of their team i.e. the main disciplines involved, the key staff member / expert responsible for each discipline, and the proposed technical and support staff and site staff. The roles and responsibilities of each key staff member / expert should be set out as job descriptions. In the case of an association / joint venture / consortium, it should, indicate how the duties and responsibilities are to be shared.

The Tenderer must attach his / her organization and staffing proposals to this page.

The scoring of the proposed organization and staffing will be as follows:

No submission (score 0)	No Organizational and Staffing proposal submitted.
Poor (score 40)	The organization chart is sketchy; the staffing plan is weak in important areas. There is no clarity in allocation of tasks and responsibilities.
Satisfactory (score 70)	The organizational chart is complete and detailed, the technical level and composition of the staffing arrangements are adequate.
Good (score 90)	Besides meeting the "satisfactory" rating, staff are well balanced i.e. they show good co-ordination, complimentary skills, clear and defined duties and responsibilities. Some members of the project team have worked together before on limited occasions.
Very good (score 100)	Besides meeting the "good" rating, the proposed team is well integrated and several members have worked together extensively in the past.

T2.38.

T2.2.12 PROPOSED ORGANIZATION AND STAFFING (Continued)

INSERT HERE

T2.39.

T2.2.13	TENDERER'S SCHEDULE OF PLANT AND EQUIPMENT	(NOT APPLICABLE)
---------	--	------------------

The following are lists of major items of relevant equipment that I / we presently own or lease and will have available for this contract if my / our Tender is accepted.

(a) Details of major equipment that is owned by me / us and immediately available for this contract.

DESCRIPTION (type, size, capacity etc)	QUANTITY	YEAR OF MANUFACTURE
		A

Attach additional pages if more space is required

(b) Details of major equipment that will be hired, or acquired for this contract if my / our Tender is accepted

		HOW ACQUI	RED
DESCRIPTION (type, size, capacity etc)	QUANTITY	HIRE/ BUY	SOURCE
2.0			
(0)			

Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

Failure to complete this form properly and correctly, will lead to the conclusion that the Tenderer does not have the necessary plant and equipment resources at its disposal, which will prejudice its Tender.

,	SIGNATURE:	DATE:
	of person authorized to sign on behalf of the Tend	lerer)

T2.40.

T2.2.13 TENDERER'S SCHEDULE OF PLANT AND EQUIPMENT (Continued) (NOT APPLICABLE)

The scoring of the scheduled plant and equipment will be as follows:

T2.2.14 QUALITY ASSURANCE AND ENVIRONMENTAL MANAGEMENT

1.	Does the Tenderer have a quality management system which is certified in term							
	9001: 2015	YES	NO					
2.	If "yes", Tenderer to supply brief summary of structure of system:							
3.	If "no", does the Tenderer intend to apply for certification?	YES	NO .					
	By when?	Date						
<u>OR</u>								
4.	If "no", does the Tenderer have its own system?	YES	NO .					
5.	If "yes", please supply details of the system							
6.	Does the Tenderer have an environmental management system which is certified in terms of ISO 14001	YES	NO .					

7. If "yes", Tenderer to supply brief summary of structure of system:

T2.41.

		YES	NO
8.	If "no", does the Tenderer intend to apply for certification?	153	NO
		Date	
	By when?		
	·		
<u>OR</u>			
9.	If "no", does the Tenderer have its own system?	YES	NO
ð.	II TIO , does the Tenderer have its own system?		
10.	If "yes", please supply details of the system		

If the Tenderer does <u>not</u> intend to apply for certification it shall submit details of the quality / environmental management system presently in place.

[The Tenderer shall insert here a copy of the company's quality assurance plan, control procedures and the relevant documentation supporting its commitment to environmental management. In the event of these documents being too extensive to be included in the procurement document, an abbreviated version of the master document will be included, referring to the master document.]

Scoring of Quality Assurance and Environmental Management will be as follows: 10]

QUALITY ASSURANCE AND ENVIRONMENTAL MANAGEMENT					
No submission (score 0)	No Quality Assurance Plan & support documents submitted				
Poor (score 40)	The organisation has its own developed Quality Assurance and Environmental Management system.				
Satisfactory (score 70)	The organisation has applied for ISO 9001 or ISO 14001 certification. Or The organisation has a detailed Quality Assurance and Environmental Management System that is tailored for this project.				
Good (score 90)	The organisation is ISO 9001 or ISO 14001 certified.				
Very good (score 100)	The organisation is both ISO 9001 and ISO 14001 certified.				

T2.42.

T2.2.15 METHOD STATEMENT

The method statement must respond to the Scope of Work and outline the proposed approach / methodology. The method statement should articulate what value the Tenderer will add by in achieving the stated objectives for the project.

The Tenderer must as such explain his / her understanding of the objectives of the assignment and the Purchaser's stated and implied requirements, highlight the issues of importance, and explain the technical approach they would adopt to address them. The approach paper should explain the methodologies which are to be adopted, demonstrate the compatibility of those methodologies with the proposed approach. The approach should also include a quality plan which outlines processes, procedures and associated resources, applied by whom and when, to meet the requirements and indicate how risks will be managed and what contribution can be made regarding value management.

The method statement shall cover but not limited to the following:

- Isolation procedure (electrically and hydraulically)
- How equipment is going to be lifted out of the pump stations
- Overhaul procedure for pumps to be detailed
- Performance test for electrical motors
- Performance test procedures to be detailed for all pumps. Performance tests to meet the OEM targeted efficiency percentages. (reference section C3 for efficiency percentages)
- Procedure for installation of online condition monitoring and performance data collection equipment
- The risks must clearly be identified and the mitigation measures clearly indicated. Some risks includes:
 - 1) Lifting of heavy equipment that require extra care,
 - 2) Flooding of pump station due to water leaks
 - 3) Working on a live pumping station

The Tenderer must attach his / her approach paper to this page. The approach paper should not be longer than 8 pages.

The scoring of the approach paper will be as follows: 30

Criteria	Description	Maximum Total Points
	Method Statement for Spring Grove Pump Station	
</td <td> Provide a method statement for Overhaul Services and installation of online condition monitoring and performance data collection equipment for Spring Grove Pump Station No method statement provided (0) A basic and generic method statement pertaining to overhauling of a pump station. (40) A method statement with satisfactory details of pump station overhaul and installation of condition monitoring and performance data collection equipment. (70) A comprehensive method statement tailor-made for overhauling of Spring Grove pump station including the installation of the online condition monitoring and performance data collection equipment, safe work procedure and risk assessment are supplied (100) </td> <td>100</td>	 Provide a method statement for Overhaul Services and installation of online condition monitoring and performance data collection equipment for Spring Grove Pump Station No method statement provided (0) A basic and generic method statement pertaining to overhauling of a pump station. (40) A method statement with satisfactory details of pump station overhaul and installation of condition monitoring and performance data collection equipment. (70) A comprehensive method statement tailor-made for overhauling of Spring Grove pump station including the installation of the online condition monitoring and performance data collection equipment, safe work procedure and risk assessment are supplied (100) 	100

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Criteria	Description	Maximum Total Points
	Method Statement for Mearns Pump Station	
	 Provide a method statement for Overhaul Services and installation of online condition monitoring and performance data collection equipment for Mearns Pump Station No method statement provided (0) A basic and generic method statement pertaining to overhauling of a pump station. (40) A method statement with satisfactory details of pump station overhaul and installation of condition monitoring and performance data collection equipment. (70) A comprehensive method statement tailor-made for overhauling of Mearns pump station including the installation of the online condition monitoring and performance data collection equipment, safe work procedure and risk assessment are supplied (100) 	100

T2.44.

T2.2.15 METHOD STATEMENT (Continued)

INSERT HERE

T2.45.

T2.2.16 PRELIMINARY PROGRAMME (NOT APPLICABLE)

The Tenderer shall detail below or attach a preliminary programme reflecting the proposed sequence and tempo of execution of the main work components. The programme shall be in accordance with the information supplied in the Contract, requirements of the Project Specifications and with all other aspects of his Tender.

The program is to identify the following:

- Major components of the project
- Sub component of the project
- Activities and tasks
- Linkage with the method statement
- Indicate the critical path
- Resource management
- The project must be implemented within 3 months

The contract should note that the contract is required to be completed, commissioned and handed over to the Purchaser by the date specified in the contract data.

PROGRAMME											
Component / sub component		WEEKS / MONTHS									
)_			
				. (
&C											

Note: The programme must be based on the completion time as specified in the Contract Data. No other completion time that may be indicated on this programme will be regarded as an alternative offer, unless it is listed in supported by a detailed statement to that effect, all as specified in the Tender Data.

Scoring of the preliminary programme will be as follows:

	Suitability of programme
No submission (score 0)	No preliminary programme submitted
Poor	Programme is inadequate and/or considered unrealistic and does not achieve
(score 40)	required completion date
Satisfactory	Programme is considered realistic and adequately shows the main components
(score 70)	and compliance with completion date
Good	Programme is considered realistic and includes the main components and sub
(score 90)	subcomponents and compliance with completion date
Very good	Programme is considered realistic and includes the main components and
(score 100)	subcomponents and linkages and compliance with completion date

T2.46.

T2.2.16 PRELIMINARY PROGRAMME (Continued)

INSERT HERE

T2.47.

T.2.2.17 REGISTRATION CERTIFICATE / AGREEMENT / ID DOCUMENT

Important note to Tenderer: The relevant supporting documents to the organization tendering i.e. Registration Certificates for Companies, Close Corporations and Partnerships, or Agreements and Powers of Attorney for Joint Ventures and Consortiums, or ID documents for Sole Proprietors, all as referred to in the foregoing forms and in T2.1, must be inserted here

INSERT HERE

T2.48.

T2.2.18 AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

(This is not an invitation for amendments, deviations or alternatives but should the Tenderer desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder. Umgeni Water will not consider any amendment, alternative offers or discounts unless forms (a), (b) and (c) have been completed to the satisfaction of the Purchaser).

I / We herewith propose the amendments, alternatives and discounts as set out in the tables below:

(a) AMENDMENTS - NOT APPLICABLE

PAGE, CLAUSE OR ITEM NO.	PROPOSED AMENDMENT			
	(9)			

- [Notes: (1) Proposals for amendments to the General and Special Conditions of Contract are not acceptable, and will be ignored;
 - (2) The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his Tender.

(b) ALTERNATIVES - NOT APPLICABLE

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

[Notes: (1) Individual alternative items that do not justify an alternative Tender, and an alternative offer for time for completion should be listed here.

- (2) In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the Tender.
- (3) Alternative Tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main Tender offer.]

T2.49.

(c)	UNCONDITIONA	L DISCOUNTS
-----	--------------	-------------

ITEM ON WHICH DISCOUNT IS OFFERED	DESCRIPTION OF DISCOUNT OFFERED

[Note: The Tenderer must give full details of the discounts offered in a covering letter attached to his Tender, failing which, the offer for a discount may have to be disregarded.]

Signature	Date

T2.50.

T2.2.19 RECORD OF ADDENDA TO TENDER DOCUMENTS

I / We confirm that the following communications amending the Tender documents that I / we received from Umgeni Water or his representative before the closing date for submission of Tenders have been taken into account in this Tender.

A signed copy of each addendum shall be inserted after this page.

ADDENDUM No	DATE	TITLE OR DETAILS				
Signature		Date				
(of person authoriz	ed to sign on behal	f of the Tenderer)				

T2.51.

T2.2.20 VAT REGISTRATION CERTIFICATE

[VAT Registration Certificate obtained from SARS to be inserted here]

T2.52.

T2.2.21 SCHEDULE OF PROPOSED SUB-SUPPLIERS

Important note to Tenderer: The relevant supporting documents to the organization tendering i.e. Registration Certificates for Companies, Close Corporations and Partnerships, or Agreements and Powers of Attorney for Joint Ventures and Consortiums, or ID documents for Sole Proprietors, all as referred to in the foregoing forms and in T2.1, must be inserted here

We notify you that it is our intention to employ the following Sub-Suppliers for work in this contract. If we are awarded a contract we agree that this notification does not change the requirement for us to submit the names of proposed Sub-Suppliers in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

	Name and address of proposed Sub-Supplier	Nature and extent of work	Previous experience with Sub-Supplier.
1.			0
2.			
3.			
4.	401		
5.			
Sign	ature	Date	
	e		
Tenc	lerer		

T2.53.

T2.2.22 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all tenders:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).
- 1.2 The value of this tender is estimated not to exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 system shall be applicable.
- 1.3 Preference points for this tender shall be awarded for:
 - (a) Price; and
 - (b) B-BBEE Status Level of Contribution. (Refer Clause 5.7)
- 1.3.1 The maximum points for this tender are allocated as follows:

	POINTS
1.3.1.1 PRICE	80
1.3.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION	20
Total points for Price and B-BBEE must not exceed	100

- 1.4 Failure on the part of a tenderer to fill in and/or to sign this form and submit a B-BBEE Affidavit, Verification Certificate from a B-BBEE Verification Agency accredited by the South African National Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA), issued prior to 01 January 2017 together with the tender, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.5 The purchaser reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

- 2.1 "all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 2.2 "B-BBEE" means broad-based black economic empowerment as defined in section 1 of the Broad -Based Black Economic Empowerment Act;

T2.54.

- 2.3 "B-BBEE status level of contributor" means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice, or Sector Code on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 "tender" means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive tendering processes or proposals;
- 2.5 "Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 "comparative price" means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration:
- 2.7 "consortium or joint venture" means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract:
- 2.8 "contract" means the agreement that results from the acceptance of a tender by an organ of state:
- 2.9 "EME" (Exempted Micro Enterprise) means an Entity with annual turnover of R10 million or less
- 2.10 "Firm price" means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the Supplier and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 "functionality" means the measurement according to predetermined norms, as set out in the tender documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a tenderer;
- 2.12 "non-firm prices" means all prices other than "firm" prices;
- 2.13 "person" includes a juristic person;
- 2.14 "QSE" (Qualifying Small Enterprise) means an Entity that qualifies for measurement under the QSE scorecard with turnover of R10 million or more but less than R50 million.
- 2.15 "rand value" means the total estimated value of a contract in South African currency, calculated at the time of tender invitations, and includes all applicable taxes and excise duties;
- 2.16 "sub-contract" means the primary Supplier's assigning, leasing, making out work to, or employing, another person to support such primary Supplier in the execution of part of a project in terms of the contract;
- 2.17 "total revenue" means the total income of an entity from its operations as determined under South African Generally Accepted Accounting Practice, as per Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the Government Gazette on 9 February 2007;
- 2.18 "trust" means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.19 "trustee" means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

- 3.1 The tenderer obtaining the highest number of total points will be awarded the contract.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;.
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- 3.4 In the event that two or more tenders have scored equal total points, the successful tender must be the one scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more tenders have scored equal points including equal preference points for B-BBEE, the successful tender must be the one scoring the highest score for functionality.
- 3.6 Should two or more tenders be equal in all respects, the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR PRICE

4.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 or 90/10

$$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right)$$
 or

Where:

Ps = Points scored for comparative price of tender under consideration

Pt = Comparative price of tender under consideration
Pmin = Comparative price of lowest acceptable tender

5. Points awarded for B-BBEE Status Level of Contribution

5.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations 2017, preference points must be awarded to a tenderer for attaining the B-BBEE status level of contribution in accordance with the table below:

T2.56.

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

- 5.2 Tenderers who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA, prior to 01 May 2015 or a B-BBEE Affidavit with B-BBEE Status Level Certificates.
- Tenderers other than EMEs must submit their original and valid B-BBEE status level Affidavit QSE (For entities whose turnover is between R10 Million and R50 Million, with 51% to 100% Black Ownership) verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA (prior to 1 January 2017) or a Verification Agency accredited by SANAS.
- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate for consortiums or joint ventures and affidavit for trusts.
- A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate tender.
- 5.6 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialised scorecard contained in the Amended B-BBEE Codes of Good Practice, Gazette No. 38766.
- 5.7 A person will not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for, unless the intended sub-Supplier is an EME that has the capability and ability to execute the sub-contract.
- 5.8 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6. TENDER DECLARATION

- 6.1 Tenderers who claim points in respect of B-BBEE Status Level of Contribution must complete the following:
- 7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1

T2.57.

7.1	B-BBEE Status Level of Contribution: = (maximum of 10 or 20 points)		
	(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA (prior to 01 January 2017) or an Accounting Officer as contemplated in the CCA).		
8.	SUB-CONTRACTING		
8.1	Will any portion of the contract be sub-contracted? YES / NO (delete which is no applicable)		
8.1.1	If yes, indicate:		
	 i. what percentage of the contract will be subcontracted?		
9.	DECLARATION WITH REGARD TO COMPANY/FIRM		
9.1	Name of organization:		
9.2	VAT registration number:		
9.3	Company Registration number:		
9.4	TYPE OF COMPANY/ FIRM		
	 □ Partnership/Joint Venture / Consortium □ One person business/sole propriety □ Close corporation □ Company □ (Pty) Limited [TICK APPLICABLE BOX] 		
9.5	DESCRIBE PRINCIPAL BUSINESS ACTIVITIES		
9.6	COMPANY CLASSIFICATION		
	 □ Manufacturer □ Supplier □ Professional supplier □ Other suppliers, e.g. transporter, etc. [TICK APPLICABLE BOX] 		
9.7	Total number of years the company/firm has been in business?		

T2.58.

- 9.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:
 - (i) The information furnished is true and correct
 - (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form
 - (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the Supplier may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
 - (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) restrict the tenderer or Supplier, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution

SIGNATURE(S) OF TEN	IDERER(S):			
DATE:				
ADDRESS:				
WITNESSES:				
1				
2				

T2.59.

T2.2.22 .../continued B-BBEE STATUS LEVEL VERIFICATION CERTIFICATES

Tenderers not submitting a **valid original or a certified copy** B-BBEE Status Level Verification Certificate or are non-compliant contributors to B-BBEE do not qualify for preference points for B-BBEE but will not be disqualified from the tendering process.

T2.60.

T2.2.23 PROOF OF PURCHASE OF TENDER DOCUMENT INSERT HERE

T2.61.

T2.2.24 GOODS AND SERVICES SOURCED INTERNATIONALLY

NOT APPLICABLE

INTRODUCTION

The National Industrial Participation (NIP) Programme, which is applicable to all government procurement contracts that have an imported content, became effective on the 1 September 1996. The NIP policy and guidelines were fully endorsed by Cabinet on 30 April 1997. In terms of the Cabinet decision, all state and State Owned Entities purchases / lease contracts (for goods, works and services) entered into after this date, are subject to the NIP requirements. NIP is obligatory and therefore must be complied with. The Industrial Participation Secretariat (IPS) of the Department of Trade and Industry (DTI) is charged with the responsibility of administering the programme.

1. PILLARS OF THE PROGRAMME

- 1.1 The NIP obligation is benchmarked on the imported content of the contract. Any contract having an imported content equal to or exceeding US\$ 10 million or other currency equivalent to US\$ 10 million will have a NIP obligation. This threshold of US\$ 10 million can be reached as follows:
 - (a) Any single contract with imported content exceeding US\$10 million.

or

(b) Multiple contracts for the same goods, works or services each with imported content exceeding US\$3 million awarded to one seller over a 2 year period which in total exceeds US\$10 million.

or

(c) A contract with a renewable option clause, where should the option be exercised the total value of the imported content will exceed US\$10 million.

or

- (d) Multiple suppliers of the same goods, works or services under the same contract, where the value of the imported content of each allocation is equal to or exceeds US\$ 3 million worth of goods, works or services to the same government institution, which in total over a two (2) year period exceeds US\$10 million.
- 1.2 The NIP obligation applicable to suppliers in respect of sub-paragraphs 1.1 (a) to 1.1 (c) above will amount to 30 % of the imported content whilst suppliers in respect of paragraph 1.1 (d) shall incur 30% of the total NIP obligation on a pro-rata basis.
- 1.3 To satisfy the NIP obligation, the DTI would negotiate and conclude agreements such as investments, joint ventures, sub-contracting, licensee production, export promotion, sourcing arrangements and research and development (R&D) with partners or suppliers.
- 1.4 A period of seven years has been identified as the time frame within which to discharge the obligation.

2. REQUIREMENTS OF THE DEPARTMENT OF TRADE AND INDUSTRY

- 2.1 In order to ensure effective implementation of the programme, successful tenderers (Suppliers) are required to, immediately after the award of a contract that is in excess of R10 million (ten million Rands), submit details of such a contract to the DTI for reporting purposes.
- 2.2 The purpose for reporting details of contracts in excess of the amount of R10 million (ten million Rands) is to cater for multiple contracts for the same goods, works or services; renewable contracts and multiple suppliers for the same goods, works or services under the same contract as provided for in paragraphs 1.1.(b) to 1.1. (d) above.
- 3. TENDER SUBMISSION AND CONTRACT REPORTING REQUIREMENTS OF TENDERERS AND SUCCESSFUL TENDERERS (SUPPLIERS)

T2.62.

- 3.1 Tenderers are required to sign and submit this Section together with the tender on the closing date and time.
- 3.2 In order to accommodate multiple contracts for the same goods, works or services; renewable contracts and multiple suppliers for the same goods, works or services under the same contract as indicated in sub-paragraphs 1.1 (b) to 1.1(d) above and to enable the DTI in determining the NIP obligation, successful tenderers (Suppliers) are required, immediately after being officially notified about any successful tender with a value in excess of R10 million (ten million Rands), to contact and furnish the DTI with the following information:
 - Tender / contract number.
 - · Description of the goods, works or services.
 - · Date on which the contract was accepted.
 - · Name, address and contact details of the government institution.
 - · Value of the contract.
 - · Imported content of the contract, if possible.
- 3.3 The information required in paragraph 3.2 above must be sent to the Department of Trade and Industry, Private Bag X 84, Pretoria, 0001 for the attention of Mr Elias Malapane within five (5) working days after award of the contract. Mr Malapane may be contacted on telephone (012) 3941401, facsimile (012) 3942401 or e-mail at Elias@thedti.gov.za for further details about the programme.

4. PROCESS TO SATISFY THE NIP OBLIGATION

- 4.1 Once the successful tenderer (Supplier) has made contact with and furnished the DTI with the information required, the following steps will be followed:
 - (a) the Supplier and the DTI will determine the NIP obligation;
 - (b) the Supplier and the DTI will sign the NIP obligation agreement;
 - (c) the Supplier will submit a performance guarantee to the DTI:
 - (d) the Supplier will submit a business concept for consideration and approval by the DTI;
 - (e) upon approval of the business concept by the DTI, the Supplier will submit detailed business plans outlining the business concepts;
 - (f) the Supplier will implement the business plans; and
 - (g) the Supplier will submit bi-annual progress reports on approved plans to the DTI.
- 4.2 The NIP obligation agreement is between the DTI and the successful tenderer (Supplier) and, therefore, does not involve the purchasing institution.

Tender number	Closing date
Name of tenderer	
Postal address	
Signature Date	Name (in print)

T2.63.

T2.2.25 LETTER OF GOOD STANDING IN TERMS OF COID ACT (Compensation for Occupational Injuries and Diseases Act)

INSERT HERE

T2.64.

T2.2.26 TENDERER'S FINANCIAL STANDING

In terms of the standard conditions of Tender, the Tenderer shall provide information about its commercial position, which includes information necessary for the Purchaser to evaluate the Tenderer's financial standing.

To that end the Tenderer must provide with its Tender a bank rating, certified by its banker, to the effect that it will be able to successfully complete the contract at the Tendered amount within the specified time for completion.

However, should the Tenderer be unable to provide a bank rating with its Tender, it shall state the reasons as to why it is unable to do so, and in addition provide the following details of its banker and bank account that it intends to use for project:

Name of account holder:	
Name of Bank:	Branch:
Account number:	Type of account:
Telephone number:	Facsimile number:
Name of contact person (at bank:	
lead to the conclusion that the Tenderer do	details or a certified bank rating with its Tender, will es not have the necessary financial resources at its ully within the specified time for completion.
The Purchaser undertakes to treat the informal evaluation of the Tender submitted by the Tender	tion thus obtained as confidential, strictly for the use of derer.
SIGNATURE:	DATE:
(of person authorized to sign on behalf of the T	-enderer)

T2.65.

T2.2.27 SUPPLIERS HEALTH AND SAFETY DECLARATION

In terms of Clause 5(1)9(h) of the OHSA 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Supplier may only be appointed to perform construction work if the Purchaser is satisfied that the Supplier has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2014.

To that effect a person duly authorized by the Tenderer must complete and sign the declaration hereafter in detail.

Declaration by Tenderer

- 1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
- 2. I hereby declare that my company / enterprise have the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Purchaser's Health and Safety Specifications.
- 3. I hereby undertake, if my Tender is accepted, to provide a sufficiently documented Health and Safety Plan in accordance with CR7(1) of the Construction Regulations, approved by the Purchaser or its representative, before I will be allowed to commence with construction work under the contract. I hereby agree that my company/enterprise will not have a claim for compensation for delay or extension of time because of my failure to obtain the necessary approval for the said safety plan.
- 4. I confirm that copies of my company's approved Health and Safety Plan, the Purchaser's Safety Specifications as well as the OHSA 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Supplier's personnel, the Purchaser's personnel, the Engineer, visitors, and officials and inspectors of the Department of Labour.
- 5. I hereby confirm that adequate provision has been made in my Tendered rates and prices in the bill of quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2014, including the cost for specific items that may be scheduled in the bill of quantities.
- 6. I hereby confirm that I will be liable for any penalties that may be applied by the Purchaser in terms of the said Regulations for failure on my part to comply with the provisions of the Act and the Regulations as set out in Regulation 30 of the Regulations.
- 7. I agree that my failure to complete and execute this declaration to the satisfaction of the Purchaser will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2014, and accept that my Tender will be prejudiced and may be rejected at the discretion of the Purchaser.
- 8. I am aware of the fact that, should I be awarded the contract, I must submit the notification required in terms of Regulation 4 of the OHSA 1993 Construction Regulations 2014 (example attached hereafter) before I will be allowed to proceed with any work under the contract.

SIGNATURE:	DATE:
(of person authorized to sign on behalf of the Tend	derer)

T2.66.

T2.2.28 PRO FORMA OHS NOTIFICATION

PRO FORMA NOTIFICATION FORM IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993, CONSTRUCTION REGULATIONS 2014

[In terms of Regulation 4 of the Construction Regulations 2014, the successful Tenderer must complete and forward this form <u>prior to commencement</u> of work to the office of the Department of Labour.]

1.	(a)	Name and postal address of Supplier:
	(b)	Name of Supplier's contact person:
		Telephone number:
2	Sun	plier's compensation registration number:
2.	Sup	pilet's compensation registration number.
3.	(a)	Name and postal address of Purchaser:
	(b)	Name of Purchaser's contact person or
	age	nt:
		Telephone
	num	lber
4.	(a)	Name and postal address of designer(s) for the project:
	(b)	Name of designer's contact person:
		Tilahan
	num	Telephone ber
5.	Nan	ne of Supplier's construction supervisor on site appointed in terms of Regulation 6(1):
		Telephone number:
6.	Nan	ne/s of Supplier's sub-ordinate supervisors on site appointed in terms of regulation 6(2).

T2.67.

7.	Exact physical address of the construction site or site office
8.	Nature of the construction work:
9.	Expected commencement date:
10.	Expected completion date:
11.	Estimated maximum number of persons on the construction site:
12.	Planned number of Sub-contractors on the construction site accountable to Supplier:
13.	Name(s) of Sub-contractors already chosen:
SIG	NED BY:
SUF	PPLIER: DATE:
PUF	RCHASER: DATE:

T2.68.

T2.2.29 LETTER OF INTENT FOR PUBLIC LIABILITY (R10 000 000.00) INSERT HERE

1

T2.69.

T2.2.30 LETTER OF INTENT FOR PERFORMANCE GUARANTEE

[The Tenderer must attach hereto a letter from the bank or institution with whom it has made the necessary arrangements, to the effect that the said bank or institution will be prepared to provide the required performance guarantee when asked to do so. The Tenderer must also attach proof that the institution that will provide the performance guarantee is registered and in good standing with the Financial Services Conduct Authority.]

INSERT HERE

T2.70.

T2.2.31 REGISTRATION CERTIFICATES - NOT APPLICABLE

T2.71.

T2.2.32 CENTRAL SUPPLIER DATABASE (CSD) REPORT

Insert Here

T2.72.



CONTRACT NO: 2022/033

OVERHAUL SERVICE FOR SPRING GROVE PUMP STATION AND MEARNS PUMP STATION

VOLUME 2 - Offer, Contract, Pricing, Scope of Work and Site Information Issued by: **Tender Queries:** Umgeni Water Contact Name: Londeka Dladla 310 Burger Street Telephone: 033 341 1034 Pietermaritzburg Name of Service Provider:

T2.2.

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C1.1

C.1 AGREEMENTS AND CONTRACT DATA

IMPORTANT NOTE ON C1.1:

ALL Tenderers MUST complete and sign Form A: OFFER (the first page hereafter).

Form B: ACCEPTANCE will be signed by the <u>Employer</u> and then only in the case of the successful Tenderer.

Form C: SCHEDULE OF DEVIATIONS must be signed by the <u>Employer</u> as well as the <u>successful</u> <u>Tenderer</u> after award of the contract.

Form D: CONFIRMATION OF RECEIPT must be signed by the <u>successful Tenderer</u> on receipt of a fully completed original copy of the Agreement including the Schedule of Deviations, if any.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:

UMGENI WATER
CONTRACT NO. 2022/033
C1: AGREEMENTS & CONTRACT DATA

C1.2

C1.1 FORM OF OFFER AND ACCEPTANCE

A. OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of Overhaul services for Spring Grove and Mearns pump stations. This will include overhauling of high-lift and low-lift pumps at Spring Grove pump station, overhauling of high-lift and low-lift pumps at Mearns pump station including the DN 900 ball valve and hydraulic power packs, supply of telemetry equipment for Mearns pump station, supply and installation of online condition monitoring and performance data collection equipment for Spring Grove and Mearns pump stations

The Tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.

The Tenderer, identified in the Offer signature block, has examined the draft contract as listed in the Acceptance section and agreed to provide this Offer.

By the representative of the Tenderer, deemed to be duly authorized, signing this part of this Form of Offer and Acceptance the Tenderer offers to perform all of the obligations and liabilities of the Service Provider under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

(in words)......Rand; (in figures) R..... The Tenderer confirms that he has read the Standard General Services Contract referred to in C1.2 Contract Data. This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data. Signature(s) (of persons authorized to sign the acceptance) Name(s) Capacity For the Tenderer: (Insert name and address of organization)..... Name & Signature of Witness Date

C1.3

B: ACCEPTANCE

By signing this part of the Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in:

- C.1 Agreement, and Contract Data, (which include this Agreement)
- C.2 Pricing Data, including the Bill of Quantities
- C.3 Scope of Work
- C.4 Site Information
- C.5 Annexures

and the schedules, forms, drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 5 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorized representatives of both parties.

The Tenderer shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any other bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Service Provider) within five days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

Signature: (of person authorized to sign the acceptance)			
Name: (of signatory in capitals)			
Capacity: (of Signatory)			
Name of Employer: (organization)	Umgeni Water		
Address	310 Burger Street, Pietermaritzburg		
Telephone number: 033 3411111	Fax number:		
AS WITNESS			
Signature:	Name: (in capitals)		
Date:			

C1.4

C: SCHEDULE OF DEVIATIONS

The extent of deviations from the tender documents issued by Umgeni Water prior to the tender closing date is limited to those permitted in terms of the Tender Data and the Conditions of Tender.

A Tenderer's covering letter will not necessarily be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

Any other matters arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.

Any change or addition to the tender documents arising from the above agreements and recorded here shall also be incorporated into the final draft of the Contract.

1.	Subject:	
	Details:	
_	Ouds in ad-	
2.		
	Details:	
3.	Subject:	
	Details:	
	20140.	
_		
4.	•	
	Details:	
5.	Subject:	
	Dotailo.	
6.	•	
	Details:	
7.	Subject:	
- •		
	Details.	

By the duly authorized representatives signing this Schedule of Deviations, Umgeni Water and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and Umgeni Water during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

C1.5

FOR THE TENDERER:		
Signature:		
Name:		
Capacity:		
Tenderer: (Na.	me and address of organization)	
Witness:		
Signature:		
Name:		
Date:		
FOR UMGENI	I WATER	
Signature:		
Name:		
Capacity:		
Witness:		
Signature:		
Name:		
Date:		

C1.6

D: CONFIRMATION OF RECEIPT

The Tenderer, (now Service Provider), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations on this

FOR THE CO	FOR THE CONTRACTOR:		
Signature:			
Name:			
Capacity:			
	d name of witness:		
Signature:			
Name:			

C1.7

C.1.2 CONTRACT DATA (INCLUDING SPECIAL CONDITIONS OF CONTRACT)

The Conditions of Contract are the Umgeni Water Standard Services Contract (document number: SCM027), a copy of which may be obtained from the Umgeni Water Supply Chain Management office or can be downloaded from the following web site: www.umgeni.co.za/sustainable_development/sud.asp

Each item of data given below is cross-referenced to the clause in the Conditions of Contract to which it mainly applies.

Special Conditions of Contract

1. National Treasury Central Supplier Database

The successful Tenderer is required to provide proof of registration with the National Treasury Central Supplier Database (CSD) prior to the award of contract.

2. Application of Contract Price Adjustment Factor

Contract Price Adjustment will be/not be applicable

3. Progress Payments

Payment of Payment Certificates shall be effected on or before but not later than the last day of the month following the month in which the Invoice and accompanying statement was dated".

C1.8

PART 1: DATA PROVIDED BY THE EMPLOYER

Clause	Data
1	The Employer is Umgeni Water
1	The Contract is <i>t</i> o do overhaul services for Spring Grove and Mearns pump stations. This will include overhauling of high-lift and low-lift pumps at Spring Grove pump station, overhauling of high-lift and low-lift pumps at Mearns pump station including the DN 900 ball valves and hydraulic power packs, supply of telemetry equipment for Mearns pump station, supply and installation of online condition monitoring and performance data collection equipment for Spring Grove and Mearns pump stations
1	The Period of Performance is 14 weeks from the Commencement Date.
3.4	The authorized and designated representative of the Employer is: Name: Londeka Dladla The address for receipt of communications is: Telephone: 033 341 1034 E-mail: Londeka.dladla@umgeni.co.za Address: 9 Portland Road, Mkondeni. Pietermaritzburg 3201
3.5	The location for the performance of the Contract is Spring Grove pump station and Mearns pump station
3.13	The programme shall be submitted within 14 Days of the Contract becoming effective.
5.4.1	The Service Provider is required to provide the following insurance: 1. Public Liability Insurance Minimum Cover is: R10 000 000 (Ten million rand) Period of cover: For the period of performance Insurance cover requirements should be confirmed on award
5.5	The Service Provider is required to obtain the Employer's prior approval in writing before taking any of the following actions: a) Procurement of parts, telemetry equipment and online condition monitoring equipment, the PM shall approve the datasheets and technical specifications. b) Accessing UW pump stations c) Removing equipment from the pump stations d) Delivery of equipment to site e) Commissioning and handover of equipment
7.2	The Service Provider is required to provide personnel in accordance with the provisions of Clause 7.2 and to complete the Personnel Schedule.
8.1	The Service Provider is to commence the performance of the Services within 14 Days of date that the Contract becomes effective.
12.2.1/2/3	Interim settlement of disputes is to be by mediation
	In the event that the parties fail to agree on a mediator, the mediator is nominated by the Association of Arbitrators (Southern Africa)
12.2.4	Final settlement is by litigation.

C1.9

13.1.3	All persons in a joint venture or consortium shall carry a minimum General indemnity insurance of the value stipulated in clause 5.4.1 of the Contract Data.
15	The interest rate will be prime interest rate of the Employer's bank at the time that the amount is due.

The additional conditions of contract are:

C1.10

PART 2: DATA PROVIDED BY THE SERVICE PROVIDER

Clause	Data
1	The Service Provider is.
	Name:
	Address:
	Telephone: Facsimile:
5.3	The authorized and designated representative of the Service Provider is:
	Name:
	The address for receipt of communications is:
	Address:
	Telephone: Facsimile:
5.5 7.1.2	The Key Persons and their jobs / functions in relation to the services are:
7.1.2	Name Specific duties
	60,

PART C2: PRICING DATA

PRICING TO BE DONE BY MEANS OF BILL OF QUANTITIES

C2.1 Bill of Quantities

- **2.1.1 Definition of unit rates** the tenderer is required to review the scope of work defined within C3 and to determine all the resources required resulting in the unit rates to achieve the work components within the scope.
- **2.1.2 Bill of Quantities** the tenderer is required to fill in the Bill of Quantities and complete the pricing calculations set down in C2.2 Pricing Schedule, and carry forward the tender amount from the C2.2 Pricing Schedule to the Offer C1.1.
- **2.1.3** Payment the tenderer will be paid the amounts per quantity of each item delivered on a monthly basis.
- **2.1.4 Prices** must remain firm for a 12 month period and thereafter, will be subject to CPI escalation on the anniversary of the contract. A 30 day notice period prior to price increases is required.
- 2.1.5 The service providers shall provide prices (VAT exclusive) for ALL items listed in the table. Failure to provide prices in any of the items listed will deem this tender to be non-responsive.

C2.2 Pricing Schedule - Bill of Quantities

Item Number	Item Description	Unit of Measur e	Qua ntity	Rate	Amount per Item (excl VAT)
1	PART 1-PRELIMINARY AND GENERAL				
1.1	Compile and Submit SHEQ Safety File (Ref: Scope of Works 7.6)	Each	1	R	R
1.2	Operation, Health and Safety Act compliance	Sum	1	R	R
1.3	Submission of Equipment Manuals for Real Time Maintenance System (O&M manual)	Sum	2	R	R
1.4	Site Establishment	Sum	1		R
<mark>1.5</mark>	Project Management	Months	3		R
1.6	Provisional sum for Electrical Motors	PSum	1		R 400 000
1.7	Provisional sum for rotating elements	PSum	1		R 300 000
1.8	Provisional sum for pump shafts	PSum	1		R 50 000
1.9	Programming Tool				
1.9.1	Provisional sum for industrial programmable tool with SCADA Software and PLC Software and accessories (communication cables)	PSum	1		R 300 000
1.10	Training for pumps				
	The contractor is to provide one accredited technical training session to UW for 10 employees (3 days theory and 2 days practical per session). Each attendee shall be issued with an attendance certificate. The training will take place at Mkondeni Training Room or Midmar Water Works Boardroom.				
1.10.1	Accredited Training	Sum	1	R	R
1.10.2	Trainer Fee	Hours	6	R	R
1.10.3	Trainer Living Out Allowance	Sum	6	R	R
1.11	Training for Real Time Maintenance System				
۷,	The contractor is to provide one accredited technical training session to UW for 10 employees (3 days theory and 2 days practical per session). Each attendee shall be issued with an attendance certificate. The training will take place at Mkondeni Training Room or Midmar Water Works Boardroom.				
1.11.1	Accredited Training	Sum	1	R	R
1.11.2	Trainer Fee	Hours	6	R	R
1.11.3	Trainer Living Out Allowance	Days	6	R	R
	OVERHAUL SERVICE FOR SPRING				R ND MEARNS PUMP
STATION		1	ı	1	
2.1	Mearns High-Lift Pump Sets Overhaul Service for Mearns high-Lift pumps (Ref: Scope of Works 4)				
		Each	3	В	
2.1.1	Material	Lacii	3	R	R

BSC 496 Item no.7.8

					
2.1.3	Performance test, pump curve development and issuing of certificate (Ref: Scope of Works 4.3 & 6.3)	Each	3	R	R
2.1.4	Provision for two UW personnel to witness performance test	Sum	1	R	R
2.1.5	Performance test for Mearns High-lift	Each	3	R	
	Electrical Motors Overhaul Service for Mearns Hydraulic				
	power packs (Ref: Scope of Works 4.5)				
2.1.6	Material	Each	3	R	R
2.1.7	Labour	Sum	3	R	R
	Overhaul Service for Mearns High-Lift non-return valves (ball valves) (Ref: Scope of Works 4.6)				
2.1.8	Material	Each	3	R	R
2.1.9	Labour	Sum	3	R	R
	Supply, Install and commission Real Time Maintenance System for Mearns High-Lift pumps and electrical motors (Ref: Scope of Works 4.7)				
2.1.10	Material Material	Each Pach	<mark>3</mark>	R	R
2.1.11	<mark>Labour</mark>	Sum Sum	<mark>3</mark>	R	R
2.2	Mearns Low-Lift Pump Sets				
	Overhaul Service for Mearns low-Lift pumps (Ref: Scope of Works 5)				
2.2.1	Material	Each	4	R	R
2.2.2	Labour	Sum	4	R	R
2.2.3	Performance test, pump curve development and issuing of certificate (Ref: Scope of Works 5.3 & 6.3)	Each	4	R	R
2.2.4	Provision for two UW personnel to witness performance test	Sum	1	R	R
2.2.5	Performance test for Mearns Low-Lift Electrical Motors	Each	4	R	R
	Supply, Install and commission Real Time Maintenance System for Mearns Low-Lift pumps and motors (Ref: Scope of Works 4.7)				
2.2.6	Material Material	Each Pach	4	R	R
2.2.7	Labour	Sum	4	R	R
2.2.8	Transportation of High-lift pump sets, Low-lift pump sets, Hydraulic power packs and non-return valves from and to Mearns pump station	Sum		R	R
2.3	Commission and handover Mearns pump station		1	R	
2.4	Telemetry Equipment for Mearns Pump Station				
	Supply, install and commission a remote telemetry unit. (Ref: Scope of Works 4.9.1, 4.9.2, 4.9.3 & 4.9.4)				
2.4.1	Material Material	Sum	1	R	
2.4.2	<mark>labour</mark>	sum	1	R	
2.4.3	Supply software with license	Sum	1	R	
	Supply and deliver telemetry equipment for Mearns pump station (Ref: Scope of Works 4.9)				

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	U3.4				
2.4.4	Motorola ACE 3640 CPU Basic Frame No Radio 12 V PS (AF7509) or similar approved	Each	12	R	R
2.4.5	Motorola ACE 3600 5 Slot Rack 12 VDC (AV105) or similar approved	Each	4	R	R
2.4.6	Motorola ACE 3600 3 Slot Rack 12 VDC (AV103) or similar approved	Each	8	R	R
2.4.7	Motorola ACE 3600 4 AO Module (AV118) or similar approved	Each	4	R	R
2.4.8	Motorola ACE 3600 Mixed I/O Module (AV245) or similar approved	Each	18	R	R
2.4.9	Motorola ACE 3600 16 AI +/-20 MA Module (AV463) or similar approved	Each	1	R	R
2.4.10	Motorola ACE 3600 32 DI Fast 24 V IEC TP2 Module (AV959) or similar approved	Each	1	R	R
2.4.11	Motorola ACE 3600 32 DI Fast 24 V DC Module (AV379) or similar approved	Each	1	R	R
2.4.12	Motorola ACE 3600 8 AI +/-20 MA Module (AV318) or similar approved	Each	2	R	R
2.4.13	Motorola ACE 3600 4 AO / 8 AI +/- 20 MA Module (AV562) or similar approved	Each	1	R	R
2.4.14	Motorola ACE 3600 Expansion LAN switch (AVA00226) or similar approved	Each	1	R	R
2.4.15	Motorola ACE 3600 Plug-In RS-232 Port (AV184) or similar approved	Each	50	R	R
2.4.16	Motorola ACE 3600 40 Pin TB Holder Kit (AV153) or similar approved	Each	18	R	R
2.4.17	Motorola ACE 3600 40 Way 1.5 M Cable Loom OTTO Plus Kit (OM800215-1.5M) or similar approved	Each	18	R	R
2.4.18	Motorola ACE 3600 DC –DC 24 V DC Piggy Back I/O PSU (AFPN1653) or similar approved	Each	18	R	R
2.4.19	Motorola ACE 3600 12 V DC Expansion PS (FPN1654B) or similar approved	Each	1	R	R
2.4.20	Transportation of telemetry equipment to Mearns pump station	Sum		R	R
2.5	Spring Grove High-lift pumping System				
	Overhaul Service for High Lift pumps at Spring Grove pump station (Ref: Scope of Works 4)				
2.5.1	Material	Each	3	R	R
2.5.2	Labour	Sum	3	R	R
2.5.3	Performance test, development of pump curves and issuing of certificate for High-Lift pumps (Ref: Scope of Works 6.3)	Each	3	R	R
2.5.4	Provision for two UW personnel to witness performance test	Sum	1	R	R
2.5.5	Performance test for Spring Grove High- lift electrical motors (Ref: Scope of Works 4.10)	Each	3	R	R
	Refurbish High-lift pump spare rotating element (Ref: Scope of Works 4.8)				
2.5.6	Material	Each	1	R	R
2.5.7	Labour	Sum	1	R	R
	Supply, Install and commission Real Time Maintenance System for Spring				

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	Grove High-Lift and pumps and electrical motors				
2.5.8	Material		3	R	R
2.5.9	Labour		3	R	R
			3	K	K
2.8	Spring Grove Low-lift pumping system				
	Overhaul Service for low-Lift pumps at Spring Grove pump station (Ref: Scope of Works 5)				
2.8.1	Material	Each	2	R	R
2.8.2	Labour	sum	2	R	R
2.8.3	Performance test, development of pump curves and issuing of certificate for Low-Lift pumps	Each	2	R	R
2.8.4	Provision for two UW personnel to witness performance test	Sum	1	R	R
2.8.5	Performance test for low-Lift Electric motors at Spring Grove pump station	Each	2	R	R
	Supply, Install and commission Real Time Maintenance System for Spring Grove Low-Lift pumps and electrical motors (Ref: Scope of Works 4.7)		C	0	
2.8.6	Material	Each	2	R	R
2.8.7	Labour Labour	Sum	2	R	R
2.8.8	Transportation of High-lift pump sets and Low-lift pump sets from and to Spring Grove pump station	Sum		R	R
2.9	Commission and handover Spring Grove pump station	Sum	1	R	R
PART 2 -	- TOTAL CARRIED FORWARD TO SUMM	ARY PAGE			R

A - Total for all Items excluding VAT (PART 1 + PART 2) (Use to calculate CPG amount and percentage)	
B - Contingences @ 15% of A	R
C Subtotal (A + B)	R
D - VAT @ 15% of C	
E Total including VAT (C+D) carried forward to C1.1 (Offer).	R

PART C3: SCOPE OF WORK

1. Employer's objectives

The objective is to restore functionality of Spring Grove pump station and Mearns pump station and to install online condition monitoring equipment and performance data collection equipment for Spring Grove and Mearns pump stations.

2. Description of the services

Umgeni water requires a contractor to overhaul pumping systems for Mearns pump station and Spring Grove pump station. The scope of works entails the following:

- Overhauling of the pumping system at Mearns pump station and Spring Groove Pump Stations. This includes:
 - Mearns Pump Station
 - High Lift pumps (3 off)
 - Low Lift pumps (4 off)
 - Hydraulic power packs (3 off)
 - DN 900, PN 2500 kPa Ball valves (3 off)
 - Spring Grove Pump Station
 - High Lift pumps (3 off)
 - Low Lift pumps (2 off)
- Supply of telemetry equipment for Mearns pump station
- Supply and installation of online condition monitoring and performance data collection equipment for all pumps at Mearns pump station and Spring Grove pump station.

Overhaul work will be done using the duty / standby arrangement to ensure that pumping can still occur whilst an individual pump is out for overhaul. Umgeni Water reserves the right to use the equipment after it has been overhauled within the three-month period of the project and the contractor will take responsibility of any failure that occurs within that period.

3. Equipment Specifications:

3.1. Mearns pump station

3.1.1. High Lift pumps (3 off)

Manufacturer: Sulzer South Africa

Type: Split casing Model: SM 501 – 640

Head: 102m
Efficiency: 90.05%
Speed: 1490rpm
Medium: Raw Water
Suction Rating: PN25
Delivery Rating: PN40

3.1.2. High Lift electric motors (3 off)

Manufacturer: ALSTOM

Size: 2070kW, 1491rpm, 6600V

3.1.3. Low lift pumps (4 off)

Pump type: MFD 900 Configuration: Vertical Number of stages: 1

Delivery rate: 5760m³/hr
Delivery head: 20m
Speed: 740rpm
Pumped liquid: Raw Water

Pump efficiency: 80.5%

Discharge branch bore: 900mm

3.1.4. Low lift electric motors (4 off)

Size: 410kW, 742rpm, 6600V

3.1.5. Hydraulic power packs (3 off)

Electric motor size: 4kW, 1430rpm

Tank size: 600mm x 300mm x 300mm

3.1.6. Non-return valves (3 off)

Valve size: DN 900mm Pressure: PN2500kPa

Type: CS GR 480 WCB Ball valves

3.2. Spring Grove pump station

3.2.1. High Lift pumps (3 off)

Manufacturer: KSB

Type: Split casing

Model: RDLO 700-980 A SB GF

Flow rate: 2250 l/s
Head: 67,8 m
Efficiency: 91 %
Speed: 746 rpm
Medium: Raw Water
Discharge Pressure: 6,64 bar

3.2.2. High Lift Motors (3 off)

Size: 2060 kW Speed: 746 rpm

3.2.3. Low Lift Pumps (2 off)

Manufacturer: KSB

Type: End Suction
Model: ETA 250-33
Flow rate: 845,4 m³/h
Head: 33,4 m
Efficiency: 81,3 %
Speed: 1580 rpm

Medium: Raw Water

3.2.4. Low Lift Motors (2 off)

Size: 132 kW Speed: 1580 rpm

4. Work Scope for High Lift pumps (6 OFF)

4.1. Pump dismantling

THE SCOPE INCLUDES BUT NOT LIMITED TO THE FOLLOWING:

- Isolate the pump electrically, hydraulically and any other ancillary supplies and discharges
- Disconnect the drive coupling and drain out pump casing
- Remove electrical and instrument accessories from pump
- Unbolt and remove the pump from the plinth
- Dismantle and split pump
- Remove rotating element

4.2. Examination, Reconditioning, Replacement of components

THE SCOPE INCLUDES BUT NOT LIMITED TO THE FOLLOWING:

- Clean all components and examine for damage and wear
- Casing reconditioning
 - o Re-build bearing landings
 - Re-line casing internal
 - Replace casing wear rings and bushes
 - Renew casing external paint to UW specification
- Impeller reconditioning
 - Repair impeller necks
 - Re-coat impeller
 - Dynamically balance impeller / rotating assembly
- Shaft reconditioning
 - Rebuild shaft
- Rotating element assembly
 - Fit impeller to shaft
 - o Replace shaft sleeves
 - Replace shaft sealing
 - Replace O' ring seals and joints
 - Replace bearings and grease accordingly
- Reinstall coupling
- Refer to OEM component specification for acceptable wear tolerances
- Replace all components worn beyond acceptable tolerances.
- Dynamically Balance all rotating components individually and on assembly

Table 1: Clearances for SM-640

Description	Pump (SM 501 – 640)	
Casing neck ring clearances (mm)	On radius 0.35mm average	
Casing neck ring ID (mm)	310.7	
Impeller wear ring OD (mm)	310	
Journal bearing clearance (mm)	On radius 0.1455	
Thrust bearing clearance (mm)	Total 0.38	

4.3. Assembling and Testing

- Re-assembly pump to OEM specification
- Performance test pump and issue a performance test certificate

4.4. Installation and Commissioning

THE SCOPE INCLUDES BUT NOT LIMITED TO THE FOLLOWING:

- Transport the pump to site
- Hoist the pump into position
- Re-assembly pump/motor coupling
- Reinstall pump and laser align it to acceptable ISO 9000 standard (issue laser alignment certificate)
- Renew lubricant
- Replace coupling guards
- Cold commission pump and hot commission pump

4.5. Hydraulics power packs (3 off)

THE SCOPE INCLUDES BUT NOT LIMITED TO THE FOLLOWING: Service hydraulic power packs.

- Isolate hydraulic power pack
- Depressurize the hydraulic system
- Empty reservoir tank
- Remove and service block solenoids and valves
- Replace worn hydraulic hoses
- Remove and service hydraulic pump
- Replace hydraulic oil filters
- Re-assembly power pack and refill new hydraulic oil
- Test the power pack
- Set limits, Test and commission power pack.

4.6. Non-return valve (3 off)

THE SCOPE INCLUDES BUT NOT LIMITED TO THE FOLLOWING:

Repair internal seals on non-return valves

- Isolate pump, suction and delivery lines
- Remove non-return valve (NRV)
- Strip inspect and replace damaged valve internals
- Re-assemble valve
- Reinstall valve
- · Set limits, test and commission valve

4.7. Real-Time Maintenance (RTM) System

The required solution must be able to gather equipment operational data, together with condition based monitoring data and diagnostics from The Field Device Layer, analyse this data using the respective evaluation units at The Control Layer and provide the user at the IOT layer with accurate information to make an informed decision.

4.7.1. The Field Device Layer

The Field Device Layer will be used for obtaining RTM data from pump sets. This layer consists of two categories, namely: 1) Vibration monitoring and 2) IO-Link process instrumentation

4.7.1.1. Vibration monitoring devices

Vibration sensors shall be installed by screw mounting (8mm) at each bearing location at the pump and the motor. They should ideally be position horizontally on the motor bearing housing and vertically on the pump bearing housing. The sensors should offer the possibility to carry out a self-test. Table 2 shows the technical requirements and functionality of vibration monitoring devices.

Table 2: Technical requirements & functionality of vibration monitoring devices

Description	Specification		
Sensor type	Accelerometer, Mems (microelectromechanical system)		
Measuring Range	Vibration: -2525g, Frequency: 16000Hz		
Operating voltage	7.210.8 VDC		
Measuring principle	Capacitive		
Mounting type	M8 X 1.25mm		
RTM Diagnostics	Integrated Sensor Self-test functionality		
Measurement axes	Single		
Accessories	Conical washer for mounting, 20M screened cable with 4 pin M12 connection		

4.7.1.2. Reference speed measurement

This is critical for vibration measurement and must be achieved by using an inductive proximity sensor mounted at the coupling to sense the key on the shaft of the pump. Each pump set must have one speed sensor. Technical requirements and functionality of speed measuring sensor is shown in Table 3.

Table 3: Technical requirements & functionality of speed measuring sensor

Description	Specification
Sensor type	Inductive
Size	M18 X 65mm
Operating voltage	1030 VDC
Output function	Normally open. PNP
Switching Frequency	2000Hz
Mounting	Non – Flush mountable, 12mm sensing distance
Accessories	20M screened cable with M12 connection. Angled mounting bracket

4.7.1.3. IO-Link Process instrumentation

All instrumentation used to gather process data and diagnostics around the pump set must be IO Link compatible.

4.7.1.4. Bearing temperature sensors

A temperature sensing device must be installed at each bearing location on the pump-set. The location should be at any convenient radial position of the bearing housing. The technical requirements and functionality of bearing temperature sensors are shown in Table 4.

Table 4: Technical requirements & functionality of bearing temperature sensor

Description	Specification
Sensor type	PT100 sensing element
Physical dimensions	6mm probe, 50mm length
Process connection	G1/4"
Output function	IO Link
Temperature range	0200 deg
Diagnostic data	Valid process value, wire break detection
Accessories	20M PUR cable with M12 moulded connection, 1/4" process adapter

4.7.1.5. Motor winding temperature

Winding temperature sensors must be installed within the motor and encased in the terminal box. The PT100 output signals should be converted to IO Link and transmitted to the relevant control unit. Table 5 shows the technical requirements & functionality of motor winding temperature sensor

Table 5: Technical requirements & functionality of motor winding temperature sensor

Description	Specification
Sensor type	Evaluation unit for PT100 sensors
Measuring range	-5030 deg (scalable)
Operating voltage	2032VDC
Output function	IO Link
Connection	M12
Diagnostic data	Automatic sensor recognition, wire break detection, integrated watchdog
Accessories	20M PUR cable with M12 moulded connection, ½" process adapter, M12 wirable plug for connection to PT100 sensing elements

4.7.1.6. Pressure sensing devices

Pressure sensors must be mounted at the suction and delivery pipes of each pump set. These sensors should be screwed into a ½" process connection socket and must be able to withstand pressure spikes, water hammer and turbulent flow. The technical requirements and functionality of pressure sensing devices must be as shown in Table 6.

Table 6: Technical requirements & functionality of pressure sensing devices

Description	Specification	
Sensor type	Pressure sensor	
Measuring range	0 to 10 bar	

Operating voltage	2032VDC
Output function	IO Link
Process Connection	G1/4" internal thread
Measuring element	Ceramic capacitive cell
Minimum bursting	150 Bar
pressure	
Diagnostic data	Highest/ lowest pressure sensed, Wire break detection. Valid process
	value
Accessories	20M PUR cable with M12 moulded connection,1/2" process adapter,

4.7.1.7. Flow sensor

A flow sensor must be installed at the delivery of the pump to indicate presence of flow. This flow sensor should be installed horizontally and adhere to straight pipe diameter flow requirements. Table 7 shows the technical requirements and functionality of flow sensors.

Table 7: Technical requirements & functionality of flow sensor

Description	Specification
Sensor type	Flow sensor
Measuring range	0 to 3m/s
Operating voltage	2032VDC
Output function	IO Link
Process Connection	1/2"
Probe dimensions	8mm X 200mm
Measuring principle	Calometric
Pressure rating	50 Bar
Diagnostic data	Integrated temperature monitoring, Wire break, Valid process value
Accessories	20M PUR cable with M12 moulded connection, 1/2" process adapter with metal ferrule to allow for 8mm probe connection. Plastic protective cover

4.7.2. The Control Layer

The Control Layer should consist of a locally mounted panel at each pump set to obtain data from the field devices.

- Each localised panel should consist of a 24VDC power supply unit, a vibration evaluation unit to obtain data from the vibration sensors and an IO-Link masters to obtain data from the process instrumentation.
- Each panel should be wired with a circuit breaker for a 220VAC supply together with relevant screw terminal blocks and cable trunking.
- All connection cables and internal wiring should be labelled accordingly.
- A wiring diagram must be made available at each panel for troubleshooting purposes.

4.7.2.1. Vibration evaluation unit

- The vibration sensors at the field layer should connect to the dynamic inputs of the vibration control unit.
- The speed sensor of the relevant pump set should be connected to the static input of the control unit.
- The vibration evaluation unit should be able to provide both, a global warning and a
 global trip signal which should each be hardwired as two separate digital outputs in a N/C
 state to the PLC.
- The vibration evaluation unit must have the ability to simplify raw data into and allow for the modelling of specific broad and narrow band vibration indicators which include but not limited to unbalance, looseness, misalignment, cavitation, lubrication, bearing damage.
- Raw data should be accessible in both the time wave form as well as the Fast Fourier transform spectrum. This will allow for in-depth analysis in the complete frequency range.
- The vibration evaluation unit should have an onboard measurement trend history to allow for fault analysis.
- The vibration evaluation unit should be able to accommodate two separate ethernet based networks. The first network should consist of a dedicated IOT port available for

RTM data and configuring of the vibration device. The second network should consist of two ethernet ports which allow for daisy chaining of field bus network for data transmission to the PLC. The vibration evaluation unit must offer the possibility to carry out a self-test for the connected relevant vibration sensors.

Technical requirements for vibration evaluation units are shown in Table 8.

Table 8: Technical requirements & functionality of vibration evaluation unit

Description	Specification
Device type	Diagnostic electronics for vibration sensors
Dynamic vibration inputs	4 dynamic inputs for Mems accelerometer(configurable)
Static inputs	2 X digital/analogue inputs (configurable)
Operating voltage	2032VDC
Outputs	2 X PNP switching outputs(configurable)
PLC Interface	2 X RJ45 ports for Ethernet IP communication (Daisy chaining
	compatible)
IOT Interface	1 X RJ45 Ports for TCP connection for Real Time maintenance and
	programming
Frequency Range	012000Hz, Resolution: 16bit, Sample rate:100K samples
Mounting	Din rail mounting
Diagnostic data	Integrated sensor self-test function to detect wire break and monitor
	sensor calibration.
Accessories	Programming software (no license cost), Ethernet patch cable

4.7.2.2. IO Link Master

- All IO Link process instrumentation from the field device layer must be connected to the
 respective ports on an 8 channel IO Link master. These masters will be din rail mounted and
 enclosed in the same panel as the vibration evaluation unit.
- The IO Link master must have the capability to communicate to multi-vendor products and must have IO Link approvals.
- The IO Link master should be able to transmit sensor values to a Rockwell PLC using Ethernet IP communication and must support DLR and daisy chaining functionality.
- The PLC network shall by no means be interrupted by external factors therefore the vital RTM data from IO Link sensors should be channeled independently to the IOT layer using a dedicated IOT port on the IO Link master. The unit must feature galvanic separation between the IOT socket and the control network.

Table 9 shows technical requirements for the IO link master.

Table 9: Technical requirements & functionality of the IO link master

Description	Specification
Device type	IO Link master
Inputs	8 X IO Link ports – Class A (configurable)
Mounting	Din rail mounting
Operating voltage	2032VDC
Maximum current load	3.6 Amps
PLC Interface	2 X RJ45 ports for Ethernet IP communication (Daisy chaining compatible)
IOT Interface	1 X RJ45 Ports for TCP connection for Real Time maintenance and programming
IO Link Revision	1.1
Protection class	III
Mounting	Din rail mounting
Diagnostic data	Short circuit protection. Automatic transfer of sensor parameters.
Interface topologies	Line, Ring, DLR
Programming software	LR Device

4.7.3. The IOT layer

This layer shall comprise of an industrial PC in which the RTM software application will reside. The visualizations created must be displayed on a desktop monitor at the pump station MCC/control room. The IOT connections from each vibration evaluation unit and IO Link master should connect to the IPC via an Industrial ethernet switch. A VPN connection to the IPC must be made available using a 4G/LTE modem to allow for remote connection to the IPC. This will enable online remote condition monitoring.

4.7.3.1. Software

This should be an industry and manufacturer- independent IOT platform that enables easy visualizations to be created and diagnostic data from sensors to indicate warning and trip conditions. This package should not be related to any SCADA system and must have no connection to the PLC The following features will be required:

- Ability to auto-detect all devices on the network, Configure IP addresses, adjust parameters and view real time process values from sensors
- View local and online IODD catalogue, install updates and import IODD's from any manufacturer
- Be flexible by having ability to add new devices at any stage,
- Freely selectable data to display
- Simple drag and drop interface for logic/math functions
- Must have a monitoring table where all process values with date and time stamped can be viewed
- Dashboard creation must allow for simple drag and drop functionality for a customised dashboard, ability to import an image or gif
- Historical data must be able to be viewed as graphical trends and export for further analysis
- Definable thresholds for warning and alarm conditions. Action when threshold is violated by creating an email or text message notification
- Review of alarm history and checking of current status
- Acknowledgement of and clearing of open warnings and alarms

Table 10 shows the technical requirements and functionality of software Table 10: Technical requirements & functionality of software

Description	Specification
Supported operating systems	Windows 10 (64bit), Windows server 2016, 2019, 20H2
Supported web browsers	Google Chrome(V88), Mozilla Firefox(V78)
Compatible control units	Vibration evaluation units, IO Link masters, connection from
	dedicated IOT Ports
Multiple users	Administrator, other users
Resolution	Full HD 1920 X 1080
Data Communication protocol	MQTT / JSON
Licences	All applicable license costs and expiry dates must be stipulated
Service & support	Service level agreement for online support and local support
	for supplier

4.7.3.2. Industrial PC (IPC)

The minimum hardware requirements are:

Quadcore CPU with min. 2,3 GHz, 8 GB RAM

SSD Hard-drive space required approximately (depending on usage and use cases the values may vary):

- 1 GB RTM software Application
- 64 GB Process data storage
- 5 GB Non process data storage
- 5 GB Log-Files

In total about 75GB hard-drive space shall be reserved for the RTM software application and its data.

4.7.3.3. Wireless Router

The following features are required:

Seamless VPN connection to IPC to allow for remote log in

Connectivity: 4G/LTE, 3G, 2G

Ethernet ports: 4

Sim: Dual with automatic fail switch over. Back up WAN

Below (Figure 1) is an illustration of how the RTM system should be configured:

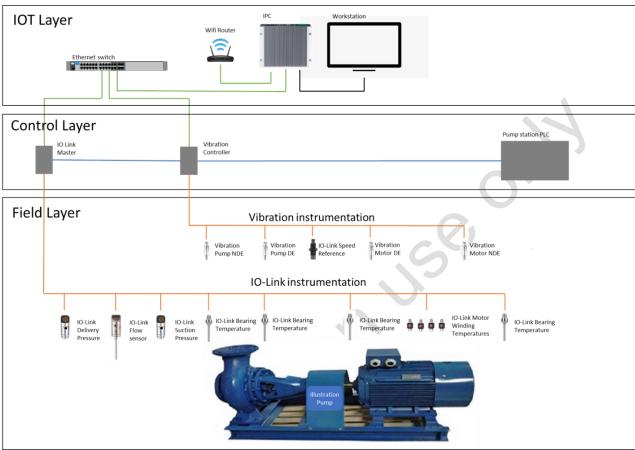


Figure 1: RT System

The above scope must be done for all 6 High Lift pumps.

4.8. Spare Rotating Element

 Refurbish spare rotating element, dynamically balance the assembly and deliver back to the pump station wrapped in denso tape and packed in wooden pallet for extended storage time.

4.9. Telemetry

- Telemetry equipment at Mearns pump station is of moscad equipment and is obsolete. The supplied equipment will be used to replace these old / obsolete moscad equipment.
- Supply and deliver the equipment as detailed in the BOQ

4.9.1. Remote Telemetry Unit

- Supply and install the smart RTU. The RTU shall run parallel with ACE Motorola PLC.
- Configure the RTU to transmit real time data to the existing SCADA
- · Configure the existing SCADA to receive data from the RTU

4.9.2. Specification for RTU

- DNP3 Level 4
- IP based connectivity
- IEC 61131-3 programming languages

- Availability of local technical support
- Availability of recognized and accredited training
- RTU scalability
- Peer to Peer communication capability
- RTU digital repeating (Di-peating) capability or store and forward
- The controller must be able to receive information from other sites and retransmit the data to another site, using the same communications port. This should be integrated into the controllers routing configuration.
- RTU remote configuration and firmware updates capabilities.
- RTU certification/registration with DNP3.org device interoperability profiles detailing compliance and level of functionality must be supplied.

4.9.2.1. Architecture

- Processor: 32-bit dual core Cortex A9 microcontroller, 500MHz.
- Memory: 128MB NAND FLASH, 128MB DDR3 RAM
- Non-volatile RAM CMOS SRAM with lithium battery retains contents for 2years with no power.

4.9.2.2. Database capacity

• Up to 20 000 objects (this number decreases if the event pool is above 7000 events).

4.9.2.3. Database Concentrator:

- Up to 15000 objects depending on the type used (analog or digital)
- Up to 100 devices in DNP3 and up to 100 devices in Modbus

File system storage Internal: 10MB;

External: 32GB (memory stick - optional)

4.9.3. COMMUNICATIONS

4.9.3.1. Serial Ports: Serial1, Serial2

- RS-232 port, 8pin modular RJ45, full or half duplex with RTS/8-8 pin modular RJ45 jack, full
 or half duplex with RTS/CTS control and operator interface power control, supports baud
 rates up to 15200 bps
- Rated to ±15kV (IEC 61000-4-2, air discharge) static protection

4.9.3.2. Serial Ports: Serial3 and Serial4 configurable as:

- Either RS-232 port, 8 pin modular RJ45 jack, full or half duplex, rated to ±15kV (IEC 61000-4-2, air discharge) static protection
- Or RS-485 port, 2wire, half duplex, supports rates up to 115200 bps

4.9.3.3. Embedded Wireless

Socket modem support for future use

4.9.3.4. Serial Protocols

DNP3 level 4 slave/master and peer to peer, IEC 60870-5-101 slave, Modbus slave/master

4.9.3.5. Ethernet Ports: Eth1, Eth2 and Eth3

8-pin modular RJ45 jack, 10/100 Mbps UTP (10/100Base-T) transformer isolated

4.9.3.6. IP Protocols

- DNP3 level 4 in TCP slave/master, UDP Master/slave and peer-to-peer, IEC 60870-5-104 slave, Modbus/TCP server, Modbus/TCP Client, Modbus RTU in TCP client.
- NTP Client/Server, telnet server, FTP Server, BOOTP Server, Master-slave capability
- As data concentrator it can manage up to 100 local or remote DNP3 slaves, and up to 100 local slaves communicating with Modbus RTU/TCP
- In peer-to-peer it can connect to up 90 remote sites
- Provides HART 5/6/7 (pass-thru and FBs)

4.9.3.7. USB Device Port

 USB 2.0 compliant "B"- type receptacle, local configuration, supports devices up to 32GB (specific memory supported)

4.9.4. GENERAL

4.9.4.1. Logic Control

• Remote connect software (IEC 61131-3 languages)

4.9.4.2. I/O Terminations

• 5, 6, 7, 9, 11-pole connectors, 0.0810...3.31mm² solid or stranded

4.9.4.3. Environment

- -40 to 70°C operating temperature
- 5% RH to 95% RH, non-condensing

4.9.4.4. POWER SUPPLY

 12...30VDC, 5W typical. Limit voltage: 11.5...32VDC; turn on voltage: 10...11.5VDC and turn off voltage: 9...10VDC

Maximum Power:

- 8.7W: +4 x expansion IO modules + USB memory stick
- Power requirements (controller with integrated IO) 4.8W
- Expansion IO 1.1W
- USB (5V at 100mA) 0.6W
- Serial port (5v at 250mA) 1.5W

4.9.4.5. Digital and Analog Inputs/Outputs

- Digital Inputs 0 to 24VDC
 Analog Inputs 4 to 20mA (voltage output or signal maybe accomplished with external precision resistor)
- Resolution of 12-bit over 4 20mA

4.10. Electrical Motors (6 off)

4.10.1. Disconnecting Motor

- Isolate electrical feeder and perform local lockout
- Disconnect electrical supply cables from motor terminal box
- Decoupling of motor from the pump
- Clean and inspect all the components
- Conduct performance test

5. Work Scope for Low Lift Pumps (6 off)

5.1. Pump dismantling

THE SCOPE INCLUDES BUT NOT LIMITED TO THE FOLLOWING:

- Isolate the pump electrically and hydraulically
- Remove coupling guards
- Disconnect driving coupling from driven coupling
- Disconnect electrical supply cables from terminal box
- Unbolt and rig off motor complete with coupling half hub fitted
- Disconnect pump pipework
- Lift pump out of sump
- Transport pump to workshop

5.2. Examination, Reconditioning, Replacement of components

THE SCOPE INCLUDES BUT NOT LIMITED TO THE FOLLOWING:

- Strip the pump
- Examine all components for damage, wear and deterioration
- Repair protective coatings where possible
- Examine and recondition impeller conditions
- Examine and replace or recondition bearing sleeves and bushes
- Examine and replace lantern ring / gland packings
- · Examine and replace O'ring seals and joints
- Examine and replace bearings
- Examine and replace wear rings

The maximum and minimum tolerances for Mearns Low Lift pumps are shown in Table 11 below.

Table 11: Tolerances for Mearns Low Lift Pumps

Description	Minimum tolerance	Maximum tolerance
Impeller and bellmouth neck ring	0.55	0.69
Impeller and diffuser bowl neck ring	0.47	0.573
Pump shaft sleeve and diffuser hub bush	0.23	0.3
Pump shaft sleeve and diffuser bush	0.23	0.3
Spider bearing sleeve and spider bearing	0.23	0.3
bush		
Gland sleeve and split gland	0.73	0.8
Gland sleeve and stuffing box bush	0.23	0.3

5.3. Assembling and Testing

- Re-assembly pump and ensure OEM tolerance are adhered to
- Performance test pump and issue a performance test certificate

5.4. Installation and Commissioning

THE SCOPE INCLUDES BUT NOT LIMITED TO THE FOLLOWING:

- Transport the pump to site
- Grease pump and rig into position
- Grease couplings and Rig motor onto pump and assembly
- Connect pipework
- Reinstate coupling guards
- Connect electrical cables
- Cold commission pump
- Hot commission pump

The above must be done for all 6 pumps

6. COMMISSIONING AND HAND OVER

6.1. Quality system

 The contractor shall maintain an effective quality management system in accordance with the requirements so as to ensure and demonstrate that goods and services conform to the specified requirements.

6.2. Delivery

- The delivery process will be under the supervision of Project Leader.
- The Contractor shall therefore inform the Project Leader of the date and time of the delivery of the equipment through e-mail, in order to facilitate access to the site.
- All other related activities of this delivery work shall be covered in the contract.
- The Contractor shall therefore inform the Project Leader of the date and time of the delivery of the equipment through e-mail, in order to facilitate access to the different sites.

6.3. Equipment Performance Test and Acceptance Criteria

In accordance to the Umgeni Water Instrumentation, Electrical and Mechanical Technical Specifications, the following shall be noted and complied with:

- Equipment / devices hand over procedures as stipulated by the suppliers of equipment shall at all times be strictly adhered to;
- The handover of specialised equipment / devices shall be undertaken by the supplier or an approved specialist;
- All components or parts of the equipment / devices shall be thoroughly checked for normal operation before equipment shall be allowed to run for hand over trial purposes;
- The responsible handover Contractor's Personnel shall be present to supervise the operation of the equipment /devices during the entire handover period;
- Where the Umgeni Water personnel are to witness any tests, the Contractor shall ensure that the Project Leader receives one week's prior notice in writing via e-mail before such tests commence;
- Tests to demonstrate the operation of all apparatus shall be arranged with the Project Leader who will avail the following personnel from Umgeni Water: Maintenance Engineer, Maintenance Foremen, Mechanical Technician
- The Contractor shall submit detailed test procedures for approval to the Umgeni Water Maintenance Engineer prior to testing;
- The Contractor shall carry out offsite performance tests on the pumps and onsite performance tests after installation to demonstrate the pumps are in compliance with the requirements of the Specification;
- Following completion pumps shall be subjected to performance acceptance tests by the Contractor & Project Leader with the performance data being continuously recorded and documented as portfolio of evidence for at least a minimum seven days. The tests shall include, but not limited to, the following:
 - > Vibration measurements
 - > Flow measurements
 - Thermal measurements
 - Pressure measurements
 - Power quality measurements
- The Contractor must allow for reasonable assistance to the Umgeni Water personnel during the following inspections:
 - a) First Physical and Acceptance Inspection: The completeness and correctness of the pumps will be checked, all workmanship and materials will be checked for compliance with the specification.
 - b) Final Physical and Acceptance Inspection: The remedial work pointed out in (a) above will be checked. Any new items noticed will also be pointed out to the Contractor.
 - c) First Performance Acceptance Inspection:
 - d) Final Performance Acceptance Inspection: The remedial work pointed out in (c) above will be checked. Any new items noticed will also be pointed out to the Contractor.

- e) Handover Inspection: The outstanding items in (a) and (c) will again be inspected. The Contractor will be given time for remedial work and re-inspection.
- Handover will be accepted after the final performance acceptance inspection process is completed and, if both parties are satisfied that everything is according to the specification.
- Immediately after the handover of the equipment, the Umgeni Water Project leader will issue the Certificate of Practical Completion to the Contractor;
- The guarantee period will come into effect after the Final Performance Acceptance Inspection is completed, on the condition that the Contractor does not have outstanding remedial work.
- The guarantee period will start immediately after the completion of any outstanding remedial work.
- Certificates confirming inspections and listing faults will be issued to the Project Leader for every inspection held.
- The Contractor must ensure that the pump assembly is correct, complete and to specification before calling for a Final Performance Acceptance Inspection.
- All additional costs relating to abortive Final Performance Acceptance Inspection, where the Project Leader is called to site, but finds the Contractor ill prepared for it, shall be borne by Contractor.
- The Contractor shall provide a competent person to accompany the Project Leader or his Representative during inspections.
- This representative shall know the equipment, shall be in a position to accept and carry out instructions and shall take notes during the inspections, so that the inspection work can continue smoothly.
- The Contractor must replace any portion of the pumps that does not meet with the requirements of this specification as may be imposed thereon by test or inspection and, such replacements shall be done at his own costs.
- The Contractor must keep an inspection register of all tests to be witnessed and all inspections to be held by the Project Leader.
- The times and dates for tests and inspections must be agreed to by all parties after the receipt by the Project Leader of the Contractor's written application for such tests to be witnessed or inspections to be held.
- The Contractor shall carry out all reasonable tests requested by the Project Leader to demonstrate that the pump or parts thereof comply with the specification document.
- The Project Leader can request that any part of the equipment or the part thereof be retested, as part of the acceptance inspections if reasonable doubt exists about the performance of the equipment or part thereof during the test.

7. SHEQ

7.1. Security

- The Contractor shall ensure that all tools and materials are kept under lock and key.
- Umgeni Water is not responsible for the loss of the Contractor's equipment as a result of any cause whatsoever.
- Umgeni Water reserves the right for security guards to search persons or vehicles entering or leaving the premises.
- The contractor must ensure that COVID-19 protocols are adhered to at all times during the execution of this work

7.2. Permits

- The Contractor shall not perform work for which the issuing of a permit is required prior to the
 obtaining of a duly completed and approved work permit. The following are included as
 hazardous tasks and may not be carried out by the Contractor unless a work permit has been
 duly authorized by Umgeni Water:
 - Cutting or welding in any risk area.
 - Working at a height of more than two meters.
 - Working with hazardous substances (e.g. toxic chemicals and flammable liquids).
 - Working inside confined spaces (e.g. vessels, chambers and pipelines).
 - Working in electrical lockouts installations.
 - Breaking in any live water main.

7.3. Housekeeping

- After the completion of each day work the Contractor must make good and clean up the site
 area where work was performed, and also at the completion of the contract.
- Sites must be kept reasonable tidy during work operations.

7.4. Alcohol or intoxicating Substances

 The Contractor shall ensure that NO alcohol or intoxicating substances are on their possession while on site. Anyone suspected to be intoxicated or under influence of Alcohol shall not be allowed on site.

7.5. Safety

- Umgeni Water has a strict attitude when it comes to personal safety of <u>ALL</u> on site. The Contractor is expected to provide a Health and Safety File to meet the minimum requirements of the Construction Regulations 2014.
 - The Health & Safety file must be submitted to the SHEQ co-ordinator prior to any work execution. The Contractor and sub-contractors have to attend a Compulsory Induction before starting the project.
 - Unsafe activities, equipment / device(s) and procedures shall not be tolerated. It should be
 noted that if this work requires people to work in elevated positions and confined areas,
 compliance to the OHS Act is mandatory. The Contractor will be required to submit together
 with the quotation a schedule of all his activities and as to how he intends to carry them, to
 the Umgeni Water Project Manager and Safety Officer for approval.

7.6. Safety file index

• Organogram (Site Structure)

- Section 37 (signed by Umgeni Water representative as well as the contractor) (To be provided by Umgeni Water)
- Rules for contractors on site (signed by contractor supervisor) (To be provided by Umgeni Water)
- · Appointments (As well as proof of training)
- Medical fitness test certificated with copies of IDs
- Letter of good standing with Labour Department
- COID
- Company safety Policy
- Method Statements
- Risk assessments
- Safe working Procedures / SHE Plan (to include confined space as well as a fall protection plan if work is to be done at heights exceeding 1.5M)
- Equipment certification (as per legislative requirements depending on the equipment to be
 used during the project as well as proof of training to operate equipment as may be required
 by legislation also depending on equipment / machinery used during the project)
- Registers (PPE, Equipment Checklist, First aid box etc)
- Emergency Numbers
- Environmental Management Plan (covering bad weather conditions as well)

7.7. Safety induction

 The qualifying contractor to make sure that all staff who will be working on this Project must be Safety Inducted before the commencement of any work. This will include all subcontractors' staff.

7.8. Safety Clothing and Equipment

 The Contractor shall supply all the Umgeni Water specified safety clothing and equipment for his workmen on site. The Contractor's workmen on site shall wear hard hats, safety glasses, safety shoes and overalls.

7.9. Accidents

- In addition to any statutory obligations, the Contractor shall immediately report to the Project Manager every occurrence causing damage to property or injury to persons.
- If required by the Employer, the Contractor shall submit a further report in writing to the Employer within 48 hours of such requirement setting out full details of the occurrence.
- The Contractor shall report those injuries that are reportable in terms of Section 24 of the OHS Act (1993) to the Department of Labour.
- The Employer shall have the right to make any queries either on the Site or elsewhere as to the cause and results of any such occurrence and the Contractor shall make available to the Employer the necessary facilities for carrying out such enquiries.

8. General

- Various standard and project specifications refer to equipment / device(s) being equivalent to
 a certain brand article. This should be read as equipment / device(s) that would normally meet
 the requirements of the Umgeni Water specifications, but as brand articles are always subject
 to changes by the manufacturers, it remains the Tenderer's responsibility to ensure that such
 brand article will also meet the performance and other technical requirements of the project
 specification.
- Such requirements shall be read as being in addition to that which the brand article can
 provide. If the brand article cannot be offered by the Supplier, to meet such requirements,
 then the Tenderer must allow for the adjustment of the brand article to comply with such
 requirements.

- In preparing the work, the Umgeni Water Maintenance Engineer will have contact with Suppliers of equipment, to allow for such normal requirements with regard to equipment size, access for installation, access for maintenance, mass, safety precautions, etc., that Suppliers might have, in order to ensure proper overhaul and future safety and optimum operation of such equipment.
- As the final selection of equipment is, however, in the hands of the successful Tenderer, and
 the contract for the supply of the equipment, is between the Contractor and the Supplier
 (OEM), it shall be the Contractor's responsibility to ensure that the equipment ordered will be
 suitable for the work in which it will be installed and that other influences shall not interfere
 with the safe, and optimum future operation of such equipment.
- Particular attention must be given to the aspects of easy accessibility for maintenance and adjustment and specific safety requirements of particular suppliers.
- Preference will be given to equipment and materials of local manufacture where such equipment and materials meet with the requirements of the standard and OEM specifications.
- Tenderers shall only offer alternative equipment and materials approved by the OEM for the work, unless prior approval has been obtained from the Umgeni Water Maintenance Engineer.
- The continuous successful operation of the equipment is dependent on good maintenance and the availability of spares. It is therefore important that Tenderers only include for equipment with good local representation, who are able to provide after-sales service.
- Installation fit is an engineering function and not a system design function.
- Tenderers shall price in their contract for the required engineering undertaken during the preparation / acquisition of relevant equipment drawings for use in performing the work.
- Such engineering to include co-ordination with other Contractors and shall take into account the Mechanical Contractor's preferred services installation sequence program.
- It shall be a condition of this contract that in submitting a tender, the Tenderer will be deemed
 to have visited the site and to have considered all factors relating thereto which could
 influence his tender.
- No claims for additional payment on the grounds of insufficient and or inaccurate information will be entertained.
- The Contractor shall nominate the "responsible person" who shall be responsible for the
 contract delivery work, and who shall ensure that training is provided to the Umgeni Water
 Personnel on the operation, handling and maintenance of the new equipment / device(s) to be
 delivered on site.
- The Contractor shall study the documentation supplied and comment on the bill of materials.
 All travelling and subsistence costs involved in execution of this work shall be included in the price.
- This is firm and fixed price contract and the Contractor to bear in mind that no additional work will be paid for unless it is at the request of Umgeni Water.
- All people working on site shall not use water from the dam or from the tap which has a warning sign on it. Usage of this un-sanitised water will result to exposure to severe diseases.
- The Contractor's obligations under the Contract comprise the provision of all labour, materials, transport and supervision for the supply, delivery, installation and commissioning of all the specified equipment.
- The Umgeni Water Rules for Contractors on Site guided by, SHE Guideline 5-43-1 Rules for Contractors on Site shall apply and a copy of this document will be attached.

Note: The above general specifications shall form part of the contract document.

- The Tenderer is required to submit a 'bona fide' Tender, intended to be competitive and not to fix or adjust the amount of the Tender by or under or in accordance with any agreement or arrangement with any third party. The Tenderer is also obliged to ensure that it has not and will not at any time before the hour and date for the lodgement of this Tender do any of the following acts:
 - Communicate to any person the amount or approximate amount of the proposed Tender except where the disclosure, in confidence, of the amount of this Tender was necessary for the preparation of the Tender.
 - Enter into any agreement or arrangement with any third party that we shall refrain from submitting a Tender or regarding the amount of any Tender to be submitted.
 - Offer, pay or give or agree to pay or give any sum of money or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to this or any other Tender or proposed Tender for the Works any act or deed of the sort described above; and
 - Commit any act or omission that would be contrary to the Maintenance and Promotion of Competition Act 96 of 1979 and notices and regulations published in terms of that Act, or contrary to the Harmful Business Practices Act 71 of 1988.
- In the aforementioned context the word "person" includes any person or anybody or association, corporate or otherwise; and any "agreement or arrangement" includes any transaction, formal or informal, and whether legally binding or not.
- The Contractor shall use suitably qualified and experienced Personnel for handling and installation of all items for this supply, delivery, installation and commissioning work.
- The handling of this equipment shall be such that no components shall be damaged in the entire process. In the event any components get damaged, the contractor shall timeously replace it.

9. Guarantee

- Contractor shall provide a minimum twelve month guarantee for all equipment / device(s) supplied in terms of the contract.
- The guarantee period shall commence upon hand over of the project.

10. Training

10.1. Training for Pumps

Training for pumps to include but not limited to the following:

- Basic pump principles
- Mechanical Seal Installation and Replacement
- Pump Sizing and Selection
- Centrifugal Pump Installation and Startup
- NPSH and Cavitation
- Priming
- Air Ingestion
- Performance Measurement
- Pump Safety
- Centrifugal Pump Operation
- Pump Alignment
- Maintenance

- Mechanical Seal Operation and Maintenance
- Centrifugal Pump Performance
- Trouble shooting and fault finding
- Bearing installation
- · Balancing of rotating element

10.2. Training for Real Time Maintenance System

The Real time maintenance system training to consist of the following but not limited:

- Theory of Real time maintenance system
- How to collect data and analyses data for:
 - Vibration
 - Flow
 - Temperature
 - Pressure
 - Power quality
- Operation and maintenance
- Trouble shooting and fault finding
- Software
- Hands on training
- Safety

11. Reference Documents And Standards

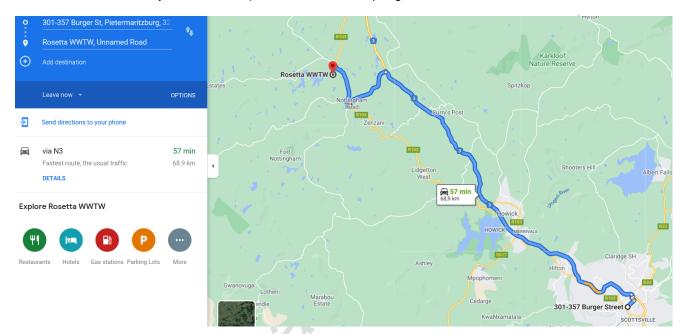
- All design, procedures, materials and equipment shall be in accordance with the current editions of the relevant South African National Standards Codes.
- All work carried out shall fully comply with the requirements of the applicable and relevant Standards.
- The Contractor shall pay special attention to and abide by Umgeni Water's rules for Contractors on site.
- The Contractor shall also pay special attention to O & M Manuals which shall be according to the Umgeni Water O&M manuals specifications.
- All reports shall be written in the English language.
- All drawings, technical documents, manuals, plates and labels shall use the International System of Units (SI).

PART C4: SITE INFORMATION

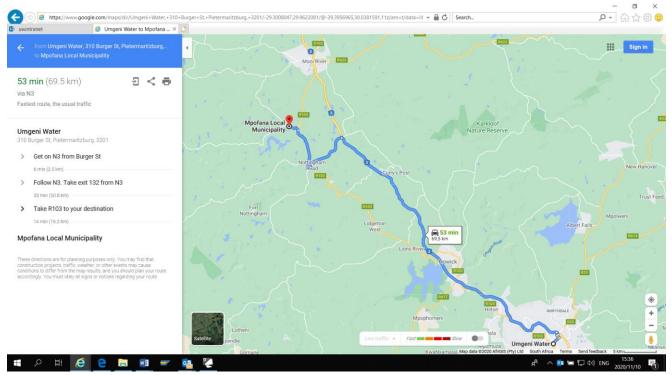
Mearns and Spring Grove pump stations are located in the Mpofana Local Municipality, in Mooi River, the co-ordinates for Mearns pump station and Spring Grove pump stations are shown in Table 12 below. *Table 12: Co-ordinates for Mearns and Spring Grove Pump Stations*

Pump Station	Co-ordinates
Mearns Pump Station	-29.247849, 29.970861
Spring Grove Pump Station	-29.318441, 29.968710

Spring Grove Pump Station: Situated in the Mooi River area, about 6-7 Km from the Mooi River Toll Plaza on the N3 Freeway; Coordinates {UW Head Office – Spring Grove Dam



Mearns Pump Station: Situated in the Mooi River area, about 6-7 Km from the Mooi River Toll Plaza on the N3 Freeway; Coordinates {UW Head Office – Mearns Pump Station



FOR INFORMATION USE ONLY

UMGENI WATER CONTRACT NO. 2022/033 C5: ANNEXURES

C5.1

ANNEXURE to C1.2

- 1. Umgeni Water Technical Specifications Operation and Maintenance (O&M) Manuals
- 2. Umgeni Water Particular Specification for OHASA 1993 Health and Safety
- 3. Umgeni Water Particular Specification for Mechanical Works.
- 4. Umgeni Water Particular Specification for Electrical Works.
- 5. Umgeni Water Particular Specification for Instrumentation.
- 6. Umgeni Water Particular Specification for Steel Pipe, Specials and Coatings