

TENDER DOCUMENT

TENDER NO SBM 55/21/22

SUPPLY AND DELIVERY OF ELECTRICAL EQUIPMENT AND MATERIAL FOR THE PERIOD: 01 OCTOBER 2022 TILL 30 SEPTEMBER 2024.

CLOSING DATE: 01 JULY 2022

CLOSING TIME: 12H00

BID DOCUMENTS MAY BE POSTED TO:

Private Bag X12
VREDENBURG
7380

A tender posted (at sender's risk) to THE MUNICIPAL MANAGER, SALDANHA BAY MUNICIPALITY, PRIVATE BAG X12, VREDENBURG, 7380 in good time so as to reach the Municipal Manager before the above-mentioned closing date, may be accepted on condition that it is placed in the TENDER box before the closing time, it being understood that the Council disclaims any responsibility for seeing that such tenders are in fact lodged in the tender box.

OR

DEPOSITED IN THE TENDER BOX SITUATED AT (*STREET ADDRESS*)

Buller/Investment Centre
15 Main Road
Ground Floor
VREDENBURG

NB: TENDERS must be properly received and deposited in the above-mentioned tender box on or before the closing date and before the closing time. No late tender offers will be accepted under any circumstances. Tender offers must be submitted in a sealed envelope properly marked in terms of the tender number and tender description as indicated above. If the tender offer is too large to fit into the abovementioned box, please enquire at the public counter opposite the tender boxes for assistance. No tender offers will be accepted via facsimile, email or electronic copies.

TENDERER	
NAME OF TENDERER
ADDRESS
TEL NO

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EMAIL FOR CORRESPONDENCE*
CSD DATABASE REG NO*

All bids must be submitted on the official bid documents issued by SBM for this bid and not be re-typed.

Do not dismember this Tender Document (do not take it apart or put documents between its pages) and all other documents of the submission must be attached to this Tender Document.

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Department: Supply Chain Management

Contact Person: Viandro van Wyk

Tel: 022 701 7168

Email: viandro.vanwyk@sbm.gov.za

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION / SPECIFICATIONS MAY BE DIRECTED TO:

Contact Person: Cassie du Preez

Tel: 022 701 7123

Email: cassie.dupreez@sbm.gov.za

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CHECKLIST

Please ensure that you have included all the documents listed below and submit it with your tender document as well as ensure that you adhere to the listed requirements. This will ensure that your tender is not deemed to be non-responsive and disqualified

PLEASE TICK BOX THE LEFT

- Identity Documents of all those with equity ownership in the organization. In the case of a company please include only those ID documents of the Directors with equity ownership.
- Company registration forms.
- Certified copy of bidder and Director’s municipal account or valid lease agreement.
- Registration with professional body (If applicable).
- Samples Provided (If applicable).
- All relevant sections complete and signed, and all pages of tender document initialed by authorized signatory.
- Proof attached that signatory is duly authorized to enter into contractual agreement with Saldanha Bay Municipality on behalf of the organization.
- Original or Certified copy of a valid SANAS approved B-BBEE certificate or B-BBEE affidavit.
- Tax compliant status on Central Supplier Database.
- Audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

DECLARATION

I declare that all relevant documentations have been included with the bid document and all the tender conditions have been adhered to.

.....
Name

.....
Signature

.....
Date

.....
Capacity

.....
Name of Firm

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SECTION 1.1 ADVERTISEMENT

MUNISIPALITEIT SALDANHABAAI	SALDANHA BAY MUNICIPALITY
<p align="center"><u>TENDER: SBM 55/21/22</u></p>	<p align="center"><u>TENDER: SBM 55/21/22</u></p>
<p>BESKRYWING: VOORSIENING EN LEWERING VAN ELEKTRIESE MATERIAAL EN TOERUSTING VIR DIE TYDPERK 01 OKTOBER 2022 TOT 30 SEPTEMBER 2024.</p>	<p>DESCRIPTION: SUPPLY AND DELIVERY OF ELECTRICAL EQUIPMENT AND MATERIAL FOR THE PERIOD: 01 OCTOBER 2022 TILL 30 SEPTEMBER 2024.</p>
<p>Tenderdokumente is beskikbaar vir aflaai op die eTender publikasie webtuiste www.etenders.gov.za, of kan alternatiewelik opgetel word by Mnr. Christo de Bruyn, Hoofstraat 15, Buller/Beleggingssentrum, Vredenburg vanaf Maandag, 30 Mei 2022.</p>	<p>Tender documents can be downloaded from the eTender publication portal at www.etenders.gov.za, or alternatively can be collected from Mr. Christo de Bruyn, 15 Main Road, Buller/Investment Centre, Vredenburg from Monday, 30 May 2022.</p>
<p>Indien tenders opgetel word, moet 'n nierugbetaalbare tender deposito van R172.50 betaal word aan Saldanhaabaai Munisipaliteit. 'n Bewys van betaling moet aangebied word vir die verkryging van tenderdokumente.</p>	<p>If tenders are collected, a non-refundable tender deposit of R172.50 is payable to Saldanha Bay Municipality. A proof of deposit is required for the collection of tender documents.</p>
<p>Navrae kan gerig word aan Mnr. Cassie du Preez. Epos: cassie.dupreez@sbm.gov.za</p>	<p>Enquiries can be directed to Mr. Cassie du Preez. Email: cassie.dupreez@sbm.gov.za</p>
<p>Tenders moet in die tenderbus by die Buller/Beleggingssentrum, Grond Vloer, Hoofstraat 15, Vredenburg geplaas word voor 12:00 op Vrydag, 01 Julie 2022 en moet in 'n geseëde koevert wees waarop daar aan die buitekant duidelik gemerk is die bovermelde tender nommer en beskrywing.</p>	<p>Tenders must be placed in the tender box at the Buller/Investment Centre, Ground Floor, 15 Main Road, Vredenburg, before 12:00 on Friday, 01 July 2022 in a sealed envelope upon the outside whereon is clearly marked the above-mentioned tender number and description.</p>
<p>Na die sluitingsuur sal die tenders in die publiek oopgemaak word. Enige of die laagste tender sal nie noodwendig aanvaar word nie.</p>	<p>The tenders shall be opened in the public after the closing hour. Any or the lowest tender will not necessarily be accepted.</p>
<p>Die 80/20 voorkeur-puntestelsel soos vervat in die Voorkeur Verkrygingsregulasies Nr. R32 van 20 Januarie 2017 (B-BBEE) sal in die beoordeling van hierdie tender gebruik word.</p>	<p>The 80/20 preference point system as contained in the Preferential Procurement Regulations No. R32 of 20 January 2017 (B-BBEE) will be used in the adjudication of this tender.</p>
<p>'n Geldige inkomstebelasting uitklaringsertifikaat, soos uitgereik deur die Suid-Afrikaanse Inkomstediens, moet met die tenderdokument ingehandig word, en die tenderaar moet voldoen aan die belastingvoorwaardes op die Sentrale Verskaffers Databasis (CSD).</p>	<p>A valid tax clearance certificate, from the South African Revenue Services, must be supplied with the tender document and the tenderer must be tax-compliant on the Central Supplier Database (CSD).</p>
<p>Mnr. H.F. Mettler MUNISIPALE BESTURDER Munisipaliteit Saldanhaabaai Privaatsak X 12 VREDENBURG 7380</p>	<p>Mr. H.F. Mettler MUNICIPAL MANAGER Saldanha Bay Municipality Private Bag X 12 VREDENBURG 7380</p>

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SECTION 1.2

TENDER CONDITIONS AND INFORMATION

1.2.1 General and Special Conditions of Contract

The General Conditions of Contract (GCC) as well as Special Conditions of Contract (SCC) forming part of this set of tender documents will be applicable to this tender in addition to the conditions of tender. Where the GCC and SCC are in conflict with one another, the stipulations of the SCC will prevail.

1.2.2 Acceptance or Rejection of a Tender

The Municipality reserves the right to withdraw any invitation to tender and/or to re-advertise or to reject any tender or to accept a part of it. The Municipality does not bind itself to accepting the lowest tender or the tender scoring the highest points.

1.2.3 Validity Period

Bids shall remain valid and binding for a minimum of 90 days after the tender closure date and the validity extend automatically till the contract is signed if validity goes beyond the number of days indicated. The reason for this is to ensure that the tender is valid till appeals were considered, if received.

1.2.4 Cost of Tender Documents

Tender documents can be downloaded from the eTender publication portal at www.etenders.gov.za or alternatively can be collected at a non-refundable tender deposit rate payable to Saldanha Bay Municipality. Payment for tender documents must be made by a crossed cheque, cash or payment into Saldanha Bay Municipality's bank account, payable to the Saldanha Bay Municipality. These costs are non-refundable. No unauthorised alteration of this set of tender documents will be allowed. Any unauthorised alteration will disqualify the tender automatically.

1.2.5 Registration on Accredited Supplier Database

It is expected of all prospective service providers who are not yet registered on the Central Supplier Database, to register online. In the event that a tenderer is not yet registered, it is requested that the online registration proceeds with the Central Supplier Database. The Municipality reserves the right not to award tenders to prospective suppliers who are not registered on the Central Supplier Database.

1.2.6 Completion of Tender Documents

(a) The original tender document must be completed fully in black ink and signed by the authorised signatory to validate the tender.
All the pages must be initialled by the authorised signatory and returned. Failure to do so will result in the disqualification of the tender.

(b) Tender documents may not be retyped. Retyped documents will result in the disqualification of the tender.

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(c) The complete original tender document must be returned. Missing pages will result in the disqualification of the tender.

(d) No unauthorized alteration of this set of tender documents will be allowed. Any unauthorized alteration will disqualify the tender automatically. Any ambiguity has to be cleared with the contact person for the tender before the tender closure.

(e) Tenders must be completed in indelible ink and **NO CORRECTION FLUID** may be used in the Tender Document. If corrections must be made, a line must be drawn through the correction and it must be initialled.

(f) The bidder should verify regularly on E-tender whether there are any addendums before submission and addendums must be submitted with the tender document.

1.2.7 Compulsory Documentation

1.2.7.1 Income Tax Clearance Certificate

(a) A valid income tax clearance certificate must accompany the bid documents unless the bidder is registered on the Central Supplier Database and are Tax compliant. If the South African Revenue Services (SARS) cannot provide a valid income tax clearance certificate, the bidder must submit a letter from SARS on an original SARS letterhead that their tax matters are in order.

1.2.7.2 Construction Industry Development Board (CIDB)

When applicable, a certified copy of the bidder's registration and grading certificate with the CIDB must be included with the tender. Failure to do so will result in the disqualification of the tender.

1.2.7.3 Municipal Rates, Taxes and Charges

(a) A certified copy of the bidder's municipal account for the month preceding the tender closure date must accompany the tender documents.

(b) Any bidder which is or whose directors are in arrears with their municipal rates and taxes or municipal charges due to any Municipality or any of its entities for more than three months and have not made an arrangement for settlement of same before the bid closure date will be disqualified.

1.2.8 Authorized Signatory

(a) A copy of the recorded Resolution taken by the Board of Directors, members, partners or trustees authorizing the representative to submit this bid on the bidder's behalf must be attached to the Bid Document on submission of same.

(b) A bid shall be eligible for consideration only if it bears the signature of the bidder or of some person duly and lawfully authorized to sign it for and on behalf of the bidder.

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1.2.9 Site / Information Meetings

Site or information meetings, if specified, are compulsory. Bids will not be accepted from bidders who have not attended the compulsory site or information meeting on the specified date.

1.2.10 Samples

Samples, if requested, are to be provided to the Municipality with the tender document and are not returnable.

1.2.11 Quantities of Specific Items

If tenders are called for a specific number of items, Council reserves the right to change the number of such items to be higher or lower. The successful bidder will then be given an opportunity to evaluate the new scenario and inform the Municipality if it is acceptable. If the successful bidder does not accept the new scenario, it will be offered to the second placed bidder. The process will be continued to the Municipality's satisfaction.

1.2.12 Submission of Tender

(a) The tender must be placed in a sealed envelope, or envelopes when the two-envelope system is specified, clearly marked with the tender number, title as well as closing date and time and be placed in the **tender box at the Buller/Investment Centre, Ground Floor, 15 Main Road, Vredenburg by not later than 12:00 on the specified closing date.**

(b) Faxed, e-mailed and late tenders will not be accepted. Tenders may be delivered by hand, by courier, or posted at the bidder's risk and must be received by the deadline specified above, irrespective of how they are sent or delivered.

1.2.13 Expenses Incurred in Preparation of Tender

The Municipality shall not be liable for any expenses incurred in the preparation and submission of the tender.

1.2.14 Contact with Municipality after Tender Closure Date

Bidders shall not contact the Saldanha Bay Municipality on any matter relating to their bid from the time of the opening of the bid to the time the contract is awarded. If a bidder wishes to bring additional information to the notice of the Saldanha Bay Municipality, it should do so in writing to the Saldanha Bay Municipality. Any effort by the firm to influence the Saldanha Bay Municipality in the bid evaluation, bid comparison or contract award decisions may result in the rejection of the bid.

1.2.15 Opening, Recording and Publications of Tenders Received

(a) Tenders will be opened on the closing date immediately after the closing time specified in the tender documents. If requested by any bidder present, the names of the bidders, and if practical, the total amount of each bid and of any alternative bids will be read out aloud.

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(b) Details of tenders received in time will be published on the Municipality's website as well as recorded in a register which is open to public inspection.

1.2.16 Evaluation of Tenders

Tenders will be evaluated in terms of their responsiveness to the tender specifications and requirements as well as such additional criteria as set out in this set of tender documents.

1.2.17 Supply Chain Management Policy and Regulations

Bids will be awarded in accordance with the Preferential Procurement Regulations, 2017 pertaining to the Preferential Procurement Policy Framework Act, No 5 of 2000 as well as the Municipality's Supply Chain Management Policy.

1.2.18 Contract

The successful bidder will be expected to sign the agreement of this bid document within 7 (seven) days of the date of notification by the Saldanha Bay Municipality that his/her bid has been accepted. **The signing of the relevant sections of this bid document signifies the conclusion of the contract. The Municipality, at its discretion, may request the signing of an additional Service Level Agreement which, together with the signed tender document, will constitute the full agreement between the Municipality and the successful bidder.**

1.2.19 Language of Contract

The contract documents will be compiled in English and the English versions of all referred documents will be taken as applicable.

1.2.20 Stamp and Other Duties

The successful bidder will be liable for all duties and costs on legal documents resulting in the establishment of a contract and for the surety and retentions.

1.2.21 Wrong Information Furnished

Where a contract has been awarded on the strength of the information furnished by the bidder which, after the conclusion of the relevant agreement, is proved to have been incorrect, the Municipality may, in addition to any other legal remedy it may have, recover from the contractor all costs, losses or damages incurred or sustained by the Municipality as a result of the award of the contract.

1.2.22 Enquiries

Enquiries in connection with this tender, prior to the tender closure date, regarding the Supply Chain Management related aspects, may be addressed to Viandro van Wyk, Tel: 022 701 7168 or email viandro.vanwyk@sbm.gov.za. Enquiries regarding the specifications may be addressed to Cassie du Preez, Tel: 022 701 7123 or email: cassie.dupreez@sbm.gov.za.

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1.2.23 Intellectual Property Ownership

The tenderer / Contractor agrees to tender and perform the mutually agreed services as stipulated in the tender and any amendments thereto on the basis that the Tenderer / Contractor (T/C) hereby assigns to SBM all rights, including, without implication, copyrights, patents, trademark rights, and any other intellectual property rights associated with any ideas, concepts, techniques, inventions, processes, works of authorship, confidential information or trade secrets. (i) Developed or created by the T/C, solely or jointly with others during the course of performing work for or on behalf of SBM. (ii) That the T/C conceives, develops, discovers or makes in whole or in part during the T/C employment by SBM that relate to the business of SBM.

If, notwithstanding the foregoing, the T/C for any reasons retains any right, title or interest in or relating to any Work Product, the T/C agrees promptly to assign, in writing and without any requirement of further consideration, all such right, title and interest to SBM. Upon request of SBM at any time during or after the Employment Period, the T/C will take such further actions, including execution and delivery of instruments of conveyance, as may be appropriate to evidence, perfect, record or otherwise give full and proper effect to any assignments of rights under or pursuant to this tender. The T/C will promptly disclose to SBM any such work product in writing.

1.2.24 Waste Management

All tenderers need to ensure correct waste provisions are in place during the project period, and that the construction area is cleaned of all waste after completion to ensure that the environment is not polluted in any way. Waste should be disposed of at a registered Landfill Site or Municipal drop off facility, documented proof (safe disposal certificates) need to be submitted before final payment will be processed. Contractors should make use of skips or any other temporary containers to store their waste during the construction process to avoid windblown litter and to comply with Municipal Regulations.

All technical departments/ project managers/ consultants appointed by Saldanha Bay Municipality should make waste management a compulsory item to discuss and monitor during construction meetings.

The Municipality will enforce penalties if adequate waste provisions are not in place during construction period or if waste is not disposed of in a legal manner during or after construction period, please refer to below sections of the Municipal By-laws:

Section 21 (1): Plans and inspections: “An owner or occupier or any person responsible for the submission of building plans for a new building or an alteration to an existing building must include therein the manner in which building waste will be handled.”

Section 21 (2): “An authorized official of the Municipality must inspect and verify that the waste arrangements contemplated in subsection (1) were followed and all building waste disposed of as part of the final municipal sign-off of the building activities.”

Section 22 (1): Generation and Storage: “Notwithstanding the waste arrangements contemplated in section 21, the owner or occupier of premises on which building waste is generated or the person engaged in any activity which causes such waste to be generated, must ensure that-

- (a) All building waste and the containers used for the storage thereof is kept on the premises on which the building waste is generated;

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- (b) The premises on which the building waste is generated does not become unsightly or cause a nuisance as a result of accumulated building waste;
- (c) Any building waste which is blown off the premises, is promptly retrieved.”

Section 22 (2): “Upon written request and subject to conditions as it may determine the municipality may approve the use of a bulk container placed on verge for a specified duration.”

Section 22 (3): “The Municipality may instruct an owner or occupier of premises on which building waste is generated or person engaged in any activity which causes such waste to be generated to make use of special containers to dispose of it and will determine a tariff for the use of such containers should these be provided by the Municipality.”

Section 23 (1): Removal and Disposal:

“The owner or occupier of premises on which building waste is generated or the person engaged in any activity which causes such waste to be generated, must ensure that all building waste is removed and disposed of continuously during construction so as to prevent unnecessary accumulation of such waste.”

Section 23 (2): “Building waste must be disposed of at a waste handling or waste disposal facility determined by the Municipality.”

Please ensure compliance to all regulations and by-laws of Saldanha Bay Municipality.

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1.2.25 Submission of Invoices:

The successful bidder(s) to ensure compliance with Section 20(4) of the Value Added Tax (VAT) Act, 89 of 1991.

In terms of Section 20(4) of the Act, the TAX INVOICE(S) received from registered Vat vendors MUST bear the following information:

- The words "TAX INVOICE" in a prominent place;
- Name, address and VAT registration number of the supplier;
- The name and address: Saldanha Bay Municipality, Private Bag X12, Vredenburg, 7380;
- The Saldanha Bay Municipality VAT registration number: 41001113150;
- Unique VAT invoice number and date of issue;
- Accurate description of goods and/or services;
- Quantity or volume of goods or services supplied; and
- Price and VAT amount and percentage (%).

Failure to comply with abovementioned will result in payments not been made timeously.

Also take note that Saldanha Bay Municipality will not be liable for any late payments as a result of invalid Tax Invoice submitted by suppliers

I hereby declare compliance with Section 20(4) of the Value Added Tax (VAT) Act, 89 of 1991 and that I am duly authorised to sign on behalf of the company

PRINT NAME

SIGNATURE

DATE

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SECTION 1.3

General Conditions of Contract

1. Definitions

1. The following terms shall be interpreted as indicated:
 - 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
 - 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
 - 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
 - 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
 - 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
 - 1.7 "Day" means calendar day.
 - 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
 - 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
 - 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
 - 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
 - 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable.
Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
 - 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
 - 1.14 "GCC" means the General Conditions of Contract.

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- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
- 1.25 "Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.

2. Application

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

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4. Standards

- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information; inspection.

- 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser

6. Patent rights

- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder.

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- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

Initial _____

10. Delivery and documents

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

- 11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

- 12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
 - (a) Performance or supervision of on-site assembly and/or commissioning of the supplied goods;
 - (b) Furnishing of tools required for assembly and/or maintenance of the supplied goods;
 - (c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
 - (e) Training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
- 13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

- 14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:
 - (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
 - (b) In the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and

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- (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

- 15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- 15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

- 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4 Payment will be made in Rand unless otherwise stipulated in SCC.

17. Prices

- 17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.

18. Contract amendments

- 18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.

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19. Assignment

- 19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

- 20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under these contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

- 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
- 21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
- 21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without canceling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

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22. Penalties

- 22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

- 23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:
- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
 - (b) if the Supplier fails to perform any other obligation(s) under the contract; or
 - (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.
- 23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.
- 23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

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- (i) the name and address of the supplier and / or person restricted by the purchaser;
- (ii) the date of commencement of the restriction
- (iii) the period of restriction; and
- (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

- 23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

- 24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favorable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

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26. Termination for insolvency

- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) The parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier.

28. Limitation of liability

- 28.1 Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
 - (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

29. Governing language

- 29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.

30. Applicable law

- 30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.

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31. Notices

- 31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.
- 31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties

- 32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
- 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
- 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.

33. National Industrial Participation (NIP) Programme

- 33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.

34 Prohibition of Restrictive practices

- 34.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
- 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.
- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

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SECTION 2.1

INVITATION TO BID

MBD 1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/PUBLIC ENTITY)

BID NUMBER: **SBM 55/21/22** CLOSING DATE: **01 JULY 2022** CLOSING TIME: **12:00**

DESCRIPTION: SUPPLY AND DELIVERY OF ELECTRICAL EQUIPMENT AND MATERIAL FOR THE PERIOD: 01 OCTOBER 2022 TILL 30 SEPTEMBER 2024.

The successful bidder will be required to fill in and sign a written Contract Form (MBD 7.1).

BID DOCUMENTS MAY BE POSTED TO:

Private Bag X12
Vredenburg
Western Cape
7380

OR

DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)

Buller/Investment Centre
Ground Floor
15 Main Road
VREDENBURG

Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

THE FOLLOWING PARTICULARS MUST BE FURNISHED (FAILURE TO DO SO MAY RESULT IN YOUR BID BEING DISQUALIFIED)

NAME OF BIDDER.....

POSTAL ADDRESS.....

STREET ADDRESS.....

TELEPHONE NUMBER CODE.....NUMBER.....

Initial_____

CELL PHONE NUMBER.....

FACSIMILE NUMBER CODE.....NUMBER.....

VAT REGISTRATION NUMBER.....

HAS A TAX CLEARANCE CERTIFICATE BEEN ATTACHED (MBD 2)? **YES / NO**

HAS A SANAS APPROVED B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE / B-BBEE AFFIDAVIT BEEN SUBMITTED? (MBD 6.1) **YES / NO**

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA).....

A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN ACCREDITATION SYSTEM (SANAS); OR.....

A REGISTERED AUDITOR
[TICK APPLICABLE BOX]

(A SANAS APPROVED B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE / B-BBEE AFFIDAVIT MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE)

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS / SERVICES OFFERED BY YOU? **YES / NO**
(IF YES ENCLOSE PROOF)

SIGNATURE OF BIDDER.....

DATE.....

CAPACITY UNDER WHICH THIS BID IS SIGNED.....

TOTAL BID PRICE

TOTAL NUMBER OF ITEMS OFFERED.....

(IF APPLICABLE)

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Department: Supply Chain Management

Contact Person : Viandro van Wyk

Tel : 022 701 7168

E-mail address: viandro.vanwyk@sbm.gov.za

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SECTION 2.2

MBD 2

TAX CLEARANCE CERTIFICATE REQUIREMENTS

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

1. In order to meet these requirement bidders are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are Also applicable to foreign bidders / individuals who wish to submit bids.
- 2 SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each part must submit a separate Tax Clearance Certificate.
- 4 Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
- 5 Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.

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SECTION 3.1

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 / shareholder’s 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.

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

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:
.....

Initial_____

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

Full Name	Identity Number	State Employee Number

.....
Signature

.....
Date

.....
Capacity

.....
Name of Bidder

Initial _____

SECTION 3.2

MBD 5

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire:

1 Are you by law required to prepare annual financial statements for auditing? ***YES / NO**

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

.....
.....

***YES / NO**

2 Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?

2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.

2.2 If yes, provide particulars.

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

* Delete if not applicable

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3 Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract? ***YES / NO**

3.1 If yes, furnish particulars

.....
.....

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic? ***YES / NO**

4.1 If yes, furnish particulars

.....
.....

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THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder (The company)

Initial _____

SECTION 3.3**MBD 6.1****PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017**

This preference form must form part of all bids 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, BIDDERS 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 bids:
- 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 bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable.
- 1.3 Preference points for this bid shall be awarded for:
- (a) Price; and
 - (b) B-BBEE Status Level of Contribution.
- 1.4 The maximum points for this bid are allocated as follows:

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

- 1.5 Failure on the part of a bidder to submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS), or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or a sworn affidavit confirming annual turnover and level of black ownership in case of an EME and QSE together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

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2. DEFINITIONS

- (a) **“all applicable taxes”** includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- (b) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (c) **“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 on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (d) **“bid”** 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 bidding processes or proposals;
- (e) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003) as amended by Act No 46 of 2013;
- (f) **“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;
- (g) **“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;
- (h) **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- (i) **“EME”** means an Exempted Micro Enterprise as defines by Codes of Good Practice issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (j) **“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 contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- (k) **“functionality”** means the measurement according to predetermined norms, as set out in the bid 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 bidder;
- (l) **“non-firm prices”** means all prices other than “firm” prices;
- (m) **“person”** includes a juristic person;
- (n) **“QSE”** means a Qualifying Small Enterprise as defines by Codes of Good Practice issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (o) **“rand value”** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- (p) **“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;

- (q) **“total revenue”** bears the same meaning assigned to this expression in the 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;
- (r) **“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
- (s) **“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 bidder 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 bids have scored equal total points, the successful bid 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 bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
- 3.6 Should two or more bids 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:

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) & \text{or} & P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)
 \end{array}$$

Where

P_s = Points scored for comparative price of bid under consideration

P_t = Comparative price of bid under consideration

P_{\min} = Comparative price of lowest acceptable bid

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 bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

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 A bidder who qualifies as an EME in terms of the B-BBEE Act must submit a sworn affidavit confirming Annual Total Revenue and Level of Black Ownership.
- 5.3 A Bidder other than EME or QSE must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA 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.
- 5.5 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 bid.
- 5.6 Tertiary Institutions and Public Entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.7 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder 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 bidder qualifies for, unless the intended sub-contractor 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. BID DECLARATION

6.1 Bidders 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 1.4 AND 5.1

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 or a sworn affidavit.

8. SUB-CONTRACTING

8.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

8.1.1 If yes, indicate:

- i) What percentage of the contract will be sub-contracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME.

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

9. DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm:.....

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 service provider
 - Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]

9.7 MUNICIPAL INFORMATION

Municipality where business is situated:

Registered Account Number:

Stand Number:.....

9.8 Total number of years the company/firm has been in business:.....

9.9 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 contractor 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 bidding 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 bidder or contractor, 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.

WITNESSES

1.

2.

.....
SIGNATURE(S) OF BIDDERS(S)

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	Is the bidder or any of its directors listed on the National Treasury's database as a company or person prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied).	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	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)? (To access this Register, enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445).	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		

4.3	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?	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"/>
4.5.1	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 Tenderer

DECLARATION OF MUNICIPAL ACCOUNTS OF COMPANY AND DIRECTORS

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"/>
--	---------------------------------	--------------------------------

The Tenderer must affix proof of Municipal Accounts or valid lease agreements of the company as well as Directors and also complete the addresses of Directors below. If the Bidder has more than 12 Directors, a schedule with addresses must also be attached to the tender document.

Director 1 Address:

Mr. / Mrs _____

Director 2 Address:

Mr. / Mrs _____

Director 3 Address:

Mr. / Mrs _____

Director 4 Address:

Mr. / Mrs _____

Director 5 Address:

Mr. / Mrs _____

Director 6 Address:

Mr. / Mrs _____

Director 7 Address:

Mr. / Mrs _____

Director 8 Address:

Mr. / Mrs _____

Director 9 Address:

Mr. / Mrs _____

Director 10 Address:

Mr. / Mrs _____

Director 11 Address:

Mr. / Mrs _____

Director 12 Address:

Mr. / Mrs _____

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. Takes 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

SECTION 4.1**SPECIAL CONDITIONS OF CONTRACT**

1. All prices quoted will be considered firm for the period of tender (24 months).
2. After tenders are evaluated and found responsive as per the general specifications and special conditions of contract, the Electrotechnical department can request samples of items; the purpose of samples will be for specification verification and is returnable after tender adjudication. Supply, delivery and collection of requested samples will be for the cost of the tenderer.
3. Please note that Tender will be evaluated per item. All sub items should be completed in full to be found responsive for the specific item.
4. Tender Data
 - 4.1 Tenders shall be valid for the duration of contract.
 - 4.2 Complete details, including relevant drawings which may assist in deciding on the suitability of the equipment shall accompany the tender.
 - 4.3 Any variations from the specifications shall be stated.
5. Material
 - 5.1 All material offered shall be new and the best obtainable for their respective applications, and shall comply with the respective SANS, NRS or BS and IEC Specifications.
 - 5.2 Tenderers shall quote in accordance with the specifications, but alternatives aimed at economy, with equivalent performances may be considered.
6. Delivery
 - 6.1 Delivery is expected within 4 weeks or 28 calendar days.
7. Par 1.2.6(e) supersedes Par 1.25 of the GCC relating to tender documents must be completed in handwriting.

SECTION 4.2

Central Supplier Database (CSD)

Paragraph 14(1)(a) of the Municipal Supply Chain Management Policy states that the municipality must keep a list of accredited prospective providers of goods and services that must be used for the procurement requirements. Saldanha Bay Municipality has decided to accept an invitation from Provincial Treasury to join the Western Cape Supplier Database (WCSD) with the view of using one centralized database. However, from 01 July 2016 the Municipality will make use of the Centralised Supplier Database. This decision was taken based on the advantages it holds for our suppliers as well as our organization's procurement processes. All prospective providers of municipal goods and/or services are hereby requested to register their business with the CSD.

The usage of the Centralised Supplier Database came into effect on 01 July 2016. REGISTRATION WILL BE COMPULSORY IN ORDER TO CONDUCT BUSINESS WITH SALDANHA BAY MUNICIPALITY. The database will be used to verify the accreditation of a supplier before an award can be made.

All prospective suppliers should be aware of the amended codes of good practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act as issued by the Minister of Trade and Industry (Gazette No.36928) on 11 October 2013.

Enquiries can be made to Mr. S. Macetyana and Mr. A. Adonis at 022-701 6824.

CSD registration number (if registered):

SECTION 4.3**SALDANHA BAY MUNICIPALITY****BRIEF SPECIFICATIONS****SUPPLY AND DELIVERY OF ELECTRICAL EQUIPMENT AND MATERIAL FOR THE PERIOD: 01 OCTOBER 2022 TILL 30 SEPTEMBER 2024.****IMPORTANT NOTICE TO TENDERERS**

1. All equipment and material tendered must be clearly stamped or marked with the manufacturer's brand name/logo or any other identifiable marking that will be freely and clearly available after installation, to identify the manufacturer during maintenance or with breakdowns to ensure effective quality control. Items equipped with data plates complies, provided that the manufacturer are clearly indicated on the data plate.
2. Items that are difficult or impossible to mark, e.g. steel wire, bare copper conductor, etc. shall be tagged with a metal type data plate or tag with the manufacturer's data stamped or printed onto the plate or tag and shall be affixed by means of a durable cable or other binding material to a clearly visible point of the item or any one of the items in a batch delivery.
3. Tenderers wishing to tender must ensure that the items being tendered for, forms part of the daily core business of the tenderer. Other items must be sourced from a reputable supplier of which those items form part of that supplier's core business and must be so indicated on the tender document.
4. When tendering on "equivalent" equipment, the onus lies with the tenderer to prove that items tendered are indeed equivalent to or supersedes the specifications of listed items in the tender document under the Brief Specifications schedule.
5. No items may be tendered by a tenderer for which the tenderer can't support the full warranty/guarantee as is offered standard by the manufacturer when supplied through the manufacturer's supported dealer network.
6. Items must be delivered fully functional and operational to the applicable SANS (SABS) or International (IEC, BS, etc.) standards, notwithstanding any omissions or errors in the specifications. Costs to make the supplied items safe, functional and operational, or to exchange delivered and installed sub-standard (non-compliant) items for new compliant items that meet the minimum requirements or standards, will be for the tenderer's account.

ITEM 1: SUPPLY AND DELIVERY OF MINI-SUBSTATIONS

The mini substations shall comply with the requirements of SANS 1029 and 1030 unless otherwise specified. In addition, the following requirements shall be complied with.

CONSTRUCTION AND FINISH

All mini substations shall be constructed for maximum affordable vandalism proofing, especially the doors, locking mechanisms and streetlight controller sensor. The mini substations panels shall be manufactured from sheet metal. All sides are to be welded to prevent the entry of rodents. The units shall be so manufactured to ensure a measure of vandal proofing on the structure as well. The finishing shall be as follows:

- [a] After manufacturing the complete body shall be hot dipped galvanised in accordance with SANS 32/EN 10240. The base shall, in addition, be coated with black epoxy tar paint.
- [b] After galvanising an approved etching primer shall be applied followed by a layer of red oxide / zinc-chromate primer and then dipped in one layer of exterior alkyd base synthetic enamel paint.
- [c] The final finish shall be of quality enamel corresponding to colour C12 or SANS 1091 [Avocado]; alternatively, a grey finish to Eskom specifications will be allowed.
- [d] All doors are to be provided with vandal proof padlocking facilities and the necessary danger signs in accordance with the applicable legislation.
- [e] All doors are to be provided with vandal proof lock – cover, Allen key and padlocking facilities, and the necessary danger signs in accordance with the applicable legislation.

HIGH VOLTAGE COMPARTMENT - SF6 OR VACUUM INSULATED VACUUM BREAK RING MAIN UNIT

This compartment shall be so designed as to permit the making of the cable terminations without restriction. The compartment shall be fitted with a non-extensible 11KV, 630A SF6 insulated vacuum break (200A rating) ring main unit for controlling/protecting the transformer. These units shall be sprayed and treated for a high corrosive environment.

SF6 or VACUUM INSULATED RING MAIN UNIT

The specifications for the RMU must comply with the specifications in ITEM 4/5/6 of this tender document. Configuration will be 2 x feeder/cable switches and 1 x Transformer protection device (vacuum circuit breaker) with load indication and maximum demand registers.

A means for earthing the Isolated cable shall be provided via interlocked cable testing terminals. An operating handle shall be furnished with each RMU. Cable and End boxes are to be supplied with insulated glands suitable for taking up to 3-core 185mm² 11kV copper cable.

The SF6 units must be filled to an acceptable level before delivery.

A cable Earth fault indicator together with a split core current transformer shall be included.

TRANSFORMER COMPARTMENT

The minimum specifications of the transformer are listed hereunder:

- [a] Ratings 1000, 630, 500, 315kVA
- [b] Specification - SANS 780, low loss
- [c] Type - hermetically sealed
- [d] Nominal primary voltage - 11 000 Volt
- [e] No-load secondary voltage - 415/420 Volt
- [f] Phases and frequency - 3 - 50Hz
- [g] Vector group - DYN11
- [h] High voltage tap positions: -5%, -2.5%, 0, 2.5%, 5%
- [i] Tap positions control - externally controlled, no-load selector
- [j] Low voltage neutral - for solid earthing

- [k] Oil level indicator - required
 [l] Cooling – ONAN

LOW VOLTAGE COMPARTMENT

The low voltage compartment shall accommodate the necessary and specified equipment and provide space for future requirements:

This compartment shall be fitted with the following:

- 1 x SANS approved ISOLATOR APPLICABLE TO TRANSFORMER SIZE.
- 4 x Tinned copper bus bars rated for the size of transformer.
- 3 x 15VA class 1 current transformers of rating to suit the full load current of the power transformer, for total load indication purposes and to be installed between bus bars and isolator.
- 1 x combined indication (instantaneous) and maximum demand ammeters (thermal maximum demand), scaled to suit the CT's above or an electronic power meter.
- 3 x for 315 Mini substations space provision for F15D / F35D / L20B / J25S or equivalent approved circuit breakers. No circuit breakers to be supplied. Bus bars to be pre-drilled to accommodate fitment of cable tails in future.
- 9 x for 500/630/1000 Mini sub stations space provision for F15D / F35D / L20B / J25S or equivalent approved circuit breakers. No circuit breakers to be supplied. Bus bars to be pre-drilled to accommodate fitment of cable tails in future.
- 1 x 3 phase voltmeter with selector switch for all phases to neutral or power meter.
- 1 x 400V 50A 3-pole streetlight contactor with 400V coil.
- 1 x photo electrical cell mounted externally and protected against vandalism in a vandal proof enclosure or internally mounted with vandal proof sight glass.
- 3 x 63A and 40A SANS approved MCB's for streetlight circuits.
- 1 x 5A MCB for streetlight contractor and photocell.
- 1 x Switch for streetlight auto/manual control.
- 1 x Terminal block for streetlight control terminations.
- 1 x Unistrut for main outgoing streetlight cables.
- 1 x Electronic kWh meter rated 80A, 3-phase, 4-wire for the streetlight circuits.

MCB must be to the new SANS as per table below:

SANS 10142-1	The SA national standard for the wiring of premises.	Specifies the types of circuit breakers, the safety standards and their application in LV installations.
VC8036	The SA compulsory specification for circuit breakers.	Legislation issued under Government Gazette No. 29265 of 6 October 2006, makes the compliance with SANS 556-1 a mandatory requirement for the selling and distribution of these products.
SANS 556-1	The SA national standard for circuit breakers.	SA 'front-end' specification, referring to SANS 60947-2; with the three national deviations; covering all aspects of the performance requirements of circuit breakers.
SANS 60947-2	The SA national standard for low voltage switchgear and controlgear. Part 2: circuit breakers.	This standard – together with Part 1: <i>General Rules</i> – covers all the test requirements for circuit breaker products and is an adoption of the IEC standard.

Table 2: The standards and compulsory specification which apply to MCBs.

Note 1. All fuses and MCB's to be labelled to identify functional purpose - see schedule

SCHEDULE FOR LABELLING		
ITEM	LABELLED [BLOCK LETTERS]	LETTER SIZE
Isolator	Main Disconnect, AND Switch of in case of Emergency	12mm 6mm
Voltmeter [or power meter] Voltmeter Selector Switch	Voltmeter [Power meter] Voltmeter Selector Switch	6mm 6mm
3 x 2A fuses	R, W, B	6mm
kWh meter	Streetlight Meter	6mm
3 x 63A MCB'S	Streetlight Circuits	6mm
Auto-manual switch	Streetlight M/A Selector	6mm
Ammeters (MDI)	R, W, B - Load current	6mm
1 x 5A 10kA MCB	Streetlight Control	6mm

DELIVERY

Vredenburg Municipal Stores

ITEM 2 & 3
SUPPLY AND DELIVERY OF DISTRIBUTION & MEASURING TRANSFORMERS
1. The brief specifications are listed hereunder:

- [a] Transformers to be manufactured in accordance with SANS 780 as amended and shall bear the SABS mark
- [b] Type - hermetically sealed, low loss
- [c] Nominal primary system voltage - 11 000 Volt
- [d] No-load secondary voltage: 3-ph – 415/420 Volt, single phase transformers - 230 Volt
- [e] Phases and frequency; 3 or 1 at 50 Hz
- [f] Vector group: 3 phase transformers: 25 - 1000 kVA - Dyn11
- [g] Tap positions: High voltage tap positions: -5%, -2.5%, 0, 2.5%, 5%
Single phase: selector on single phase transformers: 5 % [on bushings]
- [h] Low voltage neutral - for solid earthing
- [i] Oil level indicator - required
- [j] Cooling: ONAN
- [k] **Termination arrangement and base type:**
- Type 1** 200 - 1000kVA:
MV--cable box for 11kV 3 core PILE GDSTA & XLPE cable, LV-cable box for 4 single core cables, [roller or skid base]
- Type 2** 50 - 500kVA:
MV--cable box for 11kV 3 core PILE GDSTA & XLPE cable, LV-cable box for up to 2 X 4 core 600/1000V PVC cable, [skid base]
- Type 3** 16 - 400kVA:
Open MV- and LV bushing [skid base and/or pole/platform mounted]
- [l] **Corrosion protection:** Transformers are to be hot zinc metal sprayed. Additional protective coatings to be applied for use in a highly corrosive coastal environment. Final colour to be C12 of SANS 1091 [Avocado], alternatively, a grey to Eskom specifications (Dove grey).
- [m] **Mountings for HV Surge Arrestors:**
3 SA-unit mountings shall be catered for on the HV side for Type 3.
- [n] **Measuring transformers:**
1. Voltage 11000V to 110V 3 phase 4 wire 50Hz, Insulation level voltage (ILV) : 12 /28/95kV, Vector Group: Star / Star, Burden: 100 VA, Accuracy: Class 0.5
 2. Current ratios 100/50/25-5A or 200/100/50-5A, Insulation level voltage (ILV): 12/28/95kV, 15VA Class 1, Short time rating: 20 kA for 1 second
 3. Outdoor units to cater for a meter compartment complete with VT fuses, CT secondary terminal bushings, all marked.
 4. Outdoor units shall be encased in a galvanised or 3CR12 [Dove grey] enclosure with similar specifications to the outdoor switches in Item 4 & 5.
- [o] **Delivery**
Municipal Stores, Vredenburg

ITEM 4 & 5: SPECIFICATIONS FOR RING MAIN UNITS AND SWITCHGEAR
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VERY IMPORTANT: NO ITEM FOR OUTDOOR UNITS WILL BE ACCEPTED FOR EVALUATION IF IT IS NOT IN AN ENCLOSURE THAT ENCLOSES THE STANDARD OF-THE-SHELF UNIT

SERVICE CONDITIONS

The conditions for outdoor use are:

- a) Ambient air temperature of -10 °C to 50 °C may be encountered;
- b) Wind pressure not exceeding 700 Pa (equivalent to 34m/s) should be allowed for;
- c) For coastal applications, the ambient air pollution level shall be level IV (i.e. very heavy) in accordance with SANS 60815.

RATED VOLTAGE AND FREQUENCY

The rated voltage of the ring main unit shall be 12 kV and frequency shall be 50 Hz.

RATED INSULATION LEVELS

The rated insulation level of a ring main unit shall be for the relevant rated voltages.

Rated peak lightning impulse withstand voltage (95kV)

Rated short-duration power frequency withstand rms. voltage (28kV)

RATED SHORT-TIME AND PEAK WITHSTAND CURRENT

- The rated short-time withstand current for integral switch-fuse combination earthing switches shall be a minimum of 2kA symmetrical.
- The rated short-time (20kA) and peak (50kA) withstand currents shall also apply to bus bars and to earthing switches.
- The standard value of duration of the rated short-time current shall be 3 seconds.

RATED BREAKING CURRENT

- Switches shall be capable of breaking the rated normal current

RATED SHORT-CIRCUIT BREAKING CURRENT

- The rated short-circuit breaking current of circuit-breakers of the specified rated voltage shall be equal in value to the rated short-time withstand current.

RATED SHORT-CIRCUIT MAKING CURRENT

- The rated short-circuit making current of circuit-breakers, switch disconnectors and earthing switches of the specified rated voltage shall be equal in value to the rated peak withstand current.

GENERAL

DESIGN AND CONSTRUCTION

- All ring main units shall be designed and constructed in accordance with the relevant requirements of SANS 62271-200, and with additional requirements not covered by SANS 62271-200, as set out in this specification. Only new ring main units shall be supplied.

- When it is not practical to disconnect cables from the switches for the cable dielectric tests, those parts that remain connected to the cables shall be capable of withstanding the cable test voltages specified for XLPE cables in SANS 10198-13 and for PILC cables in SANS 97, while the contacts of the switch on the bus bar-side may still be alive.
- Facilities shall be provided for lifting or slinging the entire ring main unit assembly. Lifting eyes with a minimum diameter of 30 mm shall be provided. The lifting eyes shall be positioned at the top of the ring main unit.
- All switching devices of the ring main unit shall be operable from the front of the ring main unit.
- All units shall be capable of being padlocked to prevent unauthorized access/operations.

DEGREE OF PROTECTION

- The degree of protection for ring main units shall be in accordance with SANS 62271-200.
- The degree of protection for a prefabricated outdoor kiosk (housing a ring main unit) shall be a minimum of IP44.

CONFIGURATION

The following abbreviations MEANS

- 'C' for a **C**able switch disconnecter;
- 'F' for a **F**use switch combination and
- 'V' for a **V**acuum circuit-breaker.

CABLE TEST FACILITY

- Integral cable test facilities that are accessible from the front of the ring main unit shall be provided for all functions (i.e. switch disconnectors and circuit-breakers).
- Each cable test facility shall be interlocked with its associated earth switch and capable of being padlocked to ensure that the test terminals of the cable test facility are not accessible when the cable is energized.
- Access to the test terminals of the cable test facility shall only be possible when the associated earth switch is in the EARTH position.

EARTHING FACILITY

- Each switch disconnecter and circuit-breaker shall have an integral cable earthing switch that complies with the relevant requirements of SANS 62271-102 and SANS 62271-200.

PADLOCKING

- Each switch disconnecter, circuit-breaker and earth switch shall be capable of being padlocked in the OFF and EARTH positions.
- Padlocking shall be provided to prevent the selection of the ON position while permitting operation from OFF to EARTH or from the EARTH to OFF positions.
- All padlocking facilities shall be suitable for padlocks with 6 mm diameter shanks.

GENERAL INTERLOCKS

- Positive mechanical interlocking shall ensure that there is a definite stop in the OFF position when:
 - a) switching from the ON position to the EARTH position, and
 - b) when switching from the EARTH position to the ON position.

INSULATING/INTERRUPTING MEDIUM

- The cable termination enclosures shall be air-filled.

- The ring main unit (excluding cable termination enclosures and accessible operating mechanisms) shall be sealed for life, with a minimum maintenance-free period of 30 years.

DESIGN

- Ring main units shall be of a fixed pattern design in accordance with SANS 62271-200 i.e. non-withdrawable. The cable termination enclosure shall be an interlock-controlled accessible compartment in accordance with SANS 62271-200. The cable test facility compartment shall be an interlock-controlled accessible compartment in accordance with SANS 62271-200. The sealed compartment(s) (refer to 4.2.10.2) shall be a non-accessible compartment in accordance with SANS 62271-200.

SWITCH DISCONNECTORS FOR RINGS AND/OR T-OFFS

General

- Switch disconnectors shall be at least class E2-M1 in accordance with SANS 60265-1.
- Each switch disconnector shall be a three-pole switch that complies with the requirements for general purpose switches of SANS 60265-1.
- The rated normal current of a switch disconnector shall be 630 A.

Operation

- The operating mechanisms of switch-disconnectors shall provide independent manual closing and opening.
- The plug-in connector for the hand-held remote-control facility shall be a circular bayonet type coupler. Details of connector shall be specified in schedule A. The male coupler shall be provided and positioned on the front of the RMU.

CIRCUIT-BREAKERS FOR FEEDERS

General

- Circuit-breakers shall be class C2-E2-M1 in accordance with SANS 62271-100.
- The rated operating sequence of the circuit-breaker shall be as follows: $O - t - CO - t - CO$ where t equals 3 minutes in accordance with SANS 62271-100.
- The rated normal current of a circuit-breaker shall be either 200A, 400A or 630A
- Each circuit-breaker shall be a three-pole device that complies with the requirements of SANS 62271-100.
- The first-pole-to-clear factor shall be 1,5 in accordance with SANS 62271-100.

Protection

- The protection tripping of the circuit breaker shall be through a self-powered protection relay with load indication and maximum demand registers.
- For the 200A circuit breaker, the current transformers (CT's) shall be of the multi-ratio type, with ratios of 200/100:1 A
- For the 400/630A circuit breaker, the current transformers (CT's) shall be of the multi-ratio type, with ratios of 400/200:1 A.
- The protection relay shall provide:
 - a) an over current function with normal inverse, very inverse, extremely inverse (IDMTL); definite time (DTL); and high-set instantaneous protection elements; and
 - b) an earth fault function with normal inverse, very inverse, extremely inverse (IDMTL); and definite time (DTL) protection elements
- The minimum earth fault pick-up current shall be 40A primary and shall be independent of the CT ratio selected.
- The protection relay and CT combination shall operate according to specification up to the rated short-circuit breaking current of the circuit breaker.
- A time and date stamped event recorder storing at least the last 5 trip events with a minimum resolution of 5ms shall be provided with the relay.

- The protection relay shall be provided with a dry (potential free) trip output contact.
- The relay trip output contact, RMU indications and alarms and all wiring to the relay (e.g. from CT's) shall be terminated onto terminal blocks.
- The relay and terminal blocks of the protection relay shall be easily accessible from the front of the RMU (e.g. for testing purposes).
- The terminal blocks shall be spring loaded screw terminals.
- The relay shall be positioned and installed in such a way that it is possible to exchange it with minimal effort and tools.
- The protection relay, current sensors or current transformers shall be installed and wired complete for service.

Operation

- The operating mechanism of circuit-breakers shall provide independent manual closing and stored energy tripping.
- Circuit-breakers shall have a trip-free mechanical switching mechanism.
- A plug-in connector for the hand-held remote-control facility shall be a circular bayonet type coupler. Details of connector shall be specified in schedule A. The male coupler shall be provided and positioned on the front of the RMU.

Bus bars

- Bus bars shall have the same current ratings as the ring main switch disconnectors.

CABLE TERMINATION ENCLOSURE AND TERMINATIONS

- Ring main units shall have air-filled cable termination enclosures in accordance with NRS 012 (SANS 876).
- The cable termination enclosures shall be suitable for the termination of PILE GDSTA or XLPE-insulated cables up to 185 mm² by means of separable connectors.
- The dimensions of the connectors may be assumed to be as indicated in NRS 012 (SANS 876).
- The type of termination required shall be Type 3 or 4 in accordance with NRS 012 (SANS 876).
- Bushings shall comply with the requirements of NRS 012 (SANS 876) for Type 3 and 4 terminations.
- For each cable termination enclosure, a range-taking cable support clamp in accordance with the requirements of NRS 012 (SANS 876) that is suitable for supporting a cable with an outer diameter of 75mm to 100mm shall be fitted.
- The phase sequence of bushings in all cable termination enclosures shall be marked.

LOAD MONITORING, TELECONTROL (SCADA) AND DISTRIBUTION AUTOMATION (DA) REQUIREMENTS

Load monitoring facilities

A current transformer (suitable for load monitoring) shall be provided for the centre phase only (i.e. L2). The current transformer ratio shall be as follows:

- a) Switch disconnector: 600:1A
 - b) Circuit-breaker T-off 200:1A for the 200A, 400:1A for the 400A circuit breaker and 600:1A for the 630A circuit breaker. The accuracy class shall be class 1 or better.
- The load current (in amperes) shall be displayed using an electronic ammeter with an LCD/LED or similar display. The ammeter shall be capable of displaying the actual real-time current and recording the maximum demand current (integrated over a 15-minute period). The ammeter display shall be visible from the front of the RMU.
 - All wiring from the CT shall be terminated onto terminal blocks.
 - The ammeter and terminal blocks shall be easily accessible from the front of the RMU (e.g. for testing purposes).
 - The terminal blocks shall be spring loaded screw terminals.
 - The ammeter shall be positioned and installed in such a way that it is possible to exchange it with minimal effort and tools.

The ring main unit shall be equipped with:

- **Analogue or Digital indications: (example)**

amperes per switch disconnecter, amperes per circuit breaker T-off, Status indications (switch disconnectors), switch disconnecter open/closed; and switch disconnecter earthed.

- **Status indications (circuit-breakers):**

circuit-breaker open/closed; and circuit-breaker earthed; low gas pressure (e.g. SF6 gas)

REQUIREMENTS FOR SULPHUR HEXAFLUORIDE (SF6) - FILLED SWITCHGEAR

- Sulphur hexafluoride ring main units shall be filled with new SF6 complying with the requirements of IEC 60376.
- The switchgear shall be factory sealed so as not to require any routine gas replenishment in normal service. The design, construction and sealing of gas compartments shall be such that, the period to replenishment of gas is not less than thirty years.
- A device for checking the SF6 pressure on each tank, even in service, with indication of minimum permissible pressure level for safe operation shall be provided.
- The pressure level device shall be clearly visible to the operator from the operating side (i.e. front) of the ring main unit.
- The supplier of SF6 ring main units shall render a service to recover and replenish SF6 gas.

EARTHING

- Each accessible earth connection terminal of a ring main unit shall be indelibly marked.
- The ring main unit and each cable termination enclosure shall be provided with a copper earthing bar not less than 25mm wide and a cross-sectional area not less than 120mm², to facilitate earthing of the ring main unit and associated cables. All earthing bars shall be bonded together (i.e. providing electrical earth continuity). Any bonding conductor used to interconnect the separate earthing bars shall be copper and have a cross-sectional area of not less than that of the ring main unit earthing bar.
- The current density in the earthing bars and/or bonding conductors shall not exceed 200A/mm² under the specified earth fault conditions.
- At least 4 holes of diameter to suit a M12 bolt (i.e. 14mm diameter) shall be provided in the earthing bar to allow for earth connections.

LIVE CIRCUIT INDICATIONS

- Voltage present identification systems (VPIS) complying with the requirements of SANS 62271-206 shall be provided on all switching devices of the ring main unit.
- The VPIS unit shall comprise of three integrated indication lamps marked in accordance with SANS 62271-206 (i.e. L1, L2, L3). In addition, three corresponding phase comparator connecting points in accordance with SANS 62271-206 shall be provided.
- The indicator lamps and the corresponding phase comparator connecting points shall be powered by capacitive dividers incorporated inside the MV bushings.

EARTH FAULT INDICATIONS

- A self-powered earth fault indicator (EFI) shall be supplied and fitted with each ring main unit.
- The EFI shall be provided with a label (stick-on type) stating the date of battery installation and expected battery replacement date.
- The EFI control unit shall be clearly visible to the operator from the operating side (i.e. front) of the ring main unit.

Enclosure/Kiosk (Compulsory for all free-standing outdoor ring main units)

- A kiosk is required for all units to be installed in the public space.
- The kiosk shall be constructed from materials in accordance with the relevant SANS regulations.
- All kiosks shall be finished in Avocado (C12) in accordance with SANS 1091.
- The ring main unit shall be supplied with the kiosk i.e. the ring main unit shall be fitted by the manufacturer into the kiosk, and the assembly shall be supplied as one unit.
- The design and construction of the kiosk shall complement the internal arc test requirements of the ring main unit. Therefore, in the event of an internal arc fault occurring in any air- or gas-filled enclosures within the ring main unit, the kiosk shall be designed for the safe venting of gases (with respect to operator as well as general public safety) released under conditions of arcing.
- The kiosk access doors shall be secured with a three-point locking mechanism.
- The three-point locking mechanism shall have an additional, captive, 10mm stainless steel Allen cap screw.
- The cap screw shall be recessed, i.e., the head shall be flush with the door surface and the screw shall lock the swivel mechanism of the three-point locking device when the mechanism is in the closed position.
- The kiosk shall be capable of being padlocked to prevent unauthorized access.
- Suitable lifting eyes shall be attached to the kiosk (at the top of the kiosk). The lifting eyes shall be designed to lift the kiosk with the ring main unit fitted inside. Lifting eyes with a minimum diameter of 30mm shall be provided.
- A steel documentation pocket shall be provided for the safe-keeping of all relevant documentation (i.e. installation, operating and maintenance instructions for the ring main unit and all routine test certification) on the inside of the kiosk door. The means used (e.g. pop rivets) to secure the pocket shall not protrude through the door.
- The kiosk doors shall be fitted with a facility to enable them to be held open at an angle of at least 90°, to allow operation under windy conditions. The facility shall be robust to withstand the force of wind and weather under adverse conditions.
- The kiosk doors and, if applicable, all steel enclosure sections, shall be electrically bonded to the main steel enclosure (i.e. inter-connected) by means of copper bonding conductors (i.e. tinned copper braids or PVC-insulated stranded copper cables, lugged at both ends) with a minimum cross-sectional area of 4mm².
- The main steel enclosure shall be electrically bonded to the ring main unit earthing bar by means of copper bonding conductors (i.e. tinned copper braids or stranded copper conductor, lugged at both ends) with a minimum cross-sectional area of 70mm².
- The kiosk and position of the ring main unit within the kiosk shall be suitable for mounting on concrete plinths in accordance with D-DT-0863. Flanges that are provided for the fitting of M16 holding-down set screws shall be a minimum of 5mm thick steel or alternatively shall be reinforced to prevent bending during handling, transportation and installation.
- The kiosk steel base and sills of the doors shall be constructed with removable sections adjacent to the cable termination enclosures to allow the MV cables to be moved into position during installation. These sections shall be lap-bolted with the nuts on the inside of the base channel and enclosure.

RATING/DATA PLATES

- All rating plates shall be securely attached; of intrinsically corrosion-resistant metal, with legible and ineradicable marking; comply with the relevant requirements of clause 5.10 of SANS 62271-200.
- Actual values shall be depicted on the rating plates and shall be provided for each switch disconnecter, or circuit-breaker with the following information:
 - a) rated normal current;
 - b) rated short time withstand current;
 - c) rated peak withstands current;
 - d) that the switch disconnecter or circuit-breaker has been tested to the relevant standard for switch disconnectors, and for circuit breakers.
- the class of the switching device; and
- for circuit-breakers, the ratios and classes of all current transformers.

- For current transformers, rating plates shall be provided stating the CT class, ratio(s) and burden (if applicable). For ring type current transformers, the rating plate shall be clearly visible and attached to each current transformer. For current sensor technology around the Type C bushing, the current transformer rating plate shall be positioned adjacent to the protection relay.

MARKING AND LABELLING

General

- All labels shall be securely attached.
- All labels shall be legible and of indelible marking.
- Metallic labels shall be intrinsically corrosion-resistant metal.

Main circuit designation labels

- The main circuit designation labels for indoor ring main units shall be blank sandwich board or equivalent (orange-black-orange) that can be removed easily for engraving (i.e. resulting in black lettering on an orange background). The main circuit designation labels for outdoor ring main units shall be made of a durable material.
- Main circuit designation labels for each switching device shall be located at the front of each ring main unit.
- Main circuit designation labels shall be at least 150mm wide and 35mm high.

Auxiliary circuit labels

- All relays, instruments, fuses, auxiliary circuit-breakers, control switches, luminous indicators and test points, the functions of which are not identified by signs or pictograms, shall be clearly labelled to indicate their functions.
- These labels shall be in text with black letters at least 5mm high, on a white background.
- Terminal blocks or rail-mounted terminals shall be labelled to identify them when more than one block is used. It shall be possible to access and test all terminal blocks, and read all associated labels, without undue effort.

ON, OFF and EARTH position labels

- All switching devices shall include labels that indicate the ON, OFF and EARTH positions.
- These labels shall be permanently marked metal plates that have characters at least 10mm high and shall be located on a moving component of the switch that is visible through an opening.
- The marking shall be as follows:
 - a) white lettering on a red background for the ON position;
 - b) white lettering on a green background for the OFF position; and
 - c) the earth symbol in black on a yellow background for the EARTH position.
- All position labels shall be visible to the operator standing in a normal operating position.

Other labels and signs

- Instruction plates in English or in pictograms shall be provided on switch-fuse combination panels to indicate to the operator how to insert and remove fuses when the fuse carriers are completely isolated and safe. These plates shall be placed near the appropriate interlocking device.
- The total mass of the ring main unit (in kilograms) shall be marked on the side or rear of the ring main unit. In the case of kiosk applications, the total mass of the ring main unit and kiosk assembly shall be stencilled on the side of the kiosk in white letters with a minimum font size of 50mm (e.g. "TOTAL MASS: 500kg").
- Cable test facilities shall be clearly labelled e.g. "CABLE TEST FACILITY BEHIND COVER".
- Where the supplier is not the manufacturer, the supplier shall provide a label containing the supplier's name or trademark.
- External metallic corrosion-resistant electrical symbolic warning signs (warning-flash) shall be permanently attached to all the doors. If pop-rivets are used to attach the signs to the kiosk doors, only aircraft (i.e. blind) pop-rivets will be acceptable. Normal pop-rivets are not acceptable.

- Push buttons provided for switching devices that incorporate stored energy operation shall be labelled accordingly (i.e. “TRIP” for the trip/open button and “CLOSE” for the close button if applicable). The labels shall be in text with black letters at least 10mm high, on an orange background.
- A short operating procedure shall be provided for the tee-off indicating the steps required to a) isolate and earth the tee-off and b) close the tee-off. The operating procedure shall be in text with black letters at least 5mm high, on an orange background. A drawing depicting the wording of the operating procedure label shall be provided and referenced in schedule B.

PROTECTION AGAINST CORROSION (ring main units, kiosks)

- The ring main unit is required for coastal (corrosive) environments.
- The supplier shall ensure that the coating system and instructions recommended by the paint manufacturer are used.
- For coastal (corrosive) environments, stainless steel, zinc metal-sprayed mild steel or other intrinsically corrosion-resistant metal (e.g. 3CR12) is acceptable.
- All other materials and components used shall be inherently corrosion resistant.

DOCUMENTATION

Documentation to be supplied with each tender

Tenderers shall supply the following documentation with each tender: Drawing showing the fully dimensioned general assembly of the ring main unit kiosk (if applicable), illustrating the following:

The following documentation shall be supplied (in the documentation pocket) with each ring main unit:

- completed factory routine test report;
- installation, operating and maintenance manual(s);
- current transformer routine test certificates; and
- Auxiliary circuit wiring diagram(s) (e.g. protection relay, LV CT's, EFI, live indication system, trip/close coils, etc.).

DELIVERY

VREDENBURG MUNICIPAL STORES

**ITEMS 6, 7 & 8:
SUPPLY AND DELIVERY OF ELECTRICAL CABLE AND CONDUCTOR**

SECTION A [COPPER CABLE]

1. 11kV PILE GDSTA PVC Copper Cable

This cable shall be of the 3-core, plain, annealed, stranded copper conductor, fully impregnated, non-draining, paper insulated, lead covered, fibrous bedding, galvanised double steel tape armoured and PVC served type, manufactured in accordance with the requirements of SANS 97, Table 18 for general purpose duty. This cable shall be suitable for use on 11000V, 3 phase 3-wire, 50 cycle, non-earthed systems. Colour - black (UV Stabilised) with size, voltage and SABS specification embossed on outer sheath at 1m intervals. Cable will be ordered in full drum lengths only. Cable to be marked in meters (sequential markings).

2. 11kV XLPE Copper Cable (only dry cured)

Type A

This cable shall be of the 3-core stranded, compacted circular copper conductor and must comply with the specifications of SANS 1339. The colour of the outer sheath shall be black (UV stabilised). Apart from the requirements and specifications, the outer surface of the sheath shall also be embossed with the size of the cable at regular intervals. Cable to be marked in meters (sequential markings).

3. 600/1000V Distribution cable [PVC low voltage cables]

This cable shall be of the 4-core, plain annealed stranded copper, shaped conductor with PVC insulation. Cable, PVC outer sheathing, steel wire armouring and PVC inner sheathing to be manufactured in accordance with the requirements of SANS 1507. Cable will be ordered in drum lengths of 300 or 500m as required. Cable to be marked in meters (sequential markings).

4. 3,3kV PVC SWA Cable

To SANS 1507-3, 1900/3300v 3 core, PVC insulated, bedded and screened, Steel wire armoured. Cable will be ordered in drum lengths of 300 or 500m as required. Cable to be marked in meters (sequential markings).

5. Flexible General-Purpose Trailing Cable

Flexible copper conductor (Class 5 Annealed Copper Conductor), EPR based rubber insulated, core laid up and Neoprene rubber sheeted.

6. Power Panel Flex Cable

Single core Flexible copper conductor to SANS 1411 part 1, insulated with general purpose flexible grade PVC and sheathed a flexible grade waterproof PVC/ Nitrile. SANS 1574-3, temperature -10 – 70 Degrees, 600/100V.

7. 500mm², Single Core 11kV XLPE Armoured Underground Cable, Copper tape screened, PVC bedded, Copper wire, armoured and PVC sheathed.

This cable shall be of the 1-core stranded, compacted circular copper conductor and must comply with the specifications of SANS 1339. The colour of the outer sheath shall be black (UV stabilised). Apart from the requirements and specifications, the outer surface of the sheath shall also be embossed with the size of the cable at regular intervals and to be marked in metres (sequential markings).

SECTION B [ALUMINIUM]

Same (mostly) as Section A, but with Aluminium conductor.

1. 11kV XLPE Aluminium Cable (Water blocked only)

Type A

This cable shall be of the 3-core stranded, compacted circular aluminium conductor and must comply with the specifications of SANS 1339. The colour of the outer sheath shall be black (UV stabilised); XLPE insulated, individually copper tape screened, flame retardant PVC bedded, galvanized steel wire armoured, medium density Polyethylene sheathed.

Apart from the requirements and specifications, the outer surface of the sheath shall also be embossed with the size of the cable at regular intervals. Cable to be marked in meters (sequential markings).

CONDUCTOR – COPPER AND ALUMINIUM

1. Hard Drawn Copper Conductor for Power distribution

The conductor shall meet the specifications of SANS 182-1.

A consignment shall not be less than the manufacturer's minimum standard length per drum.

2. Aluminium Alloy Conductor for Power distribution

The conductor shall meet the specifications of SANS 182-2 and shall be impregnated with an anti-corrosive inhibitor. A consignment shall not be less than the manufacturer's minimum standard length per drum.

DELIVERY

VREDENBURG MUNICIPAL STORES

**ITEM 9:
SUPPLY AND DELIVERY OF AERIAL BUNDLE CONDUCTOR**

General

Item must comply with applicable SABS standards (SANS 1418-1 & 2).

Standard Specifications

Aerial bundle conductors offered shall comply with the relevant National Specifications. The name of the cable manufacturer shall also be clearly stated on the tender.

Any other offers will be considered if the following minimum requirements are met and can be acceptably proved by the Tenderer.

Operating conditions

- | | |
|--|----------------|
| 1. Nominal system voltage | 400V or 11000V |
| 2. Average maximum summer ambient temperature | 40°C |
| 3. Average minimum winter ambient temperature | -5°C |
| 4. Pollution conditions Tenderers to assume severe marine conditions | |
| 5. Ultraviolet radiation level | |
| 6. Wind speed for design 120 km/h | |
| 1/50 microsecond impulse withstand Voltage (type testing only) | 15kV peak |
| Continuous conductor operating temperature allowable that will not damage the insulation | 75°C minimum |
| Allowable final conductor temperature | 250°C |

The insulation shall further carry the neutral and phase identification. All forms of core identification shall be clearly and indelibly marked at intervals not exceeding 250mm. Preference shall be given from the same supplier, or an alternative local source.

Composition of bundle

Each bundle shall consist of the following:

Three hard drawn (3/4 hard) stranded and circularly compacted electrical grade aluminium phase conductors of the specified cross – sectional area and insulated as further specified herein.

One stranded and circularly compacted aluminium alloy conductor, with a cross section and current rating which shall not be less than 50% of the specified phase conductor size, insulated as specified further herein, to serve as neutral conductor.

If required and specified herein, one hard drawn (3/4 hard) stranded and circularly compacted electrical grade aluminium streetlight conductor of the specified cross-sectional area and as further specified herein.

Tenderers may offer alternative bundle compositions (e.g. messenger plus four aluminium phase conductors) provided that:

The neutral/messenger insulation shall be electrical equivalent to the phase conductor insulation. The neutral/messenger current rating shall not be less than 50% of the phase conductor current rating.

Conductor Insulation

Preference shall be given to insulation systems with a proven long-term success record in tropical and high ultraviolet radiation conditions. Such proof shall be provided with the tender.

Preference will be given to extruded cross-linked polyethylene insulation with a minimum thickness of 1,3 mm, suitably treated against ultraviolet radiation levels that may be expected anywhere in Southern Africa.

The following minimum requirements must be met for the 400V ABC:

Highest continuous system voltage	440V RMS, phase to phase
Continuous 50Hz withstand voltage	1 000V RMS
15 minute 50Hz withstand voltage	2,5kV RMS

DELIVERY: VREDENBURG MUNICIPAL STORES

ITEM 10: SUPPLY AND DELIVERY OF RECLOSING UNITS WITH ASSOCIATED EQUIPMENT

1. General

The units must be vacuum break gas insulated automatic circuit reclosers for outdoor use on the West Coast on a 11KV network and must be designed to allow for longevity, optimized performance and automation, remote control and monitoring. The units must be equipped with Remote Terminal Units (RTU's) and modems/radios as standard equipment, including displays, power supplies, batteries, wiring connectors or enclosures that are required.

Each unit shall consist of:

- A: Main Reclosing Unit**
- B: 2 x Load Break Devices**

2. Brief Specifications

A: Main Reclosing Unit

Voltage:	11/12KV
Load Current:	400A
Tank/Enclosure:	Stainless Steel (316)
Contact Break:	Vacuum Interruption
Insulation:	SF6
Position:	Pole mounted
Climate:	Coastal, ambient temperature 0 – 40 degrees Celsius

Auxiliary Power

An auxiliary transformer, which shall also be pole mounted, with a voltage ratio of 11000/230, must be supplied with all fittings, cabling and control gear that may be required.

Telemetry Interface (optional)

Interfaced to our SCADA system either through its built-in V23 modem and a radio and an uninterruptible power supply must be included for radio communication when the power is off. UPS must be mounted inside the communications cubicle. Telemetry protocols of Council must be supported.

Remote Indications needed:

Breaker status, Line Voltage, Load Current Instantaneous, Fault Indications, AC & DC Aux supply voltages, Gas loss/low pressure

Computer Interface

The Operating System must be a Windows based software program for programming from a personal computer with a computer-based software package to allow off-line and on-line programming, monitoring and control of the recloser via a RS232 port or an USB converted serial port.

Remote Control

Units must be able to be individually remote controlled and monitored by radio signal and provide features such as alarm and event handling, instantaneous load and maximum demand for report generation.

Remote Operations needed:

Recloser: On/Off
SEF: On/Off
ARC: On/Off

Installation & Layout

The recloser shall be pole mounted at a minimum height of 5000mm at unit floor level with a pole mounted control and communications cubicle which must house the operator control panel and micro-electronics at ground level at an operating height of not less than 1500mm from ground. A detachable control cable must be used to connect the cubicle to the recloser controls.

Lightning arrestors (supplied by Tenderer) must be mounted on mountings that shall be provided for such installation on the main unit.

Recloser bushings must be so designed to accommodate either a 185mm² copper cable or OAK aluminium conductor or any smaller size of either copper or aluminium.

A clearly visible external pointer must indicate the service contact position.

Compulsory Standard Fittings

1. Bushing boots and 185 mm² copper insulated cable tails rated at 400A to provide for less faults caused by birds and other wildlife.
2. Ground operated hook stick.

Protection features

The recloser unit must provide the following protection:

1. Over current (settings in units of 25 from 100 up to 400A)
2. Earth Fault (settings in units of 10 from 40 up to 100A)

3. Sensitive Earth Fault (settings in units of 1 from 4 up to 20A)
4. Instantaneous Protection: Multiplier x Setting Current, range: 1 - 20
5. Recloses to lock-out: 4 – must be time selectable from 0,5 to 180 seconds for Overcurrent and Earth Fault only, no reclosing on Sensitive E/F.
6. Inverse Time Curves: Standard Inverse, Very Inverse and Extremely Inverse
7. SEF time settings in seconds from 0.1 up to 20 DTL

B: Load Break Devices

Two units must be supplied with each reclosing unit as in Item A.

Current rating:	400Amp continuous
Current Load break:	200A
Line voltage:	up to 22kV
Operating mechanism:	PULL-TO-OPEN, PULL-TO-CLOSE high-level spring-close mechanism.
Insulators:	Cycloaliphatic epoxy, 650mm creepage, 150kV BIL
Installation:	Pole mounted

Compulsory:

1. LOW LEVEL MECHANISM

A padlocking facility is an essential requirement [low level operating mechanism or equivalent type of mechanism] for lock-out during maintenance on the overhead line.

2. LOAD BREAKING CAPABILITY

The load-breaking capability of 200A by the installation of a well-proven arc control device is an essential requirement.

IMPORTANT

- i. Specification Sheets for all items tendered must be included with the tender document.
- ii. All spares/tools/equipment necessary to install the units tendered must be included in the tender price.
- iii. All additional labour/commissioning/testing needed to make the units fully functional after installation must be included in the tender price.
- iv. Notwithstanding any of the above brief specification or any omissions therein, units tendered must be fully functional items at delivery and any costs to alter/modify these units for full functionality after I installation, will be for the tenderer's account.
- v. The reclosing units must be commissioned by the Tenderer on installation thereof on the network and costs must be included in the tender price.

DELIVERY

Vredenburg stores

**ITEM 11:
SUPPLY AND DELIVERY OF KWH METERS (POST PAYMENT)**

The meters shall comply with relevant South African National Standards (SANS 62056) and shall be rated for continuous loads up to 100A for an hour. All meters must have sealing facilities and should be fairly vandal proof.

1. ELECTRONIC METERS SINGLE PHASE kWh: 20 - 80A, 200 - 250V

The meter shall have a double insulated, glass filled polycarbonate case and shall be protected against corrosive atmospheres. The display shall be liquid crystal or similar. The support software must be made available on delivery.

2. ELECTRONIC METERS 3-PHASE 4-WIRE kWh: 20 - 100A, 365 - 440V

Specifications mostly identical to Sub item 1.

3. DELIVERY:

Vredenburg Municipal Stores

**ITEM 12:
SUPPLY AND DELIVERY OF SINGLE & THREE PHASE ELECTRONIC 4 QUADRANT METERS**

1.1 ELECTRONIC METERS 1-PHASE 2-WIRE DIRECT TYPE kWh: 5-100A, 220-240V

SYSTEM	1 Phase 2 Wire Direct Connect
SYSTEM VOLTAGE	230V (P-N) +20% to -20% 220 – 240V options
CURRENT RATING IB	5A
CURRENT RATING IMAX	100A
STARTING CURRENT	0.4% Ib
FREQUENCY	50 Hz or 60 Hz +/- 2%
2 METROLOGY LED PULSE VALUE	2000 impulses per kWh
1 ALARM LED	2000 impulses per kVarh Tamper activated
NORMAL OPERATING TEMPERATURE	-25°C to +60°C
EXTREME OPERATING TEMPERATURE	-40°C to +70°C
STORAGE & TRANSPORTATION TEMPERATURE	-45°C to +80°C
HUMIDITY	Up to 95% RH (Non-condensing)
POWER CONSUMPTION: METER ONLY	Voltage circuit 0.8W, Current Circuit 8VA
METER AND COMMS MODULE	Voltage circuit 1.2W, Current Circuit 10VA
ACCURACY	Class 1.0 kWh IEC62053-21 Class 2.0 kvarh IEC62053:23
CLOCK ACCURACY	5 ppm = 0.5 Sec/day at 23°C.
BATTERY CLOCK SUPPORT (ON THE SHELF)	10 years (Replaceable)
MOUNTING	House Service (Wall)
INTEGRATION PERIOD	Programmable 1-60 minutes
PROGRAMMABLE DISPLAY SEQUENCE	With Backlight Configurable Displays List
CHARACTER SIZE	10mm x 5 mm
DIGITS	8 Digits
READ WITHOUT POWER	Supported

MEMORY: - PROGRAMMABLE LOAD PROFILE BILLING PROFILE (MONTHLY) EVENTS LOGS	4 Channels 100 Days (30 Min) 12 Sets Standard, Tamper, Contactor & Power Quality – all configurable
INGRESS PROTECTION	IP54
OTHER ELECTRICAL PARAMETERS INSULATION IMPULSE VOLTAGE AC	Conform to IEC Standards 4 kV 10kV 4 kV
METER COMMUNICATION INTERFACES	2G Modem 3G Modem Internal RS485 port (multi-drop 32 devices over 1.2 km) Optical Port
FEATURES	kWh, kvarh & kVAh, import/export 4 quadrant measurement Comprehensive Tariff recording capability LCD Display (Auto & Manual modes) & Read without Power Capability Over the Air (OTA) firmware upgrade capable SMARTset Programming software Internal Contactor for remote connect, disconnect & load limiting (Optional) DLMS approved Protocol Load Profile memory up to 100 days for 4 channels with 30 min Internal 12 Months Billing History Data for 20 selectable objects Extensive Tamper detection & logging Clock & calendar battery back-up for ten years and field replaceable 10-year operating Life
SIZE MAXIMUM	Length 244 x width x 137 x depth 76 (mm)

The meter shall have a double insulated, glass filled polycarbonate case and shall be protected against corrosive atmospheres. **It should have a Graphical User Interface (GUI) software to allow for programming, configuration and reading with a site verification application for commissioning. It should support AMI/AMR. Communication cable must be supply and delivery of first purchase of any meter.**

1.2 ELECTRONIC METERS 3-PHASE 4-WIRE kWh: 5 - 100A, 57.5 - 240V

3 ELEMENT	3 phase 4 wire 2 phases of a 3 phase 4 wire 2 phase 3 wire 1 phase 3 wire
CURRENT RANGE	CT operated – 5-6A, 5-10A, 1-2A, 1-1.2A Direct connected – 10-100A (widest range)
VOLTAGE RANGE FREQUENCY	57.5 – 240V (3 phase 4 wire) 50Hz
BURDEN VOLTAGE CIRCUITS (230V) CURRENT CIRCUITS	Single element – 1.92W, 4.17VA Two/three element – 1.12W, 2.45VA CT operated – 0.12VA @ 5A/phase, 0.02VA @ 1A/phase Direct connected – 0.2VA @ 100A/phase
INSULATION IMPULSE WITHSTAND	4kV RMS 50Hz 12kV 1.2/50µS 50ohm source

DISPLAY LCD	2 line, 16 character dot matrix Liquid crystal display 8mm digits
BAUD RATES	1200, 2400, 4800, 9600
CERTIFIED PRODUCT LIFE	10 years
TEMPERATURE	-20° to + 55° C (Operational range) -25° to + 70° C (Storage)
HUMIDITY	Annual Mean 75% (for 30 days spread over one year, 95%)
PULSE WIDTH/WEIGHT	Programmable
WEIGHT MAXIMUM	1500 grams
SPECIFICATIONS	IEC 62052-11 and IEC 62053-21, 022, -23
CASE	IP53 to IEC 60529:1989
MEASUREMENT QUANTITIES	kWh total import/export kvarh Q1, Q2, Q3, Q4 kVAh (2 calculated values) 3 customer defined registers - summation of up to 5 values 4 inputs for external meters (if fitted)
COMMUNICATION DEVICES	GSM/GPRS Modem Ethernet Modbus Converter RS232 & RS485 Modules Optical Flag Probe Wireless RF Module Local: IEC 62056-21 (formerly IEC 61107) Remote: Interchangeable modules (RS232, RS485 or customer specific)
FEATURES	OBIS Configurable Display 450 days Load with 370 days Instrumentation profiling SMARTset Programming software Supporting AMI/AMR Solutions/Packages Main Cover removal tamper detection Terminal Cover removal tamper detection 15 Year Design Life Multi-drop capable (up to 32 meters on RS485 bus)

1.3 ELECTRONIC METERS 3-PHASE 4-WIRE kWh: 5-100A, 230-400V

3 ELEMENT	3 phase 4 wire 2 phases of a 3 phase 4 wire 2 phase 3 wire 1 phase 3 wire
CURRENT RANGE	Direct connected 20 – 100A CT operated 5 – 6A
VOLTAGE RANGE	230V (L-N) 400V (L-L)
FREQUENCY	50Hz
BURDEN	
VOLTAGE CIRCUITS (230V)	0.9W, 9VA capacitive burden/phase [max]
CURRENT CIRCUITS	2VA @ 100A/phase [max]
INSULATION	4kV RMS 50Hz
IMPULSE WITHSTAND	12kV 1.2/50µS 500 ohm source
DISPLAY LCD	9.8 x 3.5mm characters

	High contrast, wide angle
BAUD RATES	Up to 9600 Baud
CERTIFIED PRODUCT LIFE	10 years
TEMPERATURE	-40° to + 55° C (operational range) -40° to + 85° C (storage)
HUMIDITY	Annual Mean 75% (for 30 days spread over one year, 95%)
PULSE WIDTH PULSE WEIGHT	Programmable from 10 to 250 mS Programmable from 1, 2, 4, 5, 10, 20, 25, 40, 50, 100 Wh
WEIGHT MAXIMUM	940 grams
SPECIFICATIONS	kWh Class 0.5 IEC 62053:21 5-6A CT Operated kVarh Class 1.0 or 2.0 IEC 62053:23
CASE	IP53 to IEC 60529:1989
MEASUREMENT PROVIDED	Import/Export (Wh), Q1, Q2, Q3, Q4 (VArh), Import/Export (VAh)
COMMUNICATION DEVICES	GSM/GPRS Modem Ethernet Modbus Converter RS485 BusBox Module Optical Flag Probe Wireless RF Module Local: IEC 62056-21 Remote: Serial Data Port
FEATURES	OBIS Configurable Display 300 days Load Profile Data SMARTset Programming software Supporting AMI/AMR Solutions/Packages Main Cover removal tamper detection Terminal Cover removal tamper detection 15 Year Design Life Independent per phase kWh recording and display Multi-drop capable (up to 32 meters on RS485 bus)

2.1 MODEM

- It should be compatible with an Elster A1140/A1700.
- It must be housed in a carrier that fits under the terminals cover of the meter.
- Communication between the modem and meter must be compatible with smart set software through the RS232 port and the GPRS/GSM modem.
- It must display GSM signal strength.
- It must connect to KoCos APN via Vodacom sim card.
- It must be remotely manageable via SMS including modem configuration.
- The antenna must have a magnetic base, 5dBi gain with at least 3m cable.

2.2 POWER SUPPLY

- The tenderer shall supply a power supply for the modem above mentioned.
- The power supply should be able to handle a range of voltages, from 110Vac up to and including 250Vac.
- The power supply unit must connect to the meter via a RS232 adapter.

3. DELIVERY

Electrical Department Stores, Vredenburg.

**ITEM 13:
PRE-PAYMENT METERS**

Pre-Payment meters shall comply with the following requirements:

The pre-payment meters must be of the type single phase and 3-phase energy dispenser for use as a pre-payment device to enable the prepayment sale of electricity to consumers and must comply with the following requirements: -

1. The enclosure and meter must comply with relevant South African standards.
2. The maximum current to be metered shall be 80A but the current level should be adjustable in 10A increments to suite the consumer/supply authority requirements.
3. It must be designed to enable a unique encrypted number as per STS standard to enter credit into the meter. This number should be specific and not re-useable after it has been entered.
4. Credit entry should be via a keypad on the front cover of the pre-payment meter, through a handheld keypad or from a common base cover plate mounted keypad. The amount of credit entered/used/remaining must be indicated on a liquid crystal display.
5. The enclosure must be sealed by the insertion of anti-tamper plugs and an opto-electrical device within the unit to ensure that any attempt at illegally opening the unit must result in continuous tripping of the circuit breaker and interrupting the supply until the device is reset.
6. The encrypted numbers should be derived from a personal computer derived Credit Dispensing Unit which has a special function encryption card installed.
7. Protection against lightning by making use of CT (current transformer) technology must be provided.
8. The pre-payment meters must carry a warranty of at least 12 months.
9. The split meter must be of the PLC or RF type and shall have a wall mounted holder for the portable keypad which shall comply with point 4 above.
10. The meter shall switch off if reverse current is detected with a clear message/code to indicate the *OFF* due to reverse current.

Communication (CIU) for PLC or RF type

1. PLC -100m range
2. RF – 200m range.

COMPATIBILITY

Meters tendered must be compatible with the existing dispensing/software system in use by Council and STS compatible. **(TID roll over compatible)**

DELIVERY VREDENBURG MUNICIPAL STORES

ITEM 14: SUPPLY AND DELIVERY OF WOODEN POLES

1. Creosoted poles shall meet the specification of SANS 753 and 754 and shall carry the relevant SABS/SANS mark. All poles shall be clearly marked at 3 metres from the foot of the pole with a unique marked or colour stained data plate or stainless-steel strapping

1.1 9,0 meter Poles - 180 to 200mm tops - (Class A or Class B)

Top and bottom ends of each pole shall be strapped with suitable strapping method.

1.2 10,0 meter Poles - 180 to 200mm tops - (Class A or Class B)

Top and bottom ends of each pole shall be strapped with suitable strapping method.

1.3 11,0 meter poles - 180 to 200mm tops (Class AA or Class A)

Top and bottom ends of each pole shall be strapped with suitable strapping method.

1.4 13,0 meter poles - 200 to 220mm tops (Class AA or Class A)

Top and bottom ends of each pole shall be strapped with suitable strapping method.

2. Quantities for a single order

A consignment shall consist of a minimum of 50 poles (mixed quantities, as specified under 1.1 to 1.4).

3. Delivery

Vredenburg Municipal Stores

**ITEM 15:
MEDIUM VOLTAGE INDOOR BREAKER UPGRADING / RETROFITTING**

A. INDOOR MEDIUM VOLTAGE BREAKER UPGRADING / RETROFIT

The retrofit medium voltage circuit breaker must consist of three separate vacuum circuit breaker poles that are maintenance free lifelong sealed units. The opening and closing operations shall be a stored energy, mechanically operated mechanism which performs independently from that of the operator's actions. The breaker shall be of the type horizontally withdrawn to the service, earth or fully withdrawn positions. Raising and lowering of the circuit breaker is by means of a geared mechanism with a removable operating handle. Motorized raising and lowering of the circuit breaker shall be quoted as an optional feature. Secondary connections between the circuit breaker and the enclosure shall be by means of self-aligning isolating contacts, which are located on the inner right-hand side of the circuit breaker compartment. The contacts in the vacuum interrupters shall be of a design with special spiral geometry that creates a self-generated rotating magnetic field over the full area of the arc column.

INTERLOCKS

Safety shall be ensured by simple positive interlocks which will prevent:

- Racking up or down of a closed-circuit breaker.
- Moving of a circuit breaker unless it is fully lowered.
- Locating of a circuit breaker in any other position that the one selected.
- Closing of a circuit breaker unless it is fully raised or fully lowered.
- Closing of a circuit breaker when fully raised unless the required secondary connections are made.

EXISTING UNITS TO BE REPLACED

- Reyrolle type LMT, LMS, LMR switchgear panel.
- Manual mechanism.

SUPPLY, COMMISSIONING, TESTING

Units supplied shall be commissioned and tested by the manufacturer after delivery and before installation, and thereafter, a test certificate shall be supplied to council for each unit. All modifications to the existing panels, additional control gear or instrumentation shall be included in the price.

GUARANTEE

Units shall have a 1 (one) year guarantee on design, manufacturing and workmanship after installation.

B. OUTDOOR HIGH VOLTAGE BREAKER UPGRADING / RETROFIT

The retrofit 66kV high voltage circuit breaker must consist of three separate vacuum circuit breaker poles that are maintenance free, lifelong sealed units. The opening and closing operations shall be a stored energy, mechanically-operated mechanism which performs independently from that of the operator's actions. The breaker shall be of the vertical type.

Motorized spring charging shall be used. The contacts in the vacuum interrupters shall be of a design with special spiral geometry that creates a self-generated rotating magnetic field over the full area of the arc column.

INTERLOCKS

Safety shall be ensured by simple positive interlocks which will prevent accidental closing/opening of the unit.

SUPPLY, COMMISSIONING, TESTING

The base plinths shall be modified/alterd by the tenderer if needed. All 66KV connections and earthing that may be required to be altered for the new units are the responsibility of the tender as well as the cost thereof. **Units supplied shall be commissioned and tested by the tenderer after installation and a test certificate shall be supplied to council for each unit.** All modifications to the existing panels, additional control gear or instrumentation shall be included in the price.

GUARANTEE

Units shall have a 3 (three) year guarantee on design, manufacturing and workmanship after installation.

DELIVERY

Vredenburg Electrical Stores.

ITEM 16: SUPPLY & DELIVERY OF ELECTRICAL DISTRIBUTION KIOSKS

The boxes and kiosks are required for use on a 230/400V, 50Hz, 3-phase 4-wire, underground cable system, the neutral of which is solidly earthed.

All the equipment supplied shall be suitable for continuous operation under the harsh West Coast conditions, as well as vandal proof in design. Therefore, it shall be so designed as to ensure adequate protection against corrosion and vandalism.

General Requirements

The unit shall comprise a root, an outer shell, and an internal frame supporting and equipment mounting board and supporting the incoming and outgoing cables. The unit shall be constructed from polyethylene or SMC (Sheet Moulding Compound) as detailed in the specific requirements. Busbars to be delivered separate from kiosks [not installed]

Polyethylene units shall be manufactured from Linear Low-Density Polyethylene using the rotational moulding method. The unit shall be rigidly moulded and shall have a high impact resistance and mechanical strength. The polyethylene compound used shall be chemically resistant and shall be resistant to deterioration from prolonged contact with soil and/or moisture. The unit shall be resistant to abrasion and heat and shall be specifically treated with stabilizing additives. To provide enhanced ultraviolet (UV) breakdown resistance. The Tenderer shall detail in the tender documents the minimum service life expectancy of the unit before UV radiation adversely affects the rigidity, mechanical strength and/or composition of the polyethylene compound, the materials used shall be free from blow holes or any other defects.

The polyethylene component parts shall be manufactured within close tolerances and shall permit interchange ability of similar parts. Polyethylene units shall have an internal frame constructed from self-supporting polyethylene equipment mounting panel.

The degree of protection of the installed kiosk shall be at least IP 54 to SANS 60529.

The units shall be fitted with bus bars, earth bars, neutral bars and consumer neutral bars. All internal equipment to be supplied separately, including all mounting devices.

The bus bars and neutral bars shall be tinned high conductivity copper bus bars in accordance with SANS 1195. Unless otherwise stated below, the phase and neutral bus bars shall have a minimum uniform cross-sectional area of 200mm² and shall be rated to carry a continuous current of 400A. The bulbar temperature at rated load shall not exceed 70°C.

The bus bars and neutral bars shall be pre-drilled, prior to tinning, in accordance with the requirements specified for the particular unit type. The bus bars and neutral bars shall be fitted with close tolerance stainless steel bolts, nuts and washers at all connecting points.

The bus bars shall be mounted on red, white and blue colour coded stand-off insulators. The bus bars shall be permanently colour coded in an approved manner to allow identification of the red, white and blue phases and the neutral bar. Red phase shall be situated at the top.

The neutral bar shall be insulated from earth by means of black stand-off insulators. The neutral bar and consumer neutral bar, where applicable, shall be connected to the earth bar with a 25mm x 3mm solid copper earth strap [to be supplied separately].

The bus bar insulators shall be nylon colour coded type M8 stand-off Insulators. The Insulators shall be rated to withstand a working voltage of 1000V under normal and damp conditions and shall be rated to withstand high voltage tests of 2kV for 5 minutes. The bus bars shall be suitably insulated with heat shrink insulation wherever practicable, and in an approved manner, to prevent accidental contact.

One or more vertical face horizontal I-"Unistrut" cable clamping rails shall be affixed at the bottom of the unit's frame and shall extend the full width of the unit. Cable clamping facilities shall be provided for incoming cables at the back of the mounting panel and for consumer cables at the front of the mounting panel. Galvanized or stainless-steel K-clamps or other approved means of clamping cables of varying sizes securely shall be provided.

For all units manufactured from polyethylene, all non-current carrying metal parts, cable armouring and equipment shell be suitably bonded to the earth bar and suitably treated against corrosion. The earth stud, neutral bus bar and earth bus bar shall be connected in accordance with the requirements specified for the particular unit's type.

A 150mm x 160mm SANS 1186-1 Type WW7 danger sign, including the words "Danger, Gevaar, Ingozi", on the back and front of each unit. In the case of non-steel units, the danger signs shall be in the form of an indelibly marked vinyl sticker. No rivets or bolts shall be used to fix the danger sign and the danger sign shall not be painted onto the unit.

Vandal proof Polyethylene: 6-Way, 9-Way Double Door Kiosks

- Polyethylene Shall be manufactured from compounded dark grey UV stabilised Linear Low Density Polyethylene (LLDPE) using rotational moulding. Such UV Polyethylene to carry a 25 year UV guarantee.
- The design of the unit to be such that all external surfaces are "rounded" to prevent buckling.
- Shall be rigidly moulded and have high impact resistance and dielectric strength.
- Kiosk wall thickness shall be at least 6 -7 mm throughout.
- LLDPE used must be chemically resistant and resistant to deterioration from prolonged contact with soil and/or moisture.
- Must be resistant to abrasion and heat and specifically treated with stabilising additives to provide enhanced UV breakdown resistance.
- Materials used must be free from blow holes and defects. Frame: Root must be moulded incorporating a self-supporting polyethylene equipment mounting panel, so as to decrease the likelihood of condensation. The frame must contain a 19mm wooden block board inserted the whole width and length of the frame.

Colouring

- All Kiosks shall be coloured "Light Grey – UV25."

Doors & Hinges

- Must be manufactured from polyethylene.
- Danger labels on the doors must be of the mould-in graphic type.
- Doors must open at least 130 degrees with hinges being an integral part of the moulding process.
- No piano hinges will be accepted.
- Doors to be removable on site for ease of installation, maintenance and replacement (where necessary).
- Stainless Steel 3 Point gravity pad lockable locking mechanism to be provided for both doors.
- Polyethylene external lock cover box to cover locks to be provided for both doors.
- A polyethylene legend holder with card must be riveted to the inside of the consumer door.

- All rivets, bolts, nuts, washers and set screws must be Stainless Steel.

Din Rail

- Two lengths of 35mm perforated din rail to be fitted the width of the back board on the consumer side for mounting of CB's and split meters. (Metering kiosks only)

Cable Termination

- Galvanised heavy duty Unistrut 40 x 20mm is to be installed on both the incomer and consumer side of the kiosk, for cable termination and must be connected to the Earth and neutral bars by means of 70mm sq cable

Busbars

- All kiosks must be fitted with phase busbars, earth bars and neutral bars.
- All Busbars to be high conductivity tinned copper.
- Phase Busbars are to be mounted horizontally on a moulded 3Ph staggered polyethylene Busbar holder.
- Phase Busbars must be capable of accommodating 3 x 300mm cables (per phase) and must be heat shrink colour coded red, white, and blue.
- A polyethylene Busbar shroud, which is enclosed on top and sides for safety, to be fitted over the phase Busbars.
- The Busbar shroud is to include a mould-in graphics danger label, as well as a trafolite danger live Busbars label.
- Busbars must be predrilled prior to tinning or galvanising.
- Busbars must be fitted with close tolerance stainless steel bolts, nuts, spring and flat washers at all connecting points.
- Neutral and Earth bars are to be fitted to the consumer side of the kiosk and must extend through to the incoming side.
- No interconnecting cables will be allowed.
- Earth and Neutral bars to be connected by means of 70mm wire (green), bolted to Unistrut.
- Phase, neutral and earth bar shall be dimensioned as detailed in Table 1:

Table 1:

Distribution Kiosk Type	Main & Neutral Busbars			Earth Bar	
	Cross Section (mm)	Pre-drilling Requirements (Excl Mountings) (mm dia)		Cross Section (mm)	Pre-drilling Requirements (Excl Mountings) (mm dia)
		Main Busbars	Neutral Busbar		
6-Way	25 x 6 (470A)	3 x 6.5 3 x 10.5	9 x 6.5 3 x 10.5	25 x 6	9 x 6.5 3 x 10.5
9-Way	32 x 6 (560A)	4 x 6.5 3 x 10.5	12 x 6.5 3 x 10.5	32 x 6	12 x 6.5 3 x 10.5

CARAVAN BOXES

All AP/Caravan boxes shall be fitted with a steel pole bracket for BAND-IT® strapping and a double row of DIN railing, neutral bar and earth bar. Front opening of the AP boxes shall be so designed to ensure maximum free working area for operators.

Caravan Boxes shall be fitted with:

2 x 63A Earth Leakage unit (30mA)

1 x 16A MCB for each **consumer plug combination**

1 x Live Terminal Block, covered, 4-way, up to 25mm² (for one feeder cable and 3 feed-offs)
1 x Neutral Terminal Block, covered, 4-way, up to 25mm² (for one feeder cable and 3 feed-offs)

Consumer plug combination: 1 x switchable 16A 3 pin plug internally fitted

No open conductive parts - all conductive equipment shall be covered from accidental touching to SANS10142-1.

Box shall be so designed that the extension leads from the internal plugs run through a slotted area, allowing for complete closure of the lid with up to 4 leads plugged into the units.

For the 'Caravan plug only' configuration, a maximum of two plugs will be allowed per earth leakage unit. Thus, 4-way shall have 2 earth leakage units.

Unit combinations for both dual plug and caravan plug only:

2 x consumer outlet on the 2-way unit (1 Earth Leakage)

4 x consumer outlet on the 4-way unit (2 Earth Leakages)

DELIVERY

VREDENBURG MUNICIPAL STORES

ITEM 17: COMPACT DISTRIBUTION BOARDS (READY BOARDS)

Compact Distribution boards (Ready Board) shall comply with the following requirements:

The board must be wired for single phase supply and must be constructed to be used in conjunction with prepaid metering. Units will be either with or without a light. The board must comply to SANS 10142-1 standards. Each board must be delivered with a Certificate of Compliance to SANS 10142-1.

1. The board shall be constructed of Glass Reinforced Polyester which should have the following characteristics: -

- (a) High Dielectric Strength
- (b) Weather Resistant
- (c) Self-Extinguishing
- (d) Non- Corrosive
- (e) Thermally Stable
- (f) Mechanically Robust and vandal resistant

2. The board shall be fitted with and wired for: -

- (a) Domestic distribution board with a fast curve main circuit breaker of maximum 40A, complete with 20-30mA sensitivity Earth leakage relay [or combination unit] and a 20A Circuit Breaker for plugs and 10A Circuit breaker for light circuit.
- (b) The distribution boards shall be fitted with 1 x 16A switched socket outlet, 3 x 6A 3 pin Euro socket outlet and 1 x 60W light fitting (light unit), if so required [fixed or extendable] – pre-fitted with a 14W CFL or LED equivalent lamp.
- (c) The distribution board must be manufactured so that extended circuits can be wired by way of 20mm PVC conduit, flat twin and earth and SWA cable.

MCB to comply to the new SANS as per table below:

SANS 10142-1	The SA national standard for the wiring of premises.	Specifies the types of circuit breakers, the safety standards and their application in LV installations.
VC8036	The SA compulsory specification for circuit breakers.	Legislation issued under Government Gazette No. 29265 of 6 October 2006, makes the compliance with SANS 556-1 a mandatory requirement for the selling and distribution of these products.
SANS 556-1	The SA national standard for circuit breakers.	SA 'front-end' specification, referring to SANS 60947-2; with the three national deviations; covering all aspects of the performance requirements of circuit breakers.
SANS 60947-2	The SA national standard for low voltage switchgear and controlgear. Part 2: circuit breakers.	This standard – together with Part 1: <i>General Rules</i> – covers all the test requirements for circuit breaker products and is an adoption of the IEC standard.

Table 2: The standards and compulsory specification which apply to MCBs.

DELIVERY

VREDENBURG MUNICIPAL STORES

ITEM 18: SUPPLY AND DELIVERY OF LOW VOLTAGE CIRCUIT BREAKERS

All MCB's and MCCB's shall be delivered with an equal amount of sealable cover plates [including screws], screen plates and/or phase dividers as may be required by die manufacturer of the unit and shall thus form part of the tender price.

1. SINGLE POLE:

Slow operation (Curve 1) – Amp rating (6, 10, 20, 40, 63, 80, 100)

Fast operation (Curve 2) – Amp rating (5, 10, 20, 30, 40, 63, 80, 100)

The circuit breakers shall comply with SANS 156 and IEC 60947-2 standards.

2. 3-Pole

QF-3 - Amp rating (20, 40, 63, 80, 100) – slow (Curve1) and fast (Curve 2)

J25S/F25D – Amp rating (100, 150, 175, 200, 225, 250) WITH EXTENDED TERMINALS

L20B – Amp rating (300, 450, 600, 1200)

N85DE – Amp rating (600 – 1600) mixed load

The circuit breakers shall comply with SANS 156 and IEC 60947-2 standards.

3. Earth Leakage Units

Units shall be the non-overload type and shall comply with SANS and SABS regulations. MCB to comply to the new SANS as per table below:

SANS 10142-1	The SA national standard for the wiring of premises.	Specifies the types of circuit breakers, the safety standards and their application in LV installations.
VC8036	The SA compulsory specification for circuit breakers.	Legislation issued under Government Gazette No. 29265 of 6 October 2006, makes the compliance with SANS 556-1 a mandatory requirement for the selling and distribution of these products.
SANS 556-1	The SA national standard for circuit breakers.	SA 'front-end' specification, referring to SANS 60947-2; with the three national deviations; covering all aspects of the performance requirements of circuit breakers.
SANS 60947-2	The SA national standard for low voltage switchgear and controlgear. Part 2: circuit breakers.	This standard – together with Part 1: <i>General Rules</i> – covers all the test requirements for circuit breaker products and is an adoption of the IEC standard.

Table 2: The standards and compulsory specification which apply to MCBs.

4. DELIVERY: Vredenburg Municipal Stores

**ITEM 19:
SUPPLY AND DELIVERY OF SECURED PADLOCKS & KEYS [LOW SECURITY]**

Items	Particulars:
1.1	Level A & B - Low Security Padlocks with Controlled Keys: Padlocks <u>40mm</u> with short (25mm) stainless steel shackle with 5 - 6mm diameter and Orange[A] and Grey[B] UPVC.
1.2	Level A & B - Low Security Padlocks with Controlled Keys: Padlocks <u>40mm</u> with long (60mm) stainless steel shackle with 5 - 6mm diameter and Orange[A] and Grey[B] UPVC.
1.3	Level A & B - Low Security Padlocks with Controlled Keys: Padlocks <u>50mm</u> with short (25mm) stainless steel shackle with 8 - 9mm diameter and Orange[A] and Grey[B] UPVC.
1.4	Level A & B - Low Security Padlocks with Controlled Keys: Padlocks <u>50mm</u> with long (60mm) stainless steel shackle with 8 - 9mm diameter and Orange[A] and Grey[B] UPVC.

Brief Specifications

1. All padlocks must be so designed and manufactured that it can withstand the harsh environmental conditions of the West Coast (rust, iron ore dust, dust, salt, etc.)
2. All padlocks must be so designed and manufactured that it is compatible with the electrical department's current padlock/keys **(Master keys will be supplied by the Municipality before manufacturing).**
3. The padlocks and keys must be so designed, Keyed Alike and/or Master Keyed, that the following method of operation will be possible:
Key for A – to unlock all A and B padlocks
Key for B – to unlock B padlocks only
4. Colour Coding of the Padlocks should comply with the following guidelines:
Padlock A – Orange preferred, Red acceptable
Padlock B – Grey preferred, Green acceptable
5. Keys for any of A or B padlocks must be so designed to prohibit copying thereof (through secure technology) and keys/blanks must not be freely available commercially to any third party. Keys may only be issued or handed over to the designated person/s of the Stores Department, and all keys not issued to SBM must be kept safe by the original supplier of the padlocks.
6. Padlocks must be so designed (stainless steel shackles) to ensure that general cutting or sawing of the units would not be easily accomplished with freely available hand tools.
7. Padlock body must be of the solid cast type, fully covered by a UPVC colour coding, and be somewhat destruction proof, including damage by heat, and must have some form of protection against dust ingress.
8. All dimensions are approximate, and the long-shackled padlocks shall not exceed 70mm shackle length.
9. Key must be removable in both locked and unlocked positions.
10. Components in the locking mechanism (barrel and shackle) must be either brass/bronze/stainless steel.
11. Samples must be provided to the Store Manager to establish suitability for tendering, including both keys and both A and B padlocks.

DELIVERY: Vredenburg Municipal Stores

<p style="text-align: center;">ITEM 20 & 21 & 22: SUPPLY AND DELIVER OF TERMINATIONS, JOINTS, CLAMPS & CONNECTING DEVICES FOR CABLES, LINES & ABC CONDUCTOR</p>

**FOR MV CABLE, LV CABLE, ABC AND OVERHEAD LINE ASSOCIATED EQUIPMENT
AND MATERIAL**

All items tendered shall be SANS approved and shall comply with the points listed under "Important Notice to Tenderers" under the **Brief Specifications** heading in Section 4.3 and shall be to a high quality standard and shall be specifically designed for use in a highly corrosive coastal region, to ensure longevity and full functionality under these adverse conditions, including and not limited to, maximum creepage distances, highest BIL ratings, etc. for use on the applicable and individual voltage categories of 415V, 11000V and 66000V. Length of outdoor tails to be not less than 1600mm.

Items tendered must be well established and have a proven record of reliability in the South African Local Government sector or must be Eskom-approved for installation or utilisation on Eskom networks.

Note that all items tendered are subject to submission of a sample, if so, requested by Council during the evaluation process, before any evaluation of the item will be finalised, sample of which will be returned after the adjudication process, if so requested by the tenderer. All costs for sample submissions and returns will be for the account of the tenderer.

DELIVERY:

Vredenburg Municipal Stores

ITEM 23: HIGH MAST LIGHTING

1. **MASTS**

15m masts to be supplied and pre-fitted with 6 LED luminaires
 30m masts to be supplied and pre-fitted with 9 LED luminaires

1.1 **Construction**

The masts shall be constructed from conical sections which, when assembled, will form a tapered column of ***circular cross section***. There shall be no fillet welds of the overlaps. The sections shall be joined by friction fit only. The mast shall be lightweight construction and a base plate shall be welded to the bottom end of the lowest section suitably drilled for foundation bolts.

All welding to be subjected to SABS Spec 044 Part 3 Grade B and shall be carried out by SABS coded welders only. Proof that all welders have been tested by the SABS. must be submitted on request.

The steel used in the manufacture of the mast shall have ***an ultimate tensile strength of between 450 and 500MPa*** and identical to ISCOR steel quality JIS G3444 STK 500.

Proof must be supplied that the manufacture is ISO 9001 accredited.

1.2 **Dimensions**

The mast offered shall give an overall floodlight mounting height of 15m and 30m.
 The cross-section and wall thickness of the mast are determined on the basis of the working loads.

1.3 **Working Loads**

The mast shall be designed in accordance with the SABS 0225 Code of Practice for the design and construction of lighting masts.

1.4 **Raising and Lowering Device**

The mast shall be equipped with a ***suitable hoisting mechanism***. All shafts, split pins, bolts, nuts and washers shall be prevented from rotating in their housings

The luminaire carriage shall be drawn against three inverted cones to ensure level positioning of the fittings in the operation position.

The hoisting ropes, which will remain under tension at all times, shall terminate inside the mast on a clevis plate, to which the rope of the hoisting unit can be connected or to which, when in the raised position, the locking device can be attached.

The locking device shall be secured to a structurally sound member of the mast base. The other ends of the hoisting ropes shall be firmly secured to the luminaire carriage. Rope ends shall not be secured by Crosby clamps and only "Talurit" type ferrules of compatible material shall be used. In addition, a safety chain shall be provided between the clevis plate and a structurally sound member of the mast base.

All fasteners connected with the raising and lowering device shall be secured by Nylok type nuts or stainless-steel split pins. The luminaire carriage shall consist of two flanged halves to facilitate the removal thereof from the erected mast.

1.5 **Hoisting Unit (3 WIRE SYSTEM)**

This shall be a single drum worm gear winch with a 50:1 ratio and suitable for manual or power operation. The winch shall run in a fully enclosed oil bath. It shall be possible for the winch to be removed, if so desired, thus not requiring a winch in each mast.

1.6 Access Opening

An access door adequately protected against the weather shall be provided in the mast, with the bottom lintel 600mm above the base plate. The door shall be adequately protected against vandalism and secured by three screws requiring a special opening tool. The opening in the mast shall be reinforced by a doorframe. The mounting strips welded opposite the door opening shall be drilled for the mounting of a control board. Earth terminals, as well as a support bar for the incoming supply cables, shall be provided below the door opening.

1.7 Corrosion Protection

All parts of the mast and raising and lowering device, not specified as manufactured from stainless steel, shall be hot dip galvanised to SABS 763/1977 and inspection certificated provided if required. No welding, drilling, punching, bending or removal of burrs shall be carried out after galvanising.

1.8 Electrical Connection to the Luminaires

A flexible, heavy-duty trailing cable which runs over a separate set of nylon sheaves at the head frame shall be provided. Sheaves shall be of nylon, running on stainless steel shafts. The shafts shall be positively secured from rotating in their housings. The nylon sheaves shall be adequately sized to prevent deformation of the cable. The trailing cable shall be firmly connected to the luminaire carriage at its one end and to the clevis plate at the other end. Suitable connectors of the CEE type or connectors meeting IP55 within DIN 40-050 shall be provided.

1.9 Foundations

Each mast shall be supplied with foundation bolts and templates. The bolts shall be hot dip galvanised over their entire length to SABS 763/1977. Two galvanised nuts, two washers and one spring washer shall be supplied for each bolt. The number of foundation bolts shall be determined according to the design. Calculations shall be submitted upon request. A foundation plan, adequately designed for the conditions as per 1.3 of this specification, giving details of the reinforcing required shall be submitted. Soil pressure and overturning safety factor shall be stated. All reinforcing and foundation bolts shall have a minimum of 100mm concrete cover. The 28 days cube strength of the concrete shall be 25MPa. All foundations shall have a circular flat base from which a square plinth shall rise to above the surrounding ground level. One or two PVC, Class B cable sleeves shall be provided from the centre of the top of the foundation plinth, through the concrete to a point below ground level on the side of the plinth. After in-situ casting of the foundation, the slab shall be covered by earth, properly compacted. The area around the plinth shall be brought to the original level and shall be left neat and tidy.

2. Flood light specifications

The luminaires shall consist of high pressure die cast aluminium and stainless-steel lamp housings with a separate but attached control gearbox's (if needed) and shall be designed to operate LED lights with the following configurations: 15 metre masts – at least 6 luminaires, 30 metre masts – at least 9 luminaires.

300-Watt LED Flood Lights

Specifications

- Light Source - Power LED
- Input Voltage(V) - 48V /DC&AC85V-265V
- Lamp power (W) - 300 W
- Light Lumens - 28100 LM
- Lumen Efficiency - 100 Lm/w
- CRI (Ra>) - 85
- Light Color - Pure white
- Working temperature - 40-55 degree Celsius
- Working lifetime (hour) - 50000 hours
- Material of lamp body - Aluminium
- Mounting Stirrup - Galvanised or Stainless steel

- IP Rating - IP65
- Warranty - 3 Years
- Lighting Angle - 120 Degrees light angle

300W LED Edison Flood Light or equivalent

Notwithstanding any omissions, all items shall be delivered fully functional and operational, complying with the minimum specifications and SANS standards. Additional cost to comply shall be for the account of the Tenderer.

3. **Particulars of the system**

The electrical system is required for operation on a 230/400V, 50Hz, 3 Phase, 4 wire system.

The equipment supplied shall be suitable for continuous operation under the following conditions:

Altitude	: Sea Level
Minimum Temperature	: -5°C
Maximum Temperature	: + 40°C
Average mean Temp	: 24°C

The mast will be exposed to salt-laden atmosphere and high winds, therefore, shall be such as to ensure maximum protection against corrosion.

4. **Wiring**

All wiring shall conform to the wiring Code (SANS 10142-1). Wiring shall be neat.

5. **Electricity Supply**

The Local Authority will be responsible for the installation of the electricity supply from the point of supply to the point of consumption (Mast).

6. **Testing**

The contractor shall provide at his own cost the tools, instruments, equipment and consumables necessary for the performance of the test required. The contractor shall further arrange for the tests to be performed at times suitable for the Local Authority. All tests shall be performed with the Local Authority present. The contractor shall hand over the original copies of all test certificates to the Local Authority on completion of the project.

7. **Drawings and Information**

The contractor shall submit 3 copies of the following documents:

Brochures and technical information regarding the unit.
 A plan of the reinforcement in the Plinth and it dimensions
 A plan of the 15/30m mast dimensions
 A plan of the Head Assembly
 A plan of the Base compartment
 Operational and maintenance manuals

8. **Delivery**

Identified site

ITEM 24, 25, 26 & 27: SUPPLY AND DELIVER OF STREETLIGHT LUMINAIRES

FLOODLIGHT LUMINAIRE DESIGNED FOR SECURITY AND GENERAL FLOODLIGHTING

The luminaire shall consist of a high pressure die cast aluminium and stainless-steel lamp housing with a separate but attached control gearbox and shall be designed to operate 400Watt high pressure sodium (HPS) lamps.

The luminaire shall bear the SANS 1279 mark and the SANS 1464 safety mark.

The luminaire shall have a degree of protection that complies with SANS 1222:

Lamp compartment: IP65

Control gear compartment: IP65

The IP rating shall be certified by a SABS test report.

The lamp housing shall consist of two high pressure die cast aluminium side plates that control the shape of the pre-formed back reflectors by four extruded aluminium stay bars. The front glass shall be heat and impact resistant, held to the lamp housing by at least four stainless steel clamps and sealed by a moulded heat resistant silicon sponge gasket. The reflector system shall be manufactured from 99,98% super-pure anodised aluminium and shall consist of the back reflector and two side reflectors. The luminaire shall be available in a symmetrical narrow, medium, wide and extra wide beam distribution. Asymmetrical beam distributions shall be available on request.

Lamp replacement shall be facilitated from the side by a high pressure die cast aluminium lamp holder housing. It shall be sealed with a one-piece silicon gasket and shall be held to the floodlight with two stainless steel screws. The finger grips on the lamp holder housing shall be able to be used for visual aiming. The control gear compartment shall be manufactured from high pressure die cast aluminium for good heat dissipation. It shall consist of a lid and body that shall seal the control gear compartment to an IP65 ingress protection rating when closed. The lid shall be held captive by a removable wish-bone spring when opened.

The lamp holder complies with VC 8011, shall be rated to withstand 240°C/5kV and shall prevent loosening of the lamp caused by vibrations. The control gear shall be incorporated inside the control gear compartment and shall be mounted on a removable gear tray. It shall be suitable for operation with the specified rating of the lamp on a 230V + 3%/-10% 50Hz single phase system. All control gear components shall be removable and shall bear the relevant SABS mark. All internal wiring shall be Teflon® coated with protective sleeving to prevent damage by possible abrasion. All screws, bolts and metal parts shall be stainless steel or non-corrosive material. Mains connections shall be by means of a suitable screw terminal block with a wire clamping contact. Igniters, where applicable, shall be of the superposed pulse type. The luminaires shall be power factor corrected to a minimum of 0,85. The stirrup shall be manufactured from 5 x 40mm hot dipped galvanised steel. Holes shall be provided for mounting purposes. A stainless-steel version shall be available on request. The floodlight must be complete with galvanised pole clamp assembly with galvanised bolts and nuts.

FLOODLIGHT ENERGY SAVING OUTDOOR

- Fitting complete with lamp (LED), Wattages of lamps:

± 40-Watt 4000K, IK10

± 50-Watt 4000K, IK10

TECHNICAL SPECIFICATIONS DESIGNED FOR THE LIGHTING OF GROUP B ROADS WHERE EFFICIENCY, EASE OF MAINTENANCE AND ECONOMY ARE REQUIRED

LUMINAIRE : 70W [THIS ITEM SPECIFICATIONS SHALL BE USED AS FAR AS POSSIBLE FOR THE LED REPLACEMENT UNIT]

- The luminaire must be designed to operate 70W HPS lamps.
- The Luminaire housing must consist of a separate compartment for the lamp, gear and spigot.

- The luminaires must have a separate spigot compartment, suitable for both side entry and bottom entry and must be designed in such a fashion that the control gear is not subjected to possible damage during the installation or by moisture rising up the pole when heated by the sun during the day.
- The luminaire shall have a degree of protection as stated below:
Lamp compartment: IP 65
Gear compartment: IP 65
- All screws, bolts, nuts and metal parts shall be stainless steel or non-corrosive material.
- The luminaire must bear the SANS 475 performance mark and the SANS 60598-2-3 safety mark.
- The luminaire spigot entries shall comply with SANS 1088 – Table 2
Side entry: 42mm Ø x 125mm
Bottom entry: 76mm Ø x 75mm
- The lamp compartment shall be robustly constructed, weatherproof, hail proof, corrosion proof and vandal resistant.
- It must be manufactured from filled ultraviolet stabilized engineering polymer.
- An exterior lip of 7mm must be provided on the lamp housing to avoid direct rainwater contact with the gasket, thus ensuring that no moisture is sucked into the diffuser when the luminaire is switched off and cools down.
- The diffuser bowl shall be a non-discolouring clear high impact bowl with no external prisms.
- The diffuser bowl shall be held to the housing by three stainless steel clips or equivalent.
- The diffuser bowl shall remain attached to the housing when the hinges are opened.
- The lamp compartment shall be sealed off by a gasket made of silicon sponge rubber and shall be fitted into a tongue and groove arrangement.
- The reflectors shall be manufactured from 99.98% super pure deep anodized aluminium.
- The lamp holder must comply with VC 8011 and must be rated to withstand 240° C /5kV and prevents loosening of the lamp caused by vibrations.
- The gear compartment shall be covered by a hinged, non-corrosive lid, which fits into a silicon sponge gasket in the body, in a tongue and groove arrangement.
- Access to the gear compartment shall be gained from underneath by loosening one captive stainless-steel screw.
- The gear compartment shall be ingress protected against dust and moisture.
- The Control gear must be suitable for operation with the specified lamps on a 230V +3%/-10%, 50Hz, single phase supply.
- The control gear shall bear the relevant SABS mark.
- Mains connections shall be by means of a suitable screw terminal block with a wire clamping contact.
- The luminaire must be power factor corrected to a minimum of 0.9

TECHNICAL SPECIFICATIONS DESIGNED FOR THE LIGHTING OF GROUP A ROADS WHERE EFFICIENCY, EASE OF MAINTENANCE AND ECONOMY ARE REQUIRED

LUMINAIRE : 250W [THIS ITEM SPECIFICATIONS SHALL BE USED AS FAR AS POSSIBLE FOR THE LED REPLACEMENT UNIT]

- The luminaire must be designed to operate 250W HPS lamps
- The Luminaire housing must consist of a separate compartment for the lamp, gear and spigot.
- The luminaires must have a separate spigot compartment, suitable for both side entry and bottom entry and must be designed in such a fashion that the control gear is not subjected to possible damage during the installation or by moisture rising up the pole when heated by the sun during the day.
- The luminaire shall have a degree of protection as stated below:
Lamp compartment: IP 65
Gear compartment: IP 65
- All screws, bolts, nuts and metal parts shall be stainless steel or non-corrosive material.
- The luminaire must bear the SANS 475 performance mark and the SANS 60598-2-3 safety mark.
- The luminaire spigot entries shall comply with SANS 1088 – Table 1
Side entry: 42mm Ø x 125mm
Bottom entry: 76mm Ø x 75mm
- The lamp compartment shall be robustly constructed, weatherproof, hail proof, corrosion proof and vandal resistant.

- It must be manufactured from filled ultraviolet stabilized engineering polymer.
- An exterior lip of 7mm must be provided on the lamp housing to avoid direct rainwater contact with the gasket, thus ensuring that no moisture is sucked into the diffuser when the luminaire is switched off and cools down.
- The diffuser bowl shall be a non-discolouring clear high impact bowl with no external prisms.
- The diffuser bowl shall be held to the housing by three stainless steel clips.
- The diffuser bowl shall remain attached to the housing when the hinges are opened.
- The lamp compartment shall be sealed off by a gasket made of silicon sponge rubber and shall be fitted into a tongue and groove arrangement.
- The reflectors shall be manufactured from 99.98% super pure deep anodized aluminium.
- The lamp holder must comply with VC 8011 and must be rated to withstand 240°C /5kV and prevents loosening of the lamp caused by vibrations.
- The gear compartment shall be covered by a hinged, non-corrosive lid, which fits into a silicon sponge gasket in the body, in a tongue and groove arrangement.
- Access to the gear compartment shall be gained from underneath by loosening one captive stainless-steel screw.
- The gear compartment shall be ingress protected against dust and moisture.
- The Control gear must be suitable for operation with the specified lamps on a 230V +3%/-10%, 50Hz, single phase supply.
- The control gear shall bear the relevant SABS mark.
- Mains connections shall be by means of a suitable screw terminal block with a wire clamping contact.
- The luminaire must be power factor corrected to a minimum of 0.9

TECHNICAL SPECIFICATIONS POST TOP STREETLIGHTS LUMINAIRES

LUMINAIRE : POST TOP

- The luminaire must consist of a spigot base, lamp compartment with integral control gear and a top cover.
- The luminaire shall be designed to operate compact fluorescent 70-Watt HPS lamps.
- A "Bird spike" made of 6 mm stainless steel with a minimum length of 170 mm shall be fitted on top of the luminaire.
- The luminaire shall bear the SANS 475 performance mark and the SANS 60598-2-3 safety mark.
- The luminaire spigot entry shall comply with SANS 1088 – Table 1 for type 2: 76mm diameter x 75mm deep.
- The top cover shall be robustly constructed, weather-proof, hail proof, corrosion proof and vandal resistant.
- The top cover shall be manufactured from glass-filled nylon and shall be firmly secured with a single injection moulded dome nut.
- The top cover must be coated white on the inside to improve the efficiency of the luminaire
- A silicon sponge gasket must be fixed into a groove to seal the top cover against the diffuser to IP65.
- The luminaire shall have a degree of protection that complies with SANS 60598-2-3.
- The Lamp compartment shall have an IP65 rating
- An IP rating must be certified by a SABS test report. (The report must be submitted with the quotation)
- The bowl shall be an injected moulded non-discolouring high impact acrylic bowl.
- The bowl shall have a hexagonal shape and must be available in a clear version.
- The bowl shall be smooth on the outside.
- The bowl shall have internal prisms to reduce the direct glare component
- A drip ridge shall be provided at the bottom edge to prevent direct rainwater contact with the gasket.
- The spigot base shall be manufactured from high pressure die cast aluminium.
- The spigot base shall be powder coated for added protection in the colour specified.]
- The luminaire shall be secured to the pole by three M8 stainless steel grub screws
- The lamp holder shall comply with VC8011 and shall be rated to withstand 240° C /5kV and prevents loosening of the lamp caused by vibrations.

- The control gear shall be incorporated inside the luminaire and mounted on a removable gear tray.
- The luminaire shall be suitable for operation with a specified lamp rating on a 230V +3% / - 10 % at 50 Hz, single phase.
- The luminaire shall have control gear components that are removable, and all components shall bear the relevant SABS mark.
- All internal wiring shall be Teflon coated with protective sleeving to prevent damage by possible abrasion.
- All screws, bolts, and metal parts shall be stainless steel or of a non-corrosive material.
- Mains connections shall be by means of a suitable screw terminal block with a wire clamping contact.
- The luminaire shall be power factor corrected to a minimum of 0.9

TECHNICAL SPECIFICATIONS FOR HEAVY DUTY LOW WATTAGE STREETLIGHTS DESIGNED FOR THE LIGHTING OF RESIDENTIAL ROADS WHERE HIGH PERFORMANCE AND HIGH PROTECTION IS REQUIRED

LUMINAIRE

- The luminaire must be designed to operate 70W HPS lamps
- The Luminaire housing must consist of a separate compartment for the lamp, gear and spigot.
- The luminaires must have a separate spigot compartment, suitable for both side entry and bottom entry and must be designed in such a fashion that the control gear is not subjected to possible damage during the installation or by moisture rising up the pole when heated by the sun during the day.
- The luminaire shall have a degree of protection as stated below:
Lamp compartment: IP 66
Gear compartment: IP 66
- All screws, bolts, nuts and metal parts shall be stainless steel or non-corrosive material.
- The luminaire must bear the SANS 475 performance mark and the SANS 60598-2-3 safety mark.
- The luminaire spigot entries shall comply with SANS 1088 – Table 1
Side entry: 42mm Ø x 125mm
Bottom entry: 76mm Ø x 75mm
- The lamp compartment shall be robustly constructed, weatherproof, hail proof, corrosion proof and vandal resistant.
- It must be manufactured from filled ultraviolet stabilized engineering polymer.
- An exterior lip of 7mm must be provided on the lamp housing to avoid direct rainwater contact with the gasket, thus ensuring that no moisture is sucked into the diffuser when the luminaire is switched off and cools down.
- The diffuser bowl shall be a non-discolouring clear high impact bowl with no external prisms.
- The diffuser bowl shall be held to the housing by three stainless steel clips.
- The diffuser bowl shall remain attached to the housing when the hinges are opened.
- The lamp compartment shall be sealed off by a gasket made of silicon sponge rubber and shall be fitted into a tongue and groove arrangement.
- The reflectors shall be manufactured from 99.98% super pure deep anodized aluminium.
- The lamp holder must comply with VC 8011 and must be rated to withstand 240° C /5kV and prevents loosening of the lamp caused by vibrations.
- The gear compartment shall be covered by a hinged, non-corrosive lid, which fits into a silicon sponge gasket in the body, in a tongue and groove arrangement.
- Access to the gear compartment shall be gained from underneath by loosening one captive stainless-steel screw.
- The gear compartment shall be ingress protected against dust and moisture.
- The Control gear must be suitable for operation with the specified lamps on a 230V +3%/- 10%, 50Hz, single phase supply.
- The control gear shall bear the relevant SABS mark.

- Mains connections shall be by means of a suitable screw terminal block with a wire clamping contact.
- The luminaire must be power factor corrected to a minimum of 0.9.

LED STREETLIGHT AND FLOODLIGHT TECHNICAL SPECIFICATIONS

GENERAL

Only offers for streetlights which bear the SANS mark with maintenance facilities and spare parts located in the Western Cape will be considered.

Complete technical details, specifications and copies of test certificates of the luminaires offered shall be submitted with the tender. Tenders received without the documentation will not be considered.

All luminaires shall be delivered to Saldanha Bay Municipality, Vredenburg facilities for storage. Each luminaire shall be delivered completely assembled ready for use and shall be individually packed in suitable and sturdy containers such as cardboard boxes. The internal packaging shall be such that no damage shall occur to the luminaire (during normal handling). The containers shall be marked with appropriate description and stock code of the luminaire contained within.

Standards applicable:

Code	Description	Comply? (Y/N)
IEC 60598-1	Luminaires - Part 1: General requirements and tests	
IEC 60598-2-3	Luminaires - Part 2: Particular requirements - Section 3: Luminaires for road and street lighting	
SANS 475	Luminaire shall bear this SANS performance mark	
ISO 4762	Hexagon socket head cap screws	
SANS 529	Heat-resisting wiring cables	
SANS 121	Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods.	
SANS 1088	Luminaire entries and spigots	
SANS 1091	Natural colour standards for paints	
SANS 60529	Degrees of protection provided by enclosures (IP Code)	
SANS 1507	Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 3: PVC Distribution cables	
SANS 1574	Electric flexible cores, cords and cables with solid extruded dielectric insulation Part 3: PVC insulated cores and cables	
SANS ARP 035	Guidelines for the installation and maintenance of street lighting, aa 2014	
SANS 61000-3-2	Electromagnetic compatibility (EMC) Part 3-2: Limits — Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)	
OHSACT (Act 85 of 1993)	Occupational Health and Safety Act and Regulations	

35-45W LED POST TOP STREETLIGHT

The LED post top luminaire shall be designed to meet the lighting criteria for Group B roads as required.

The luminaire shall be designed in accordance with the following requirements:

- a. Design life: In excess of 25 years

- b. The Post Top shall be a LED replacement for existing 125W MV/70W HPS Post Tops on a mounting height of between 5-7m. The tenderer shall provide a photometric design proving that the offered unit can replace the 125W MV/70W HPS units and retain the same lux levels as before.**
- c. The luminaire shall be completely glare free. This shall be achieved by incorporating a symmetrical indirect lighting reflector within the luminaire. An asymmetrical reflector shall be available on request.
- d. The luminaire shall incorporate a temperature sensor which monitors the temperature of the LEDs on the PCBs. Once a critical temperature is reached, the current shall be reduced to a safe temperature level. The temperature sensor shall not completely switch off the LEDs at high temperatures, which shall facilitate maintenance to be undertaken during daylight hours.
- e. The power supply or driver shall be able to withstand surges of up to 10kV/10kA by means of an external inline fused surge protection device mounted inside the gear compartment. This surge protection shall be easily replaceable.
- f. The power supply or driver should incorporate a thermal switch to prevent exceeding the case temperature for maximum lifetime of equipment. The lifetime of the power supply or driver shall be 100 000hrs with 90% survival over the lifetime.
- g. Minimum IP rating of the light compartment, including driver compartment: IP66.
- h. The protector shall be smooth, for easy cleaning, and shall be manufactured of impact resistant UV polycarbonate (IK10). The housing shall be robustly constructed, weatherproof, hail proof, insect proof, corrosion proof, ultraviolet light resistant and vandal resistant.
- i. The top cover of the luminaire shall be manufactured of Plastamid and in the specified colour.
- j. The Post Top luminaire shall be certified, in terms of SANS 60598, to operate at an ambient temperature of 35°C. The thermal design shall be particularly designed for African exterior conditions, i.e. high temperatures, high pollution, corrosion resistant.
- k. The LED life expectancy shall be minimum 50,000 hours at 80% lumen maintenance. (Documentary evidence from the LED manufacturer, by means of an appropriate datasheet, confirming the statistical correlation, shall be provided).
- l. Use of high efficiency LED's (> 150 lumens/watt: Absolute photometry) Colour rendering > Ra70. Documentary evidence of compliance to this clause shall be submitted with the tender.
- m. Colour temperature shall be neutral white (4000K) with an option to be supplied in warm white (3000K). A report from the LED vendor, for LED's used in the luminaire, shall be submitted, which shall include the following documentary evidence:
- Measured LED junction temperature for a given test condition and extrapolated for an ambient temperature of 35°C.
 - LED drive current.
 - LED manufacturer data that clearly correlates LED junction temperature and LED drive current to lumen maintenance.
 - The LED datasheets, indicating the Byy, Lxx data, as provided by the LED manufacturer.
- n. The luminaire spigot housing shall be constructed of marine grade high pressure die cast EN 1706 AC-44300 aluminium. Tenderers shall submit a metallurgical report from an independent metallurgist confirming the grade of aluminium for all the luminaires offered.
- o. The spigot shall be equipped with 3 x M8 hexagon screws for fastening on the bottom entry pole.
- p. The control gear and LED engine shall be incorporated into the spigot housing for heat dissipation. The power supply connection must take place inside the spigot.

SPIGOT ENTRIES:

Spigot entries shall be designed to fit easily over the existing bottom entry and shall comply with Table 1 of SANS 1088 as follows:

- For Type 2 luminaires (bottom entry): Nominal size 76 x 75 mm

POWER SUPPLY:

- The power factor shall be rated at ≥ 0.95 .
- The power supply shall be removable and shall be suitable for operation with the specified rating of the lamp on a 120-277 VAC 50Hz single phase system.
- Operating temperatures shall be from -15deg to +60deg on the housing (case temperature).
- Operating humidity shall be from 20% to 95%.
- The control gear shall incorporate a thermal switch for protection when exceeding the case temperature.
- Provisions shall be made to withstand surges up to 10kV/10kA.
- The unit shall be EMC compliant to the SANS 55015 and SANS 61347-1 standard.
- The unit shall be able to be supplied with a recessed down facing daylight sensor on request.

LED STREET LIGHT LUMINAIRE TEST REPORTS

Failure to provide test reports of the following tests called for may result in the rejection of the Tender:

Type test according to SANS 60598-1:2004 and SANS 60598-2-3:2003.

IP rating test reports for all items offered in accordance with SANS 60529.

A separate ambient temperature (Ta rating) test report shall be provided, in accordance with SANS 475.

The test reports shall be issued by SANS or IEC accredited test authority.

DETAILS OF LED POST TOP STREETLIGHT REQUIRED

Direct replacement for 125W MV/70W HPS luminaire w.r.t. average illuminance on road surface.

Comparative photometric data and horizontal and vertical illuminance graphs of LED and 125W MV/70W HPS luminaires to be included in tender submission.

Construction: Marine Grade EN 1706 AC-44300 Aluminium

LED's: 35-40W (> 140 lumens/watt: Absolute photometry)

LED Current: Maximum 700mA

LED Colour: Neutral White (4000K) with an option to be supplied in warm white (3000K)

Minimum Lumen output: 6200

Light Distribution: Asymmetrical

Optical and electronic compartment IP Rating: IP66

Protector: UV Resistant Polycarbonate IK10

Top Cover: Plastamid

Colour: Pearl light grey

Mounting Height: 5-7m

MCB: Not required

Daylight Switch: Not required

TECHNICAL DETAILS OF EQUIPMENT OFFERED

35-40W LED POST TOP STREET LIGHT LUMINAIRES

Name of the LED streetlight luminaire manufacturer

Place of manufacture

Manufacturer's identification reference

Physical Address in the Western Cape

.....

Type of luminaire LED

What is the nominal lumen flux at Tq of 35 °C?

Luminaire installation inclination angle

Rated wattage

Number of LEDS per luminaire

LED Current

Class and type of luminaire

Colour temperature

Luminaire efficacy lm/W

Colour rendering index 70 (minimum)

Lumen Depreciation of the LED luminaire when installed for 100 000 hours (min.) 80% of initial lumens

.....

Bears SANS 60529 Mark

Degree of protection to SANS 60529

Material of the top cover

Material of the diffuser

Aluminium grade of housing

Standard to which hot-dip galvanising all ferrous components comply with

.....

Steel grade for toggle clips, bolts, screws, nuts and washers

Location of the LED drivers

Material of gasket silicon

Driver specification with which drivers or power supply complies

.....

Driver manufacturer

Voltage service range of driver

Type of Driver or power supply

Power factor of the power supply 0,95 lagging (min)

Operating frequency

Harmonic distortion levels of driver or power supply to comply with SANS 61000-3-2

.....

Gross mass of complete luminaire

Replacement for 125W MV/70W HPS luminaire w.r.t. average illuminance on road surface (Yes/No)

Comparative photometric data of LED and 125W MV/70W HPS luminaires included in tender submission (Yes/No)

.....

Have test reports been submitted with the tender documents

Guarantee period

35-45W LED STREETLIGHTS

The LED luminaire shall be designed to meet the lighting criteria for Group B roads.

The luminaire shall be designed in accordance with the following requirements:

- a. Design life: In excess of 25 years.
- b. The luminaire shall incorporate a temperature sensor which monitors the temperature of the LEDs on the PCBs.
- c. Once a critical temperature is reached, the current shall be reduced to a safe temperature level. The temperature sensor shall not completely switch off the LEDs at high temperatures, which shall facilitate maintenance to be undertaken during daylight hours.
- d. The power supply or driver shall be able to withstand surges of up to 10kV/10kA by means of an external inline fused surge protection device mounted inside the gear compartment. This surge protection shall be easily replaceable.
- e. The power supply or driver should incorporate a thermal switch to prevent exceeding the case temperature for maximum lifetime of equipment. The lifetime of the power supply or driver shall be 100 000hrs with 90% survival over the lifetime.
- f. Minimum IP rating of the light compartment, including driver compartment: IP66.
- g. The protector shall be smooth, for easy cleaning, and shall be manufactured of UV resistant Polycarbonate (IK10).
- h. It shall be certified, in terms of IEC 60598, to operate at an ambient temperature of 35°C. The thermal design shall be particularly designed for African exterior conditions, i.e. high temperatures, high pollution, corrosion resistant.
- i. The cooling fins shall be designed in such a manner to prevent the accumulation of dirt, thus ensuring the continuous effective cooling. Additionally, the top surface shall be curved in shape.
- j. The LED life expectancy shall be minimum 100 000 hours at 80% lumen maintenance. (Documentary evidence from the LED manufacturer, by means of an appropriate datasheet, confirming the statistical correlation, shall be provided).
- k. Use of high efficiency LED's (> 140 lumens/watt: Absolute photometry) Colour rendering > Ra70. Documentary evidence of compliance to this clause shall be submitted with the tender.
- l. Colour temperature shall be neutral white (4000K) with an option to be supplied in warm white (3000K). A report from the LED vendor, for LED's used in the luminaire, shall be submitted, which shall include the following documentary evidence:
 - Measured LED junction temperature for a given test condition and extrapolated for an ambient temperature of 35°C.
 - LED drive current.
 - LED manufacturer data that clearly correlates LED junction temperature and LED drive current to lumen maintenance.
 - The LED datasheets, indicating the Byy, Lxx data, as provided by the LED manufacturer.
 - Documentary evidence, confirming that the failure of one LED will not cause additional LED's to fail.
- m. Direct conduction & maximized surface for external heat exchange shall be provided. The luminaire housing shall be constructed of marine grade high pressure die cast EN 1706 AC-44300 aluminium.

- n. Tenderers shall submit a metallurgical report from an independent metallurgist confirming the grade of aluminium for all the luminaires offered. The housing shall be robustly constructed, weatherproof, hail proof, insect proof, corrosion proof, ultraviolet light resistant and vandal resistant.
- o. Luminaire closure shall be by means of a clip mechanism.
- p. The control gear compartment shall be incorporated into the luminaire housing.
- q. The power supply connection must take place inside the luminaire.

SPIGOT ENTRIES:

Spigot entries shall be designed to fit easily over the bracket pipe and shall be truly parallel to the fitting axis and shall comply with Table 1 of SANS 1088 as follows:

- For Type 2 luminaires (side entry): Nominal size 42 mm

The luminaire shall be secured to the spigot by means of at least two stainless steel M8 grub screws, as specified in ISO 4762. This shall be done from the inside of the luminaire to minimise the risk of vandalism and theft.

POWER SUPPLY:

- The power factor shall be rated at ≥ 0.95 .
- The power supply shall be removable and shall be suitable for operation with the specified rating of the lamp on a 108-305VAC 50Hz single phase system.
- Operating temperatures shall be from -15deg to +60deg on the housing (case temperature).
- Operating humidity shall be from 20% to 95%.
- Provisions shall be made to withstand surges up to 10kV/10kA.
- The unit shall be EMC compliant to the EN55015 and EN61347-1 standard.
- The unit shall provide the option to add a daylight sensor.

LED STREETLIGHT LUMINAIRE MARKINGS

Each luminaire shall bear the name or trademark of the **manufacturer** and the **date of manufacture**.

LED STREETLIGHT LUMINAIRE TEST REPORTS

Failure to provide test reports of the following tests called for will result in the rejection of the Tender:

Type test according to IEC 60598-1:2004 and IEC 60598-2-3:2003.

IP rating test reports for all items offered in accordance with SANS 60529.

A separate ambient temperature (Ta rating) test report shall be provided, in accordance with SANS 475.

The test reports shall be issued by SANS or IEC accredited test authority.

DETAILS OF LED STREETLIGHT REQUIRED

Direct replacement for 125W MV/70W HPS luminaire : average illuminance on road surface.

Comparative photometric data and horizontal and vertical illuminance graphs of LED and 125W MV/70W HPS luminaires to be included in tender submission.

Construction: Marine Grade EN 1706 AC-44300 Aluminium
 LED's: 35-40W (> 140 lumens/watt: Absolute photometry)
 LED Current: Maximum 700mA
 LED Colour: Neutral White (4000K) with an option to be supplied in warm white (3000K)
 Minimum Lumen output: 5300
 Protector: Polycarbonate (IK10)
 LED and Driver unit replaceable
Lighting Distribution: Urban road width 8-10m, pole spacings 36-60m
Mounting Height: 7-8m
 Mounting inclination: Existing mounting arms generally 15°
 MCB: Not required
 Daylight Switch: Not required

TECHNICAL DETAILS OF EQUIPMENT OFFERED

35-45W LED STREETLIGHT LUMINAIRES

Name of the LED streetlight luminaire manufacturer

Place of manufacture

Manufacturer's identification reference

Physical Address

.....

Type of luminaire LED

What is the nominal lumen flux at Tq of 35 °C?

Luminaire installation inclination angle

Rated wattage

Number of LEDS per luminaire

LED Current

Class and type of luminaire

Replacement for 125W MV/70W HPS luminaire : average illuminance on road surface (Yes/No)

.....

Comparative photometric data of LED and 125W MV/70W HPS luminaires included in tender submission (Yes/No)

.....

Colour temperature

Luminaire efficacy lm/W

Colour rendering index 70 (minimum)

Lumen Depreciation of the LED luminaire when installed for 100 000 hours (min.) 80% of initial lumens

.....

Bears SANS 60529 Mark

Degree of protection to SANS 60529

Material of the LED luminaire

Aluminium grade of housing

Does the luminaire have a heat sink?

Standard to which hot-dip galvanising all ferrous components comply with

.....

Steel grade for toggle clips, bolts, screws, nuts and washers

Location of the LED drivers

Sealed LED and driver unit replaceable without removal of luminaire

.....

Type and nominal size of spigot entry

Maximum length of spigot entry into luminaire

Material of protector lens High impact glass or acrylic

Material of gasket silicon

Driver specification with which drivers or power supply complies

.....

Driver manufacturer

Voltage service range of driver

Type of Driver or power supply

Power factor of the power supply 0,95 lagging (min)

Operating frequency

Harmonic distortion levels of driver or power supply to comply with SANS 61000-3-2

.....

Gross mass of complete luminaire

Have test reports been submitted with the tender documents

Guarantee period

65-75W LED STREETLIGHT

Direct replacement for 150W HPS luminaire : average illuminance on road surface.

Comparative photometric data and horizontal and vertical illuminance graphs of LED and 150W HPS luminaires to be included in tender submission.

Construction: Marine Grade EN 1706 AC-44300 Aluminium
 LED's: 65-75W (> 140 lumens/watt: Absolute photometry)
 LED Current: Maximum 700mA
 LED Colour: Neutral White (4000K) with an option to be supplied in warm white (3000K)
 Minimum Lumen output: 10600
 Protector: Polycarbonate (IK10)
 LED and Driver unit replaceable by means of hinging mechanism
Lighting Distribution: Urban road width 11m, pole spacings 30-40m
Mounting Height: 10m
 Mounting inclination: Existing mounting arms generally 15°
 MCB: Not required
 Daylight Switch: Not required
 Luminaire Colour: Unpainted aluminium

TECHNICAL DETAILS OF EQUIPMENT OFFERED

65-75W LED STREETLIGHT LUMINAIRES

Name of the LED streetlight luminaire manufacturer

Place of manufacture

Manufacturer's identification reference

Physical Address in the Western Cape

.....

Type of luminaire LED

What is the nominal lumen flux at Tq of 35 °C?

Luminaire installation inclination angle

Rated wattage

Number of LEDS per luminaire

LED Current

Class and type of luminaire

Replacement for 150W HPS luminaire : average illuminance on road surface (Yes/No)

Comparative photometric data of LED and 150W HPS luminaires included in tender submission (Yes/No)..

.....

Colour temperature

Luminaire efficacy lm/W

Colour rendering index 70 (minimum)

Lumen Depreciation of the LED luminaire when installed for 100 000 hours (min.) 80% of initial lumens

.....

Bears SANS 60529 Mark

Degree of protection to SANS 60529

Material of the LED luminaire

Aluminium grade of housing

Does the luminaire have a heat sink?

Standard to which hot dip galvanising all ferrous components comply with

.....

Steel grade for toggle clips, bolts, screws, nuts and washers

Location of the LED drivers

Sealed LED and driver unit replaceable without removal of luminaire

.....

Type and nominal size of spigot entry

Maximum length of spigot entry into luminaire

Material of protector lens High impact glass or acrylic

Material of gasket silicon

Driver specification with which drivers or power supply complies

.....

Driver manufacturer

Voltage service range of driver

Type of Driver or power supply

Power factor of the power supply 0,95 lagging (min)

Operating frequency

Harmonic distortion levels of driver or power supply to comply with SANS 61000-3-2

.....

Gross mass of complete luminaire

Have test reports been submitted with the tender documents

Guarantee period

100-110W LED STREETLIGHT

Direct replacement for 250W HPS luminaire: average illuminance on road surface.

Comparative photometric data and horizontal and vertical illuminance graphs of LED and 250W HPS luminaires to be included in tender submission.

Construction: Marine Grade EN 1706 AC-44300 Aluminium
 LED's: 100-110W (> 140 lumens/watt: Absolute photometry)
 LED Current: Maximum 700mA
 LED Colour: Neutral White (4000K) with an option to be supplied in warm white (3000K)
 Minimum Lumen output: 16200
 Protector: Polycarbonate (IK10)
 LED and Driver unit replaceable by means of hinging mechanism
Lighting Distribution: Urban road width 11m, pole spacings 30-40m
Mounting Height: 10m

Mounting inclination: Existing mounting arms generally 15°

MCB: Not required

Daylight Switch: Not required

Luminaire Colour: Unpainted aluminium

TECHNICAL DETAILS OF EQUIPMENT OFFERED

100-110W LED STREETLIGHT LUMINAIRES

Name of the LED streetlight luminaire manufacturer

Place of manufacture

Manufacturer's identification reference

Physical Address in the Western Cape

.....

Type of luminaire LED

What is the nominal lumen flux at Tq of 35 0C?

Luminaire installation inclination angle

Rated wattage

Number of LEDS per luminaire

LED Current

Class and type of luminaire

Replacement for 250W HPS luminaire : average illuminance on road surface (Yes/No)

.....

Comparative photometric data of LED and 250W HPS luminaires included in tender submission (Yes/No)

.....

Colour temperature

Luminaire efficacy lm/W

Colour rendering index 70 (minimum)

Lumen Depreciation of the LED luminaire when installed for 100 000 hours (min.) 80% of initial lumens

.....

Bears SANS 60529 Mark

Degree of protection to SANS 60529

Material of the LED luminaire

Aluminium grade of housing

Does the luminaire have a heat sink?

Standard to which hot dip galvanising all ferrous components comply with

.....

Steel grade for toggle clips, bolts, screws, nuts and washers

Location of the LED drivers

Sealed LED and driver unit replaceable without removal of luminaire

.....

Type and nominal size of spigot entry

Maximum length of spigot entry into luminaire

Material of protector lens High impact glass or acrylic

Material of gasket silicon

Driver specification with which drivers or power supply complies

.....

Driver manufacturer

Voltage service range of driver

Type of Driver or power supply

Power factor of the power supply 0,95 lagging (min)

Operating frequency

Harmonic distortion levels of driver or power supply to comply with SANS 61000-3-2

.....

Gross mass of complete luminaire

Have test reports been submitted with the tender documents

Guarantee period

140-160W LED STREETLIGHT

Direct replacement for 400W HPS luminaire: average illuminance on road surface.

Comparative photometric data and horizontal and vertical illuminance graphs of LED and 400W HPS luminaires to be included in tender submission.

Construction: Marine Grade EN 1706 AC-44300 Aluminium
 LED's: 140-160W (> 140 lumens/watt: Absolute photometry)
 LED Current: Maximum 700mA
 LED Colour: Neutral White (4000K) with an option to be supplied in warm white (3000K)
 Minimum Lumen output: 21600
 Protector: Polycarbonate (IK10)
 LED and Driver unit replaceable by means of hinging mechanism
Lighting Distribution: Urban road width 11m, pole spacings 40-50m
Mounting Height: 10m
 Mounting inclination: Existing mounting arms generally 15°
 MCB: Not required
 Daylight Switch: Not required
 Luminaire Colour: Unpainted aluminium

TECHNICAL DETAILS OF EQUIPMENT OFFERED

140-160W LED STREETLIGHT LUMINAIRES

Name of the LED streetlight luminaire manufacturer

Place of manufacture

Manufacturer's identification reference

Physical Address in the Western Cape.....

.....

Type of luminaire LED.....

What is the nominal lumen flux at Tq of 35 0C?.....

Luminaire installation inclination angle.....

Rated wattage

Number of LEDS per luminaire

LED Current

Class and type of luminaire

Replacement for 400W HPS luminaire : average illuminance on road surface (Yes/No)

Comparative photometric data of LED and 400W HPS luminaires included in tender submission (Yes/No)..

.....

Colour temperature

Luminaire efficacy lm/W

Colour rendering index 70 (minimum)

Lumen Depreciation of the LED luminaire when installed for 100 000 hours (min.) 80% of initial lumens

Bears SANS 60529 Mark

Degree of protection to SANS 60529

Material of the LED luminaire

Aluminium grade of housing

Does the luminaire have a heat sink?

Standard to which hot dip galvanising all ferrous components comply with

Steel grade for toggle clips, bolts, screws, nuts and washers

Location of the LED drivers

Sealed LED and driver unit replaceable without removal of luminaire

Type and nominal size of spigot entry

Maximum length of spigot entry into luminaire

Material of protector lens High impact glass or acrylic

Material of gasket silicon

Driver specification with which drivers or power supply complies

Driver manufacturer

Voltage service range of driver

Type of Driver or power supply

Power factor of the power supply 0,95 lagging (min)

Operating frequency

Harmonic distortion levels of driver or power supply to comply with SANS 61000-3-2

Gross mass of complete luminaire

Have test reports been submitted with the tender documents

Guarantee period

DECORATIVE LAMPS SAME AS OOSTEWAL STREET LANGEBAAN

Lamps - BEKA ALBANY LED or equivalent

- i. 40W LED – 24 LEDs, 500mA, warm white 75W
- ii. LED – 48 LEDs, 500mA, warm white



DELIVERY

Vredenburg Municipal Stores

ITEM 28: SUPPLY AND DELIVERY OF GALVANISED STEEL TUBULAR POLES

1. Material

Steel tubing to applicable parts of SANS 657 - grade 250Mpa; Ultimate tensile strength 450Mpa

2. Construction

The poles shall be manufactured in such a way to obtain a smooth tapered design with optimum strength and rigidity. The spigot must be designed to fit a luminaire of 70 - 76mm and a weight of 15kg. Reference to Pole length shall be the total pole length. A base plate of 300 x 300mm is required to prevent pole turning and easy pull-out.

3. Protective coats

Hot dip galvanised to SANS 763

4. Access door, mounting plate and cable entry

A hot dip galvanised cover door mounted flush to the surface of the pole with mounting height to be at 3 metres above ground level. The size of the mounting plate shall be 250 x 70-100mm and equipped with at least two vandal-restrictive fasteners. A cable entry of 60 x 100mm shall be provided underground.

5. DECORATIVE POLES

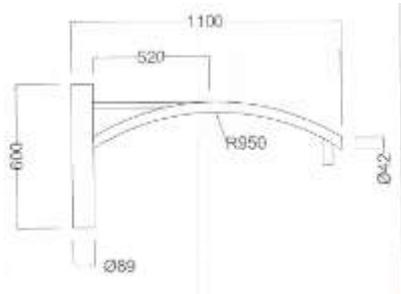
Poles:

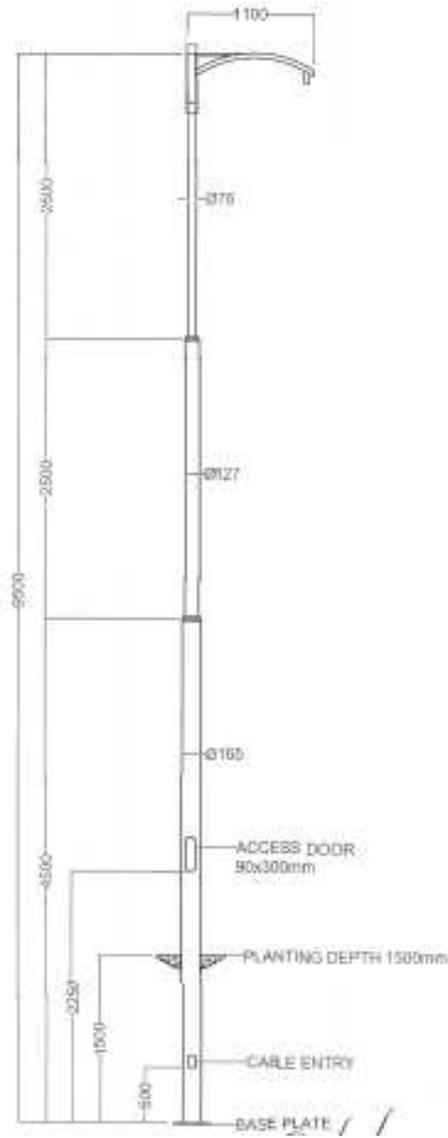
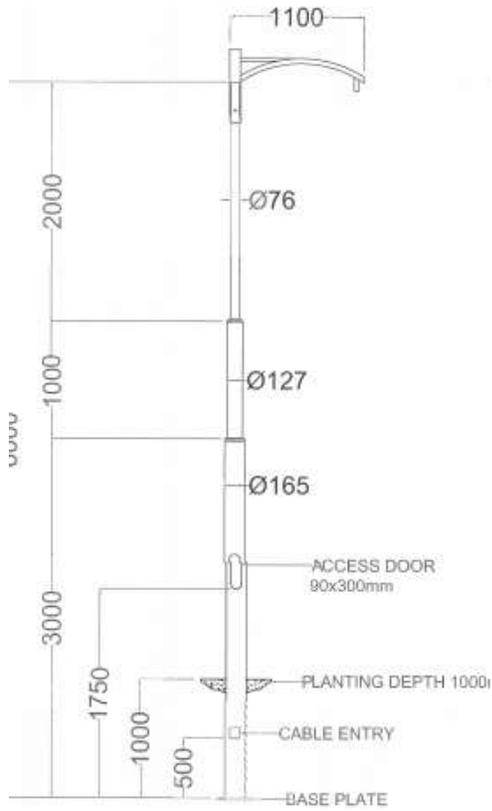
- Length/Mounting Height: 9.5m/8m on the median of the road
6m/5m on the sidewalks
- Pole Buried Depth: 1.5m for the 9.5m pole
1.0m for the 6m pole
- Pole Construction: Decorative Stepped Pole with 2 Aluminium casting rings.
Hot Dipped Galvanised Steel to SABS ISO1461 and
Powder Coated with base plate. Colour RAL 6005 Mos Green

Outreach Arms:

- Single: 1.1m horizontal length
- Double: 2.2m horizontal length
- Mounting Height: Single - 5m; Double – 8m (Median) & 5m (Sidewalks)
- Construction: Hot Dipped Galvanised Steel to SABS ISO1461 & Powder Coated
Colour RAL 6005 Mos Green

The double outreach arm has the same dimension for both arms as for single outreach arm.





6. Delivery

Vredenburg Municipal Stores

ITEM 29: SUPPLY AND DELIVERY OF LOAD CONTROL UNITS

13. The brief specifications are listed hereunder:

- [a] Radio Controlled Load Control Unit for domestic geyser control.
- [b] Must be compatible with existing equipment.
Existing Equipment:
ENTEK Series TC 240 or equivalent and compatible with exciting system
- [c] ICASA approved.
- [d] Power consumption not more than 4 Watts.
- [e] Power supply input of 240V AC.
- [f] GOLAY format compatibility.
- [g] 16Amp contacts.
- [h] LED indications for "Load shed" and "operational".
- [i] Infrared.
- [j] A-word and B-word to be programmed according to existing groups utilised by Saldanha Bay Municipality.
- [k] Sealed PVC enclosure designed for an Entek series TC240 load control unit.
Must include front and back covers. Must include brass nickel-plated fasteners to apply seals to the front cover

2. **Delivery:**

Municipal Stores, Vredenburg

ITEMS 30 to 33: SUPPLY AND DELIVERY OF ELECTRICAL CONSUMABLES
--

The brief specifications are listed hereunder:

- [a] All items tendered shall be industrial type strength, no cheap, domestic type of equipment will be evaluated [samples may be requested during evaluation & adjudication]
- [b] Where brand names were used, tenderers may supply an equivalent or higher spec'd item with exactly the same function/dimensions.
- [c] All items tendered upon shall comply with IEC standards, BS or shall be SANS approved.
- [d] All items tendered with additional or accessories to make it functional, shall be quoted with the additional equipment needed for functionality.
- [e] The thickness of the danger tapes must be as such to prevent easy tearing through wind, persons and machinery.
- [f] All house wires shall be PVC coated, with Earth wires coated in Green, or Yellow with Green striping
- [g] All copper lugs and Ferrules shall be tinned copper and shall be for stranded copper. Supplier must be SABS/SANS/Nefta approved

Delivery:

Municipal Stores, Vredenburg

**ITEMS 34 to 37:
SUPPLY AND DELIVERY OF 11KV LINE CONSTRUCTION MATERIAL**

1. Line Material

All line material shall be SABS approved and tested and shall be to Eskom specifications. Material must be suitably protected against corrosion as the application will be in a highly corrosive coastal environment.

2. CUT-OUT FUSE LINKS

CONSTRUCTION: Porcelain Cut-out 11+22kV 560mm Creepage
Silicone Cut-out 11+22kV 560mm OR 750mm Creepage

Contacts shall be of the double-contact type (two contact rods making beneath two static finger contacts)

1. Solid links

Rating: Solid links for all fuse units to be rated at 200A continuous current

2. FUSE LINKS FOR USE ON CUT-OUT FUSES

Rating: Universal Type "K" - Fast blow.
Universal Type "T" - Slow blow
Removable and Non-Removable Button head.
Amp Ratings from 5Amp to 100Amp.
Fuse Links to IEC282 Standards.

3. LOAD BREAKS

Load breaks shall be of the pole mounted type with 400A continuous load carrying capacity and a 200A load break capacity. Insulators shall be of the silicone type and manual operation shall be hot stick operated.

4. MV LINE FAULT INDICATORS

11KV Line Fault Indicators of the Pole mount type with 10-year battery life.
Detection: Voltage loss, 2x the Load Current and 5 Amp Sensitive Earth Fault and with Current inrush restraint
Xenon flash & LED light indication – visibility of at least 3000m
Auto reset on time and voltage restoration

5. MV CABLE FAULT INDICATORS

11KV Cable Fault Indicator, split core type for easy applications, must reset after normal Current & Voltage return, Starting fault sensing current of 40A to 50A, Inrush restraint/block, Red indicator for fault, white for none, clearly visible day and night. If electronic, battery must be designed for 7 to 10 years. Earth Fault and Short Circuit detection.

6. LINE CONSTRUCTION MATERIAL

All line material shall be to Eskom and AMEU specifications, and material tendered must be clearly stamped/marked with the manufacturer's brand name/branding logo or any other identifiable marking that will be freely and clearly available after installation, so as to identify the manufacturer during maintenance or with breakdowns to ensure effective quality control. Items equipped with data plates complies, provided that the manufacturer are clearly indicated on the data plate.

DELIVERY: VREDENBURG MUNICIPAL STORES

**ITEMS 38:
SUPPLY AND DELIVERY OF METERING CT'S, WIRE AND ACCESSORIES**
1.1 SUMMATION METERING CT'S

- Ratio- 5+5/5A
- Class 0.5
- Burden between 8 to 15 VA
- Each CT be mountable with at least two screws

2.1 500/5A RING METERING CT'S

- Ratio- 500/5A
- Class 0.5
- Burden between 30 and 50 VA
- Diameter from 38mm to 50mm
- Each terminal S1 and S2 must have two screws
- Each CT be mountable with at least two screws

2.2 300/5A RING METERING CT'S

- Ratio- 300/5A
- Class 0.5
- Burden of at least 30-50 VA
- Diameter of at least 38mm to 50mm
- Each terminal S1 and S2 must have two screws
- Each CT be mountable with at least two screws

2.3 200/5A RING METERING CT'S

- Ratio- 200/5A
- Class 0.5
- Burden of at least 8-15 VA
- Diameter of at least 28mm to 40mm
- Each terminal S1 and S2 must have two screws
- Each CT be mountable with at least two screws

3.1 WIRE (100m pack)

- red 2.5mm flexible panel wire
- black 2.5mm flexible panel wire
- yellow or white 2.5mm flexible panel wire
- blue 2.5mm flexible panel wire
- green earth wire 2.5mm flexible panel wire

4.1 INSULATED LUGS (100 IN A PACKETS)

- blue 2.5mm insulated lugs 2HB
- blue 2.5mm insulated lugs 2FB18
- red 1.5mm insulated lugs 1HB
- blue 1.5mm insulated lugs 1FB18

5.1 DIN RAIL MOUNTABLE FUSE HOLDER

- Single Phase 10x38 Fuse Holder 32A 500V

5.2 FUSES

- 10x38 2A Fuse 10kA

6.1 DELIVERY Electrical Department Stores, Vredenburg.

<p style="text-align: center;">ITEMS 39: SUPPLY AND DELIVERY OF PORTABLE KEYPADS FOR ITRON ACE 9000 PREPAID METERS</p>

The brief specifications are listed hereunder:

- [a] Items to be tendered shall be to the exact specifications listed below and these units are manufactured by Ontec, Cape Town
- [b] Limited quantities are available

SPECIFICATIONS

1. For Itron Ace 9000 SSP PLC MCU DIN Rail mounted meter
2. Handheld or wall mounted plug-in unit for power line communication
3. Battery back-up

DETAILED SPECIFICATION COMPLIANCY STATEMENT

	Detailed specification: SABS, SANS, NRS, IEC (As define in each item specification)	Comply	Detailed description of non-compliance
1	Mini-Substations	Yes/No	
2	Distribution Transformers	Yes/No	
3	Measuring Transformers	Yes/No	
4	Ring Main Units and Switchgear	Yes/No	
5	Network Switch Disconnecter	Yes/No	
6	Electrical MV Cable and Conductor	Yes/No	
7	Electrical LV Cable and Conductor	Yes/No	
8	Line & Earth Conductor	Yes/No	
9	Aerial Bundle Conductor	Yes/No	
10	Reclosing Units with Associated Equipment	Yes/No	
11	kWh Meters (Post Payment)	Yes/No	
12	4 Quadrant Single & Three Phase Meters (Post Payment)	Yes/No	
13	Pre-Payment Meters	Yes/No	
14	Wooden Poles	Yes/No	
15	MV Indoor Breaker Upgrading / Retrofitting	Yes/No	
16	Distribution Kiosks	Yes/No	
17	Compact Distribution Boards (Ready Boards)	Yes/No	
18	Low Voltage Circuit Breakers	Yes/No	
19	Secured Padlocks & Keys [Low Security]	Yes/No	
20	Terminations, Joints, Clamps & Connecting Devices Cables [Heat Shrink]	Yes/No	
21	Connecting Devices Lines	Yes/No	
22	Connecting Devices LV Cables	Yes/No	
23	High Mast Lighting	Yes/No	
24	Streetlight Luminaires HPS	Yes/No	
25	Luminaires Domestic	Yes/No	
26	Streetlight Luminaires Lamps	Yes/No	
27	Streetlight Luminaires LED	Yes/No	
28	Steel Tubular Poles	Yes/No	
29	Load Control Units	Yes/No	
30	Electrical Consumables – Wiring	Yes/No	
31	Electrical Consumables - Lugs and Ferrules	Yes/No	
32	Electrical Consumables - Tape	Yes/No	
33	Electrical Consumables - Fuses	Yes/No	
34	11kV Line Construction Material - Hardware	Yes/No	
35	11kV Line Construction Material - Connectors	Yes/No	
36	11kV Line Construction Material - Preformed Products	Yes/No	
37	11kV Line and Cable Components	Yes/No	
38	400V Metering CT's, Wire and Accessories	Yes/No	
39	Itron Ace 9000 Keypads	Yes/No	

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

SECTION 4.4

PRICING AND DELIVERY SCHEDULE

(Please note that Tender will be evaluated per item. All sub items should be completed in full to be found responsive for the specific item.)

SUPPLY AND DELIVERY OF ELECTRICAL EQUIPMENT AND MATERIAL FOR THE PERIOD: 01 OCTOBER 2022 TILL 30 SEPTEMBER 2024.

I / We the undersigned, hereby acknowledge myself / ourselves fully conversant with the details and conditions as set out in the Specification and with the Conditions of Tendering and General Conditions of Purchase and Conditions of Tender attached hereto, and hereby agree to supply and deliver for a period of 24 months from the date of commencement of tender, in accordance therewith, the following:

ITEM 1: MINI-SUBSTATIONS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	315KVA WITH CCV RMU					
A.2	500KVA WITH CCV RMU					
A.3	630KVA WITH CCV RMU					
A.4	800KVA WITH CCV RMU					
A.5	1000KVA WITH CCV RMU					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 2: TRANSFORMERS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	1000KVA WITH ROLLERS TYPE 1					
A.2	630KVA WITH ROLLERS TYPE 1					
A.3	500KVA WITH ROLLERS TYPE 1					
A.4	630KVA TYPE 3 MINISUB REPLACEMENT PLATFORM					
A.5	500KVA TYPE 3 MINISUB REPLACEMENT PLATFORM					
A.6	500KVA TYPE 2 WITH PLATFORM MOUNTING					
A.7	200KVA TYPE 3 WITH POLE/PLATFORM MOUNTING					
A.8	100KVA TYPE 3 WITH POLE/PLATFORM MOUNTING					
A.9	50KVA TYPE 3 WITH POLE MOUNT PLATFORM MOUNTING					
A.10	25KVA TYPE 3 WITH POLE/PLATFORM MOUNTING					
A.11	16KVA SINGLE PHASE TYPE 3 WITH POLE/PLATFORM MOUNTING					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 3: VT AND CT METERING TRANSFORMERS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	11KV to 110VAC VT REYROLLE INDOOR PANEL MOUNT 2P-E					
A.2	11KV to 110VAC VT REYROLLE INDOOR PANEL MOUNT 3P-E					
A.3	11KV to 110VAC, 25/50/100-5A CT'S INDOOR & OUTDOOR METERING UNIT FLOOR MOUNT					
A.4	11KV to 110VAC, 25/50/100-5A CT'S OUTDOOR METERING UNIT KIOSK MOUNT					
A.5	11KV to 110VAC, 50/100/200-5A CT'S INDOOR & OUTDOOR METERING UNIT FLOOR MOUNT					
A.6	11KV to 110VAC, 50/100/200-5A CT'S OUTDOOR METERING UNIT KIOSK MOUNT					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 4: RING MAIN UNITS – SF6 INSULATED, VACUUM BREAK
--

ALL ITEMS PRICES CONSISTS OF THE SWITCH AND THE PRICE OF THE OUTDOOR KIOSK

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	630A CCV 200A UNIT WITH ENCLOSURE					
A.2	630A CCVV 200A UNIT WITH ENCLOSURE					
A.3	630A CCVVV 200A UNIT WITH ENCLOSURE					
A.4	630A CCVVV 200A UNIT WITH ENCLOSURE					
A.5	630A CCVV 400A UNIT WITH ENCLOSURE					
A.6	630A CCC SF6 OR VACUUM INSULATED UNIT WITH KIOSK					
A.7	ADDITIONAL (EXTENSIBLE) V-UNIT 200A COMPATIBLE WITH ITEMS B, C, D, E - WITH KIOSK					
A.8	ADDITIONAL (EXTENSIBLE) V-UNIT 400A COMPATIBLE WITH ITEMS F - WITH KIOSK					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 5: NETWORK SWITCH DISCONNECTOR

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	400A CONTINUOUS LOAD / 200A LOAD BREAK - LINE DISCONNECTOR SWITCH - MANUALLY OPERATED					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 6A: 11000V COPPER CABLE						
Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	35mm ² PILE GDSTA 11/11KV TABLE 18					
A.2	70mm ² PILE GDSTA 11/11KV TABLE 18					
A.3	95mm ² PILE GDSTA 11/11KV TABLE 18					
A.4	185mm ² PILE GDSTA 11/11KV TABLE 18					
B.1	35mm ² XLPE 6.35/11KV ARMOURED TYPE A					
B.2	70mm ² XLPE 6.35/11KV ARMOURED TYPE A					
B.3	95mm ² XLPE 6.35/11KV ARMOURED TYPE A					
B.4	120mm ² XLPE 6.35/11KV ARMOURED TYPE A					
B.5	185mm ² XLPE 6.35/11KV ARMOURED TYPE A					
B.6	240mm ² XLPE 6.35/11KV ARMOURED TYPE A					
C.1	500mm ² XLPE 11KV Single CORE TYPE A (as per specification)					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 6B: 11000V ALUMINIUM CABLE

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	50mm ² XLPE, Type A, stranded					
A.2	95mm ² XLPE, Type A, stranded					
A.3	150mm ² XLPE, Type A, stranded					
A.4	185mm ² XLPE, Type A, stranded					
A.5	300mm ² XLPE, Type A, stranded					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 7A: 600/1000/3300V COPPER

SECTION A: COPPER

	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	6mm ² 2 CORE 600/1000V PVCSWA					
A.2	10mm ² 2 CORE 600/1000V PVCSWA					
A.3	16mm ² 2 CORE 600/1000V PVCSWA					
A.4	25mm ² 2 CORE 600/1000V PVCSWA					
A.5	6mm ² 4 CORE 600/1000V PVCSWA					
A.6	10mm ² 4 CORE 600/1000V PVCSWA					
A.7	16mm ² 4 CORE 600/1000V PVCSWA A					
A.8	25mm ² 4 CORE 600/1000V PVCSWA					
A.9	35mm ² 4 CORE 600/1000V PVCSWA					
A.10	50mm ² 4 CORE 600/1000V PVCSWA					
A.11	70mm ² 4 CORE 600/1000V PVCSWA					
A.12	95mm ² 4 CORE 600/1000V PVCSWA					
A.13	120mm ² 4 CORE 600/1000V PVCSWA					

A.14	150mm ² 4 CORE 600/1000V PVCSWA					
A.15	185mm ² 4 CORE 600/1000V PVCSWA					
A.16	240mm ² 4 CORE 600/1000V PVCSWA					
B.1	10mm ² 2 CORE AIRDAC INSULATED NEUTRAL AND EARTH					
B.2	6mm ² 3 CORE 600/1000V PVCSWA					
C.1	2.5mm ² PILOT CABLE 600/1000V PVCSWA 7 CORES					
C.2	2.5mm ² PILOT CABLE 600/1000V PVCSWA 9 CORES					
C.3	1.5mm ² PILOT CABLE 600/1000V PVCSWA 12 CORES					
D.1	16mm ² 3 CORE 3300V PVC SWA CABLE (ARMADAC)					
D.2	25mm ² 3 CORE 3300V PVC SWA CABLE (ARMADAC)					
E.1	35mm ² Single core PVC and sheathed a flexible grade waterproof PVC/ Nitrile Power Panel Flex Cable					
E.2	50mm ² Single core PVC and sheathed a flexible grade waterproof PVC/ Nitrile Power Panel Flex Cable					
E.3	70mm ² Single core PVC and sheathed a flexible grade waterproof PVC/ Nitrile Power Panel Flex Cable					
E.4	95mm ² Single core PVC and sheathed a flexible grade waterproof PVC/ Nitrile Power Panel Flex Cable					
F.1	16mm ² 5 CORE Flexible General-Purpose Trailing Cable. EPR based rubber insulated, core laid up and Neoprene rubber sheeted.					
F.2	25mm ² 5 CORE Flexible General-Purpose Trailing Cable. EPR based rubber insulated, core laid up and Neoprene rubber sheeted.					

F.3	35mm ² 5 CORE Flexible General-Purpose Trailing Cable. EPR based rubber insulated, core laid up and Neoprene rubber sheeted.					
F.4	70mm ² 5 CORE Flexible General-Purpose Trailing Cable. EPR based rubber insulated, core laid up and Neoprene rubber sheeted.					
F.5	95mm ² 5 CORE Flexible General-Purpose Trailing Cable. EPR based rubber insulated, core laid up and Neoprene rubber sheeted.					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 7B: 600/1000/3300V ALUMINIUM
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Section B : ALUMINIUM CABLE

	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	25mm ² 2 CORE 600/1000V PVCSWA					
A.2	35mm ² 4 CORE 600/1000V PVCSWA					
A.3	95mm ² 4 CORE 600/1000V PVCSWA					
A.4	150mm ² 4 CORE 600/1000V PVCSWA					
A.5	185mm ² 4 CORE 600/1000V PVCSWA					
A.6	300mm ² 4 CORE 600/1000V PVCSWA					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 8: LINE & EARTH CONDUCTORS
--

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	AAAC PINE GREASED					
A.2	AAAC OAK GREASED					
A.3	AAAC ASH GREASED					
A.4	COPPER BARE MULTISTRAND 70mm ² EARTHING CONDUCTOR					
A.5	COPPER BARE MULTISTRAND 35mm ² EARTHING CONDUCTOR					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 9: AERIAL BUNDLE CONDUCTOR: 600/1000V and 11000V
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Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	95mm ² 3 CORE + MESSENGER + 25mm ² STREETLIGHT					
A.2	150mm ² 3 CORE + MESSENGER + 25mm ² STREETLIGHT					
A.3	25mm ² x 2 CORE STREETLIGHT					
A.4	INSULATION PIERCING CONNECTORS – TYPE PC1WP1F					
A.5	INSULATION PIERCING CONNECTORS – TYPE PC3WP1CF					
A.6	INSULATION PIERCING CONNECTORS – TYPE PC5WP1F					
A.7	95mm ² 3 CORE 11000V					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 10: SUPPLY AND DELIVERY OF AUTO-BREAK & RECLOSING UNITS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	AUTOMATIC RECLOSING UNIT – VACUUM BREAK SF6 INSULATED					
A.2	2 X LOADBREAK 400A CONTINUOUS LOAD MANUALLY OPERATED					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 11: CONVENTIONAL KWH METERS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	ELECTRONIC SINGLE PHASE 20A-80A, 230V					
A.2	ELECTRONIC THREE PHASE 4-WIRE 20A-100A, 400V					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

.....
SIGNATURE OF TENDERER

ITEM 12: SUPPLY AND DELIVERY OF SINGLE & THREE PHASE ELECTRONIC 4 QUADRANT METERS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	ELECTRONIC METERS 1-PHASE 2-WIRE DIRECT TYPE kWh: 5-100A, 220-240V					
A.2	ELECTRONIC METERS 3 PHASE 4 WIRE kWh: 5 100A, 57.5 240V					
A.3	ELECTRONIC METERS 3-PHASE 4-WIRE kWh: 5-100A, 230-400V					
B.1	MODEM					
B.2	POWER SUPPLY					
C.1	DELIVERY					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all of the above.

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SIGNATURE OF TENDERER

ITEM 13: PREPAID ELECTRONIC KWH METERS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	SINGLE PHASE 20A-80A, 230V					
A.2	THREE PHASE 4-WIRE 20A-100A, 400V					
A.3	SPLIT METER PLC TYPE 20-80AMP INCLUDING KEYPAD					
A.4	SPLIT METER RF TYPE 20-80AMP INCLUDING KEYPAD					
A.5	KEYPADS FOR ITEM C					
A.6	KEYPADS FOR ITEM D					
A.7	Wall Mount Common Base Mounted Keypad For Item C					
A.8	Wall Mount Common Base Mounted Keypad For Item D					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 14: LINE CONSTRUCTION WOODEN POLES
--

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	9 METER WOODEN POLE 180 – 200mm DIAMETER TOP					
A.2	10 METER WOODEN POLE 180 – 200mm DIAMETER TOP					
A.3	11 METER WOODEN POLE 180 – 200mm DIAMETER TOP					
A.4	13 METER WOODEN POLE 200 – 220mm DIAMETER TOP					
A.5	DELIVERY PER LOAD (MAX 100, MIN 50) FOR ITEMS A TO D					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

.....
SIGNATURE OF TENDERER

ITEM 15: MEDIUM VOLTAGE INDOOR BREAKER RETROFITTING						
Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	800A – 1250A 11KV INDOOR REYROLLE RETROFIT WITH SF6 GAS INSULATED VACUUM BREAK MANUAL RAISE/LOWER 25KA					
A.2	1600A 11KV INDOOR REYROLLE RETROFIT WITH SF6 GAS INSULATED VACUUM BREAK MANUAL RAISE/LOWER 30KA					
A.3	DELIVERY PRICE PER UNIT ITEM A & B					
A.4	INSTALLATION, TESTING & COMMISSIONING PER UNIT					
A.5	1600A 66/88KV OUTDOOR BREAKER RETROFITS WITH SF6 GAS OR NON-OIL MEDIUM INSULATION WITH VACUUM BREAK CONTACTS					
A.6	DELIVERY PRICE PER UNIT IN ITEM E					
A.7	INSTALLATION, TESTING & COMMISSIONING PER UNIT IN ITEM E					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 16: DISTRIBUTION KIOSKS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	2 WAY SINGLE DOOR					
A.2	4 WAY DOUBLE DOOR					
A.3	6 WAY DOUBLE DOOR [VANDALPROOF]					
A.4	9 WAY DOUBLE DOOR [VANDALPROOF]					
A.5	12 WAY DOUBLE DOOR					
A.6	POLE MOUNTED BUNDLE BOX SINGLE DOOR (TILT 5 WAY) 480 x 355 x 150					
A.7	POLE MOUNTED BUNDLE BOX SINGLE DOOR (TILT 6 WAY) 550 x 500 x 150					
A.8	POLE MOUNTED BUNDLE BOX SINGLE DOOR (9 WAY) 600 x 400 x 250					
A.9	CARAVAN BOX, POLE MOUNTED, SINGLE DOOR, 2- WAY					
A.10	CARAVAN BOX, POLE MOUNTED, SINGLE DOOR, 4- WAY					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 17: READY BOARDS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	WALL MOUNT WITHOUT LIGHT					
A.2	WALL MOUNT WITH LIGHT					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 18: SUPPLY AND DELIVERY OF CIRCUIT BREAKERS AND EARTH LEAKAGE UNITS

Circuit Breaker 6kA Curve 1+2 Mini and Din Rail Mounting 57mm Escutcheon (QF-1 or Similar)

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	SINGLE POLE (CURVE 1) 5 AMPS					
A.2	SINGLE POLE (CURVE 1) 10 AMPS					
A.3	SINGLE POLE (CURVE 1) 20 AMPS					
A.4	SINGLE POLE (CURVE 1) 40 AMPS					
A.5	SINGLE POLE (CURVE 1) 63 AMPS					
A.6	SINGLE POLE (CURVE 1) 80 AMPS					
A.7	SINGLE POLE (CURVE 1) 100 AMPS					
A.8	SINGLE POLE (CURVE 2) 5 AMPS					
A.9	SINGLE POLE (CURVE 2) 10 AMPS					
A.10	SINGLE POLE (CURVE 2) 20 AMPS					
A.11	SINGLE POLE (CURVE 2) 30 AMPS					
A.12	SINGLE POLE (CURVE 2) 40 AMPS					
A.13	SINGLE POLE (CURVE 2) 63 AMPS					
A.14	SINGLE POLE (CURVE 2) 80 AMPS					
A.15	SINGLE POLE (CURVE 2) 100 AMPS					

Circuit Breaker 6kA Curve 1+2 Din Rail Mounting 45mm Escutcheon (QF-1 or Similar)

B.1	SINGLE POLE (CURVE 1) 6 AMPS					
B.2	SINGLE POLE (CURVE 1) 10 AMPS					
B.3	SINGLE POLE (CURVE 1) 20 AMPS					
B.4	SINGLE POLE (CURVE 1) 40 AMPS					
B.5	SINGLE POLE (CURVE 1) 63 AMPS					
B.6	SINGLE POLE (CURVE 2) 6 AMPS					
B.7	SINGLE POLE (CURVE 2) 10 AMPS					
B.8	SINGLE POLE (CURVE 2) 20 AMPS					
B.9	SINGLE POLE (CURVE 2) 40 AMPS					
B.10	SINGLE POLE (CURVE 2) 63 AMPS					

Circuit Breaker 6kA Curve 1+2 Mini and Din Rail Mounting 57mm Escutcheon (QF-3 or Similar)

C.1	3 POLE (CURVE 1) 20 AMPS					
C.2	3 POLE (CURVE 1) 30 AMPS					
C.3	3 POLE (CURVE 1) 40 AMPS					
C.4	3 POLE (CURVE 1) 63 AMPS					
C.5	3 POLE (CURVE 1) 80 AMPS					
C.6	3 POLE (CURVE 1) 100 AMPS					
C.7	3 POLE (CURVE 2) 20 AMPS					
C.8	3 POLE (CURVE 2) 30 AMPS					

C.9	3 POLE (CURVE 2) 40 AMPS					
C.10	3 POLE (CURVE 2) 63 AMPS					
C.11	3 POLE (CURVE 2) 80 AMPS					
C.12	3 POLE (CURVE 2) 100 AMPS					

Circuit Breaker 6kA Curve 1+2 Din Rail Mounting 45mm Escutcheon (QF-3 or Similar)

D.1	3 POLE (CURVE 1) 20 AMPS					
D.2	3 POLE (CURVE 1) 32 AMPS					
D.3	3 POLE (CURVE 1) 40 AMPS					
D.4	3 POLE (CURVE 1) 63 AMPS					
D.5	3 POLE (CURVE 2) 20 AMPS					
D.6	3 POLE (CURVE 2) 32 AMPS					
D.7	3 POLE (CURVE 2) 40 AMPS					
D.8	3 POLE (CURVE 2) 63 AMPS					

Circuit Breaker (Mixed Load) 25kA, Hydraulic Magnetic, Completed with Stub bar / Phase barriers (JS 25 or Similar)

E.1	3 POLE, 80 AMPS					
E.2	3 POLE, 100 AMPS					
E.3	3 POLE, 150 AMPS					
E.4	3 POLE, 175 AMPS					
E.5	3 POLE, 200 AMPS					

E.6	3 POLE, 225 AMPS					
E.7	3 POLE, 250 AMPS					

Distribution Circuit Breaker (Mixed Load) 20kA, Hydraulic Magnetic (LB20 or Similar)

F.1	3 POLE 300 AMPS					
F.2	3 POLE 450 AMPS					
F.3	3 POLE 500 AMPS					
F.4	3 POLE 600 AMPS					
F.5	3 POLE L20B – AMP RATING (300 - 600)					

Distribution Circuit Breaker (Mixed Load) 85kA, Electronic Adjustable (N85DE or Similar)

G.1	3 POLE N85DE – AMP RATING (600 – 1600) MIXED LOAD TYPE MCCB 500 – 1000 AMPS					
G.2	3 POLE N85DE – AMP RATING (600 – 1250) MIXED LOAD TYPE MCCB 600 – 1250 AMPS					
G.3	3 POLE N85DE – AMP RATING (800 – 1600) MIXED LOAD TYPE MCCB 800 – 1600 AMPS					

Single Phase Earth Leakages 6kA, 30mA without Overload protection

H.1	1 + N (63 AMPS)					
H.2	1 + N (80 AMPS)					

3 Phase Earth Leakages 6kA, 30mA without Overload protection

I.1	3 + N (63 AMPS)					
I.2	3 + N (80 AMPS)					

3 Phase Switch Disconnectors

J.1	L-TYPE 800A 35KA					
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J.2	N-TYPE 1000A 85KA					
J.3	N-TYPE 1250 85KA					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

.....
SIGNATURE OF TENDERER

ITEM 19: SUPPLY AND DELIVERY OF PADLOCKS AND KEYS – LOW SECURITY

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	40mm (6mm SHACKLE) A – short (Red/Orange)					
A.2	40mm (6mm SHACKLE) A – long (Red/Orange)					
A.3	40mm (6mm SHACKLE) B – short (Green / Grey)					
B.1	50mm (6mm SHACKLE) B – long (Green / Grey)					
B.2	50mm (8mm SHACKLE) A – short (Red/Orange)					
B.3	50mm (8mm SHACKLE) A – Long (Red/Orange)					
B.4	50mm (8mm SHACKLE) B – short (Green / Grey)					
B.5	50mm (8mm SHACKLE) B – Long (Green / Grey)					
C.1	KEYED ALIKED, MASTER KEYS (A KEYS)					
C.2	KEYED ALIKED, MASTER KEYS (B KEYS)					
D.1	INDIVIDUAL KEYED ALIKED PRIVATE PADLOCK SET – 5 X PADLOCKS + 3 KEYS [1 KEY OPENS ALL]					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 20: TERMINATIONS AND JOINTS: HEAT SHRINK INDOOR/OUTDOOR FOR 400V/11KV CABLES
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Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	11KV CABLE HEAT SHRINK INDOOR TERMINATIONS FOR XLPE CABLE 35 – 70mm					
A.2	11KV CABLE HEAT SHRINK INDOOR TERMINATIONS FOR XLPE CABLE 95 – 240mm					
A.3	11KV CABLE HEAT SHRINK OUTDOOR TERMINATIONS FOR XLPE CABLE 35 – 70mm					
A.4	11KV CABLE HEAT SHRINK OUTDOOR TERMINATIONS FOR XLPE CABLE 95 – 240mm					
A.5	11KV CABLE HEAT SHRINK JOINTS FOR XLPE CABLE 25 – 95mm					
A.6	11KV CABLE HEAT SHRINK JOINTS FOR XLPE CABLE 120 – 300mm					
A.7	11KV CABLE HEAT SHRINK INDOOR TERMINATIONS FOR PILE CABLE 35 – 70mm					
A.8	11KV CABLE HEAT SHRINK INDOOR TERMINATIONS FOR PILE CABLE 95 – 240mm					
A.9	11KV CABLE HEAT SHRINK OUTDOOR TERMINATIONS FOR PILE CABLE 35 – 70mm					
A.10	11KV CABLE HEAT SHRINK OUTDOOR TERMINATIONS FOR PILE CABLE 95 – 240mm					
A.11	11KV CABLE HEAT SHRINK JOINTS FOR PILE CABLE 16 – 50mm					
A.12	11KV CABLE HEAT SHRINK JOINTS FOR PILE CABLE 50 – 95mm					

A.13	11KV CABLE HEAT SHRINK JOINTS FOR PILE CABLE 95 – 185mm					
A.14	11KV CABLE EARTHING KITS FOR PILE CABLE TERMINATIONS 16 – 120mm					
A.15	11KV CABLE EARTHING KITS FOR PILE CABLE TERMINATIONS 150 – 240mm					
A.16	11KV CABLE STRAIGHT INSULATIONS BOOTS HEAT SHRINK 50 – 95mm					
A.17	11KV CABLE STRAIGHT INSULATIONS BOOTS HEAT SHRINK 120 – 300mm					
A.18	11KV CABLE RIGHT ANGLE INSULATIONS BOOTS HEAT SHRINK 16 – 35mm					
A.19	11KV CABLE RIGHT ANGLE INSULATIONS BOOTS HEAT SHRINK 50 – 95mm					
B.1	400V/11KV CABLE HEAT SHRINK END CAP 35 – 120mm					
B.2	400V/11KV CABLE HEAT SHRINK END CAP 120 – 240mm					
C.1	Flexible bushing boot-silicon type 95KV Bushing diameter: 30-45mm, Cable sizes: 35-400mm ²					
C.2	11kV Transition Joints PILC/PILE to XLPE Cable for 50-95mm 3 core Belted/Screen Cables with Transition and Earthing Modules					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 21: OVERHEAD JOINTS, LINE BI-METALLIC LUGS AND LINE SPLICES

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	OVERHEAD LINE FULL TENSION JOINTS FOX					
A.2	OVERHEAD LINE FULL TENSION JOINTS PINE					
A.3	OVERHEAD LINE FULL TENSION JOINTS OAK					
A.4	OVERHEAD LINE FULL TENSION JOINTS ASH					
B.1	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 4.5 – 9mm NT					
B.2	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 9 – 15mm NT					
B.3	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 6 – 9mm T-O					
B.4	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 6 – 9mm TAP					
B.5	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 9 – 15mm T-O					
B.6	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 6 – 9mm TAP					
B.7	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 9 – 15mm T-O					
B.8	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 9 – 15mm TAP					

B.9	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 4.5 – 9mm NT					
B.10	OVERHEAD LINE NON-TENSION AND T-OFF JOINTS 9 – 15mm NT					
C.1	OVERHEAD LINE BI-METALLIC LUG 4.5 – 9mm NT					
C.2	OVERHEAD LINE BI-METALLIC LUG 9 – 15mm NT					
D.1	OVERHEAD LINE: LINE SPLICE FOR AAAC & COPPER 6 – 8.5mm					
D.2	OVERHEAD LINE: LINE SPLICE FOR AAAC & COPPER 9 – 12mm					
D.3	OVERHEAD LINE: LINE SPLICE FOR AAAC & COPPER 12 – 15mm					
D.4	OVERHEAD LINE: LINE SPLICE FOR AAAC & COPPER CU - 25mm²					
D.5	OVERHEAD LINE: LINE SPLICE FOR AAAC & COPPER CU - 35mm²					
D.6	OVERHEAD LINE: LINE SPLICE FOR AAAC & COPPER CU - 50mm²					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 22: SUPPLY AND DELIVER OF LV JOINTS FOR CABLES

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	LV CABLE RESIN JOINT 1.5 – 4mm ²					
A.2	LV CABLE RESIN JOINT 6 – 16mm ²					
A.3	LV CABLE RESIN JOINT 16 – 35mm ²					
A.4	LV CABLE RESIN JOINT 25 – 70mm ²					
A.5	LV CABLE RESIN JOINT 70 – 95mm ²					
A.6	LV CABLE RESIN JOINT 95 – 120mm ²					
A.7	LV CABLE RESIN JOINT 150 – 300mm ²					
A.8	JOINT LV CABLE HEAT SHRINK 1.5 – 2.5mm					
A.9	JOINT LV CABLE HEAT SHRINK 4 – 6mm					
A.10	JOINT LV CABLE HEAT SHRINK 10 – 16mm					
A.11	JOINT LV CABLE HEAT SHRINK 25 – 50mm					
A.12	JOINT LV CABLE HEAT SHRINK 70 – 150mm					
A.13	JOINT LV CABLE HEAT SHRINK 185 – 300mm					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

SIGNATURE OF TENDERER:.....

ITEM 23: HIGH MAST LIGHTS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.	15m HIGH MAST, INCLUDING 6X300 W LED FLOODLIGHTS. MAST COMPLETE WITH HEADGEAR, RISING AND LOWERING CABLES, ALL HOT DIPPED GALVANISED TO SABS 763					
B.	30m HIGH MAST, INCLUDING 9X300 W LED FLOODLIGHTS. MAST COMPLETE WITH HEADGEAR, RISING AND LOWERING CABLES, ALL HOT DIPPED GALVANISED TO SABS 763					
C.	15m AND 30m HML FOUNDATION IN HARD SOIL, ASSUMING FREE AND EASY ACCESS TO SITE AND THAT THE SOIL BEARING PRESSURE IS 150 KPA, USING 25 MPA CONCRETE					
D.	SITE ESTABLISHMENT AND DELIVERY					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 24: STREETLIGHT LUMINAIRES HPS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	400W HPS/E FLOODLIGHT SPEC 1A					
A.2	70W HPS/E HD BOTTOM ENTRY LUMINAIRE WITH CLEAR HIGH IMPACT ACRYLIC BOWL SPEC 5					
A.3	70W HPS/E HD SIDE ENTRY LUMINAIRE WITH CLEAR HIGH IMPACT ACRYLIC BOWL SPEC 5					
A.4	70W HPS/E POST TOP LUMINAIRE SPEC 4					
A.5	250W HPS/E SIDE ENTRY LUMINAIRE WITH CLEAR HIGH IMPACT ACRYLIC BOWL SPEC 5					
A.6	250W HPS/E BOTTOM ENTRY LUMINAIRE WITH CLEAR HIGH IMPACT ACRYLIC BOWL SPEC 5					
A.7	400W HPS/E BOTTOM ENTRY LUMINAIRE WITH CLEAR HIGH IMPACT ACRYLIC BOWL SPEC 5					
A.8	400W HPS/E SIDE ENTRY LUMINAIRE WITH CLEAR HIGH IMPACT ACRYLIC BOWL SPEC 5					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 25: CFL, LED AND OTHER DOMESTIC LAMPS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	LAMP 65W CFL E27 6400K					
A.2	40/50W LED FLOODLIGHT [4000k, IP65, IK10]					
A.3	STARTERS FLUORESCENT 4/5ft					
A.4	LAMPS CFL 14W/15W ES					
A.5	LAMPS LED 6W/8W ES					
A.6	LAMPS CFL 14W BC (SPIRAL OR COMPACT)					
A.7	LAMPS LED 6W/8W ES					
A.8	LAMPS CFL 18W/20W BC (spiral or compact)					
A.9	LAMPS LED 9W/11W ES					
A.10	LAMPS CFL 11W BC 3U					
A.11	LAMPS LED 4W/5W BC					
A.12	LAMPS LED 4W/5W ES					
A.13	LAMPS CFL 18W/20W ES					
A.14	LAMPS LED 9W/11W ES					
A.15	LAMPS PL 9W					
A.16	LED EQUIVALENT FOR PL9 9W					
A.17	LED REPLACEMENT [BASE WITH 2 TUBES] FOR 4FT DOUBLE					
A.18	LED CONVERSION REPLACEMENT TUBE FOR 4 FT FLUORESCENT FITTINGS					

A.19	LED REPLACEMENT [BASE WITH 2 TUBES] FOR 5 FT DOUBLE					
A.20	LED CONVERSION REPLACEMENT TUBE FOR 5 FT FLUORESCENT FITTINGS					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 26: STREETLIGHT HPS & MH LAMPS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	LAMP 70W HPS E27					
A.2	LAMP 150W HPS E27					
A.3	LAMP 250W HPS E40					
A.4	LAMP 400W HPS E40					
A.5	LAMP 400W HPS/T E40					
A.6	LAMP 1000W MH					
A.7	LAMP 2000W MH E40 230V					
A.8	LAMP 2000W MH E40 400V					
B.1	Ballast 230V/1000W MH					
B.2	Ballast 230V/2000W MH					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 27: LED STREETLIGHT LUMINAIRES AND LAMPS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	35-40-WATT, LED POST TOP STREETLIGHT					
A.2	35-40-WATT, LED STREETLIGHT SIDE ENTRY -					
A.3	35-40-WATT, LED STREETLIGHT BOTTOM ENTRY					
A.4	65-75-WATT, LED STREETLIGHT SIDE ENTRY					
A.5	65-75-WATT, LED STREETLIGHT BOTTOM ENTRY					
A.6	100-110-WATT, LED STREETLIGHT SIDE ENTRY					
A.7	100-110-WATT, LED STREETLIGHT BOTTOM ENTRY					
A.8	140-160 -WATT, LED STREETLIGHT SIDE ENTRY					
A.9	140-160 -WATT, LED STREETLIGHT BOTTOM ENTRY					
B.1	39W LUMINAIRE WITH 24 LEDS, 500mA, WARM WHITE Midi					
B.2	75W LUMINAIRE WITH 48 LEDS, 500mA, WARM WHITE Maxi					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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STREETLIGHTING OFFER

Item Nr	Wattage		Protective Cover		Lumen		Colour Rendering		Colour temp		Lens Properties		
	Spec	Offer	Spec	Offer	Spec	Offer	Spec	Offer	Spec	Offer	Mounting Height	Lighting Distribution	Comply? (Y/N)
<u>1</u>	35-40W (Post Top)		IK10		>6200		≥70		4000K		5-7m		
<u>2</u>	35-40W		IK10		>5300		≥70		4000K		7-8m	Urban road width 8-10m, pole spacings 36-60m	
<u>3</u>	65-75W		IK10		>10600		≥70		4000K		10m	Urban road width 11m, pole spacings 30-40m	
<u>4</u>	100-110W		IK10		>16200		≥70		4000K		10m	Urban road width 11m, pole spacings 30-40m	
<u>5</u>	140-160W		IK10		>21600		≥70		4000K		10m	Urban road width 11m, pole spacings 40-50m	

I accept and approve all the above

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ITEM 28: GALVANISED STEEL TUBULAR STREETLIGHT POLES AND ASSOCIATED FITTINGS
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Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	5m STEEL POLE					
A.2	6m STEEL POLE					
A.3	7m STEEL POLE					
A.4	9m STEEL POLE					
A.5	11m STEEL POLE					
A.6	12m STEEL POLE					
B.1	SINGLE HORIZONTAL OUTREACH ARM 1m					
B.2	DOUBLE HORIZONTAL OUTREACH ARMS 1m					
B.3	SINGLE OUTREACH ARM 500mm					
B.4	DOUBLE OUTREACH ARMS 500mm					
B.5	CURVED OUTREACH, 3m					
B.6	SINGLE OUTREACH ARM 500mm WOODEN POLE MOUNTING BRACKET					
C.1	1.1m SINGLE DECORATIVE OUTREACH ARMS					
C.2	2.2m DOUBLE DECORATIVE OUTREACH ARMS					

D.1	6m DECORATIVE STEEL POLE					
D.2	9.5m DECORATIVE STEEL POLE					
E	DELIVERY PER LOAD (MAX 100, MIN 50)					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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ITEM 29: LOAD CONTROL UNITS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	RADIO CONTROLLED LOAD CONTROL UNIT FOR DOMESTIC GEYSER CONTROL – MUST BE COMPATIBLE WITH EXISTING EQUIPMENT, ICASA APPROVED & HAVE POWER CONSUMPTION NOT MORE THAN 4 WATT. 240V AC, GOLAY FORMAT COMPATIBILITY, 16A CONTACTS, INDICATIONS FOR “LOAD SHED” AND “OPERATIONAL”, INFRARED <u>EXISTING EQUIPMENT:</u> ENTEK SERIES TC 240					
B.1	SEALED PVC ENCLOSURE DESIGNED FOR AN ENTEK SERIES TC240 LOAD CONTROL UNIT. MUST INCLUDE FRONT AND BACK COVERS. MUST INCLUDE BRASS NICKEL PLATED FASTENERS TO APPLY SEALS TO THE FRONT COVER.					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 30: ELECTRICAL CONSUMABLES - WIRING

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	Glands & Shrouds No 0					
A.2	Glands & Shrouds No 1					
A.3	Glands & Shrouds No 2					
A.4	Glands & Shrouds No 3					
A.5	Glands & Shrouds No 4					
A.6	Glands & Shrouds No 5					
A.7	Glands & Shrouds No 6					
A.8	PRATLEY Connectors & Shroud NO 2					
A.9	PRATLEY Connectors & Shroud NO 3					
B.1	Switches Daylight (Small) 10A					
B.2	Switches Daylight (Big) 20A					
B.3	Float Switch 13m (Mercury 1A 0 - 220V AC/DC)					
B.4	Contactors 40A 4Pole 400V With Additional 2NO+2NC Contacts					
B.5	Contactor AC 4 Pole 32A 230V Coil					
C.1	K-CLAMPS 20mm					
C.2	K-CLAMPS 26mm					
C.3	K-CLAMPS 32mm					

C.4	K-CLAMPS 40mm					
C.5	K-CLAMPS 46mm					
C.6	K-CLAMPS 52mm					
C.7	K-CLAMPS 58mm					
D.1	Surfix 2.5mm X 2 Core + Earth (100m P/Roll)					
D.2	Surfix 1.5mm X 2 Core (100m P/Roll)					
D.3	Cabtyre 1.5mm x 3C Black (100m P/Roll)					
D.4	Cabtyre 2.5mm x 3C Black (100m P/Roll)					
D.5	Wire Copper PVC Covered 2.5mm Green (100m P/Roll)					
D.6	Wire Copper PVC Covered 2.5mm Red (100m P/Roll)					
D.7	Wire Copper PVC Covered 2.5mm Green (100m P/Roll)					
D.8	Wire Copper PVC Covered 2.5mm Black (100m P/Roll)					
D.9	Wire Copper PVC Covered 1.5mm Black (100m P/Roll)					
D.10	Wire Copper PVC Covered 1.5mm Green (100m P/Roll)					
D.11	Wire Copper PVC Covered 1.5mm Red (100m P/Roll)					
D.12	10mm ² Stranded House Wire Red (100m P/Roll)					
D.13	10mm ² Stranded House Wire Black (100m P/Roll)					
D.14	10mm ² Stranded House Wire Green (100m P/Roll)					
D.15	16mm ² Stranded House Wire Red (100m P/Roll)					
D.16	16mm ² Stranded House Wire White (100m P/Roll)					
D.17	16mm ² Stranded House Wire Blue (100m P/Roll)					

D.18	16mm ² Stranded House Wire Black (100m P/Roll)					
D.19	16mm ² Stranded House Wire Green (100m P/Roll)					
E.1	Plug tops 15A (Black)					
E.2	Plug tops 15A (Red)					
E.3	Strip Connectors PVC 10A X 12way					
E.4	Strip Connectors PVC 15A					
E.5	Wonder Boxes PVC 2x4					
E.6	Wonder Boxes PVC 4x4					
E.7	Plugs Socket 4x4 Single + Plate					
E.8	Plugs Socket 4x4 Double + Plate					
E.9	Thermostat VKF 11 (230V/3000w)					
E.10	Geysers Element (3000W x 230V)					
E.11	1 Lever light switch 1 way					
E.12	2 Lever light switch 1 way					
E.13	3 Lever light switch 1 way					
E.14	2 Lever light switch 2 way					
F.1	20mm straight conduit, galvanized, plain ends, 4m lengths					
F.2	50mm straight conduit, galvanized, plain ends, 4m lengths					
F.3	20mm PVC Conduit 4m lengths					
G.1	25mm Galvanised pipe 4m length plus 5 saddles					
G.2	40mm Galvanised pipe 4m length plus 5 saddles					

G.3	50mm Galvanised pipe 4m length plus 5 saddles					
G.4	110mm Galvanised pipe 4m length plus 5 saddles					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 31: ELECTRICAL CONSUMABLES – LUGS & FERRULES
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Item	Description First value cable sq, second value hole size	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	6mm x 10					
A.2	10mm x 8					
A.3	10mm x 10					
A.4	16mm x 8					
A.5	16mm x 10					
A.6	25mm x 12					
A.7	35mm x 12					
A.8	50mm x 12					
A.9	70mm x 12					
A.10	95mm x 12					
A.11	120mm x 12					
A.12	150mm x 12					
A.13	185mm x 12					
B.1	6mm ² Ferrule					
B.2	10mm ² Ferrule					
B.3	16mm ² Ferrule					
B.4	25mm ² Ferrule					
B.5	35mm ² Ferrule					
B.6	50mm ² Ferrule					
B.7	70mm ² Ferrule					

B.8	95mm2 Ferrule					
B.9	120mm2 Ferrule					
B.10	150mm2 Ferrule					
B.11	185mm2 Ferrule					
C.1	25mm x 12 Aluminium					
C.2	35mm x 12 Aluminium					
C.3	95mm x 12 Aluminium					
C.4	150mm x 12 Aluminium					
C.5	240mm x 16 Aluminium					
C.6	300mm x 16 Aluminium					
D.1	25mm2 Aluminium Ferrule					
D.2	35mm2 Aluminium Ferrule					
D.3	95mm2 Aluminium Ferrule					
D.4	150mm2 Aluminium Ferrule					
D.5	240mm2 Aluminium Ferrule					
D.6	300mm2 Aluminium Ferrule					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 32: ELECTRICAL CONSUMABLES – TAPE & TIES
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Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	Elec Ins Tape - Green 3m – 747 (0.18mmx18mmx20m)					
A.2	Elec Ins Tape - Black 3m – 747 (0.18mmx18mmx20m)					
A.3	Elec Ins Tape - Blue 3m -747 (0.18mmx18mmx20m)					
A.4	Elec Ins Tape – White 3m – 747 (0.18x18mmx20m)					
A.5	Elec Ins Tape - Red 3m – 747 -(0.18mmx18mmx20m)					
A.6	Scotch Tape 35 - Blue					
A.7	Scotch Tape 35 - Green					
A.8	Scotch Tape 35 - Red					
A.9	Scotch Tape 35 - White					
A.10	Tape Scotch 22					
A.11	Tape Scotch 23					
A.12	Tape Scotch 24					
A.13	Tape Scotch 13					
A.14	Tape Scotch Filling (38x1.5x3000mm)					
A.15	Tape Scotch 70					
A.16	Tape Scotch 33 – Black					
B.1	Warning Tape Orange, Underground, 300mm x 500m, durable, clearly marked: Danger – HV Electrical Cable					

B.2	Warning Tape Chevron Red & White Above ground, 75mm x 100m diagonal stripe					
C.1	Cable Ties: 4,8mm X 200mm Black (100 pack)					
C.2	Cable Ties: 7.8mm X 400mm Black (50 Pack)					
C.3	Cable Ties: 13mm X 530mm Black (50 Pack)					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

.....
SIGNATURE OF TENDERER

ITEM 33: ELECTRICAL CONSUMABLES – FUSES

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	HRC 100A BLADE TYPE 500V					
A.2	HRC 125A BLADE TYPE					
A.3	HRC 160A BLADE TYPE					
A.4	HRC 200A BLADE TYPE					
A.5	HRC 250A BLADE TYPE					
A.6	HRC 315A BLADE TYPE					
A.7	HRC 400A BLADE TYPE					
B.1	HRC 125A J TYPE 500V					
B.2	HRC 160A J TYPE					
B.3	HRC 200A J TYPE					
B.4	HRC 250A J TYPE					
B.5	HRC 315A J TYPE					
B.6	HRC 400A J TYPE					
C.1	NSH FUSE HOLDER WITH 5A FUSE					
D.1	FUSE LINKS 11KV CUT-OUT FUSES 5 AMPS FAST					
D.2	FUSE LINKS 11KV CUT-OUT FUSES 10 AMPS FAST					
D.3	FUSE LINKS 11KV CUT-OUT FUSES 20 AMPS MEDIUM					
D.4	FUSE LINKS 11KV CUT-OUT FUSES 30 AMPS MEDIUM					
D.5	FUSE LINKS 11KV CUT-OUT FUSES 40 AMPS MEDIUM					
D.6	FUSE LINKS 11KV CUT-OUT FUSES 50 AMPS SLOW					

D.7	FUSE LINKS 11KV CUT-OUT FUSES 60 AMPS SLOW					
D.8	FUSE LINKS 11KV CUT-OUT FUSES 80 AMPS SLOW					
D.9	FUSE LINKS 11KV CUT-OUT FUSES 100 AMPS SLOW					
E.1	HRC FUSE LINKS 11KV WITH STRIKER PIN OIL SWITCHGEAR – TYPE BUSSMAN 31.5A SHORT					
E.2	HRC FUSE LINKS 11KV WITH STRIKER PIN OIL SWITCHGEAR – TYPE BUSSMAN 50A SHORT					
E.3	HRC FUSE LINKS 11KV WITH STRIKER PIN OIL SWITCHGEAR – TYPE BUSSMAN 60A SHORT					
E.4	HRC FUSE LINKS 11KV WITH STRIKER PIN OIL SWITCHGEAR – TYPE BUSSMAN 80A SHORT					
E.5	HRC FUSE LINKS 11KV WITH STRIKER PIN OIL SWITCHGEAR – TYPE BUSSMAN 100A SHORT					
E.6	HRC FUSE LINKS 11KV WITH STRIKER PIN OIL SWITCHGEAR – TYPE BUSSMAN 80A LONG					
E.7	HRC FUSE LINKS 11KV WITH STRIKER PIN OIL SWITCHGEAR – TYPE BUSSMAN 100A LONG					
E.8	HRC FUSE LINKS 11KV WITH STRIKER PIN OIL SWITCHGEAR – TYPE BUSSMAN 125A LONG					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 34: ASSOCIATED LINE MATERIAL - HARDWARE

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	PORCELAIN CUT-OUT FUSE 11+22KV 560mm CREEPAGE					
A.2	SILICONE CUT-OUT FUSE 11+22KV 750mm					
A.3	LINE POST INSULATORS – SILCON TYPE, 22KV, 750mm CREEPAGE, 4KN					
A.4	SPINDLE, M20 X 50mm FOR ITEM A.3 WITH WASHERS					
A.5	A-FRAME INTERMEDIATE ARM FOR 11KV – TYPE STANDARD, GALVANISED					
A.6	A-FRAME STRAIN ARM FOR 11KV – TYPE STANDARD GALVANISED					
A.7	SPECIAL STRAIN CROSS ARM FOR 11KV – GALVANISED					
A.8	STRUT POLE SWIVEL AND STANDARD SWIVEL BRACKET GALVANISED					
A.9	STRUT POLE SWIVEL AND STANDARD BRACKET GALVANISED					
B.1	SURGE ARRESTOR 12KV 10KA DISTRIBUTION CLASS POLYMER HOUSED METAL OXIDE TYPE					
B.2	LINE POST INSULATORS – PORCELAIN, 22KV, 560/750mm CREEPAGE, 4KN					
B.3	SPINDLE, M20 X 50mm for B.2 WITH WASHERS					
B.3	STAND-OFF INSULATORS – PORCELAIN, 22KV, 750mm CREEPAGE, WITH COPPER MOUNT PLATE					
B.4	SILICONE STRAIN LONG ROD INSULATOR 22KV, 70KN, 765mm CREEPAGE					
B.5	SILICONE LONG ROD INSULATOR 66KV, 70KN, 2300mm CREEPAGE – BALL & SOCKET TYPE					
B.6	FIBREGLASS STAY STRAIN INSULATOR, 70Kn, 460mm CREEPAGE					

B.7	PORCELAIN STAY INSULATOR, 136mm X 85mm					
B.8	STAY ROD ADJUSTABLE M20 X 1.8m					
B.9	STAY PLATE FOR ADJUSTABLE STAY RODS 6mm 300mm X 300mm					
C.1	STAY PLATE FOR ADJUSTABLE STAY RODS 6mm 300mm X 300mm					
C.2	STAY PLATE FOR ADJUSTABLE STAY RODS 6mm 450mm X 450mm					
C.3	GALVANISED STEEL WIRE 1000MPA 3 X 3.35mm					
C.4	GALVANISED STEEL WIRE 1000MPA 7 X 4mm					
C.5	CRADLE SUSPENSION CLAMP - FOR AAAC CONDUCTOR 8 – 18mm					
C.6	CRADLE SUSPENSION CLAMP - FOR AAAC CONDUCTOR 15mm - 26mm					
C.7	PISTOL GRIPS FOR AAAC CONDUCTOR 5mm – 16mm Al, 3 U-Bolts					
C.8	PISTOL GRIPS - FOR AAAC CONDUCTOR 16mm - 22mm Cast Iron					
D.1	LINE FIXING/HOOKING MATERIAL/DEVICES COACH SCREW M12 75mm					
D.2	LINE FIXING/HOOKING MATERIAL/DEVICES PIGTAIL ASSY M16 380mm					
D.3	LINE FIXING/HOOKING MATERIAL/DEVICES D-SHACKLE PIN TYP 70kN					
D.4	LINE FIXING/HOOKING MATERIAL/DEVICES CLEVIS THIMBLE 70Kn Cast Iron					
D.5	LINE SOCKET TONGUE ADAPTOR, 70kN, Galvanised					
E.1	THREADED ROD ASSEMBLIES – 2 X SQUARE WASHERS +2 X FLAT WASHERS + 2 X SPRING WASHERS + 4 X NUTS – ALL GALVANISED M20 X 350mm					
E.2	THREADED ROD ASSEMBLIES – 2 X SQUARE WASHERS +2 X FLAT WASHERS + 2 X SPRING WASHERS + 4 X NUTS – ALL GALVANISED M16 X 350mm					

E.3	THREADED ROD ASSEMBLIES – 2 X SQUARE WASHERS +2 X FLAT WASHERS + 2 X SPRING WASHERS + 4 X NUTS – ALL GALVANISED M20 X 600mm					
E.4	THREADED ROD ASSEMBLIES – 2 X SQUARE WASHERS +2 X FLAT WASHERS + 2 X SPRING WASHERS + 4 X NUTS – ALL GALVANISED M20 X 1000mm					
F.1	CLAMPS, GROOVED (Cu 10-95)					
F.2	CLAMPS, GROOVED (Al 25-150)					
F.3	BANDIT STRAPPING 20mm & BUCKLES (316 STAINLESS STEEL - 19mm X 0.75mm X 30m)					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

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SIGNATURE OF TENDERER

ITEM 35: ELECTRICAL LINE MATERIAL – CONNECTORS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	ABC PRE-INSULATED COMPRESSION CONNECTORS 25-16 ORANGE - BLUE 4E-173					
A.2	ABC PRE-INSULATED COMPRESSION CONNECTORS 54.6-54.6 BLACK 4E-133					
A.3	ABC PRE-INSULATED COMPRESSION CONNECTORS 70-70 WHITE 4E-173					
A.4	ABC PRE-INSULATED COMPRESSION CONNECTORS 95-95 GREY 4E-173					
A.5	ABC PRE-INSULATED COMPRESSION CONNECTORS 120-120					
A.6	ABC PRE-INSULATED COMPRESSION CONNECTORS 150-150					
A.7	ABC LV CLAMPS TYPE PA-1500 FOR INSULATED NEUTRAL STRAIN CLAMP					
A.8	ABC LV CLAMPS TYPE PA-1500 FOR INSULATED NEUTRAL SUSPENSION CLAMP					
A.9	ABC BUNDLE CONNECTORS TTD 151F					
A.10	ABC BUNDLE CONNECTORS TTD 201F					
B.1	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX 70-70 FERRULE					
B.2	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX 70-95 FERRULE					
B.3	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX 95-70 FERRULE					
B.4	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX 70 X 12mm LUG					
B.5	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX 95 X 12mm LUG					
B.6	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX 120 X 12mm LUG					

B.7	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX 150 X 12mm LUG					
B.8	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX PINE X 12mm LUG					
B.9	ALUMINIUM AND AAAC TO COPPER FERRULES TYPE XGX AND LUGS TYPE XCX OAK X 12mm LUG					
C.1	BOLTED TRFR CONNECTORS, TWISTED LUG, 6 – 15mm					
C.2	LINE TAPS 2x70mm, tinned copper					
C.3	LINE TAPS 2x35mm, tinned copper					
					TOTAL EXCLUDING 15% VAT	
					15% VAT	
					TOTAL INCLUDING 15% VAT	

I accept and approve all the above

.....
SIGNATURE OF TENDERER

ITEM 36: ELECTRICAL LINE MATERIAL – PREFORMED PRODUCTS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	DEAD ENDS - FOR AAAC CONDUCTOR FIR					
A.2	DEAD ENDS - FOR AAAC CONDUCTOR PINE					
A.3	DEAD ENDS - FOR AAAC CONDUCTOR OAK					
A.4	DEAD ENDS - FOR AAAC CONDUCTOR ASH					
B.1	WRAP LOCK TIES - FOR AAAC CONDUCTOR FIR					
B.2	WRAP LOCK TIES - FOR AAAC CONDUCTOR PINE					
B.3	WRAP LOCK TIES - FOR AAAC CONDUCTOR OAK					
C.1	ARMOUR RODS - FOR AAAC CONDUCTOR PINE					
C.2	ARMOUR RODS - FOR AAAC CONDUCTOR OAK					
C.3	ARMOUR RODS - FOR AAAC CONDUCTOR ASH					
D.1	VIBRATION DAMPER, SPIRAL, HIGH IMPACT PVC - FOR AAAC CONDUCTOR OAK					
D.2	VIBRATION DAMPER, SPIRAL, HIGH IMPACT PVC - FOR AAAC CONDUCTOR ASH					
E.1	POLE TOP MAKE-OFF GALVANISED STEEL STAY WIRE 7 X 4mm					
E.2	GUY GRIP DEAD END FOR GALVANISED STEEL WIRE 3 X 3.35mm					
E.3	GUY GRIP DEAD END FOR GALVANISED STEEL WIRE 7 X 4mm					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above. SIGNATURE OF TENDERER:.....

ITEM 37: ELECTRICAL CABLE & LINE COMPONENTS

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	Line Fault Indicator – 3phase pole mounted					
A.2	Line Fault Indicator – Single Phase conductor mounted					
B.1	Cable Fault Indicator – 3 phase live mount					
B.2	Cable Fault Indicator – 3 phase dead mount					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

.....
SIGNATURE OF TENDERER

ITEMS 38: SUPPLY AND DELIVERY OF METERING CT'S, WIRE AND ACCESSORIES

Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
A.1	Summation Metering CT's					
B.1	500/5A RING METERING CT'S					
B.2	300/5A RING METERING CT'S					
B.3	200/5A RING METERING CT'S					
C.1	red 2.5mm flexible panel wire (100m per roll)					
C.2	black 2.5mm flexible panel wire (100m per roll)					
C.3	yellow or white 2.5mm flexible panel wire (100m per roll)					
C.4	blue 2.5mm flexible panel wire (100m per roll)					
C.5	green earth wire 2.5mm flexible panel wire (100m per roll)					
D.1	blue 2.5mm insulated lugs 2HB (100 per pack)					
D.2	blue 2.5mm insulated lugs 2FB18 (100 per pack)					
D.3	red 1.5mm insulated lugs 1HB (100 per pack)					
D.4	blue 1.5mm insulated lugs 1FB18 (100 per pack)					
E.1	Single Phase 10x38 Fuse Holder 32A 500V					
E.2	10x38 2A Fuse 10kA					
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all of the above. SIGNATURE OF TENDERER:

ITEM 39: KEYPADS FOR ITRON ACE 9000 SSP PLC MCU METERS						
Item	Description	Manufacturer Make	Fixed Unit price 1 October 2022/ 30 September 2023	Fixed Unit price 1 October 2023/ 30 September 2024	Total Price Year 1+2	Delivery Period Weeks
B.1	KEYPADS FOR ACE9000 PLC SPLIT METER	ONTEC, CAPE TOWN ITRON ACE9000				
TOTAL EXCLUDING 15% VAT						
15% VAT						
TOTAL INCLUDING 15% VAT						

I accept and approve all the above

.....
SIGNATURE OF TENDERER

MBD 7.1

SECTION 4.5

CONTRACT FORM - PURCHASE OF GOODS/WORKS

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SUCCESSFUL BIDDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SUCCESSFUL BIDDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE BIDDER)

1. I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to (name of institution)..... in accordance with the requirements and specifications stipulated in bid number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of bid.

2. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - (i) Bidding documents, viz
 - Invitation to bid;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Technical Specification(s);
 - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2017;
 - Declaration of interest;
 - Declaration of bidder's past SCM practices;
 - Certificate of Independent Bid Determination;
 - Special Conditions of Contract;
 - (ii) General Conditions of Contract; and
 - (iii) Other (specify)

3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.

5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.

6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES	
1
2.
DATE:.....	

CONTRACT FORM - PURCHASE OF GOODS/WORKS

PART 2 (TO BE FILLED IN BY THE PURCHASER)

1. I..... in my capacity as..... accept your bid under reference numberdated.....for the supply of goods/works indicated hereunder and/or further specified in the annexure(s).
2. An official order indicating delivery instructions is forthcoming.
3. I undertake to make payment for the goods/works delivered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice accompanied by the delivery note.

ITEM NO.	PRICE APPLICABLE (ALL TAXES INCLUDED)	BRAND	DELIVERY PERIOD	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

4. I confirm that I am duly authorized to sign this contract.

SIGNED ATON.....

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP

WITNESSES

1.

2.

DATE

SECTION 4.6

PRICE ADJUSTMENTS

Bids shall remain valid and binding for a minimum of 90 days after the tender closure date and the validity extend automatically till the contract is signed if validity goes beyond the number of days indicated. The reason for this is to ensure that the tender is valid till appeals were considered, if received.

I accept and approve all of the above.

.....
SIGNATURE OF TENDERER

Failure to accept the automatic extension will render the bid non-responsive. Any bidder may at any time withdraw their bid in writing in which case the bid will not be further considered.

Initial_____

SECTION 4.7

OMMISSIONS, ALTERATIONS AND ADDITIONS

Initial_____

SECTION 4.8**SCHEDULE OF VARIATIONS FROM SPECIAL CONDITIONS OF CONTRACT**

Should your company ***BE WILLING TO PROVIDE THE 2.5% deduction for payment within 30 days*** as per the payment clause in the Conditions of Contract, then **complete the following.**

YES, my company **IS WILLING TO HAVE THE 2.5%** taken off of the payment of the items even though the 2.5% will not be taken into account in the adjudication of the tender.

Tenderer's signature for acceptance of the 2.5% discount

(Only if tenderer wishes to provide the 2.5% discount)

Initial_____

SECTION 4.9

E-TENDER DECLARATION

<u>It is compulsory to confirm "yes or no" on all line items</u>	<u>Comply Yes/NO</u>
The original document collected from the Municipality must be submitted or, if documents are printed from the e-tender website, the original, printed document must be submitted, clearly reflecting all writing and signatures in black ink. Copied documents where the writing and signatures is unclear and/or copied will render the tender non- responsive	
Print the tender document with a quality printer. If the wording is unclear, the document will be discarded	
Printed documents must be <u>binded securely</u> according to page numbers to prevent pages getting lost. Missing pages will render the tender non-responsive.	
The Price Schedule and All Annexures with compulsory attachments must be binded to the back of the document.	
No alterations of the document will be accepted. Any alterations will disqualify the tender.	
Print the <u>Tender document</u> on <u>both sides</u> to save paper and for standardisation.	

It is compulsory to comply and sign below if the tenderer agrees to the requirements above

I accept and approve all of the above.

.....
SIGNATURE OF TENDERER

Initial_____

SECTION 4.10**SUPPORTING DOCUMENTATION FROM TENDERER**

Note :-

(No pricing or pricing adjustment documentation can be attached to the tender
Any pricing or pricing adjustment documentation which is attached by the tenderer will not be
considered

The schedules supplied by Council must be used for all pricing matters.)

Initial_____