

REQUEST FOR PRICING (GOODS AND SERVICES)	Form No: JW SCM Dev MBD1 Revision No: 02 Effective Date: February 2023
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RFP NUMBER:	JW MS RFP 06/04/2023	CLOSING DATE:	19 April 2023	CLOSING TIME:	12:00
DESCRIPTION:	Supply, Delivery, Installation and Commissioning of Low Voltage Variable Speed Drive with Motor Control Centre and Electrical Motor as a once off purchase contract for a period not exceeding six (6) months				
BRIEFING SESSION DATE AND TIME	Yes Wednesday 12 April 2023 at 11:00	BRIEFING SESSION VENUE	Crosby Pump Station Adare Street, Crosby S26 11 15.3 E27 58 52.6		
CIDB Grade	Electrical works - 3EB/ 3EP				
ISSUE DATE	06 April 2023				

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			
Bidding procedure enquiries <u>must</u> be sent to the below Official		Technical enquiries must be directed to	
CONTACT PERSON	Mapule Setaka	CONTACT PERSON	Nontokozi Masilela
TELEPHONE NUMBER	011 688 1574	TELEPHONE NUMBER	011 688 1585
E-MAIL ADDRESS	mapule.setaka@jwater.co.za	E-MAIL ADDRESS	nontokozi.masilela@jwater.co.za

Directors:

Ms Gugulethu Phakathi (Chairperson), Mr Ntshavheni Mukwevho (Managing Director and Executive Director),
Mr Johan Koekemoer (Financial Director and Executive Director), Mr Phetole Modika, Mr Siphamandla Mnyani, Mr Siyabonga Mthembu,
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Mr Lunga Bernard

Ms Kethabile Mabe (Company Secretary),

Johannesburg Water SOC Ltd

Registration Number: 2000/029271/30

SUPPLIER INFORMATION				
NAME OF BIDDER				
POSTAL ADDRESS				
STREET ADDRESS				
TELEPHONE NUMBER	CODE		NUMBER	
CELLPHONE NUMBER				
E-MAIL ADDRESS				
E-MAIL ADDRESS				
VAT REGISTRATION NUMBER			CIDB GRADING	3EB/EP
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE VERIFICATION CERTIFICATE	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE SWORN AFFIDAVIT (EMEs OR QSEs)	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No

BID SUBMISSION:
<ul style="list-style-type: none"> Bids must be submitted by the stipulated time in tender box at: Turbine Hall 65 Ntengi Piliso Street Newtown Johannesburg Water Late bids will not be accepted for consideration All pricing/quotation must be submitted by completing the attached or on the official company letterhead, signed and accompanied by the returnable documents stated below. 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 member's persons in the service of the state.

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1. SCOPE OF WORK

1.1. DESCRIPTION

The contract entails the supply, delivery, installation, and commissioning of Low Voltage (LV) Variable Speed Drive (VSD) with Motor Control Centre (MCC) and Electrical Motor (size 220kW/ or equivalent (to be determined by existing mechanical pump)). The scope of work include pump set one (1) and pump set three (3).

The appointed service provider will be expected to supply, deliver, install and commission the goods and services required as specified and all goods are to comply with JW standards as stipulated and with the specifications as stipulated.

1.2. GENERAL

All items supplied must be as follows:

- They must be in accordance with the specified requirements
- Items offered must be SANS approved where applicable as specifically stated

1.3. REQUIREMENTS

The following items are expected to be supplied, delivered, installed and commissioned by the appointed service provider as a turnkey project on receipt of an official order. Each line item includes material and labour costs.

Items required:

- 1.3.1 Supply, delivery, installation and commissioning of MCC complete with upstream Circuit Breaker (CB), VSD and Isolator for a 220kW load/ or equivalent (to be determined by existing mechanical pump).
- 1.3.2 Supply, delivery, installation and commissioning of Electrical Motor, 220kW/ or equivalent (to be determined by existing mechanical pump), minimum IE3
- 1.3.3 Supply, delivery, installation and commissioning of electrical cables for MCC, power cables from VSD to Motor, power cable from Main Distribution Board to the MCC, panel wires.
- 1.3.4 Sum amount for modification of plinth for Pump set 1 and 3, including alignment with existing pump.
- 1.3.5 Certificate of Compliance (CoC) in accordance with SANS10142 for all electrical work done.
- 1.3.6 Sum amount for Safety file.

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- 1.3.7 Training of Maintenance personnel on the new system installed for Operations and Maintenance (+- 10 personnel).
- 1.3.8 Twelve-month maintenance plan, drawings and related documentation as part of commissioning and handover.
- 1.3.9 10% Contingencies of the total project cost.

1.4. QUANTITIES

Turnkey projects for Crosby Pump Station for pump set 1 and 3.

1.5. DURATION OF CONTRACT

Six (6) months from date of signature.

2. TENDER FORM AND PRICE SCHEDULES

To: Johannesburg Water (SOC) Ltd.

Having examined the Tender documents including Addenda Nos _____ [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer **Supply, delivery, installation and commissioning of Low Voltage Variable Speed Drive with Motor Control Centre and Electrical Motor** as specified in conformity with the said RFP documents and as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Tender.

Details of my / our offer are / are as follows:

We undertake, if our Tender is accepted, execute the contract in accordance with the requirements as specified.

We agree to abide by this Tender for a period of ninety (90) days from the date fixed for Tender opening, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Tender, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We understand that Johannesburg Water is not bound to accept the lowest or any tender it may receive, and that the contract may be awarded in whole or in part and to more than one tenderer.

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Should my/our tender be successful, it be understood that a contract will come into existence as a once off contract which will commence from the date indicated in the letter of acceptance.

2.1 SCHEDULE OF PRICES:

The evaluation on price alteration will be conducted as follows:

2.1.1 Where the tender award strategy is to evaluate and award per item or category, the following must apply:

- (i) If there is an alteration on the rate but no alteration on the total for the item or category, the bidder will not be disqualified
- (ii) If there is an alteration on the total for the item/s without authentication, bidders will only be disqualified for alteration per item or category.

2.1.2 Where the tender award strategy is to evaluate and award total bid offer, the following must apply:

- (i) If there is an alteration on the rate, total for the line item, sub-total/ sum brought/carried forward for the section but no alteration on the total bid offer, the bidder will not be disqualified.
- (ii) If there is an alteration on the total bid offer on form of offer, then the amount in words must be considered or vice-versa.
- (iii) If there is an unauthenticated alteration on the total bid offer and the amount in words is not authenticated the bidders will be disqualified for the entire tender.

2.1.3. Where the tender pricing schedule or bill of quantities is requesting rates/price from bidder/s without providing a total, the following will apply:

- (i) If there is an unauthenticated alteration on the unit rate/price the bidder must be disqualified.

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Tenderer to complete the below table:

Item	Description	Estimated Qty	Unit Rate- Each item offered (Excl. VAT)	Unit Rate- Each item offered (VAT. Amount)	Unit Rate- Each item offered (Incl. VAT.)	Total Price (Incl. VAT.) [Unit Rate- Each item offered (Incl. VAT.) x Estimated Qty]
1	Supply, delivery, installation and commissioning of MCC complete with upstream Circuit Breaker (CB), VSD and Isolator for a 220kW system/ or equivalent (to be determined by existing mechanical pump)	2	R	R	R	R
2	Supply, delivery, installation and commissioning of Electrical Motor, 220kW/ or equivalent (to be determined by existing mechanical pump), minimum IE3 motor.	2	R	R	R	R
3	Supply, delivery, installation and commissioning of electrical cables for MCC, power cables from VSD to Motor, power cable from Main Distribution Board to the MCC, panel wires.	2	R	R	R	R
4	Sum amount for modification of plinth for Pump set one and three, including alignment with existing pump.	2	R	R	R	R
5	Certificate of Compliance (CoC) in accordance with SANS10142 for all electrical work done.	1	R	R	R	R
6	Sum amount for Safety file.	1	R	R	R	R
7	Training of Maintenance personnel on the new system installed for Operations and Maintenance +- 10 personnel	1	R	R	R	R
8	Twelve-month maintenance plan, drawings and related documentation as part of commissioning and handover.	1	R	R	R	R
	10% Contingencies of the total project cost.	1	R	R	R	R

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3. EVALUATION CRITERIA

3.1. Stage 1: Mandatory Evaluation

NO.	MANDATORY CRITERIA	YES
1	Mandatory Tender Briefing Meeting	Yes
2	CIDB Grading – Electrical works - 3EB/ 3EP	Yes

3.2. Stage 2: Administrative Requirements

Registered on CSD.

3.3. Stage 2: Functionality/Technical Evaluation Criteria

The functionality or technical evaluation criteria is as follows:

CRITERIA NO #	CRITERIA	EVIDENCE	SUB-CRITERIA/CLAUSE	MIN SCORE	SCORE
1	Tenderers experience with respect to Supply, Installation and Commissioning of MCC/ Electrical Drive and Motor	The bidder must provide reference letter (s). Where Supply, Installation and Commissioning of MCC/ Electrical Drive and Motor was carried out successfully. NB: The attached reference template must be completed by the referee and included in the tender submission. Alternatively, the client's letterhead may be used for this purpose provided it complies with the functional criteria requirements.	Years of Experience Less than 1 year 1 year and more but less than 2years 3 years and more, but less than 5 years	[30]	 0 30 50
2	Capacity to Supply, Installation and Commissioning of MCC/ Electrical Drive and Motor	The bidder must provide reference letter (s). Where Supply, Installation and Commissioning of MCC/ Electrical Drive and Motor was carried out successfully and the contract value was R 1Million or more. NB: The attached reference template must be completed by the referee and included in the tender submission. Alternatively, the client's letterhead may be used for this purpose provided it complies with the functional criteria requirements.	Total Combined Value of Contracts Completed Less than R 1Million. R1 million and more but less than R2 million R2 million or more	[30]	 0 30 50
	MINIMUM SCORE			60	
	MAXIMUM SCORE			100	

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CONTACTABLE REFERENCE

To Johannesburg Water (SOC) Ltd

I, the undersigned being duly authorized to do so, hereby furnish a reference to Johannesburg Water relative to the **Supply, delivery, installation and commissioning of Low Voltage Variable Speed Drive with Motor Control Centre and Electrical Motor as a once off purchase contract.**

Name of Tenderer:

Description of Goods / Services provided

.....
.....
.....

Duration: Year-Month-Day when the Goods / Services were provided

Start Date/...../.....

End Date/...../.....

Contract/Project Value:

Name of authorised person:

Signature: **Date**

Telephone/Mobile:

Email:

Completed on behalf (Name of Client)

*NB: This document must be completed in full by the referee and included in the tender submission. Alternatively, the client's letterhead may be used for this purpose provided it complies with **all** the above requirements. A separate form must be completed for each reference as required in the evaluation criteria. Failure to adhere to this requirement will result in such tender being prejudiced.*

Information provided will be verified and if found to be false or misrepresented, punitive measures will be instituted against the respective party including blacklisting and restriction from participating in any future government tender.

IF BIDDER WAS A SUBCONTRACTOR ON THE PROJECT – PROOF OF SUBCONTRACTING AGREEMENT BETWEEN BIDDER AND MAIN CONTRACTOR PLUS REFERENCE LETTER FROM CLIENT OF MAIN CONTRACTOR TO BE SUBMITTED AS STATED ABOVE

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Start Date/...../.....

End Date/...../.....

Contract/Project Value:

Name of authorised person:

Signature: **Date**

Telephone/Mobile:

Email:

Completed on behalf (Name of Client)

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- 3.3.1.** Bidders are required to meet a minimum of 60 points on the functionality evaluation to be further evaluated on the preference points. Bidders that do not meet a minimum of 60 points will be disqualified and will not be evaluated further.

Gatekeepers (Technical)

Note: Tenderer will need to comply with the respective criteria for their area of expertise as indicated on the price schedule it is what they will be tendering for.

- 3.4. Stage 3:** The responses will be evaluated on the **80/20 preference point's principle**. 80 Points Price and 20 Points Specific Goals. Pricing schedule to be completed **fully by the bidder**. Bidders who failure to quote or complete the pricing schedule as per this requirement will be disqualified.

The required proof for claiming points for specific goals is as follows:

SPECIFIC GOALS – ANY ONE OR A COMBINATION OF ANY	MEANS OF VERIFICATION THAT MUST BE SUBMITTED OR A COMBINATION THEREOF TO PROVIDE POINTS CLAIMED
Business owned by 51% or more – Black people living in a region within COJ, COJ municipality or Gauteng province	<ul style="list-style-type: none"> • Full CSD report and ID copy of owner/s. • Proof of municipal account / lease agreement, letter from the Ward Council confirming the business address.
SMME (An EME or QSE)	<ul style="list-style-type: none"> • Full CSD report and ID copy of owner/s. • BEE Certificate issued by SANAS accredited verification agency, DTI BBBEE Certificate for Exempted Micro Enterprises or Affidavit sworn under oath. • CIPC registration document of company or share certificates for all shareholders.

Note: A tenderer failing to submit proof of specific goals claimed as per the tender conditions may not be disqualified but only points for price will be allocated and zero points for specific goals.

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4. AWARDING STRATEGY

This request for pricing will be awarded to the highest scoring bidder in terms of price and points scored for specific goal

5. RETURNABLE DOCUMENTS

The following documents **must** be returned together with this Request for Pricing:

- 5.1. This request for pricing document must be completed and submitted with pricing or quotation.
- 5.2. Proof of points claimed for specific goal must be submitted in order to qualify for Specific Goals points.
- 5.3. Complete and sign the following Municipal Bidding Documents (MBD).
 - 5.3.1. MBD 3.1 Firm Price(s) Purchase
 - 5.3.2. MBD 4 form (Declaration of Interest).
 - 5.3.3. MBD 6.1 Form (Preference points claim form).
 - 5.3.4. MBD 8 (Declaration of Bidder's Past Supply Chain Management Practices)
 - 5.3.5. MBD 9 (Certificate of Independent Bid Determination).
- 5.4. Latest municipal account/statement not older than three months or valid lease agreement for both the company and all active Directors.
- 5.5. The required documentary evidence for functionality or technical evaluation (where Applicable).
- 5.6. CIDB Certificate

6. GENERAL TERMS AND CONDITIONS

Price(s) quoted must be valid for at least **ninety (90) days** from date of your offer.

Price(s) quoted **must** be **firm for the duration of the contract** and must be inclusive of VAT.

Bidders will be afforded a period of two (2) days to complete the following returnable documents (MBD 4, MBD 6.1, MBD 8 and MBD 9) in instances where such forms are incomplete.

Bidders who did not submit municipal statement of account or valid lease agreement for both the company and all active directors will be afforded a period of two (2) days to submit. In a case where the company or active Directors have municipal commitments overdue for more than 90 days they will be offered three (3) days to settle their overdue amounts or submit proof of an arrangement agreed to between that municipality and that company or Director.

GENERAL CONDITIONS OF CONTRACT (GCC) WILL BE APPLICABLE TO THIS RFP. SHOULD THERE BE A DISCREPANCY BETWEEN THE GCC AND SPECIAL CONDITIONS OF CONTRACT (SCC), THE SCC SHALL PREVAIL.

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GENERAL CONDITIONS OF CONTRACT APPLY. SHOULD THERE BE A DISCREPANCY BETWEEN THE GENERAL CONDITIONS OF CONTRACT SPECIAL CONDITIONS OF THE CONTRACT, THE SPECIAL CONDITIONS OF THE CONTRACT SHALL PREVAIL.

SPECIAL CONDITIONS

- | | |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>1. DEFINITIONS:</u> | <p>1.1 That "Johannesburg Water (SOC) Ltd" shall herein after be referred to as "JW".</p> <p>1.2 The "Managing Director" shall mean the Managing Director: Johannesburg Water (Soc) Ltd or his authorised representative.</p> <p>1.3 "Vat" shall mean Value Added Tax in terms of the Value Added Tax Act 89 of 1991 as amended.</p> |
| <u>2. PRICE:</u> | <p>2.1 All prices shall exclude Value Added Tax (VAT) at the standard rate as gazetted from time to time by the Minister of Finance in terms of the Value Added Tax Act 89 of 1991 as amended.</p> <p>2.2 All price(s) tendered shall include the cost of all insurances, services, labour, equipment, materials, etc. and be the net price after all discounts and settlement discount have been deducted. The net price/s shall be without any extra or additional charges to JW whatsoever.</p> <p>2.3 A firm price will be acceptable.</p> <p>2.4 Prices must include cost of supply, delivery, installation and commissioning as per technical specification.</p> |
| <u>3. SURETY BOND:</u> | <p>3.1 No surety bond shall be required in terms of this contract.</p> |
| <u>4. COMPLIANCE WITH LEGISLATION AND SPECIFICATION:</u> | <p>4.1 The Service Provider shall comply with all Municipal By-laws, and any other Laws, Regulations or Ordinances and shall give all notices and pay all fees required by the provisions of such By-laws and Regulations specified therein.</p> <p>4.2 The Service Provider shall comply with all the requirements prescribed in the specification.</p> <p>4.3 Equipment must meet SANS and issue CoC in line with SANS10142</p> |

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5. SAFETY:

- 5.1 Without derogation from the generality of Clause 4.1, or from any other provision of this contract, the Service Provider shall at all times during the contract, comply in all respects with the safety and other requirements of the Occupational Health and Safety Act 85 of 1993 and the regulations applicable hereunder.

6. EMPLOYMENT OF LABOUR:

- 6.1 The Service Provider must ensure that all relevant legislation is complied with in the employment of labour.

7. INSURANCE AND INDEMNIFICATION:

- 7.1 In addition to any insurance required to be held by the Service Provider in terms of the Contract in terms of the Occupational Injuries and Diseases Act no. 130 of 1993, the Service Provider must be fully insured against all accidents, loss or damage arising out of the conditions or operation of the vehicles or execution of any work including all third-party risks. The Service Provider hereby indemnifies and agrees to keep indemnified throughout the period of the contract JW against all claims by third parties or the Service Provider's own employees resulting from the operations carried out by the Service Provider under this contract.
- 7.2

- 7.3 A current certificate of good standing in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 must be furnished by the Service Provider within 21 days of notification of acceptance of the tender.

- 7.4 The Service Provider shall be liable for any damages or injury of whatever nature caused directly or indirectly as a result of his operations, to any of JW's or Municipal Government or Private Property or to his own vehicles and personnel.

Copies of such insurances and indemnifications must be supplied to JW within 21 days of notification of acceptance of the tender.

8. REMEDIES, BREACH, WHOLE AGREEMENT, WAIVER, VARIATION AND INDULGENCES

- 8.1 If the Service Provider or any person employed or associated with him or in the case of a Company, a Director or shareholder or person also associated with such Company, either directly or indirectly gives or offers to give any gratuity, reward or commission or other bribe to any person in the employ of JW this contract shall be avoidable at the instance of JW.

- 8.2 If the Service Provider has not complied with the Managing Director's requirements or if he is in breach of any of the Conditions of this contract and:

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8.2.1

Fails to remedy such breach within 14 (fourteen) days of receipt of written notice requiring it to do so (or if not reasonably possible to remedy the breach within 14 (fourteen) days), within such further period as may be reasonable in the circumstances, provided that the Service Provider furnishes evidence within the period of 14 (fourteen) days reasonably satisfactory to JW, that it has taken whatever steps are available to it to commence remedying the breach), then the JW shall be entitled, without notice and in addition to any other remedy available to it at law or under this agreement, including obtaining an interdict, to cancel this agreement or to claim specific performance of any obligation whether or not the due date for performance has arrived, in either event without prejudice to JW's right to claim damages.

8.2.2

Should JW elect to cancel the contract then and in such instance a certificate presented by the Managing Director of JW shall constitute proof of the Service Provider's indebtedness to JW.

8.3

8.4

This agreement constitutes the entire agreement between the parties relating to the matter hereof.

No amendment or consensual cancellation of this agreement or any provision or term hereof or of any agreement, bill of exchange or other document issued or executed pursuant to or in terms of this agreement and no settlement of any dispute arising under this agreement and no extension of the time, waiver or relaxation or suspension of any of the provisions or terms of this agreement or of any agreement, bill of exchange or other document issued pursuant to or in terms of this agreement shall be binding unless recorded in a written document signed by the parties. Any such extension, waiver or relaxation or suspension, which is so given or made, shall be strictly construed as relating to the matter in respect whereof it was made or given.

9. DISPUTES:

9.1

In the event of any dispute arising between JW and the Service Provider in connection with or arising out of the contract, it shall be referred to the Managing Director of JW who shall state his decision in writing and give notice of the same to the Service Provider within 28 days of the dispute having been submitted to the Managing Director of JW. Such decision shall be binding upon the Service Provider subject to clause 9.2

9.2

Directors:

Ms Gugulethu Phakathi (Chairperson), Mr Ntshavheni Mukwevho (Managing Director and Executive Director),
Mr Johan Koekemoer (Financial Director and Executive Director), Mr Phetole Modika, Mr Siphamandla Mnyani, Mr Siyabonga Mthembu,
Mrs Zandile Meeleso, Mr Pholoso Matjele, Mr Kgaile Mogoye, Mr Sandiso Mgengwana, Mr Molate Mashifane, Ms Pamela Mabece,
Mr Lunga Bernard

Ms Kethabile Mabe (Company Secretary),
Johannesburg Water SOC Ltd
Registration Number: 2000/029271/30

Should the Service Provider be dissatisfied with the decision of the Managing Director he/she may, within 28 days after receiving notice of such decision, require that the issue or issues be referred to a single arbitrator to be agreed upon between the parties or, failing agreement, to be nominated by the Chairman of the Association of Arbitrators and any such reference shall be deemed to be submission to the arbitration of a single arbitrator in terms of the Arbitration Act, 1965. The award of the arbitrator shall be final and binding on both parties.

9.3

Not later than one week after receipt of notice calling for arbitration, JW may give notice to the Service Provider that the dispute or disputes be settled by Court of Law having jurisdiction.

10. SCOPE OF CONTRACT:

10.1 The Service Provider shall be required to supply, delivery, installation and commissioning of Low Voltage Variable Speed Drive with Motor Control Centre and Electrical Motor (size 220kW/ / or equivalent (to be determined by existing mechanical pump).

10.2 **The Service Provider shall be required to provide twelve-month maintenance plan, drawings and related documentation as part of commissioning and handover.**

11. DURATION:

11.1 The tenure of the contract shall be with effect from the date of signing the contract as a once off purchase and completion within six (6) months.

12. QUANTITIES

12.1 Turnkey projects for Crosby Pump Station, pump set one.

13. PLACE AND TIME OF DELIVERIES:

13.1 Delivery shall be made to Crosby pump station during normal working hours, 08h00 to 15h00 weekdays.

14. SAMPLES:

14.1 Not required for a turnkey project

15. TENDER VALIDITY:

15.1 The Tender shall be valid for a period of ninety (90) days from the date of closing of Tenders.

16. ADJUDICATION OF TENDERS:

16.1 The highest, lowest or any tender will not necessarily be accepted by JW.
JW reserves the right to adjudicate the Tender to JW's best interest and it is not necessarily intended to award the Contract to only one Service Provider.

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Mr Lunga Bernard

Ms Kethabile Mabe (Company Secretary),

Johannesburg Water SOC Ltd

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17. ACCEPTANCE OF TENDER:

17.1 A valid and binding contract shall be concluded at the time when the Service Provider receives an official appointment letter and sign letter of acceptance at the offices of JW after the Service Provider where he/she will enter into a contract with JW with the term and conditions packaged in this document.

18. COMPLETENESS:

18.1 Failure by the tenderer to complete in full the required information regarding their proposal will render the tender liable to rejection on the grounds of being incomplete.

19 QUALITY AND GUARANTEE

19.1 The Service Provider shall not be relieved of his obligations with respect to the sufficiency of the materials, workmanship and quality of the goods by reason of no obligation having been taken thereto by JW's representative at the time the goods were delivered.

19.2 If at any time, as stipulated in the contract, but not exceeding twelve (12) months after delivery, JW is dissatisfied with the goods or with any part thereof on account of materials being faulty or of inferior quality of workmanship or bad design or on account of the goods not being in strict accordance with the contract specifications; the Service Provider shall immediately remedy the said defects free of cost to JW. Should the Service Provider delay remedial work in excess of the time stipulated by JW's representative, JW may have such remedial work executed at the Service Provider's expense.

19.3

19.4 The risk of all goods purchased by JW from the Service Provider under this contract shall remain with the Service Provider until such time the goods have been delivered to JW.

If any dispute arises between JW and the Service Provider in relation with the quality and guarantee of the goods, either party may give the other a notice in writing of the existence of such dispute as stipulated in Clause 9.1.

20. PENALTIES FOR FAILURE TO DELIVER

20.1 If the Service Provider fails to deliver the required quantity of product by the due date agreed upon: a penalty of 5% (five) shall be applied for the total value of that specific order where delivery conditions were not met. Alternatively Johannesburg Water reserves the right to purchase the product elsewhere and to deduct any extra expense in excess of the tender rates so incurred from any sum due under this tender, or recover the amount from the Service Provider as debt.

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20.2

No liability in terms of Clause 20.1 shall attach to the Service Provider if he shall prove to the satisfaction of the Engineer that the delivery has been delayed or become impossible due to fire, war, riot, strikes, Natural Disasters, lockout, accident or other unforeseen occurrences or circumstances beyond the Service Providers control, provided, however, that in all cases the Service Provider has notified Johannesburg Water in writing within 24 (Twenty-four) hours of it first coming to the Service Provider's notices, that delivery will be delayed or become impossible for the abovementioned reasons.

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR ONLINE**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.
- 2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.
- 2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN

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a world class African city



City of Johannesburg

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/ CSD NUMBER.

2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?
☐ YES ☐ NO

3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA?
☐ YES ☐ NO

3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?
☐ YES ☐ NO

3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?
☐ YES ☐ NO

3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?
☐ YES ☐ NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.

NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

Directors:

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PARTICULAR SPECIFICATION

E01 :ELECTRICAL MOTORS

2	2012-05-30	Review of Mechanical / Electrical and Control / Instrumentation Standards, plus New Design Guidance		
1	2009-05-12	Review of Mechanical / Electrical and Control / Instrumentation Standards, plus New Design Guidance		
Rev	Date	Description	Signature: JW Wastewater Partnership	Signature: Approval from Johannesburg Water

PARTICULARS SPECIFICATION : VOLUME E01 : ELECTRICAL MOTORS

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E01.1 SCOPE

This specification shall cover all electric motors to be designed, supplied, installed and tested that shall drive any of the items of equipment to be supplied under the contract. This specification shall be read together with those specifying the mechanical driven equipment.

E01.2 INTERPRETATIONS

E01.2.1 Abbreviations

In this Specification the following abbreviations will apply:-

ANSI	:	American National Standards Institute
ASTM	:	American Society for Testing and Materials
BS	:	British Standards Institution
SANS	:	South African National Standards

E01.2.2 Standards

The latest edition, including all amendments to until the date of tender, of the following particular national and international specifications, publications and codes of practice shall be read in conjunction with this specification and shall be deemed to form part thereof:

- | | | |
|-----|-----------------|--------------------------------------------------------------------------------------------------------------------|
| (a) | SABS 948-1 | Three-Phase Induction Motors |
| (b) | SANS 1222 | Enclosures for electrical equipment (classified according to the degree of protection that the enclosure provides) |
| (c) | BS 4999 | General requirements for rotating electrical machines |
| (d) | BS 1486: Part 2 | Heavy duty lubrication nipples |
| (e) | ISO281/1 | Rolling bearings - dynamic load ratings and rating life |

E01.2.3 Particular Specifications to be read in conjunction with this specifications

The following particular specifications shall be read in conjunction with the Project Specification:

G01: PARTICULAR SPECIFICATION FOR COLOUR CODES

G02: PARTICULAR SPECIFICATION FOR CORROSION PROTECTION

E01.3 GENERAL REQUIREMENTS

- (a) Electric motors shall be manufactured in South Africa and shall comply with the requirements of SABS948-1.
- (b) Imported motors shall be accepted only if they form an integral part of the equipment offered. Where imported motors are offered they shall be submitted to the South African Bureau of Standards to be tested in accordance with the requirements of SABS 948-1.
- (c) The Engineer shall be provided with the appropriate certificates obtained from the South African National Standards stating that such motors do comply, prior with the installation of the motors. However, where tests reveal that motors do not comply, it shall be the responsibility of the Contractor to supply alternative motors which comply with the requirements of SABS 948-1.

City of Johannesburg
Johannesburg Water (SOC) Ltd

- (d) Where imported motors are not normally kept in stock in South Africa, written proof shall be provided of the availability of replacement parts as well as the delivery period of the parts after placing the orders.
- (e) All motors shall be standard catalogue models and shall be readily available.
- (f) All motors shall, where possible, shall be from the same manufacturer and shall have the same interchangeable frames. Variations in type and size shall, where possible, be limited to prevent stocking a variety of special spares.
- (g) All motors shall be wound for direct-on-line (DOL) type of starting.

E01.4 WORKING VOLTAGE AND SUPPLY SYSTEMS

- (a) The motors shall be capable of operating within $\pm 10\%$ of the nominal supply voltage without risk of damage. All motors shall be suitable for operating continuously at the specified 3-phase voltage system under actual service conditions, including the $\pm 10\%$ voltage tolerance, without exceeding the specified temperature rise determined by the resistance on a basic full load heat run.
- (b) All motors shall be capable of operating continuously under actual service conditions at any supply frequency between 48 and 51 Hz together with any voltage between plus and minus 5 percent of the nominal supply voltage.
- (c) The slip-in speed of any motor at 80 percent of the nominal voltage at 50 Hz shall not exceed a percentage agreed on by the engineer, and the motors shall be capable of operating at this voltage for a period of five minutes without deleterious heating.

E01.5 TEMPERATURE RISE

The temperature rise, as determined by resistance, of all motors, shall not exceed the following derated values:-

Insulation class	E	B	F	H
Temperature rise (K)	50	60	80	100

E01.6 EFFICIENCY AND POWER FACTOR

- (a) The efficiency of all motors shall be guaranteed by the contractor. Deviations from the guaranteed efficiency shall be within the limits specified in SABS 948.-1.
- (b) The guaranteed efficiency of each size and rating of motor shall be as determined in accordance with BS 4999: Part 102. A basic test certificate of efficiency will be accepted for a motor of identical size and rating or a basic test of efficiency shall be conducted if no certificate is available.
- (c) The power factor of motors with a capacity of 20 kW or more shall not be less than 0,85 under all operating conditions.

E01.7 VIBRATION

- (a) Motors shall be statically and dynamically balanced.

- (b) All motors shall be checked for inadvertent vibration without load, and at full rated voltage at the manufacturer's works, and the vibration amplitude as measured shall be in accordance with BS 4999: Part 142, quality grade 'Special'.
- (c) The ratio of axial to radial vibration shall not exceed 0,5.

E01.8 NOISE LEVEL

Unless specified differently all motors shall be of 'normal sound power', in compliance with BS 4999.

E01.9 ENCLOSURE AND FRAME

- (a) Each motor shall be ingress protected to the degree required by its application, and its enclosure shall be designed for the system of cooling associated therewith.
- (b) Notwithstanding the requirements above, the minimum degree of protection shall be IP 55 to SANS 1222, or alternatively specified. Motors shall preferably be of the totally enclosed fan-cooled (TEFC) type.
- (c) All motors of the vertical-spindle type and exposed to the weather, shall be provided with a robust canopy of approved design by the Engineer.

E01.10 MOTOR TYPE

Motors shall be of the squirrel-cage induction type. Slip-ring induction motors or other approved types will be considered if the contractor is of the opinion that better results could be obtained by using such motors. Full electrical and mechanical details of each alternative shall be submitted with the tender documents.

E01.11 RATING AND STARTING REQUIREMENTS

- (a) Motors shall be adequately rated for the service for which they are intended, and due allowance shall be made for the temperature, altitude, climatic conditions and variations in the supply voltage. Motors shall, however, not exceed 120% of the required capacity without prior approval having been obtained from the Engineer.
- (b) Not only shall motors be based on the full load requirements, but also the motor capacity and starting characteristics shall be compatible with the requirements of the driven equipment.
- (c) Where motors are required to drive high inertia loads, the starting torque of the motor and the torque curve of the driven load shall be submitted to the Engineer for approval prior to manufacture. Such motors shall be capable of at least three starts per hour, with two consecutive starts from normal operating temperature, or more frequently if required by the Engineer.
- (d) Motors shall be of the continuously running duty class S1 unless otherwise specified in the detailed specification or if a more onerous duty is dictated by the drive requirement.
- (e) All squirrel-cage induction motors shall be suitable for direct on line starting at full voltage. Single-speed motors shall conform to BS 4999 Part 112, Design B characteristics unless approved by or dictated by the drive requirements.

- (f) Unless otherwise approved, the 15% tolerance on locked-rotor torque permitted by BS 4999: Part 143 will not be accepted and shall be limited to 10%.
- (g) Documentation shall include performance curves to suit the designed working conditions.
- (h) When making a selection of the motor size for driven equipment, motor power shall be over-rated by a factor of thirty percent (30%) more than the demand of the driven equipment.

E01.12 BEARINGS

- (a) All motors shall, wherever possible, be provided with pre-lubricated sealed bearings.
- (b) Re-greasable bearings shall require only one lubrication per year. Grease lubrication of ball or roller bearings, where approved, shall be by means of hexagonal button-type grease nipples to BS 1486: Part 2, Nos. 21A or 21B (industrial type).
- (c) Grease-lubricated bearings shall have relief holes to ensure that the bearings have been correctly packed, which holes shall be positioned so that the excess grease can be easily removed. Cups shall be fitted to contain excess grease.
- (d) Bearings shall be protected against eddy currents and shall be capable of withstanding vibrations caused by unbalanced loads.
- (e) All bearings shall be designed for a minimum L_{10h} , basic life rating of 50 000 hours at the rated load and speed for the application in accordance with ISO 281/1.

E01.13 EARTHING

All motors shall be provided with a machined or spot-faced boss tapped to receive a bolt of not less than 10 mm in diameter for earthing purposes, which is located on one side between the mounting feet.

E01.14 HEATERS AND DRAINAGE

Non-submersible motors which will be located outdoors or in a damp location such as in a drainage sump, shall be provided with suitable means of drainage to prevent the accumulation of water due to condensation. They shall also be fitted with anti-condensation heaters suitable for a 220V AC supply if considered advisable by the manufacturer.

Where specified in the project specifications, motors shall be supplied with anti-condensation heaters to keep the motor temperature at 23°C when the motor is not operational to prevent moisture from condensing in the motor.

Heater terminal boxes shall be fitted on the motor frame and shall be of robust design, liberally sized and complete with suitable terminal block and mechanical cable gland or conduit entry.

E01.15 TERMINAL ARRANGEMENTS

- (a) The line connections of each motor shall be brought out to a terminal box located in an approved position. In the case of two-speed motors, separate terminal boxes shall be provided for each speed.

- (b) Terminal boxes shall be of the totally enclosed type designed to exclude the ingress of dust and moisture and sealed from the internal circuit of the motor, and shall be manufactured from sand-cast metal. The wall thickness of the terminal boxes and the dimension of the cable inlet shall be as specified in SABS 948. The terminal box shall be so designed that the cable entry may be made in any one of four positions placed at right angles to one another.
- (c) Winding termination in the motor terminal boxes shall be properly secured or fastened to avoid hot connections during operation.
- (d) Terminal boxes shall be of ample size to allow the cable to be terminated in the box. Under no circumstances shall the cable be allowed to be in contact with the inside of the box or lid.
- (e) Terminals shall be of a substantial design and shall be suited to receive cable lugs. Pinch-screw connections will not be accepted.
- (f) The terminal arrangement shall permit the motor to be disconnected from its supply cable without damaging the cable tails and shall allow the supply cable and motor windings to be tested separately.
- (g) The electrical clearance and creepage distances, with the correct cable terminations in position, shall comply with the requirements of BS 4999.
- (h) Terminal markings shall be clear and permanent and shall comply with BS 4999. Irrespective of the direction of rotation required on the site, the connections shall be such that, when the supply leads L1 - L2 - L3 are connected to the motor terminals U - V - W respectively, the motor shall rotate in a clockwise direction when viewed from the driving end.
- (i) Motors suited for only one-directional rotation, shall be clearly marked as such by an arrow fixed to the motor frame at the driving end.
- (j) Before the contractor orders terminal boxes for electrical equipment he shall supply details of the proposed boxes to the engineer for approval. These precautions are necessary to ensure that the size of the connecting blocks installed is sufficient to accommodate the cables supplied and connected by another contractor, and that sufficient space exists within the box to route cables conveniently.

E01.16

MOTOR/LOAD COUPLING

- (a) Motors shall be coupled direct to the equipment to be driven by means of approved couplings and/or gearboxes unless specified differently. Refer to the relevant sections for specific specifications on transmission couplings and gearboxes. Vee-belt and chain drives will be considered only if direct coupling of the motor to the equipment is impossible or impractical.

Motors driving vee-belt or chain drives shall be fitted with heavy-duty bearings suited to the full side thrust at 120% of full load torque and short-term overloads of up to 250% of the full load torques during starting. The stiffness of the rotor shaft shall be checked to ensure that resonance and fatigue do not occur.

- (b) Where applicable, the flanges of the motors and equipment shall be identical.
- (c) The precision tolerance class shall apply to all flange-mounted motors with regard to concentricity, perpendicularity and shaft run-out.

E01.17 INFORMATION PLATES FOR MOTORS

In addition to the information required by SABS 948-1 the following shall also be marked on the nameplates:

- Year of manufacture,
- The order number,
- Total mass of motor in kilogram,
- Diagram indicating the number, type and positions of heaters and temperature detectors if applicable,
- Bearing types and sizes, and
- Bearing grease interval or bearing replacement interval where pre-packed bearings are used.

E01.18 ADDITIONAL SPECIFICATIONS FOR TWO-SPEED MOTORS

The following additional specifications apply to all two-speed motors:

- (a) Terminal markings shall be as per SABS 948-1.
- (b) The starting current shall not exceed six times the full load current of the high-speed rating.

E01.19 SUBMERSIBLE MOTORS

The following additional requirements apply specifically to all submersible motors:

All submersible motors shall be suited for submersion up to a depth of 1,5 times the depth of submersion shown on the drawings for each application, or as specified in the detail specifications.

All submersible motors shall have dynamically balanced rotors supported by maintenance-free, sealed-for-life ball bearings.

All motors shall be suitably coated to ensure the satisfactory operation of the motor under the specified class of service.

All terminal boxes shall be waterproof and suited for submersion up to the depth as specified for the motors.

An adequate length of waterproof cable, purpose-made for submerging, shall be supplied with each submersible motor. The coupling of this cable to the normal power-distribution cable, which usually is of the PVC type with steel-wire armour, shall be placed at least 1,0 m above the maximum water level by means of a purpose-made, weatherproof, outdoor junction box. The submerged cable shall be supported to minimize any movement of the cable which result from turbulence caused by the operation of the equipment or the flow of the water.

Thermistor protection temperature switches shall be provided for submersible motors.

Seal monitors shall be provided for submersible motors, together with the required seal monitor relays. The cost for the seal monitor relays shall be deemed to be included in the rates tendered for the equipment.

E01.20 ADDITIONAL REQUIREMENTS

- (a) The rotation speed of motors shall not exceed 1 500 rpm unless approved by the Engineer.

- (b) Thermistor protection shall be provided for each winding of each motor. Motors rated below 55kW shall have no thermistor and heater protection devices installed on them. Motor rated 55kW and above shall have both thermistor and heater protection devices installed on them.
- (c) Motors below 55kW shall be started by the DOL type method of starting. Motors including 55kW and above shall be started by the softer-starter type method of starting.
- (d) A separate thermistor and heater terminal box shall be fitted on the motor frame next to the power terminal box and shall be of robust design, liberally sized and complete with suitable terminal block and mechanical cable gland or conduit entry.
- (e) The minimum preferred class of insulation is Class F, derated in accordance with the relevant clause above.

E01.21 TECHNICAL DATA SHEETS

Details of all individual electric machines and equipment requiring electrical energy shall be indicated on the technical data sheet provided for in the tender Schedules (included in the technical data sheets).

E01.22 TESTING

Tests on completion (commissioning tests) shall be performed as described below in this specification.

E01.22.1 Performance Tests

- (a) One motor of every type shall be tested for temperature rise and excess torque. Type test certificates on identical motors will be acceptable in lieu of these tests. Should type test certificates not be available, the first motor of each size manufactured shall be tested. All tests shall be in accordance with BS 170, SABS 948-1 or BS 4999.
- (b) The measurement of the temperature rise of the stator windings of motors for use on voltages up to 1 000 volts shall be by the increase in resistance method as is now permitted by BS 170 and BS 4999.

E01.22.2 Routine Tests

- (a) Each motor shall be tested at the manufacturer's works for light-run, locked rotor, insulation resistance, high voltage, air-gap clearances and Tan Delta on each complete stator.
- (b) All tests shall be in accordance with SABS 948-1, BS 170 or BS 4999.

E01.22.3 Test Certificates

- (a) Four copies of all test certificates, showing the results of all tests performed, shall be supplied at a date not later than the delivery date of the motors.
- (b) The test certificates shall contain power factor and efficiency figures for 125%, 100%, 75%, 50% and 25% of full load conditions as calculated from the test results.

E01.22.4 Witnessing of Tests

All type and routine tests on motors larger than 45 kW shall be witnessed by the Engineer.

E01.22.5 Testing of Terminal Box Assembly

- (a) Proof shall be given to show that a prototype terminal and cable box assembly of the type being supplied on high voltage motors has been tested under internal short-circuit conditions and that the pressure relief diaphragm ruptured protecting the case of the terminal box from serious damage. In addition, that a through fault current test was made to demonstrate that the complete assembly is capable of handling the short-circuit current without damage. The fault current for these tests shall have been 45 000 ampere for a duration of 0.25 seconds.
- (b) These type tests shall have been witnessed by an independent authority.

E01.23 **DRAWINGS FOR APPROVAL**

The following drawings shall be submitted for approval:-

- (a) Dimensioned outline and foundation drawings of the motors. (Shaft diameter, shaft height and motor weight to be clearly shown).
- (b) Detailed drawings of the bearing arrangement, showing all oil pipes, coolers and pumps.
- (c) Cross-sectional dimensioned drawings of the cable boxes.
- (d) Detailed drawings of the motor base plate showing full constructional details with dimensions.
- (e) For motors of 250 kW and larger fully dimensioned drawings of the shaft showing all tolerances.
- (f) For motors designed for voltages of 3.3 kV and above, drawings showing the end winding bracing arrangements.

E01.24 **ERECTION AND COMMISSIONING**

E01.24.1 Erection

- (a) When motors are erected, care shall be taken to ensure that adequate tolerance margins are made available to ensure interchangeability with replacement motors.
- (b) A minimum of 10 mm of packers shall be provided under the motor frame or motor bedplate to allow for adjustments in height.
- (c) Before holding-down bolts are grouted in, the motor shall be lined up and the bolts shall be properly centred in the hole of the bedplate.

E01.24.2 Bearing Inspection

- (a) The Engineer shall inspect motors having ball/roller bearings.
- (b) The grease shall be examined to ensure that it is not hard.

- (c) Providing that no roughness is felt when the shaft is rotated by hand and that the motor runs without undue noise or vibration, the bearings will be considered acceptable.
- (d) Should the bearings fail or exhibit the symptoms of brineling during the guarantee period, the Contractor, free of charge, without delay, shall change them.

E01.24.3 Alignment

- (a) After erection the alignment of the half-couplings between the motor and the driven machine shall be measured. In the case of a pedestal bearing motor the air gap clearance between the rotor and the stator shall also be measured. A record shall be kept of these figures and they shall be submitted to the Engineer for approval.
- (b) A horizontal sleeve bearing or limited end-float roller bearing motor shall be run uncoupled from its load to ensure that it rotates at the axial position indicated on the shaft and that the rotor is free to move to either side of this position. Particular attention shall be paid to ensure that the free running position and the rotor end-float are in agreement with the axial movement of the flexible coupling.

E01.24.4 Drying Out

- (a) The Contractor shall dry out all motors larger than 100 kW and all smaller motors which have stood in the open during rain or have been flooded or whose cold insulation resistance is below 1.5 megaohms, before they are connected to the supply. If a motor is flooded, the motor bearings shall be replaced as a matter of urgency.

- (b) The method of drying the motor shall be by placing the motor in a heating oven.

Sufficient heat shall be applied to produce a temperature of 60°C but not greater than 80°C for a Class A or 90°C for Class B insulation systems. Insulation resistance measurements and temperature readings shall be taken regularly every half hour at the start of dry-out until the motor attains an even temperature and thereafter every hour.

The characteristic dry-out curve of insulation resistance versus temperature shall be plotted and dry-out may be considered complete four hours after the resistance readings have started to rise from the steady minimum value, providing that the winding temperatures have remained steady during this period.

- (c) The Contractor shall provide all equipment and the personnel required for the drying-out operation.
- (d) In the case of motor smaller than 100 kW the onus remains on the Contractor to satisfy himself that a motor is dry before it is connected to the supply.
- (e) Any motor, which fails as a result of being commissioned in a damp condition, shall be repaired at the cost of the Contractor.

E01.24.5 Double Shaft Extensions

The unused shaft extensions of a double ended shaft motor shall be covered with an approved rust preventative after the motor is commissioned.

E01.25 COLOUR CODING

The standard final colour codes for equipment supplied under this Contract shall be in accordance with Particular Specification G01.

E01.26 MEASUREMENT AND PAYMENT

No separate payment will be made for electric motors for equipment unless otherwise specified in the detail specifications. All direct and indirect costs associated with such motors shall be deemed to be included in the rates tendered for the equipment.

Where separate payment is required for electric motors and specified as such in the detail specifications, the following payment items shall be applicable:

<u>Item</u>	<u>Unit</u>
Supply and delivery electric motors	No

The unit of measurement shall be the number of motors supplied.

The tendered rate shall include full compensation for the design, manufacture, corrosion protection, supply, handling, transport, testing and delivery of each complete motor as specified in the detail specification to ensure satisfactory operation after installation.

Separate items will be scheduled for different sizes/types of motors required.

<u>Item</u>	<u>Unit</u>
Installation, test and commission of electric motors	No

The unit of measurement shall be the number of motors installed.

The tendered rate shall include full compensation for the installation and coupling of the motor to the required load. The tendered rate shall include full compensation for all required installation material.

Separate items will be scheduled for different sizes/types of motors required.

MINIMUM STANDARD SPECIFICATION FOR VARIABLE SPEED DRIVE (VSD):

1. PURPOSE

- 1.1. The tenderer shall supply and deliver VSDs with the following minimum standard specification
- 1.2. This specification, including reasons why the clauses should be used, has been based on the minimum criteria necessary for reliable operation of a.c. Variable Speed Drives when used in industrial applications.

2. DEFINITIONS, ABBREVIATIONS AND ACRONYMS

- 2.1. VSD – Variable Speed Drive
- 2.2. PLC – Programmable Logic Controller
- 2.3. IEC – International Electrotechnical Commission
- 2.4. GSM – Global Systems for Mobile communication
- 2.5. RFI - Radio Frequency Interference.
- 2.6. ISO – International Organisation of Standardisation
- 2.7. EMC – Electromagnetic Compatibility

3. GENERAL

- 3.1. The VSD shall be suitable type for controlling the speed of 3 phase, 380Vac to 480Vac, induction motors.
- 3.2. The VSD shall be capable of operating continuously at nominated full load rating with expected variations of +/- 10% in the supply voltage and +/- 2% in the supply frequency.
- 3.3. The VSD shall be capable of operating continuous at full load in an ambient temperature between -10°C of +45°C.
- 3.4. The VSD shall have sufficient ventilation that provides cooling of internal components (separation of the cooling air from the electronics section of the controller in order to reduce risk of contaminants entering the drive, using principles and technologies such as cold plate, or externally mounted heat sink, or back channel cooling).
- 3.5. The VSD shall have metal enclosures to prevent the radiated radio RFI noise from affecting the operation of other equipment and the metal enclosures must have earth point for connection to the main earthing system during installation.
- 3.6. The VSD shall be manufactured in accordance with manufacturing standards and quality standards according to ISO 9001.

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4. PERFORMANCE

- 4.1. The VSD shall be specifically designed for constant torque operation, but shall also incorporate a choice of output waveforms designed to control quadratic loads to give the controller flexibility over a wide application area. The tenderer shall state the kVA output power of the VSD in both constant and quadratic torque loads.

In constant torque mode the VSD shall be capable of supplying starting torques of up to 150%-160% of the motors rated torque.

In quadratic torque mode the output voltage from the VSD shall be formed in accordance with the quadratic load torque output of the centrifugal fan or pump. A choice of programmable starting torques up to 110% shall be provided to accelerate the motor to its pre-set speed.

- 4.2. At low speeds and light loads, the VSD shall incorporate automatic flux control for the motor to prevent over-magnetisation. A single fixed voltage boost that cuts out a predetermined frequency will not be considered as automatic control of the flux.
- 4.3. Where the VSD is specified to control overhauling loads it shall be fitted with a dynamic brake option. A separate external braking resistor shall be supplied according to the duty cycle required.

The VSD shall incorporate the necessary inbuilt safety functions and relay outputs to ensure the overriding mechanical brake will be released in cases where there is a risk that the load may fall under dynamic braking control due to failure of the VSD. Upon starting, the holding brake must only be released by the VSD's relay once the motor has become fully magnetized.

4.4. Radio Frequency Interference

The pump stations contain equipment sensitive to RFI interference (such as PLCs). Full compliance to the standards is requested. The VSD should be well protected and immune to electrical disturbance in order to ensure high reliability.

The VSD shall comply with the EMC immunity standards:

- **EN 61000-4-2 (IEC 1000-4-2): Electrostatic discharges (ESD)**
Simulation of electrostatic discharge from human beings.

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- **EN 61000-4-3 (IEC 1000-4-3): Incoming electromagnetic field radiation, amplitude modulation.**
Simulation of the effects of radar and radio communication equipment as well as mobile communications equipment.
- **EN 61000-4-4 (IEC 1000-4-4) Burst transients.**
Simulation of transients brought about by switching with a contractor, relays or similar devices.
- **EN 61000-4-5 (IEC 1000-4-5) Surge transients.**
Simulation of transients brought about e.g. by lightning that strikes near installations.
- **ENV 50140: Incoming electromagnetic field, pulse modulated.**
Simulation of the impact from GSM telephones.
- **ENV 50141: Cable-borne HF.**
Simulation of the effect of radio transmission equipment connected to supply cables.
- **VDE 0160 class W2 test pulse: Mains transients.**
Simulation of high-energy transients brought about by main fuse breakage, switching of power factor correction capacitors, etc.

4.5. Separate RFI Filters

Where RFI filters are supplied from a separate supply source, documentation showing the test results of the RFI and VSD combination and its compliance to EN55011 shall be supplied as evidence of conformity including the maximum length of cable.

The separate RFI filters shall be mounted in metal enclosures to the same protection rating as the VSD, and located as close to the mains connection terminals of the VSD as possible.

Ferrite cores mounted on the input cables will not be considered as RFI compliance.

4.6. Harmonics and Power Factor

The pump stations contain a high portion of harmonic producing loads. The information requested in this section of the specification is important for the evaluation of the total pump stations harmonic distortion limits.

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Mains Harmonic currents generated by the VSD must be limited by external mains reactors OR reactors in the d.c. bus of the VSD.

- 4.7. The VSD shall incorporate a PID regulator to enable closed loop control of the process. The regulator shall operate in conjunction with the ramp adjustments to allow smooth acceleration into regulation. Remote monitoring of the feedback signal via a 0/4 - 20mA signal from the VSD is required.

5. PROTECTION AND MONITORING

- 5.1. The VSD shall shut down safely under the following conditions, and operate the alarm relay. The VSD display shall indicate the nature of the fault in clear English text.

- 5.1.1. Overcurrent, short circuit and phase to ground.
- 5.1.2. Under / overvoltage in the power circuit.
- 5.1.3. Phase loss, and phase imbalance.
- 5.1.4. Over temperature in the VSD and in the motor.
- 5.1.5. Overload in the braking resistor, IGBTs/Chopper and Motor.
- 5.1.6. External Fault external alarm) and Internal Fault (CPU/Memory).
- 5.1.7. Fault in the heat sink fan.
- 5.1.8. Motor over-speeding, reverse/direction.

- 5.2. The VSD shall provide for both automatic and manual reset operation. Automatic reset shall only operate on over-current and over & under voltage. In automatic mode there shall be a programmable choice of up to 10 reset attempts per fault before the VSD shuts down making manual reset necessary to restart the system. The restart time after a trip in automatic mode shall be adjustable.

For safety reasons the VSD must have a trip lock function preventing an operator resetting the VSD under extreme condition.

In manual reset mode the reset shall be accomplished from both the keypad on the VSD and by remote signal.

- 5.3. The controller shall be equipped with a data log menu that will allow storage of the type of faults that have occurred. Last fault memory shall be required in the event of power failures.

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5.4. The design should be such that an external 24 Volt supply can be connected to maintain operation of the microprocessor and serial communication bus during the loss of AC power.

5.5. The VSD shall preferably be fitted with a USB serial port, and be supplied with suitable software utilising a windows environment to display all monitoring, fault, alarm and status signals. The software shall allow parameter changes to be made to the VSD settings by uploading the data from the VSD, changing the parameters, and then downloading the data to the VSD again. Storage of each controllers operating and set-up parameters shall be able to be stored on diskette.

6. Communication

6.1. Profibus-DP

6.2. DeviceNet

6.3. Ethernet and Profnet IO

6.4. Modbus-TCP

6.5. Modbus-RTU (RS485) & Modbus-RTU (RS232)

7. Safety Standards

7.1. EN 61800-5-1 (Safety requirements electrical, thermal and energy)

7.2. EN 50178 (Electronic equipment for use in power installations)

7.3. EN 60146 (IEC 146) Semiconductor converters.

7.4. EN 60204-1 (Safety of machinery. Electrical equipment of machines)

7.5. EN 61800-2 (Adjustable speed electrical power drive systems)

7.6. EN 60529 - Degrees of protection provided by enclosures (Enclosures for electrical equipment)

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PRICING SCHEDULE – FIRM PRICES (PURCHASES)

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

Name of Bidder.....	Bid Number.....
Closing Time	Closing Date

OFFER TO BE VALID FOR.....DAYS FROM THE CLOSING DATE OF BID.

-
- Required by:Johannesburg Water.....
 - At:Various sites.....
 - Brand and Model
 - Country of Origin

Note: All delivery costs must be included in the bid price, for delivery at the prescribed destination.

** “all applicable taxes” includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

MBD 4

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

3 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Full Name of bidder or his or her representative:.....

3.2 Identity Number:

3.3 Position occupied in the Company (director, trustee, shareholder²):.....

3.4 Company Registration Number:

3.5 Tax Reference Number:.....

3.6 VAT Registration Number:

3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.

3.8 Are you presently in the service of the state? **YES / NO**

3.8.1 If yes, furnish particulars.

.....

¹MSCM Regulations: "in the service of the state" means to be –

(a) a member of –

- (i) any municipal council;
- (ii) any provincial legislature; or
- (iii) the national Assembly or the national Council of provinces;

(b) a member of the board of directors of any municipal entity;

(c) an official of any municipality or municipal entity;

(d) an employee of 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);

(e) a member of the accounting authority of any national or provincial public entity; or

(f) an employee of Parliament or a provincial legislature.

² Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

3.9 Have you been in the service of the state for the past twelve months?**YES / NO**

3.9.1 If yes, furnish particulars.....

.....

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.10.1 If yes, furnish particulars.

.....
.....

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.11.1 If yes, furnish particulars

.....
.....

3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

3.12.1 If yes, furnish particulars.

.....
.....

3.13 Are any spouse, child or parent of the company's directors trustees, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

3.13.1 If yes, furnish particulars.

.....
.....

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract. **YES / NO**

3.14.1 If yes, furnish particulars:

.....
.....

4. Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	State Employee Number

.....
Signature

.....
Date

.....
Capacity

.....
Name of Bidder

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and

1.2 To be completed by the organ of state

a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state 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 organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

$$P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right) \quad \text{or} \quad P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

80/20 or 90/10

Where

P_s = Points scored for price of tender under consideration

P_t = Price of tender under consideration

P_{min} = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

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

$$P_S = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right) \text{ or } P_S = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.)

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Locality – Municipal account or valid lease agreement	10	
EME or QSE Black owned – Valid B-BBEE certificate or sworn affidavit	10	
Total	20	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I 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 paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state 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) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted 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, if deemed necessary.

<p>.....</p> <p>SIGNATURE(S) OF TENDERER(S)</p>	
SURNAME AND NAME:
DATE:
ADDRESS:

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities 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 bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	<p>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?</p> <p>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	<p>If so, furnish particulars:</p> 		
4.2	<p>Is the bidder 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)?</p> <p>The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	<p>If so, furnish particulars:</p> 		
4.3	<p>Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

4.3.1	If so, furnish particulars:		
Item	Question	Yes	No
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

CERTIFICATION

**I, THE UNDERSIGNED (FULL NAME)
CERTIFY THAT THE INFORMATION FURNISHED ON THIS
DECLARATION FORM TRUE AND CORRECT.**

**I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT,
ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION
PROVE TO BE FALSE.**

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.

- 2 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 bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.

- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) 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 bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

6. The bidder has arrived at the accompanying bid 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 bidding.
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 bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
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 bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids 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.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder