

EPHRAIM MOGALE LOCAL MUNICIPALITY



BID DOCUMENT

TENDER NO. EPMLM/8/3/528

APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD

CIDB GRADING: 3EP OR HIGHER

NOVEMBER 2025

PREPARED FOR AND BY

THE ACTING MUNICIPAL MANAGER

EPHRAIM MOGALE LOCAL MUNICIPALITY

Private Bag x 111

MARBLE HALL

0450

Tel: (013) 261 8400

Fax: (013) 261 4055

NAME OF BIDDER : _____

CSD SUPPLIER NO : _____

CRS (CIDB) NO : _____

TENDERED AMOUNT (WORDS) : _____

TENDERED AMOUNT (FIGURES) : _____

TEL NUMBER : _____

FAX NUMBER : _____

EPHRAIM MOGALE LOCAL MUNICIPALITY



APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD

EPMLM/8/3/528

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EPHRAIM MOGALE LOCAL MUNICIPALITY
APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI
SUBSTATION – 1028 MAIN ROAD
BID NUMBER: EPMLM/8/3/528.

VERY IMPORTANT NOTICE ON DISQUALIFICATIONS:

IMPORTANT NOTICE ON DISQUALIFICATIONS

A bid not complying with the peremptory requirements stated hereunder will be regarded as not being an “Acceptable Bid”, and as such will be rejected.

The Municipality shall adjudicate and award tenders in accordance with **the Preferential Procurement Policy Framework Act 5 of 2000 and revised Preferential Procurement Regulation of 2022** on 100 points functionality and on a 80/20 points system, where 80 points are for the price and 20 points for Specific goals according to the said legislation.

1. If the bidder is not registered on the National Treasury’s Central Supplier Database (CSD) with a compliant tax status and active business status,
2. If any pages have been removed from the bid document, and have therefore not been submitted, or a copy of the original bid document has been submitted.
3. Failure to complete the schedule of quantities as required, i.e only lump sums provided.
4. Scratching out without initialising next to the amended rates or information, writing over or painting out rates affecting evaluation of the bid.
5. The use of correction fluid (i.e. tippex) or any erasable ink, e.g. pencil.
6. The Bid document has not been properly signed by a party having Authority to do so, according to the example of “**Authority of Signatory**”.
7. No authority of signatory submitted – where it is stated that a **duly signed and dated original or certified copy of the company’s relevant resolution on the company letterhead** of their members or their board of directors, must submitted.
8. **Particulars required in respect of the bid have not been completed, except if information required on Preference Schedule in respect of specific goals, is not completed, the bid will not be disqualified but no preference points will be awarded.**
9. The bidder attempts to influence, or has in fact influenced the evaluation and/or awarding of the contract.
10. The bid has been submitted either in the wrong tender box or after the relevant closing date and time.
11. If any municipal rates and taxes or municipal service charges are owed by the bidder and any of it directors to the municipality, or to any other municipality or municipal entity, are in arrears for more than three (3) months.
12. If any bidder who during the last five (5) years has failed to perform satisfactorily on a previous contract with the municipality, municipal entity or any other organ of state after written notice was given to that bidder that performance was unsatisfactory.

13. The Accounting Officer must ensure that irrespective of the procurement process followed, no ward may be given to a person;
 - i. Who is in the service of the state, or
 - ii. If that person is not a natural person, of which any director, manager, principal shareholder or stakeholder, is a person in the service of the state, or
 - iii. Who is an advisor or consultant contracted with the municipality in respect of contract that would cause a conflict of interest.
14. Bid offers will be rejected if the bidder or any of its directors is(are) listed on the National Treasury List of Restricted Suppliers and List of Tender Defaulters, as persons prohibited from doing business with the state.
15. Bid offers will be rejected if the bidder has abused the Ephraim Mogale Local Municipality's Supply Chain Management System.
16. Failure to attach a copy of a valid signed Joint Venture/Consortium Agreement (if applicable) to the bid document.
17. Form of Offer and Acceptance not completed (**amount in figure and words**) and signed by the authorised signatory.
18. Not signing of all relevant forms in the tender document on the spaces provided

NOTE:

IN THIS DOCUMENT AND OTHER DOCUMENTS REFERRED TO BUT NOT ATTACHED, THE FOLLOWING WORDS ARE SYNONYMOUS WITH EACH OTHER.

1. CLIENT, EMPLOYER, EPHRAIM MOGALE LOCAL MUNICIPALITY (EPMLM).
2. BID, BID AND VARIATIONS THEREOF
3. JOINT VENTURE / CONSORTIUM

T1.1: BID NOTICE AND INVITATION TO BID**EPHRAIM MOGALE LOCAL MUNICIPALITY****BID NUMBER: EPMLM/8/3/528**

Tenders are hereby invited from Service Providers with relevant experience and compliance documents to bid for the following.

These are subject to the PPPFA and the Preferential Regulations 2022 and the General Conditions of Contract and, if applicable, to any special conditions of contract

Bid No & Description	Compulsory briefing And Technical Enquiries	Requirements	Bid document availability date	Nonrefundable bid fee	Closing Date and Time
EPMLM/8/3/528– APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD	Compulsory briefing session Date: 01 December 2025 Venue: Marble hall town hall Time: 12:00 J Durie:0132618454/ jdurie@emogalelm.gov.za	<ul style="list-style-type: none"> Estimated CIDB Grading of 3EP or higher Proven past experience 	25/11/2025	R1 250.00	08/12/2025 at 12:00

The municipality will adjudicate and award bids in accordance with the PPR 2022 using the 80/20-point system, where 80 will be allocated to price and 20 for Specific goals of the contributor. Bids will remain valid for 90 days after the closing date.

Bid documents will be available from **Tuesday, 25 November 2025** by the cashiers from **08H00 to 15H30** weekdays and for free download on www.etenders.gov.za

The project/s will be subjected to functionality (quality) evaluation whereby a minimum qualifying score has to be obtained for bidders to be further evaluated for procurement points. The functionality criterion is as follows per project and further explained in the bid document:

Criteria	Maximum Weights
Company Experience	40
Specific personnel knowledge	30
List of Plant and Equipment	10
Financial Capacity	20
Minimum qualifying score	70 Points
Total Points for Functionality	100

Completed bids in sealed envelopes, clearly marked with the relevant bid number and description, should be deposited in the bid box situated at the offices of the Ephraim Mogale Local Municipality, 2 Ficus Street, Marble Hall, 0450, where bids will be opened in public.

NB: Bidders should ensure that bids are delivered in time to the correct address. Late bids will not be accepted. Ephraim Mogale Local Municipality does not bind itself to accept the lowest or any bid and reserves the right to accept any bid as a whole.

SCM related enquiries should be directed to the Supply Chain Management Unit at (013) 261 8450/8462/8496/8448/8541 or by email at ephmlmsupplychain@emogalelm.gov.za and Technical enquiries may be directed to Mr .J Durie at 013 261 8454 / jdurie@emogalelm.gov.za

MAPHUTHA T.P.
ACTING MUNICIPAL MANAGER

T1.2: BID DATA

The Conditions of bid in the Standard Conditions of bid as contained in Annex F of SANS 294 – *Construction Procurement Processes, Methods and Procedures* contains references to the bid Data for details that apply specifically to this bid.

The BID Data shall be read with the Standard Conditions of bid in order to expand on the Bidder's obligations and the Employer's undertakings in administering the bid process in respect of the project under consideration.

The BID Data hereafter shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of bid.

Each item of bid Data given below is cross-referenced to the relevant clause in the standard Conditions of BID.

F.1.1 The Employer for this Contract is: **EPHRAIM MOGALE LOCAL MUNICIPALITY.**

F.1.2 Bid Documents

The Bid Document consists of the following:

BID

Part T1: Bidding Procedures

Part T2: Returnable Documents

CONTRACT

Part C1: Agreements and Contract Data

Part C2: Pricing Data

Part C3: Scope of Work

Part C4: Site Information

DRAWINGS

The bid Document with the drawings shall be obtained from the Employer or his authorized representative at the physical addresses stated in the bid notice, upon payment of the deposit stated.

F.1.4 The Employer's agent is:

Name : Mr. JL Durie
Telephone : (013) 261 8400

F.1.5 The Employer's right to accept or reject any bid offer

The Employer is not obliged to accept the lowest or any bid offer.

F.2.1 Eligibility

A bidder will not be eligible to submit a bid if:

- (a) The Contractor submitting the bid is under restrictions or has principals who are under restriction to participate in the Employer's procurement due to corrupt or fraudulent practices;
- (b) The bidder does not have the legal capacity to enter into the contract.
- (c) The Contractor submitting the BID is insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of the foregoing;

- (d) The bidder does not comply with the legal requirements stated in the Employer's procurement policy;
- (e) The bidder cannot demonstrate that he possesses the necessary professional and technical qualifications and competent, financial resources, equipment and other physical facilities, managerial capability, personnel, experience and reputation to perform the contract;
- (f) The Bidder cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract.

Only those bidders who are registered with the Construction Industry Development Board (CIDB) in a contractor-grading equal to or higher than a contractor grading designation **3EP OR HIGHER** or higher **3EP OR HIGHER** or a combined grading (in the case of a joint venture) equal or higher than **3EP OR HIGHER** as defined in the Regulations (09 August 2004 and 22 July 2005), in terms of the CIDB Act No 38 of 2000, are eligible to submit BIDs for this contract.

F.2.7 Site visit and clarification meeting

The arrangements for the compulsory clarification meeting are as stated in the Bid Notice and Invitation to bid – **Compulsory Briefing Session**
Date: 01 December 2025
Venue: Marble Hall town hall
Time: 12:00

F.2.10 Pricing the bid offer

- (a) Value Added Tax
 - The Valued Added Tax (VAT) rate shall be 15% or as otherwise provided for by legislation.
 - The successful bidder shall be required to produce a VAT invoice that shall only be prepared once measurements and valuations for work done in terms of the contract offer have been agreed with the Employers agent and a certificate of payment issued.
 - Payment of VAT to non-VAT vendors shall be processed from the month in which the bidder's liability with the South African Revenue Services is effective.

F.2.11 Alterations to document

A BID offer shall not be considered if alterations have been made to the forms of bid data or contract data (unless such alterations have been duly authenticated by the bidder) or if any particulars required therein have not been completed in all respects.

F.2.12 Alternative bid offers

No alternative offers will be considered.

F.2.13 Submitting a bid Offer

F.2.13.1 No Bidder may submit more than one Bid as set out in this clause in the Standard Conditions of Bid

F.2.13.3 Bid offers shall be submitted as an original only.

Under no circumstances whatsoever may the bid forms be retyped or redrafted.

Photocopies of the original bid documentation may be used, but an original signature must appear on such photocopies.

F.2.15 Closing Time

The closing time for submission of bid Offers is: 12:00 hrs. on **08 DECEMBER 2025**.
Telephonic, telegraphic, telex, facsimile, electronic or e-mailed BIDs will not be accepted.

F.2.16 Bid offer validity

The bid Offer validity period is 90 days from the closing time for submission of bids.

F.2.17 The Bided lump sums and rates shall be final and binding irrespective of the total Bid price

F.2.19 Access

Access shall be provided for inspections and testing by personnel acting on behalf of the Employer.

F.2.22 Return of bid Documents

Not applicable.

F.2.23 Certificates

The bidder is required to submit with his bid the following Mandatory documents:

- Valid Proof of registration with CIDB
- Joint Venture Agreement and Power of Attorney in case of Joint Ventures;
- Certified Copies of Appointment letters and Completion certificate of relevant project
- Valid proof of registration with the compensation for occupational injuries and Diseases Act (COIDA)
- Municipal Account not older than 3 months for both directors and company
- Valid proof of registration as electrical contractor with the Department of Labour

Additional Mandatory requirements

The Municipality adheres to all the acts relevant to procurements of goods and/or Services and its supply chain management policy. The Prescriptions of the Constitution and industry Development Board (CIDB) will apply.

F.3.4 Opening of bid Submissions

The time and location for opening of the **bid** offers are:

Time : 12:00 hrs. **Date:** 08 DECEMBER 2025

Location / Venue: **Finance Building, Marble Hall: EPHRAIM MOGALE LOCAL MUNICIPALITY**

Bid box,
Tel No (013) 261 8400

F.3.5 asD The two-envelope system will **not** apply to this bid.

F.3.11 Evaluation of bid Offers

Bidders will be evaluated on quality, price and preference. It is important that the relevant information is included to enable the Technical Proposal to be evaluated in accordance with the procedure outlined below. All information must be submitted in a separate file. Tampering with the original Bid document will render the Bid non-responsive. Failure to comply with the above requirements will result in the Bid being disqualified.

The Bid evaluation will be conducted as follows:

1(a) First

Bid documents that have been disassembled and copies of the Bid documents will be disqualified outright.

1(b) Second

Bidders will be checked for compliance with Bid Conditions and administrative responsiveness. Non-compliance with any of the requirements will render the Bid non-responsive and it will not be carried forward to the next stage. (refer to 2(a) below).

1(c) Third

The Bidder's experience, staffing, list of plants and financial capacity will be evaluated. Each Bid will be assessed and awarded points for Functionality. **Failure to achieve 70 points out of the 100 for Functionality will render the Bid non-responsive.**

Only Bidders that score the specified minimum number of points for Functionality will be deemed to be acceptable and carried forward to the next stage. The rest will be disqualified. The points for functionality will not be carried forward to the remainder of the evaluation. (refer to 2(b) below)

1(d) Fourth

Points will be calculated for price on the relevant prices in accordance with the preference point system, 80/20. (Refer to 2(c) below)

1(e) Fifth

Points for specific goal will be awarded in accordance with EPMLM approved policy as per the amended Preferential Procurement regulations, 2022. refer to 2(d) below)

1(f) Final

The Bid will be awarded to the short-listed Bidder who has scored the highest points for price and specific goals, unless there are justifiable, objective reasons to award the Bid to another Bidder. However, the Employer retains the right not to accept any Bid. Refer to (2e) below)

2(a) Compliance with Bid Conditions and other Requirements

The Bid will be checked to ensure that they comply with the Bid Conditions and all other requirements of the project document. In particular, the following documentation must be completed, signed and included in the Bid:

- a) Certificate of attendance at site inspection, to be signed onsite inspection attendance register, only applicable in case where there is a compulsory site meeting for the bid.
- b) Certificate of Authority for Signature. For JV's a JV Agreement shall be provided (if applicable)
- c) Record of addenda to Bid documents.
- d) Certificate of non- collusive Bid
- e) Compliance with Occupational Health and Safety Act
- f) Compulsory enterprise questionnaire.
- g) Financial details, statements and bank references.
- h) Declaration of bidder's past supply chain management practices.
- i) Declaration of interest
- j) Construction industries development board registration.
- k) Form C1.1 – Form of Offer and Acceptance
- l) Contract Data Section 2: Data provided by the contractor

Failure to comply with the Bid Conditions or to supply the necessary information at Bid closure **WILL** result in the Bid being rejected. Non submission of any of the forms listed above will result in the Bid being rejected as non-responsive.

2(b) Second Stage in Evaluation: Quality or Functionality: Points System

A brief description of the scoring system is given below. A tabulated score sheet which will be used in the evaluation is as shown below.

The Bidder must be able to demonstrate that he understands the project and the various

tasks required. Innovative solutions will be viewed favourably. For a definition of all terms, refer to Scope of Works. Bidders' submissions will be evaluated based on compliance with the following criteria to determine the responsiveness to the bid requirements:

- I. Organogram and CV's for key personnel
- II. Capability statement of the company with regard to this type of work in general, and the

Specifications of this bid. Provide project descriptions of similar completed projects, highlighting similarities between the completed projects and the specifications of this project. Highlight experience with similar projects in South Africa for similar electrical distribution authorities in the past 5 years. Provide contact details of employers for these projects. Points will be awarded for each project completed that is at least one grading lower than the CIDB grading called for this project.

- III. Plant and equipment: Indicate own and hired equipment, clearly indicating equipment to

be used specifically for this project.

- IV. Bank rating: Bidder's bank to complete the included form

Functionality

The bid will be subjected to functionality evaluation as per below criteria. Bidders will be required to obtain a minim qualifying score of **70 points** out of **100** to be further evaluated for price and preferential points

Clause Number	Tender Data																																		
	The scoring for Grade 3EP will be according to the table below																																		
	<table><tr><th colspan="4">Functionality Scorecard</th><th rowspan="2">TOTAL POINT</th></tr><tr><th>Criteria</th><th colspan="3">Scoring guide</th></tr><tr><td rowspan="5">Company Experience: The tenderer can score a maximum of 40 points by attaching proof of the completion of 4 similar minisubstation or MV switchgear projects completed within the past 5 years. The points will be awarded according to their value as indicated in the table. To qualify for points the tenderer must submit/attach the appointment letter and completion certificate or reference letter for each project. For a project to qualify for points it must have a value of at least R200 000 or more. Failure to submit the required appointment letter and Completion certificates or reference letter for each project signed by the employer/customer will result in the bidder getting zero points.</td><td>No.</td><td>Target Goals: List reference with details (Minisubstations or Medium Voltage switchgear installations)</td><td>Maximum points (40)</td><td rowspan="5">40</td></tr><tr><td>1.</td><td>Completed projects with a value of R1 million or more.</td><td>10 points each</td></tr><tr><td>2.</td><td>Completed projects with a value of R500 000 or more and less than R1 million.</td><td>5 points each</td></tr><tr><td>3.</td><td>Completed projects with a value of R200 000 or more and less than R500 000.</td><td>3 points each</td></tr><tr><td>4.</td><td>Completed projects with a value of less than R200 000.</td><td>0 points each</td></tr><tr><td>Specific Personnel</td><td>Designation</td><td colspan="2">Designation</td><td></td></tr></table>				Functionality Scorecard				TOTAL POINT	Criteria	Scoring guide			Company Experience: The tenderer can score a maximum of 40 points by attaching proof of the completion of 4 similar minisubstation or MV switchgear projects completed within the past 5 years. The points will be awarded according to their value as indicated in the table. To qualify for points the tenderer must submit/attach the appointment letter and completion certificate or reference letter for each project. For a project to qualify for points it must have a value of at least R200 000 or more. Failure to submit the required appointment letter and Completion certificates or reference letter for each project signed by the employer/customer will result in the bidder getting zero points.	No.	Target Goals: List reference with details (Minisubstations or Medium Voltage switchgear installations)	Maximum points (40)	40	1.	Completed projects with a value of R1 million or more.	10 points each	2.	Completed projects with a value of R500 000 or more and less than R1 million.	5 points each	3.	Completed projects with a value of R200 000 or more and less than R500 000.	3 points each	4.	Completed projects with a value of less than R200 000.	0 points each	Specific Personnel	Designation	Designation		
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Knowledge Certified copies of Academic qualification certificates and registrations with a professional body needs to be attached for functionality points scoring otherwise no points will be allocated. Certified copies should not be older than three (3) months. (Attach letter of employment or letter stating that the incumbent will be employed should the bid be successful)	Project Manager	<u>Project Manager:</u> <u>Points: 15</u> <u>Formal Electrical Qualifications</u> 0: No formal electrical education 3: Electrical qualification: Certificate N6 / Diploma 5: Electrical qualification: Degree - B-Tech / BSC or above <u>ECSA Registered</u> 0: No ECSA registration certificate 3: Candidate ECSA registrations 5: Registered with ECSA as professional <u>Working Experience</u> 0: 0-5 years' experience 3: >5 years' experience 5: >10 years' experience
	Site Foreman	<u>Site Foreman/Agent: (always on site)</u> <u>Points: 15</u> <u>Formal Electrical Qualifications</u> 0: No formal electrical education 3: Electrical qualification: Certificate N3 5: Electrical qualification: N Diploma/ Diploma or above <u>Trade Tests</u> 0: No trade certificates 5: Trade test Electrician <u>Working Experience</u> 0: 0-3 years' experience 3: >3 years' experience 5: >5 years' experience

30

Clause Number	Tender Data				
	FinancialCapacity Ability of the worker to finance working capital requirement before the first claim is paid by the client. The tenderer to submit a letter from the bank indicating the bank rating. The letter should not be older than six (6) months				20
		Bank rating	Weighting	Score	
		Bank rating =A	20		
		Bank rating =B	15		
		Bank rating =C	10		
		Bank rating =D	5		
		Bank rating =E,F to G	0		

List of plant and equipment 1. Tenderer to submit proof of ownership with certification not older than three months. 2. And in case of hiring, a letter of intent must be submitted with proof of ownership with certification not older than three months. Bidders will score 5 points where the total minimum plant required has a letter of intent and also proof of ownership by a rental company	Required plant	Weighting	Score	10
	1 x Crane or Truck mounted crane	5		
	1 x Light Delivery Vehicle	5		
	TOTAL	10		
Functionality Threshold (Minimum score)				70
Total Points for Functionality				100

It is important that the Bidder provides information as requested as this information will be used for functionality in which a **minimum of 70 points** must be scored to move to the next stage of evaluation. The scoring will be according to the table below

Bidders must score a minimum of 70 percentage points out of the 100 percentage to qualify for further adjudication.

2(c) Fourth Stage in Evaluation: Price

The following must be completed in full

- * The pricing schedule
- * The form of offer. No alterations, subtractions or additions may be made to the items in the pricing schedule. All items must be priced or calculated.

A total of 80 points will be awarded to the Bid with the lowest balanced price. The other Bidders will be awarded points based on the ratio of the price under consideration to the lowest price.

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

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

2(d) Fifth Stage in Evaluation: Specific goal (Ph)

The Bidders will then be evaluated in terms of the Construction industry scorecard and the PPPFA, 2000 (Act No 5 of 2000); Preferential Procurement regulation, government gazette no 47452 issued on 4 of November 2022 with the values of Ph indicated as the number of points for specific goals shown below.

80/20		
Preference Points for specific goals	Means of Verification	Number of Points
At least 51% Black ownership	Identification documents / CSD Report / CIPC Certificate	10
At least 51% Women Ownership	Identification document / CSD Report / CIPC Certificate	5

At least 51% People with Disability	Medical Report indicating disability	3
At least 51% Youth ownership (18 to 35 Years of age)	Identification document / CSD Report / CIPC Certificate	2

2(e) Final Stage in Evaluation : Calculation of Final Total Points

The final score or final total points for each Bid will be calculated by adding the scores from the; calculations.

$$P = P_s + P_h$$

F.3.13 Acceptance of bid Offer

F.3.13.1 Bid offers will only be accepted on condition that:

- (a) the bid offer is signed by a person authorized to sign on behalf of the Bidder;
- (b) an active and compliant registration on the Central Supplier Database;
- (c) the bidder's declaration of compliance with the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014, is included with his bid submission;
- (d) a bidder who submitted a bid as a Joint Venture has included an acceptable Joint Venture Agreement with his bid;
- (e) the bidder or a competent authorized representative of the contractor who submitted the bid has attended the compulsory clarification meeting or site inspection;
- (f) the contractor who submits the bid has been registered with the Construction Industry Development Board in accordance with the Construction Industry Development Board Act No. 38 of 2000 and the CIDB Regulations 2003 promulgated in terms of the Act, or if the contractor can submit proof or evidence that he will be able to register within 10 days of the closing date for submission of bids;
- (g) the bidder or any of its principals is not listed on the register of bid Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- (h) the bidder has not abused the Employer's Supply Chain Management System or has failed to perform on any previous contract and has been given a written notice to this effect;
- (i) the bidder or any of its principals, directors or managers is not employed in the service of the State or any municipality. In the event that such principals are involved, official approval from the Executing Authority regarding carrying out remunerative work outside of the public service must be included in the BID submission.
- (j) the employer is satisfied that the bidder or any of his principals have not influenced the BID offer and acceptance by the following criteria:
 - a. having offered, promised or given a bribe or other gift or remuneration to any person in connection with the obtaining or execution of this Contract;
 - b. having acted in a fraudulent or corrupt manner in obtaining or executing this Contract;
 - c. having approached an officer or employee of the Employer or the Employer's Agent with the objective of influencing the award of a Contract in the bidder's favour;
 - d. having entered into any agreement or arrangement, whether legally binding or not, with any other person, firm or company to refrain from Bidding for this Contract or as to the amount of the BID to be submitted by either party;

- e. having disclosed to any other person, firm or company other than the Employer, the exact or approximate amount of his proposed bid;
- f. the employer may, in addition to using any other legal remedies, repudiate the bid offer and acceptance and declare the Contract invalid should it have been concluded already.

F.3.18 Copies of Contract

The number of paper copies of the signed contract to be provided by the Employer is ONE.

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T1.3: STANDARD CONDITIONS OF BID

(As contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement)

F.1 General

F.1.1 Actions

The employer and each bidder submitting a bid offer shall comply with these conditions of bid. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently.

F.1.2 Bid Documents

The documents issued by the employer for the purpose of a bid offer are listed in the bid data.

F.1.3 Interpretation

F.1.3.1 The bid data and additional requirements contained in the bid schedules that are included in the returnable documents are deemed to be part of these conditions of bid.

F.1.3.2 These conditions of bid, the bid data and bid schedules which are only required for bid evaluation purposes, shall not form part of any contract arising from the invitation to bid.

F.1.3.3 For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

- a) **Comparative offer** means the bidder's financial offer after the factors of non-firm prices, all unconditional discounts and any other bided parameters that will affect the value of the financial offer have been taken into consideration
- b) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the bid process; and
- c) **Fraudulent practice** means the misrepresentation of the facts in order to influence the bid process or the award of a contract arising from a bid offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- d) **Quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and employer's agent

Each communication between the employer and a bidder shall be to or from the employer's agent only, and in a form that can be read, copied and recorded. Writing shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a bidder. The name and contact details of the employer's agent are stated in the bid data.

F.1.5 The employer's right to accept or reject any bid offer

F.1.5.1 The employer may accept or reject any variation, deviation, bid offer, or alternative bid offer, and may cancel the bid process and reject all bid offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a bidder for such cancellation and rejection, but will give written reasons for such action upon written request to do so.

F.1.5.2 The employer may not subsequent to the cancellation or abandonment of a bid process or the rejection of all responsive bid offers re-issue a bid covering substantially the same scope of work within a period of six months unless only one bid was received and such bid was returned unopened to the bidder.

F.2 Bidder's obligations**F.2.1 Eligibility**

Submit a bid offer only if the bidder complies with the criteria stated in the bid data and the bidder, or any of his principals, is not under any restriction to do business with employer.

F.2.2 Cost of bidding

Accept that the employer will not compensate the bidder for any costs incurred in the preparation and submission of a bid offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.

F.2.3 Check documents

Check the bid documents on receipt for completeness and notify the employer of any discrepancy or omission.

F.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the bid. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a bid offer in response to the invitation.

F.2.5 Reference documents

Obtain, as necessary for submitting a bid offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the bid documents by reference.

F.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the bid documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the bid data, in order to take the addenda into account.

F.2.7 Clarification meeting

Attend, where required, a clarification meeting at which bidders may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the bid data.

F.2.8 Seek clarification

Request clarification of the bid documents, if necessary, by notifying the employer at least five working days before the closing time stated in the bid data.

F.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) may not be for the full cover required in terms of the conditions of contract identified in the contract data. The bidder is advised to seek qualified advice regarding insurance.

F.2.10 Pricing the bid offer

F.2.10.1 Include in the rates, prices, and the bided total of the prices (if any) all duties, taxes

(except Value Added Tax (VAT)), and other levies payable by the successful bidder, such duties, taxes and levies being those applicable 14 days before the closing time stated in the bid data.

F.2.10.2 Show VAT payable by the employer separately as an addition to the bidder's total of the prices.

F.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in

the contract data.

F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the bid data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

F.2.11 Alterations to documents

Not make any alterations or additions to the bid documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the bidder. All signatories to the bid offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

F.2.12 Alternative bid offers

F.2.12.1 Submit alternative bid offers only if a main bid offer, strictly in accordance with all the requirements of the bid documents, is also submitted. The alternative bid offer is to be submitted with the main bid offer together with a schedule that compares the requirements of the bid documents with the alternative requirements the bidder proposes.

F.2.12.2 Accept that an alternative bid offer may be based only on the criteria stated in the bid data or criteria otherwise acceptable to the employer.

F.2.13 Submitting a bid offer

F.2.13.1 Submit a bid offer to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the bid data.

F.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.

F.2.13.3 Submit the parts of the bid offer communicated on paper as an original plus the number of copies stated in the bid data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

F.2.13.4 Sign the original and all copies of the bid offer where required in terms of the bid data. The Employer will hold all authorized signatories liable on behalf of the bidder. Signatories for bidders

Proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the bid offer.

F.2.13.5 Seal the original and each copy of the bid offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the bid data, as well as the bidder's name and contact address.

F.2.13.6 Where a two-envelope system is required in terms of the bid data, place and seal the returnable documents listed in the bid data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the bid data, as well as the bidder's name and contact address.

F.2.13.7 Seal the original bid offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the bid data.

F.2.13.8 Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the bid offer if the outer package is not sealed and marked as stated.

F.2.14 Information and data to be completed in all respects

Accept that bid offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.

F.2.15 Closing time

F.2.15.1 Ensure that the employer receives the bid offer at the address specified in the bid data not later than the closing time stated in the bid data. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept bid offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the bid data.

F.2.15.2 Accept that, if the employer extends the closing time stated in the bid data for any reason, the requirements of these conditions of bid apply equally to the extended deadline.

F.2.16 Bid offer validity

F.2.16.1 Hold the bid offer(s) valid for acceptance by the employer at any time during the validity period stated in the bid data after the closing time stated in the bid data.

F.2.16.2 If requested by the employer, consider extending the validity period stated in the bid data for an agreed additional period.

F.2.17 Clarification of bid offer after submission

Provide clarification of a bid offer in response to a request to do so from the employer during the evaluation of bid offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the total of the prices or substance of the bid offer is sought, offered, or permitted. The total of the prices stated by the bidder shall be binding upon the bidder.

Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred bidder following a competitive selection process, should the Employer elect to do so.

F.2.18 Provide other material

F.2.18.1 Provide, on request by the employer, any other material that has a bearing on the bid offer, the bidder's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the bidder not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the bid offer as non-responsive.

F.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

F.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the bid data.

F.2.20 Submit securities, bonds, policies, etc.

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

F.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

F.2.22 Return of other bid documents

If so instructed by the employer, return all retained bid documents within 28 days after the expiry of the validity period stated in the bid data.

F.2.23 Certificates

Include in the bid submission or provide the employer with any certificates as stated in the bid

data.

F.3 The employer's undertakings

F.3.1 Respond to clarification

Respond to a request for clarification received up to five working days prior to the bid closing time stated in the Bid Data and notify all bidders who drew procurement documents.

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the bid documents to each bidder during the period from the date of the Bid Notice until seven days before the bid closing time stated in the Bid Data. If, as a result a bidder applies for an extension to the closing time stated in the Bid Data, the Employer may grant such extension and, will then notify it to all bidders who drew documents.

F.3.3 Return late bid offers

Return bid offers received after the closing time stated in the Bid Data, unopened, (unless it is necessary to open a bid submission to obtain a forwarding address), to the bidder concerned.

F.3.4 Opening of bid submissions

F.3.4.1 Unless the two-envelope system is to be followed, open valid bid submissions in the presence of bidders' agents who choose to attend at the time and place stated in the bid data. Bid submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

F.3.4.2 Announce at the opening held immediately after the opening of bid submissions, at a venue indicated in the bid data, the name of each bidder whose bid offer is opened, the total of his prices, preferences claimed and time for completion, if any, for the main bid offer only.

F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

F.3.5 Two-envelope system

F.3.5.1 Where stated in the bid data that a two-envelope system is to be followed, open only the technical proposal of valid bids in the presence of bidders' agents who choose to attend at the time and place stated in the bid data and announce the name of each bidder whose technical proposal is opened.

F.3.5.2 Evaluate the quality of the technical proposals offered by bidders, then advise bidders who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of bidders, who score in the quality evaluation above the minimum number of points for quality stated in the bid data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to bidders whose technical proposals failed to achieve the minimum number of points for quality.

F.3.6 Non-disclosure

Not disclose to bidders, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of bid offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful bidder.

F.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a bidder to influence the processing of bid offers and instantly disqualify a bidder (and his bid offer) if it is established that he engaged in corrupt or fraudulent practices.

F.3.8 Test for responsiveness

Determine, on opening and before detailed evaluation, whether each bid offer properly received:

- a) Meets the requirements of these Conditions of Bid,
- b) Has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the bid documents.

A responsive bid is one that conforms to all the terms, conditions, and specifications of the bid documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- Detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- change the Employer's or the bidder's risks and responsibilities under the contract, or
- affect the competitive position of other bidders presenting responsive bids, if it were to be rectified.

Reject a non-responsive bid offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

F.3.9 Arithmetical errors

Check responsive bid offers for arithmetical errors, correcting them in the following manner:

- Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- If a bill of quantities (or schedule of rates) apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate will be corrected.
- Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the bidder's addition of prices, the total of the prices shall govern and the bidder will be asked to revise selected item prices (and their rates if a bills of quantities applies) to achieve the bided total of the prices.

Consider the rejection of a bid offer if the bidder does not correct or accept the correction of his arithmetical errors in the manner described above.

F.3.10 Clarification of a bid offer

Obtain clarification from a bidder on any matter that could give rise to ambiguity in a contract arising from the bid offer.

F.3.11 Evaluation of bid offers

F3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive bid offer to a comparative offer and evaluate it using the bid evaluation method that is indicated in the Bid Data and described below:

Method 1: Financial offer	<ol style="list-style-type: none"> 1) Rank bid offers from the most favourable to the least favourable comparative offer. 2) Recommend highest ranked bidder for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 2: Financial offer and preferences	<ol style="list-style-type: none"> 1) Score bid evaluation points for financial offer. 2) Confirm that bidders are eligible for the preferences claimed and if so, score bid evaluation points for preferencing. 3) Calculate total bid evaluation points. 4) Rank bid offers from the highest number of bid evaluation points to the lowest.

	5 Recommend bidder with the highest number of bid evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 3: Financial offer and quality	1) Score quality, rejecting all bid offers that fail to score the minimum number of points for quality stated in the Bid data. 2) Score bid evaluation points for financial offer. 3) Calculate total bid evaluation points. 4) Rank bid offers from the highest number of bid evaluation points to the lowest. 5) Recommend bidder with the highest number of bid evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 4: Financial offer, quality and preferences	1) Score quality, rejecting all bid offers that fail to score the minimum number of points for quality stated in the Bid data. 2) Score bid evaluation points for financial offer. 3) Confirm that bidders are eligible for the preferences claimed, and if so, score bid evaluation points for Preferencing. 4) Calculate total bid evaluation points. 5) Rank bid offers from the highest number of bid evaluation points to the lowest. 6) Recommend bidder with the highest number of bid evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

Score financial offers, preferences and quality, as relevant, to two decimal places.

F.3.11.2 Scoring Financial Offers

Score the financial offers of remaining responsive bid offers using either formulas 1 or 2 below as stated in the Bid Data:

Formula	Basis for comparison	Option 1	Option 2
1	Highest price or discount	$(1 + \frac{(P - P_m)}{P_m})$	P/P_m
2	Lowest price or percentage commission/fee	$(1 - \frac{(P - P_m)}{P_m})$	P_m/P

where:

P_m = the comparative offer of the most favourable bid offer.

P = the comparative offer of bid offer under consideration.

F.3.11.3 Scoring quality (functionality)

Score quality in each of the categories stated in the Bid Data and calculate total score for quality.

F.3.12 Insurance provided by the employer

If requested by the proposed successful bidder, submit for the bidder's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

F.3.13 Acceptance of bid offer

F.3.13.1 Accept bid offer only if the bidder satisfies the legal requirements stated in the Bid Data.

F.3.13.2 Notify the successful bidder of the employer's acceptance of his bid offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity

period stated in the bid data, or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the employer and the successful bidder as described in the form of offer and acceptance.

F.3.14 Notice to unsuccessful bidders

After the successful bidder has acknowledged the employer's notice of acceptance, notify other bidders that their bid offers have not been accepted.

F.3.15. Prepare contract documents

If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the bid documents to take account of:

- a) Addenda issued during the bid period,
- b) Inclusion of some of the returnable documents,
- c) Other revisions agreed between the employer and the successful bidder, and
- d) The schedule of deviations attached to the form of offer and acceptance, if any.

F.3.16 Issue final contract

Prepare and issue the final draft of contract documents to the successful bidder for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of bid require the bidder to submit, after acceptance by the employer, shall be included.

F.3.17 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

F.3.18 Provide copies of the contracts

Provide to the successful bidder the number of copies stated in the Bid Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

PART T2: RETURNABLE SCHEDULES

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T2.1: LIST OF RETURNABLE DOCUMENTS

The tenderer must complete the following returnable documents:

1 Returnable Schedules required only for tender evaluation purposes

A	MBD 1 – BIDDING INFORMATION & TERMS OF BIDDING	
B	MDB 4 - DECLARATION OF INTEREST	
C	MDB 6.1 - PREFERENCE SCHEDULE AND VERIFICATION	
D	MBD 6.2 – LOCAL PRODUCTION & CONTENT	
E	MDB 8 - PAST SCM PRACTICES	
F	MDB 9 - CERTIFICATE OF INDEPENDENT BID	
G	CERTIFICATE OF AUTHORITY OF SIGNATORY	
H	BANKING DETAILS AND RATING	
I	DECLARATION WITH REGARDS TO MUNICIPAL SERVICES, RATES AND TAXES	
J	SCHEDULE OF PROPOSED SUBCONTRACTORS	
K	RECORD OF ADDENDA	
L	SCHEDULE OF TENDERER'S EXPERIENCE	
M	KEY PERSONNEL	
N	SCHEDULE OF PLANT AND EQUIPMENT	
O	CENTRAL SUPPLIER DATABASE	
P	CONSTRUCTION INDUSTRY DISTRIBUTION BOARD	
Q	COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT1993	
R	REGISTRATION AS ELECTRICAL CONTRACTOR	
S	FORM OF OFFER	

NB: Mandatory documents will also be used for the evaluation

2. Other documents required only for bid evaluation purposes

	<u>Documents to attach</u>
	Board resolution on authority to sign
	Letter from the bank – details and Rating
	Municipal accounts (company and director)
	Appointment and completion letters
	Key CVs and certified qualification
	Proof of plant and equipment
	CIDB registration
	COIDA letter
	CSD
	Registration as Electrical Contractor
	ID Documents of directors

FORM A: MBD 1**PART A
INVITATION TO BID****YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE EPHRAIM MOGALE LOCAL MUNICIPALITY**

BID NUMBER:	EPMLM/8/3/528	CLOSING DATE:	08/12/2025	CLOSING TIME:	12:00
DESCRIPTION	APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD				

THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN
THE BID BOX SITUATED AT;

EPHRAIM MOGALE LOCAL MUNICIPALITY (BUDGET & TREASURY AND TECHNICAL BUILDING)

NO. 2 FICUS STREET

MARBLE HALL

0450

NOTE: THE BID BOX IS ONLY ACCESSIBLE MONDAY - FRIDAY DURING OFFICE HOURS (08:00 TO 16:30)

SUPPLIER INFORMATION

NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBE R		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBE R		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	MAAA

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3]
TOTAL NUMBER OF ITEMS OFFERED	.....	TOTAL BID PRICE	R
SIGNATURE OF BIDDER	.....	DATE	.....
CAPACITY UNDER WHICH THIS BID IS SIGNED	.....	

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:

DEPARTMENT	SCM
CONTACT PERSON	JOSEPH MADISHA
TELEPHONE NUMBER	013 261 8450/ 8462
FACSIMILE NUMBER	013 261 4055
E-MAIL ADDRESS	epmlmsupplychain@emogalelm.gov.za

TECHNICAL INFORMATION MAY BE DIRECTED TO:

CONTACT PERSON	Johan Durie
TELEPHONE NUMBER	013 261 8454
FACSIMILE NUMBER	013 261 4055
E-MAIL ADDRESS	jdurie@emogalelm.gov.za

PART B

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

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

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.
- 2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.
- 2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

- | | |
|--|--|
| 3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| 3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA? | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| 3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| 3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| 3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? | <input type="checkbox"/> YES <input type="checkbox"/> NO |

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

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

NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

FORM B: MBD4**MBD4****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 and/or take an oath declaring his/her interest.
3. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid. Also select the applicable answers ☒**
 - 3.1 Full Name of bidder or his or her representative:
 - 3.2 Identity Number:
 - 3.3 Position occupied in the Company (director, trustee, shareholder²)
 - 3.4 Company Registration Number:
 - 3.5 Tax Reference Number:
 - 3.6 VAT Registration Number:
 - 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
 - 3.8 Are you presently in the service of the state* YES ☐ / NO ☐
 - 3.8.1 If yes, furnish particulars.

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

- (a) a member of –
 - (i) any municipal council;
 - (ii) any provincial legislature; or
 - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

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

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

3.9.1 If yes, furnish particulars

.....

.....

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

3.11.1 If yes, furnish particulars

.....

.....

3.12 Are any of the company's directors, 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 companies or business whether or not they are bidding for this contract? YES ☐ / NO ☐

3.14.1 If yes furnish particulars:

.....

.....

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

Full Name	Identity Number	Employee Number

CERTIFICATION**I, THE UNDERSIGNED****(NAME)****CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.**

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

.....
Signature.....
Date.....
Capacity.....
Name of Bidder

FORM C : MBD 6.1**MBD 6.1****PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL
PROCUREMENT REGULATIONS 2022**

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

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

1. GENERAL CONDITIONS

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

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state

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

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

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

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

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

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

80/20

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

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

80/20

$$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the

conditions of this tender:

- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

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

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

The specific goals allocated points in terms of this tender	Means of Verification	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
At least 51% Black ownership	Identification documents / CSD Report / CIPC Certificate	10	
At least 51% Women Ownership	Identification document / CSD Report / CIPC Certificate	5	
At least 51% People with Disability	Medical Report indicating disability	3	
At least 51% Youth ownership (18 to 35 Years of age)	Identification document / CSD Report / CIPC Certificate	2	

DECLARATION WITH REGARD TO COMPANY/FIRM

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

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company

- ☐ (Pty) Limited
☐ Non-Profit Company
☐ State Owned Company
 [TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2022, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2022 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

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

Where

x is the imported content in Rand

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

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

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

- 1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation.

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
Electrical Cables (Including earth wire)	90%
Transformers class 0	90%
Steel	100%
Cement	100%

3. Does any portion of the goods or services offered have any imported content?

(Tick applicable box)

YES		NO	
-----	--	----	--

3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

4. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the DTI must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP, OR INDIVIDUAL)

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Institution):

.....
 NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thdti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),

do hereby declare, in my capacity as

of(name of bidder entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

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

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

- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2022 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

Local Content Declaration - Summary Schedule

(C1)	Tender No.
(C2)	Tender description:
(C3)	Designated product(s)
(C4)	Tender Authority:
(C5)	Tendering Entity name:
(C6)	Tender Exchange Rate:
(C7)	Specified local content %

Pula		EU		GBP	
------	--	----	--	-----	--

Signature of tenderer from Annex B

Date:

FORM E: MBD 8**MBD 8****DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES**

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

Item	Question	Yes	No
4.1	<p>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?</p> <p>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p>Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?</p> <p>The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	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:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

CERTIFICATION

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

Js367bW

FORM F: MBD 9**MBD 9****CERTIFICATE OF INDEPENDENT BID DETERMINATION**

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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

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

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of:

that:

(Name of Bidder)

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

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

FORM G: CERTIFICATE OF AUTHORITY

Indicate the status of the tenderer by ticking the appropriate box hereunder. **THE TENDERER MUST COMPLETE THE CERTIFICATE SET OUT BELOW FOR THE RELEVANT CATEGORY AND ATTACH A LETTER ON THE COMPANY LETTERHEAD.**

Please tick appropriate box:

A Company	B Partnership	C Joint Venture	D Close Corporation	E Sole Proprietor

A. CERTIFICATE FOR COMPANY

I,....., chairperson of the board of directors of
....., hereby confirm that by resolution
of the board (copy attached) taken on20.....,
Mr/Mrs..... acting in the capacity of
....., was authorised to sign all documents in
connection with this tender and any contract resulting from it on behalf of the company.

As witness

1.....

Chairman

2.....

Date

B. CERTIFICATE OF PARTNERSHIP

We, the undersigned, being the key partners in the business trading as
..... hereby authorise
Mr/Mrs....., acting in the capacity
of.....to sign all documents in connection with the
tender for Contract.....and any contract
resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NOTE: This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.

C. CERTIFICATE FOR JOINT VENTURE

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise Mr/Mrs....., authorised signatory of the company , acting in the capacity of lead partner, to sign all documents in connection with the tender offer for Contract.....and any other contract resulting from it on our behalf.

This authorisation is evidenced by the attached power of attorney signed by legally authorised signatories of all the partners to the Joint Venture.

NAME OF FIRM	ADDRESS	AUTHORISING SIGNATURE, NAME & CAPACITY
Lead partner		

D. CERTIFICATE FOR CLOSE CORPORATION

We, the undersigned, being the key members in the business trading as.....hereby authorise Mr/Mrs..... Acting in the capacity of....., to sign all documents in connection with the tender for Contract.....and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NOTE: This certificate is to be complete and signed by all the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.

E. SOLE PROPRIETOR

I,....., chairperson and sole owner of , hereby confirm that by resolution of the board (copy attached) taken on20...., Mr/Mrs.....acting in the capacity of.....,was authorised to sign all documents in connection with this tender and any contract resulting from it on behalf of the company.

As witness

1.....
Chairman

2.....
Date

BIDDERS SHOULD ATTACH A DULY SIGNED AND DATED ORIGINAL OR CERTIFIED COPY OF THE LETTER OF AUTHORITY ON THE COMPANY'S LETTERHEAD, FAILURE TO DO SO WILL LEAD TO THE DISQUALIFICATION OF THE BID AS NON-RESPONSIVE

FORM H: BIDDER'S BANKING INFORMATION

DETAILS OF BIDDERS'S BANK ACCOUNT

I/We furnish the following information:

- a) Name of Bank:
- b) Branch of Bank
- c) Town/city/suburb where bank is situated.....
- d) Contact Person at the Bank:
- e) Telephone number of Bank: Code: Number:
- f) Account Number:
- g) Bank rating: (Attach letter from the bank)

I/We hereby authorise the Employer to approach the above Bank for a reference.

NOTE:

BIDDERS SHOULD ENSURE THAT THEIR BANK ACCOUNT DETAILS HAVE BEEN VERIFIED ON THE CSD REPORT. IF SUCH IS NOT VERIFIED, BIDDERS SHOULD ATTACH A COPY OF THEIR BANK CONFIRMATION LETTER

BIDDERS SHOULD ATTACH A LETTER FROM THE BANK TO SUPPORT THE BANK RATING CLAIMED.

Signature..... Date.....

Name..... Position.....

Tenderer.....

FORM I: DECLARATION WITH REGARDS TO MUNICIPAL SERVICES, RATES AND TAXES
--

I _____ the undersigned, declare on behalf of (Name of Bidder) _____ that;

the bidder and any of its director(s) does not owe any municipal services, rates and taxes to the municipality or any other municipality or municipal entity any amount which could be in arrears for an period for a period more than three months.

In the event that this declaration is found to be false, the bid will be rejected and found to be nonresponsive.

1. COMPANY ACCOUNT		
NAME OF MUNICIPALITY	ACCOUNT NUMBER	ACCOUNT / PROPERTY OWNER
2. ACCOUNTS OF COMPANY DIRECTOR(S)		
NAME OF MUNICIPALITY	ACCOUNT NUMBER	ACCOUNT / PROPERTY OWNER

NOTE:

TENDERER TO SUBMIT A COPY OF A MUNICIPAL ACCOUNT OF THE COMPANY AND THAT OF ITS DIRECTOR(S) NOT IN ARREARS AND NOT OLDER THAN THREE (03) MONTHS; OR

IN THE EVENT THAT THE BIDDER IS LEASING, A LEASE AGREEMENT ALONG WITH THE ACCOUNT OF THE LEASED PROPERTY SHOULD BE ATTACHED; OR

A CONFIRMATION LETTER FROM THE LOCAL MUNICIPALITY NOT OLDER THAN THREE MONTHS CONFIRMING THAT SERVICES ARE NOT CHARGED/LEVIED AND BIDDER DOES NOT OWE

(FAILURE TO DO SO WILL LEAD TO THE DISQUALIFICATION OF THE BID AS NON-RESPONSIVE)

Signature.....

Date.....

Name.....

Position.....

Tenderer.....

FORM J: SCHEDULE OF PROPOSED SUBCONTRACTORS

Will you be subcontracting on this project?

(Tick the appropriate box)

Yes ☐ / No ☐

We notify you that it is our intention to employ the following subcontractors for work in this contract.

If we are awarded a contract we agree that this notification does not change the requirement for us to submit the name of proposed subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

	Name of Subcontractor	Contact Details	Description of Work to be executed by Subcontractor
1.			
2.			
3.			
4.			
5.			

Signature.....

Date.....

Name.....

Position.....

Tenderer.....

FORM K: RECORD OF ADDENDA TO TENDER DOCUMENTS

Was there an addendum issued for this project?

(Tick appropriate box and complete table accordingly)

Yes ☐ / No ☐

We confirm that the following communications received from the employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	Date	Title of Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signature..... Date

Name..... Position.....

Tenderer.....

FORM L: SCHEDULE OF TENDERER'S EXPERIENCE

The following is a statement of similar work successfully executed by myself/ourselves in the last five years with a minimum value of R200 000:
Similar means supply and installation of minisubstations or medium voltage switchgear.

INSTITUTION NAME	RELEVANT PROJECT NAME	CONTACT PERSON	CONTACT DETAILS (TEL / CELL)	PROJECT VALUE	PROJECT START & END DATE

** The project value on the above table should correspond to the supporting documents that will be attached as returnables or NO functionality points will be allocated.*

NB: COMPLETE THE TABLE ABOVE ON COMPANY EXPERIENCE (COMPULSORY TABLE) AND ALSO ATTACH PROOF OF PROJECTS LISTED ON THE ABOVE TABLE (FAILURE TO DO SO WILL LEAD TO THE DISQUALIFICATION OF THE BID AS NON-RESPONSIVE) Focus on projects that will qualify for the functionality criteria first

Signature..... Date

Name..... Position.....

FORM M: PROPOSED KEY PERSONNEL

The Bidder shall list below the key personnel (including first nominee and the second choice alternate), whom he proposes to employ on the project should his Bid be accepted, both at his headquarters and on the Site, to direct and for the execution of the work, together with their qualifications, experience, positions held and their nationalities.

DESIGNATION	NAME OF	NATION ALITY:	SUMMARY OF		NQF Level
	(i) NOMINEE (ii) ALTERNATE		QUALIFICATI ONS	EXPERIENCE AND PRESENT OCCUPATION	
<u>HEADQUARTERS</u> Project Manager					
<u>CONSTRUCTION</u> <u>MONITORING</u> Site Agent					
<u>CONSTRUCTION</u> <u>MONITORING</u> Safety Officer					

Signature..... Date

Name..... Position.....

Tenderer.....

FORM N: SCHEDULE OF PLANT AND EQUIPMENT

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

Details of major equipment that is owned by and immediately available for this contract.

Description	Manufacturer	Model	Capacity	Own or hire

Attach additional pages if more space is required.

Signature..... Date

Name..... Position.....

Tenderer.....

FORM O: CENTRAL SUPPLIER DATABASE REGISTRATION

No bid will be considered without the bidder being registered on the CSD with an active profile and a Tax Compliant status. Bidders must attach a document from the CSD showing the name of the business and the CSD number to enable live verification from the system

This will be verified during evaluation and again during adjudication. Bidders should ensure that their status stays compliant.

e-tender

FORM P: CONSTRUCTION INDUSTRY DEVELOPMENT BOARD REGISTRATION

It is a compulsory requirement that the Municipality only appoint bidder with a suitable and active CIDB registration for construction projects. The requirement for this project is **3EP** or higher and the bidder must attach proof of registration.

Unfortunately, the Municipality don't have the capacity to appoint bidder Emerging into **3EP** or higher bidders must already be registered for 3EP.

Bidder will not be considered if:

1. They are not registered with CIDB
2. They are not registered for the correct category
3. They are not registered for the correct minimum level of 3
4. The profile/registration is not active (this will be verified online during evaluation)
5. The bidder fail to attach proof.

CIDB registration no:

Category:

Signature..... Date

Name..... Position.....

Tenderer.....

**FORM Q: COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT,
1993 AND CONSTRUCTION REGULATIONS, 2014**

The bidder shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).

The bidder is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the bidder at any time during the 36 months preceding the date of this bid.

e-tender

FORM R: REGISTRATION AS ELECTRICAL CONTRACTOR

Only bidder that can proof that they are registered as Electrical Contractors with the Department of Labour will be considered.

e-tender

THE CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

PART C2: PRICING DATA

PART C3: SCOPE OF WORK

PART C4: SITE INFORMATION

EPHRAIM MOGALE LOCAL MUNICIPALITY**TABLE OF CONTENTS****PART C1: AGREEMENTS AND CONTRACT DATA (YELLOW COLOUR)****C1.1: FORM OF OFFER AND ACCEPTANCE****C1.2: CONTRACT DATA****C1.2.1: CONDITIONS OF CONTRACT****C1.2.2: PART A: CONTRACT DATA PROVIDED BY THE EMPLOYER****PART B: CONTRACT DATA PROVIDED BY THE CONTRACTOR****C1.3: FORM OF GUARANTEE****C1.4: AGREEMENT WITH ADJUDICATOR****C1.5: AGREEMENT IN TERMS OF SECTION 37(2) OF THE
OCCUPATIONAL HEALTH AND SAFETY ACT No 85 OF 1993****PART C2: PRICING DATA (YELLOW COLOUR)****C2.1: PRICING INSTRUCTIONS****C2.2: BILL OF QUANTITIES****PART C3: SCOPE OF WORK (BLUE COLOUR)****C3.1: STANDARD SPECIFICATIONS****C3.2: PROJECT SPECIFICATIONS****C3.3: PARTICULAR SPECIFICATIONS****PART C4: SITE INFORMATION (GREEN COLOUR)****C4.1: LOCALITY PLAN****C4.2: CONDITIONS ON SITE: GEOTECHNICAL REPORT****C4.3: BID DRAWINGS**

EPHRAIM MOGALE LOCAL MUNICIPALITY**APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI
SUBSTATION – 1028 MAIN ROAD****C1.1 FORM OF OFFER AND ACCEPTANCE****Offer**

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Contract No EPMLM/8/3/528: APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD.

The bidder, identified in the offer signature block, has examined the documents listed in the bid data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of bid.

By the representative of the bidder, deemed to be duly authorized, signing this part of this form of offer and acceptance, the bidder offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

.....

Rand (in words);

R (in figures)

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the bidder before the end of the period of validity stated in the bid data, whereupon the bidder becomes the party named as the contractor in the conditions of contract identified in the contract data.

Signature Block: Bidder	
Signature	Date
Name	
Capacity	
Name of organization.....	
Address of organization	
.....	
Signature of witness	Date
Name of witness	

Acceptance

By signing this part of this form of offer and acceptance, the employer identified below accepts the bidder's offer. In consideration thereof, the employer shall pay the contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the bidder's offer shall form an agreement between the employer and the bidder upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1: Agreements and contract data, (which includes this agreement)
- Part C2: Pricing data
- Part C3: Scope of work.
- Part C4: Site information
and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the bid data and any addenda thereto as listed in the bid schedules as well as any changes to the terms of the offer agreed by the bidder and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The bidder shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) for delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfill any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the bidder receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the bidder (now contractor) within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Signature Block: Employer	
Signature	Date
Name	
Capacity	
For the Employer: Municipal Manager Ephraim Mogale Local Municipality	
Signature of witness	Date
Name of witness	
.....	

Schedule of Deviations

1 Subject .....	.....
Details .....	.....
.....
.....
2 Subject .....	.....
Details .....	.....
.....
.....
3 Subject .....	.....
Details .....	.....
.....
.....
4 Subject .....	.....
Details .....	.....
.....
.....
5 Subject .....	.....
Details .....	.....
.....

By the duly authorised representatives signing this agreement, the employer and the bidder agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the bid data and addenda thereto as listed in the bid schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the bidder and the employer during this process of offer and acceptance.

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

For the Bidder:

Signature(s)	_____	_____
Name(s)	_____	_____
Capacity	_____	_____

(Name and address of organization)

Name &
Signature of
Witness

For the Employer:

Signature(s)	_____	_____
Name(s)	_____	_____
Capacity	_____	_____

(Name and address of organization)

Name &
Signature of
Witness

EPHRAIM MOGALE LOCAL MUNICIPALITY**APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A
MINI SUBSTATION – 1028 MAIN ROAD****C1.2 Contract Data**

Section 1.01 The General Conditions of Contract for Construction Works (edition 2015) published by the South African Institution of Civil Engineering, is applicable to this contract. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering (Tel: 011-805 5947).

The General Conditions of Contract for Construction Works make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of contract.

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

C1.2.1 CONDITIONS OF CONTRACT

GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works - (edition 2015)", issued by the South African Institution of Civil Engineering (Short title: "**General Conditions of Contract 2015**") and can be obtained from:

SAICE

Waterfall Park
Howick Gardens
Vorna Valley Half way House
Becker Street
MIDRAND
1685
Gauteng Province
Tel: (011) 805-5947/8
Fax: (011) 805-5971.

It is agreed that the only variations from the General Conditions of Contract 2015 are those set out hereafter under "Special Conditions of Contract".

SPECIAL CONDITIONS OF CONTRACT

1. GENERAL

These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions shall amplify, modify or supersede, as the case may be, the General Conditions of Contract 2015 to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions hereafter are numbered "SCC" followed in each case by the number of the applicable clause or sub clause in the General Conditions of Conditions 2015, and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the General Conditions, and an appropriate heading.

2. ADDITIONAL SPECIAL CONDITIONS OR AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT

2.1 General

The following clauses add to, vary or otherwise amend the General Conditions of Contract:

2.1.1 Cession (CL 2.5.1)

Delete the words "without the written consent of the other".

2.1.2 Contractor's Superintendence (CL 4.12)

Add the following sub-clause 4.12.4 to Clause 4.12:

"Where a form is included in the Appendix to the Contract Data for this purpose, the Bidder shall fill in the name of the person he proposes to entrust with the post of Contractor's Site Agent on this Contract in the space provided therefor. Previous experience of this person on work of a similar nature during the past five (5) years is to be entered in the list.

The Contractor's Site Agent shall be on Site at all times when work is being performed.

The person as approved of by the Municipality in writing shall not be replaced or removed from Site without the written approval of the Municipality."

2.1.3 Programme (CL 5.6)

Add the following sub-clause 5.6.6 to Clause 5.6:

"Failure on the part of the Contractor to deliver to the Municipality, the

- programme of the Works in terms of Clause 5.6.1 and
- supporting documents in terms of Clause 5.6.2

Within the period stated in the Contract Data, shall be sufficient cause for the Municipality to retain 25 per centum of the value of the Fixed Charge and Value-related items in assessment of amounts due to the Contractor, until the Contractor has submitted aforementioned first Programme of the Works and Supporting Documents”.

2.1.4 Contractor's Designs and Drawings (CL 5.9.7)

“All designs, calculations, drawings and operation and maintenance manuals shall be fully endorsed by a third party registered engineer, accomplished in such specific field of practice and the cost thereof shall be borne solely by the Contractor.

Once the alternative design has been approved, the Contractor shall indemnify and hold harmless the Municipality (the Employer), their agents and assigns, against all claims howsoever arising out of the said design, whether in contract or delict”

2.1.5 Suspension of the Works (CL 5.11)

Add the following sub-clause 5.11.4 to Clause 5.11:

“If the Contractor does not receive from the Employer the amount due under an Interim Payment Certificate within 28 days after expiry of the time stated in sub-clause 6.10.4 within which payment is to be made (except for deductions in accordance with sub-clauses 6.10.1.6 and 6.10.1.7), the Contractor may, after giving 14 days’ notice to the Employer, suspend the progress of the Works.

The Contractor’s action shall not prejudice his entitlements to a claim in terms of Clause 10.1 and to cancellation of the Contract in terms of Clause 9.3.

If the Contractor subsequently receives full payment of the amount due under such Interim Payment Certificate before giving a notice of cancellation of the Contract, the Contractor shall resume normal working as soon as is reasonably practicable.”

2.1.6 Extension of Time Arising from Abnormal Rainfall (CL 5.12)

Add the following to sub-clause 5.12.2.2 :

“The extension of time to be allowed due to abnormal rainfall shall be calculated separately for each calendar month or part thereof in accordance with the following formula :

$$V = (Nw - Nn) + \frac{Rw - Rn}{x}$$

V = Extension of time in calendar days for the calendar month under consideration
 Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded
 Nn = Average number of days for the calendar month on which a rainfall of 10 mm or more has been recorded, as derived from existing rainfall records
 Rw = Actual recorded rainfall for the calendar month
 Rn = Average rainfall for the calendar month, as derived from existing rainfall records
 x = 20

The rainfall records which shall provisionally be accepted for calculation purposes are:

Based on records taken at: **Rainfall Station: POLOKWANE Lat: 23.8570 Lon: 29.4510**
Height 1226 m

Average No of Days with Rainfall exceeding 10mm: 69.2 days/year

Average Rainfall: 450.5 mm/year

Years of record: 2002 – 2012

Month	Average rainfall for calendar month Rn	Average number of days for calendar month on which a rainfall of 10 mm or more were recorded Nn
	(mm)	(days)
January	66.7	10.6
February	57.8	8.1
March	51.2	8.2
April	32.2	5.5
May	10.3	2
June	3.2	1.8
July	2.5	1.6
August	2.5	0.4
September	3.7	1.9
October	37.2	6.4
November	92.1	11
December	90.9	11.6

The factor $(Nw - Nn)$ shall be considered to represent a fair allowance for days during which rainfall exceeds 10 mm and the factor $(Rw - Rn)/x$ shall be considered to represent a fair allowance for those days when rainfall does not exceed 10 mm but wet conditions prevent or disrupt work.

The total extension of time shall be the algebraic sum of all monthly totals for the contract period, but if the algebraic sum is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for a part of a month shall be calculated using pro rata values of Nn and Rn."

2.1.7 Guarantee (Security) (CL 6.1)

Delete the contents of the first paragraph of Clause 6.2 and insert:

"The Contractor shall deliver to the Employer within such time as may be stated in the Contract Data a Demand Guarantee, of Insurance Company registered in terms of the Short-term Insurance Act (Act 53 of 1998) or registered Commercial Bank, in a sum equal to the amount stated in the Contract Data. The Demand Guarantee shall be issued by an entity approved by the Employer, and shall conform in all respects to the format contained in the Appendix to the Contract Data.

Wherever a joint venture constitutes the contracting party, the Demand Guarantee shall be issued on behalf of the joint venture.

Failure to produce an acceptable Demand Guarantee within the period stated in Clause 2.2.8 of the Contract Data is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 with specific reference to sub-clause 9.2.2.5 as amended in the Special Conditions of Contract."

2.1.8 Variations (CL 6.3)

Omit the words "Provided that" under Clause 6.3.2 and omit Clause 6.3.2.1.

2.1.9 Interim Payments (CL 6.10.1)

Add to the end of Clause 6.10.1 the following paragraph:

"The Contractor shall complete the 'Contractor's Monthly Report Schedule', which pro forma documentation is obtainable from the Municipality. Pursuant to Sub-Clause (1), these, duly signed by all concerned, together with the Contractor's statement and a VAT invoice in original format are to be submitted to the Municipality.

Issue by the Contractor of any signed payment certificate is conditional to this information being fully endorsed, accurately and timeously submitted to the Municipality”.

Add to the end of Clause 6.10.1.5 the following paragraph:

“All documentary evidence of such materials shall be unambiguous with respect to ownership having fully passed to the Contractor on or before the date of submittal of the Contractor’s monthly statement.

Should the Contractor fail to supply unambiguous documentary evidence, he shall, prior to submittal of his monthly statement, deliver to the Employer a Guarantor Guarantee in the form contained in the Appendices to the Contract Data.”

2.1.10 Variations Exceeding 15 Per Cent (CL 6.11)

In sub-clause 6.11.1.3 omit the words “15 per cent” and replace with “20 per cent”.

2.1.11 Insurances (CL 8.6)

2.1.11.1 Contractor to produce proof of payment

Delete sub-clause 8.6.6 and substitute with:

“The Contractor shall before commencement of the Works produce to the Municipality:

8.6.6.1 The policies by which the insurances are effected,

8.6.6.2 Proof that due payment of all premiums there under, covering the full required period has been made, and

8.6.6.3 Proof of continuity of the policies for the required period.

Should, during the currency of the Contract, the required period of insurance be extended for any reason, the Contractor shall timeously extend (so as to maintain) the said insurances for the full extended duration.

The Municipality shall be empowered to withhold all payment certificates until the Contractor has complied with his obligations in terms of this Clause 8.6.”

2.1.11.2 Remedy of Contractor’s failure to insure

Delete sub-clause 8.6.7 and substitute with:

“Failure on the part of the Contractor to effect and keep in force any of the insurances referred to in Clause 8.6.1 and its sub-clauses, is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 and with specific reference to sub-clause 9.2.2.5, as amended, in the Special Conditions of Contract.”

2.1.12 Termination of the Contract (CL 9.1)

Alter the numbering of:

Clause 9.1.5 to 9.1.6,

Clause 9.1.6 to 9.1.7 and

insert the following new clause 9.1.5:

“The Employer shall be entitled to cancel the Contract, at any time for the Employer’s convenience, by giving written notice of such cancellation to the Contractor. The termination shall take effect 28 days after the later of the dates which the Contractor receives this written notice or the Employer returns the Demand Guarantee.

The Employer shall not cancel the Contract under this sub-clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor.

This restriction on the Employer shall lapse 18 months after the date of receipt by the Contractor of cancellation in terms of this sub-clause”.

2.1.13 Termination by Employer (CL 9.2)

Delete the contents of Clause 9.2 and substitute with:

“9.2.1 The Employer may terminate the Contract by written notice to the Contractor if:

9.2.1.1 Sequestration of the Contractor's estate is ordered by a Court with due jurisdiction, or

9.2.1.2 The Contractor publishes a notice of surrender or presents a petition for the surrender of his estate as insolvent, or makes a compromise with his creditors, or assigns in favour of his creditors, or agrees to carry out the Contract under the supervision of a committee representing his creditors, or (being a company) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purpose of amalgamation or reconstruction), or if the Contractor assigns the Contract without having first obtained the Employer's consent in writing, or if execution is levied on his goods, or

9.2.1.3 The Contractor, or anyone on his behalf, or in his employ, offers to any person in the employ of the Employer or the Engineer, a gratuity or reward or commission, or

9.2.1.4 The Contractor furnished materially inaccurate information in his Bid, which had a bearing on the award of the Contract, or

9.2.1.5 The Contractor has abandoned the Contract

9.2.2 If the Contractor:

9.2.2.1 Has failed to commence the Works in terms of Clause 5.3 hereof, or has suspended the progress of the Works for fourteen (14) days after receiving from the Engineer written notice to proceed, or

9.2.2.2 Has failed to provide the Guarantee in terms of Clause 6.2 within the time stipulated in the Contract Data, or

9.2.2.3 Has failed to proceed with the Works with due diligence, or

9.2.2.4 Has failed to remove materials from the Site or to pull down and replace work within fourteen (14) days after receiving from the Engineer written notice that the said materials or work have been condemned and rejected by the Engineer in terms of these conditions, or

9.2.2.5 Is not executing the Works in accordance with the Contract, or is neglecting to carry out his obligations under the Contract, or

9.2.2.6 Has, to the detriment of good workmanship or in defiance of the Engineer's instructions to the contrary, sublet any part of the Contract, or

9.2.2.7 Has assigned the Contract or any part thereof without the Employer's consent in writing, then the Employer may give the Contractor 14 days' notice to rectify the default, and if the Contractor fails to rectify the default in said 14 days, then, without further notice, notify the Contractor in writing of the termination of the Contract and expel the Contractor and order the Contractor to vacate the site within 24 hours of issue of the Notice of Termination and to hand the Site over to the Employer, and the Employer may then enter upon the Site and the Works without affecting the rights and powers conferred on the Employer or the Engineer by the Contract and the Employer may himself complete the Works or may employ another contractor to complete the Works, and the Employer or such other contractor may use for such completion so much of the Construction Equipment, Temporary Works and materials brought onto the Site by the Contractor as the Employer may think proper, and the Employer may at any time sell any of the said Construction Equipment, Temporary Works and

unused materials and apply the proceeds of sale towards payment of any sums that may be due or become due to the Employer by the Contractor under the Contract. In such circumstances the Contractor shall forthwith vacate the Site and shall not be entitled to remain on the Site on the grounds that he is entitled to do so on a right of retention until amounts due to him have been paid, neither will the Contractor be entitled to any further payments in terms of this Contract.

9.2.3 If the Contractor, having been given notice to rectify a default in terms of 55.2 above, rectifies said default, but later repeats the same or substantially the same default, then the Employer may notify the Contractor of the immediate termination of the Contract, and proceed as stated in the paragraph following the word "writing" in Clause 55.2.7 above.

9.2.4 Should the amounts the Employer must pay to complete the Works exceed the sum that would have been payable to the Contractor on due completion by him, then the Contractor shall upon demand pay to the Employer the difference, and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly. Provided that should the Contractor on demand not pay the amount of such excess to the Employer, such sum may be determined and deducted by the Employer from any sum due to or that may become due to the Contractor under this or any previous or subsequent contract between the Contractor and the Employer."

2.1.14 Termination by the Contractor (CL 9.3)

Add the following paragraph as Clause 9.3.5:

"In addition to, or as an alternative to the rights to termination contained in this Clause 9.3, the Contractor may notify the default to the Employer, with a copy to the Engineer, and if the default is not rectified within 10 days the Contractor may suspend progress of the works until a date 7 days after the default is rectified. The Contractor shall be entitled to extension of time to the extent of delay caused by or resulting from such suspension, and to payment of additional costs caused by or resulting from the suspension. Such extension of time and additional costs shall be promptly ascertained by the Engineer, who shall then grant the extension of time and include the additional costs in all future payment certificates. Such suspension, extension of time and/or payment of additional costs, shall not prejudice the Contractor's rights to cancel the contract."

3. **PRIORITY OF DOCUMENTS**

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purpose of interpretation, the priority of the documents shall be in accordance with the following sequence:

- a) the Form of Offer and Acceptance.
- b) amplifications of the General Conditions of Contract within the Contract Data.
- c) additional special conditions or amendments to the General Conditions of Contract within the Contract Data.
- d) the General Conditions of Contract.
- e) the Specifications, Drawings, Schedules and other documents forming part of the Contract (in that order) contained in the Scope of Work and the Site Information.

If any ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

4. **TRANSFER OF RIGHTS**

TRANSFER OF RIGHTS AND INDEMNITY (To be completed during construction by successful Bidder only)

Claim for materials on site, Payment Certificate No. **Date:**

Contract No: for (contract title)

.....

I, the undersigned (name of signatory) in my capacity

as..... of (name of Contractor)

duly authorized hereto on behalf of the Contractor hereby transfer, cede and assign all the Contractor's rights, title and interest in and to the materials and goods, for which evidence of bona fide ownership is attached hereto, unto and in favour of (name of Employer) insofar as the Contractor retains actual control of the materials and goods, the right of ownership thereof passes to the Employer by *constitutum possessorium*.

I herewith indemnify the Employer against any claim to and in respect of said materials by reason of the Contractor's sequestration or liquidation or of any defect in the Contractor's title to the materials and agree that no payment for materials on site will be made by the Employer until such time as I have submitted documentary proof of bona fide ownership of the said materials and goods.

This transfer shall become effective upon conclusion of the Contractor receiving payment from the Employer or from any other person on behalf of the Employer for the materials and goods as Materials on Site, payment of retention money thereon excluded.

Description of Item	Unit	Quantity	Rate	Amount	Supplier
Total Value of Materials and goods					

I further confirm that I am fully responsible for all materials and goods listed under this Transfer of Rights and that they have been insured adequately against all risks and will remain insured until they are built into or used in the permanent works and taken over by the Employer.

This certificate of Transfer of Rights applies only to the materials and goods as listed in the following table:

Signed by: **Date:**
for and on behalf of the Contractor.

Witnessed by: **Date:**

NOTE: This form, together with the documentary proof of ownership or proof of payment by the Contractor to the supplier, shall accompany the Contractor's claim for payment for materials on site in terms of **Clause 6.10.1.5 of the General Conditions of Contract 2010**.

C1.2.2 PART A: CONTRACT DATA PROVIDED BY THE EMPLOYER

The following contract specific data are applicable to this contract.

REFERENCE CONTRACT SPECIFIC DATA BY THE EMPLOYER

Clause 1.1.15: **Name of Employer: Ephraim Mogale Local Municipality represented by Head of Department: Department of Technical Services**

Clause 1.2.1: **Address of Employer:**

Physical:

Postal:

The Employer's address for receipt of communications is

13 Ficus street
Marble Hall
0450

P.O.Box 111
Marble Hall
0450

Telephone No: 013 261 8400

Fax No: 013 261 4055

Clause 1.1.16: **Name of Engineer**

'Engineer' means any Director, Manager or official appointed by the Municipality to fulfil the functions of the Engineer in terms of the Contract Data.

Clause 1.2.1: **Address of Engineer:**

Physical:

Postal:

The Engineer's address for receipt of communications is:

13 Ficus street
Marble Hall
0450

P.O.Box 111
Marble Hall
0450

E-Mail:

jdurie@emogalelm.gov.za

Telephone No: (013) 261 8400 Fax No: (013) 261 8384

Clause 6.2: The Guarantee shall be delivered within 14 days after receipt of the Acceptance document from the Employer.

Clause 6.2: The Liability of the Guarantee shall be for 10% of the Accepted Bid Sum.

Clause 5.3: The contractor shall commence executing the work within 14 days of the Commencement date.

Clause 5.6.1 & 5.6.2: The Contractor shall deliver to the Engineer, within 14 days calculated from the Commencement Date, a realistic programme in terms of Clause 5.6.1 and supporting documents in terms of Clause 5.6.2.

Clause 8.6.1.1.3: The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is **NIL**

Clause 8.6.1.2: Special risk insurance issued by SASRIA is required.

Clause 8.6.1.3: The limit of indemnity for liability insurance required should not be less than the contract amount.

Clause 5.13.1: **The penalty for failing to complete the works is 0.10 % of the Total Bid Sum per Calendar Day**

Clause 6.8.2: The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values:

Contract Price Adjustment Factor = $(1 - x) \left[\frac{aL_t}{L_o} + \frac{bP_t}{P_o} + \frac{cM_t}{M_o} + \frac{dF_t}{F_o} - 1 \right]$ rounded off to the fourth decimal place.

Coefficients for calculating Contract price Adjustment Factor shall be:
Value of x is 0.10

a = 0.15 b = 0.20 c = 0.55 d = 0.10

L is the "Labour Index" and shall be the "Consumer Price Index – for Polokwane Area" In Release P 0141.1 Table 21

The base month is: "the month prior to the closing of the Bid"
No Contract price Adjustment will be done if contract period is less than 7 months.

- Clause 6.83: Price adjustments for variations in the costs of special materials are not allowed.
- Clause 6.10.1.5: The percentage advance on materials not yet built into the Permanent Works is: 80%
- Clause 6.10.3: The percentage retention on the amounts due to the Contractor is 10%, excluding contract price adjustment, contingencies and VAT, and limited to 10% of the contract amount, excluding contract price adjustment, contingencies and VAT. The retention will be reduced to 5% on completion of the project.
- Clause 6.10.5: A Retention money guarantee will be not permitted.
- Clause 7.8.1: The Defects Liability Period is 12 months measured from the date of the Certificate of Completion.
- Clause 10.7.1 Dispute resolution shall be by Adjudication.
- Clause 10.7.1: Dispute Resolution shall be by Adjudication.

C1.2.2: PART B: CONTRACT DATA PROVIDED BY THE CONTRACTOR

The following contract specific data are applicable to this contract:

REFERENCE CONTRACT SPECIFIC DATA BY THE CONTRACTOR

Clause 1.1.9: **Name of Contractor:**

Clause 1.2.1: **Address of the Contractor:**
The Contractor's address for receipt of communication is:

Physical: Postal:

.....

.....

.....

.....

E-Mail:

Telephone No: Fax No:

Clause 5.5 The works shall be completed within months (including special non-working days and the year end break).

Clause 6.8.3: The variation in cost of all special materials is to be provided in the table SM 1 for special materials.

The rates and prices for the special materials shall be furnished by the Bider, which rates and prices shall not include VAT but shall include all other obligatory taxes and levies. **The quoted price is the ruling price on the Month prior to close of bid.**

TABLE: SM1

Special Materials*	Unit	Rate or Price for the base month
.....
.....
.....
.....
.....

*Contractor to indicate the type, unit and rate of special material to be listed. The Contractor shall substantiate the above rates or prices with acceptable documentary evidence. Contractor to provide any other Special Materials if deemed necessary.

N.B. Diesel, reinforcing steel, and cement will not be accepted as special material.

C1.3 Form of Guarantee - Pro Forma

Contract No

WHEREAS **The Ephraim Mogale Local Municipality** (hereinafter referred to as the Employer") entered into, a Contract with:

.....
(Hereinafter called "the Contactor") on the day of 20.....

for **APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD** in the **Ephraim Mogale Local Municipality** of the Limpopo Province.

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security by way of a guarantee for the due and faithful fulfillment of such Contract by the Contractor;

AND WHEREAS has / have at the request of the Contractor, agreed to give such guarantee;

NOW THEREFORE WE do hereby guarantee and bind ourselves jointly and severally as Guarantor and Co-principal Debtors to the Employer under renunciation of the benefits of division and execution for the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the following conditions:

1. The Employer shall, without reference and / or notice to us, have complete liberty of action to act in any manner authorized and/or contemplated by the terms of the said Contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the completion date of the works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the completion date which the Employer may make, give, concede or agree to under the said Contract.
2. This guarantee shall be limited to the payment of a sum of money.
3. The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Contractor.
4. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.
5. Our total liability hereunder shall not exceed the Guaranteed Sum of:
.....
.....Rand (in words);
R. (in figures)
6. The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum with the beneficiary, whereupon our liability hereunder shall cease.
7. We hereby choose our address for the serving of all notices for all purposes arising here from as
.....
.....
.....
.....

IN WITNESS WHEREOF this guarantee has been executed by us at
on this day of 20

Signature

Duly authorized to sign on behalf of

Address
.....
.....

As witnesses:

1

2

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C1.4: Agreement with Adjudicator

This agreement is made on the.....day of 20..... between: the Employer
(name of company / organisation).....
of
(address).....and
the Contractor (name of company / organisation)
of (address).....
..... (hereinafter called **the Parties**)

and

(name).....
of (address)
..... (hereinafter called **the Adjudicator**)

Disputes or differences may arise/have arisen* between the Parties under a Contract dated.....
and known as Contract No.....
(Contract title).....

and these disputes or differences shall be/have been* referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "**the Procedure**") and the Adjudicator may be or has been requested to act.
(* Delete as necessary)

IT IS NOW AGREED as follows:

1. The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
2. The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
3. The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
4. The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
5. The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

SIGNED by:

(Signature): (Signature): (Signature):

Name: **Name:** **Name:**

who warrants that he/ she is
duly authorised to sign for and
on behalf of the **First Party** in
the presence of

who warrants that he/ she is
duly authorised to sign for
and on behalf of the **Second
Party** in the presence of

the **Adjudicator** in the
presence of

Witness:
(Signature)..... **Witness:**
(Signature)..... **Witness:**
(Signature).....

Name: **Name:** **Name:**

Address: Address: Address:

.....

Date: Date: Date:

C1.5: Agreement In Terms Of Section 37(2) Of The Occupational Health And Safety Act No 85 Of 1993

THIS AGREEMENT is made between The EPHRAIM MOGALE Local Municipality represented by the Accounting Officer.

(hereinafter called the EMPLOYER of the one part, herein represented by:

.....in his capacity as:;

AND: (hereinafter called the CONTRACTOR) of the other part, herein represented by

in his capacity as: duly authorized to sign on behalf of the Contractor.

WHEREAS the CONTRACTOR is the Mandatory of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of

CONTRACT: APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD in the Ephraim Mogale Local Municipality of the Limpopo Province

AND WHEREAS the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHS Act Amendment Act No 181/1993 (hereinafter referred to as the ACT);

NOW THEREFORE the parties agree as follows:

1. The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the Employer's CONSULTING ENGINEERS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
4. The CONTRACTOR agrees that any duly authorized officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
5. The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at for and on behalf of the **CONTRACTOR**

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1. 2.

Thus signed at for and on behalf of the **EMPLOYER** on this
the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

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EPHRAIM MOGALE LOCAL MUNICIPALITY
APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION
– 1028 MAIN ROAD

C2.1: PRICING INSTRUCTIONS

1. GENERAL

The pricing instructions describe the criteria and assumptions which will be assumed in the Contract that the Bidder has taken into account when developing his prices. The Bills of Quantities record the Contractor's rates for providing supplies, services, engineering and construction works in accordance with the Scope of Work.

The terms of payment and the provisions for price adjustment, if applicable, are established in the Contract Data. These items are not described in the Pricing Data.

The Bidder's obligations in pricing the Bid offer and the Employer's undertakings in the checking and correction of arithmetical errors are dealt with in the Standard Conditions of Bid contained in Annexure F of SANS 294, as amended in and read in conjunction with the Bid Data.

2. DOCUMENTS MUTUALLY EXPLANATORY

The documents forming the Contract are to be taken as mutually explanatory of one another. The Bill of Quantities forms an integral part of the Contract Documents and shall be read in conjunction with the Bid Data, Contract Data, Scope of Work, Site Information General and Special Conditions of Contract, the Specifications and the Drawings.

3. DEFINITIONS

For the purpose of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

Unit	:	The unit of measurement for each item of work as defined in the pricing schedule and bill of quantities.
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of measurement at which the Bidder Bids to do the work.
Amount	:	The product of the quantity and the rate Bided for an item
Sum	:	An amount Bided for an item, the extent of which is described in the Schedule of Quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.
Prime Cost (or PC item)	:	A sum fixed by the Engineer and entered in the Schedule of Quantities as the net sum provided to cover the cost of specific goods or materials to be supplied under the contract, or the net sum to be paid by the Contractor to merchants or others for such articles or materials. ¹
Provisional Sum	:	A sum of money fixed by the Engineer and entered in the Schedule of Quantities to provide for work not defined at the Bid stage and includes any allowance specifically made for unforeseen contingencies. ¹
Extra Over (or EO)	:	Qualifies an operation (or combination of operations) which is common in a varying degree to a number of other operations and which is scheduled once as "extra over" those other operations in order to avoid a multiplicity of items each reflecting the degree to which the common operations applies. The term "extra over" invariably denoted double measurement, no deduction being made from one on account of the other. ¹

4. DESCRIPTIONS

Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised

Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.

5. **REFERENCES**

The general conditions of contract, the special conditions of contract (if any), the specifications (including the project specification) and the drawings are to be read in conjunction with the schedule of quantities.

Descriptions in the schedule of quantities are abbreviated and the schedule has been drawn up generally in accordance with the Scope of Works. Should any requirement of the measurement and payment clause of the applicable standardised specification², or the project specification², or the particular specification(s)² conflict with the terms of the schedule the requirement of the standardised, project or particular specification, as applicable, shall prevail.

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made for waste.

The prices and rates to be inserted in the schedule of quantities are to be the full inclusive prices to the Employer for the work described under the several items, value added tax excluded. Such prices shall cover all costs and expenses that may be required in and for the construction of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the quotation is based.

A price or rate is to be entered against each item in the schedule of quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the schedule

6. **UNITS OF MEASUREMENT**

The units of measurement indicated in the Bill of Quantities are metric units.

The following abbreviations are used in the Bill of Quantities:

%	=	per cent
h	=	hour
ha	=	hectare
kg	=	kilogram
kl	=	kilolitre
km	=	kilometre
km-pass	=	kilometre-pass
kW	=	kilowatt
l	=	litre
m	=	metre
mm	=	millimetre
MN	=	meganeutron
MN-m	=	meganeutron-metre
MPa	=	megapascal
kPa	=	kilopascal
m ²	=	square metre
m ³	=	cubic metre
m ³ -km	=	cubic metre-kilometre
m ² -pass	=	square metre-pass
no	=	number
PC sum	=	Prime Cost sum
Prov Sum	=	Provisional Sum
sum	=	lump sum
t	=	ton (1 000 kg)
R/only	=	Rate only

W/day = Work day

7. **NET MEASUREMENTS**

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for off-cuts and waste.

8. **QUANTITIES**

The quantities set out in these Bills of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.

The Contract Amount to be determined in accordance with the conditions of contract identified in the Contract Data shall be computed from the actual quantities of authorized work done, value at rates determined in terms of the Contract Data, against the respective items in the Bill of Quantities.

9. **CURRENCY**

All rates and sums of money quoted in the Bill of Quantities shall be in Rand and whole cents. Fractions of a cent shall be discounted.

10. **VALUE ADDED TAX**

Value Added Tax shall be excluded from the rates and sums contracted for the various items of work included in the Bill of Quantities. VAT will be added as a single entry to the summary.

11. **RATES AND PRICES**

11.1 **General**

- a) The Contractor must price each item in the Bill of Quantities in BLACK INK. Reproduced computer printouts of the Bills of Quantities will not be acceptable.
- b) The rates and prices to be inserted in the Bill of Quantities shall cover all the services and incidentals for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Bid is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- c) Where the Contractor is required to furnish detailed drawings and designs or other information in terms of the Contract Data, all costs thereof shall be deemed to have been provided for and included in the unit rates and sum amounts contracted for the items scheduled in the Bill of Quantities. Separate additional payments will not be made.
- d) A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill. The Contractor will not be paid for items against which no rate or lump sum has been entered in the Bill of Quantities.
- e) Should the Contractor group a number of items and contract one lump sum for such group of items, this single lump sum shall apply to that group of items and not to each individual item.
- f) Should the Contractor indicate against any item that compensation for such item is included in another item; the rate for the item included in another item shall be deemed nil.

- g) A submission may be regarded as non-responsive if any rates or lump sums in the Bill of Quantities are, in the opinion of the Employer, unreasonable or out of proportion.

11.2 "Rate only" items

The Contractor shall fill in a rate (in the rate column) against all items where the words "rate only" appear in the Amount column, which rate will constitute payment for work which may be done in terms of this item. Such "rate-only" items are used where it is estimated that little or no work will be required under the item or where the item is to be considered as an alternative to another item for which a quantity is given.

11.3 Arithmetic

Excepting where Sum Amounts are required or where Provisional Sums have been indicated, the Contractor shall enter an applicable rate in the Rate Column of the Bill of Quantities for each scheduled item. He shall also enter an appropriate sum in the Amount column for each scheduled item, by determining in the applicable line item the product of the Quantity and the Unit Rate.

If there is an error in the line item resulting from the product of the unit rate and the quantity, the rate shall be binding and the error of extension as entered in the Bid offer will be corrected by the Employer in determining the Contract Price.

Where there is an error in addition, either as a result of other corrections required by this checking process or in the Bidder's addition of prices, such error will be corrected by the Employer in determining the Contract Price.

12. VARIATION IN TEXT

No alteration, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognized; the original wording of the Bill of Quantities will be adhered to.

PART C2.2

BILL OF QUANTITIES

TENDER NO: EPMLM/8/3/528

**APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI
SUBSTATION – 1028 MAIN ROAD**

SECTION A - P&G and MEDIUM VOLTAGE**BILL NO.1 : PRELIMINARY AND GENERAL COSTS**

(Note : These prices shall be firm and not subject to price adjustment)

Item	Description	Unit	QTY	Rate	Amount
1	PRELIMINARY AND GENERAL				
1,1	Fixed charges				
1.1.1	Contractual Requirements	Sum	1		
1.1.2	General responsibilities and other fixed- charge obligations	Sum	1		
1.1.3	Removal of Site establishment on completion	Sum	1		
1.1.4	Facilities required by Contractor	Sum	1		
1.1.5	OHS Act and industry safety requirements	Sum	1		
1.1.6	Safety File	No	1		
1,2	Time-related charges (for duration contract.)				
1.2.1	Contractual requirements	month	3		
1.2.2	Facilities for Contractor	month	3		
1.2.3	Construction Supervision for the duration contract	month	3		
1.2.4	General responsibilities and other time related obligations	month	3		
Total for Bill No. 1 Carried forward to summary page					

SECTION B – MEDIUM VOLTAGE**BILL NO.2 : MEDIUM VOLTAGE - Material**

(Note : These prices shall be firm and not subject to price adjustment)

Item	Description	Unit	QTY	Rate	Amount
1	<u>315kVA Minisubstation</u>				
1.1	New complete minisubstation, 315kVA, 11000/400Volt, Main Circuit breaker, feeder breakers, metering and streetlight circuit with breakers. Mild steel metal and powder coated as specified.	No	1		
1.2	Prefabricated concrete plinth for the minisubstation with removable front panel on the MV cubicle front.	No	1	N/A	Use existing
2	<u>MV cables</u>				
	New power cable, supplied, delivered and installed at 1meter depth in a 1.2meter cable trench. (cable may only be ordered if quantity has been verified on site and confirmed with the Engineer):			Note only	

2.1	Supplied and delivered to site, 120mm ² , 3-core, Cu 6.35/11kV, PILC Cable (table 17). Cable may be belted or SWA.	m	15		
3	<u>Cable Terminations supplied and installed</u>				
	Cable terminations, supplied, delivered.				
3.1	Termination, Heat shrink, 120mm ² , 6.35/11kV, for 3 core, PILC, Cu	No	2		
2.2	Cold applied, type specific, 90°, bushing boots for SF6 Ring Main Unit as specified by the manufacturer.	No	6		
2.3	Lugs 120 mm ² x Ø12mm, MV, closed end for Copper cable or Torque shear type.	No	12		
2.4	Clamp for 11kV, 3 core, PILC, Cu, 120mm ² cable if cable clamps are not an integral part of the Ring Main Unit.	No	2		
2.4	Electroplated bolts, nuts, washers and spring washers - 12mmØ	sum	1		
3	<u>Cable Joints</u>				
	Supply heat shrink cable joints for 120mm ² , 6.35/11kV, 3 core, PILC cables				
3.1	Cable joints for 120mm ² , 11kV, 3-core, PILC, Cu, (Table 17)	No	2		
3.2	Ferrules 120mm ² , MV, Torque shear	No	10		
4	<u>Earthing</u>				
	Supply and deliver to site the following earth conductors, bars and rods. (BCEW may only be ordered if quantity has been verified on site and confirmed with the Engineer): 70mm ² bare copper earth conductor (2600m / 1.56 = 1667kg)				
4.1	Earth rods (1.2m long), complete with cable clamps	No	2		
4.2	70 mm ² bare copper earth conductor (2600m/1.56=1667kg)	m	5		
4.3	Ferrules, 70mm ² ,	No	8		
4.4	Lugs, 70mm ² x 12mmØ	No	4		
5	<u>Other</u>				
5.1	Loam bedding - provided that it is sifted as per SANS10198 (100-150mm bed * 200-250mm cover) (2m)	m ³	1.5		
5.2	Backfill material if local material is not suitable and material must be imported. (This cost must include the transport of the material to site and the removal of the unsuitable material)	m ³	3.0		
5.3	Cable warning tape - red on yellow	m	5		
Total for Bill No. 2 Carried forward to summary page					

BILL No. 3 : MEDIUM VOLTAGE RETICULATION – Labour					
Item	Description	Unit	QTY	Rate	Amount
1	<u>Testing and commissioning</u>				
	Testing includes all related costs like travelling to site				
1.1	Pressure testing, phasing and commissioning of MV reticulation installations - cables joints terminations	Sum	1		
2	<u>Excavation</u>				
2.1	All existing services must be identified and carefully excavated by hand by experienced staff warned of the dangers involved. (water, sewer, Telkom, Herotel fibre optic, existing MV and LV networks.)	m ³	3		
2.3	Excavate on the cable route - 1,2 meter deep & 0,5meter wide - Soft Pick able soil.	m ³	3		
2.4	Excavate on the cable route - 1,2 meter deep & 0,5meter wide - Soft Rock(Mechanical Wedging)	m ³	2		Rate only
2.5	Excavate on the cable route - 1,2 meter deep & 0,5meter wide - Hard rock (Blasting)	m ³	1		Rate only
3	<u>Backfill, compaction and rehabilitation</u>				
	Backfill, compaction, bedding and installation of danger tape(SANS 10198). REFER TO SPECIFICATION FOR DETAILS. Backfill cost must include rehabilitation of trench surface area.				
3.1	Backfill 200mm layer of loam bedding(compacted) at the bottom of the trench and 200mm loam covering around cable after cable has been laid (compacted by hand). Excavated material, if suitable, can be used, provided that it is sifted as per SANS 10198	m ³	1.5		
3.2	Backfill excavated material into trench and compact in layers of 150mm with mechanical compactors. Rocks must be removed and material must be suitable or replaced with imported material.	m ³	1.5		
4	<u>Cable installation</u>				
4.1	Cable Installed according to SANS 10198)	M	15		
5	<u>Terminations</u>				
5.1	Installation of 120mm ² heat shrink terminations and connection of conductors, cable lugs, glands, earthing etc	Ea	2		
6	<u>Jointing of cables</u>				
6.1	Install heat shrink cable joint for 120mm ² cable, 11kV, 3 core, PILC, Cu	Ea	2		
7	<u>Earthing</u>				
7.1	Install 2 earth rods at cable joint and under foundation and connect earthing	Ea	2		
7.2	Install earth wire with cable and under minisubstation	M	5		

Total for Bill No. 3 Carried forward to summary page					

SECTION C – LOW VOLTAGE**BILL NO.4 : LOW VOLTAGE – Material**

(Note : These prices shall be firm and not subject to price adjustment)

Item	Description	Unit	QTY	Rate	Amount
1	<u>LV cables</u>				
	New power cable, supplied, delivered and installed at 0.5meter in a 0.7meter cable trench. (cable may only be ordered if quantity has been verified on site and confirmed with the Engineer):			Note only	
1.1	Supplied and delivered to site, 95mm ² , 4 core, PVC, SWA, PVC, 600V	M	5		
1.2	Supplied and delivered to site, 120mm ² , 4 core, PVC, SWA, PVC, 600V	M	5		
1.3	Supplied and delivered to site, 35mm ² , 4 core, PVC, SWA, PVC, 600V	M	5		
1.5	Flexible cable, 600V, 95mm ²	M	12		
2	<u>Cable joints</u>				
2.1	Cable joint, resin casts, for 95mm ² , 4 core, PVC, SWA, PVC, 600V	No	1		
2.2	Cable joint, resin casts, for 120mm ² , 4 core, PVC, SWA, PVC, 600V	No	1		
2.3	Cable joint, resin casts, for 35mm ² , 4 core, PVC, SWA, PVC, 600V	No	1		
2.4	Lugs 120 mm ² x Ø12mm, for Cu	No	4		
2.5	Lugs 95 mm ² x Ø12mm, for Cu	No	4		
2.6	Lugs 70 mm ² x Ø12mm, for Cu	No	4		
2.7	Lugs 35 mm ² x Ø10mm, for Cu	No	4		
2.8	Lugs 16 mm ² x Ø12mm, for Cu	No	4		
2.9	Ferrules, 120 mm ² for Cu	No	4		
2.10	Ferrules, 95 mm ² for Cu	No	4		
2.11	Ferrules, 70 mm ² for Cu	No	4		
2.12	Ferrules, 35 mm ² for Cu	No	4		
2.13	Ferrules, 10 mm ² for Cu	No	15		
2.14	Ferrules, 2.5 mm ² for Cu	No	8		
2.15	Q-Clamp, Galvanised clamp and bolt, 40mm	No	3		
2.16	Q-Clamp, Galvanised clamp and bolt, 46mm	No	4		
2.17	Q-Clamp, Galvanised clamp and bolt, 52mm	No	3		
2.18	Electroplated bolts, nuts, washers and spring washers - 12mmØ	Sum	1		
3	<u>Earthing</u>				

	Supply and deliver to site the following earth conductors, bars and rods. (BCEW may only be ordered if quantity has been verified on site and confirmed with the Engineer): 70mm ² bare copper earth conductor (2600m / 1.56 = 1667kg)				
3.1	70 mm ² bare copper earth conductor	m	5		
3.2	35 mm ² bare copper earth conductor	m	5		
4	<u>Other</u>				
4.1	Loam bedding - provided that it is sifted as per SANS10198 (100-150mm bed * 200-250mm cover) 10m	m ³	2		
4.2	Backfill material if local material is not suitable and material must be imported. (This cost must include the transport of the material to site and the removal of the unsuitable material)	m ³	2		
4.3	Cable warning tape - red on yellow (double layer)	m	10		
Total for Bill No. 4 Carried forward to summary page					

BILL No. 5 :LOW VOLTAGE RETICULATION - Labour					
Item	Description	Unit	QTY	Rate	Amount
1	<u>Excavation</u>				
1.1	Excavate on the cable route – 0.75 meter deep & 0,8meter wide - Soft Pick able soil.	m ³	3		
1.2	Excavate on the cable route – 0.75 meter deep & 0,8meter wide - Soft Rock(Mechanical Wedging)	m ³	2		
1.3	Excavate on the cable route - 1,2 meter deep & 0,5meter wide - Hard rock (Blasting)	m ³	1		
2	<u>Backfill, compaction and rehabilitation</u>				
	Backfill, compaction, bedding and installation of danger tape(SANS 10198). REFER TO SPECIFICATION FOR DETAILS. Backfill cost must include rehabilitation of trench surface area.				
2.1	Backfill 200mm layer of loam bedding(compacted) at the bottom of the trench and 200mm loam covering around cable after cable has been laid (compacted by hand). Excavated material, if suitable, can be used, provided that it is sifted as per SANS 10198	m ³	1.5		
2.2	Backfill excavated material into trench and compact in layers of 150mm with mechanical compactors. Rocks must be removed and material must be suitable or replaced with imported material,	m ³	1.5		
3	<u>Cable installation</u>				
	Cable Installed according to SANS 10198)				

3.1	Install 95mm ² , 4 core, PVC, SWA, PVC, 600V	m	5		
3.2	Install 120mm ² , 4 core, PVC, SWA, PVC, 600V	m	5		
3.3	Install 35mm ² , 4 core, PVC, SWA, PVC, 600V	m	5		
4	<u>Terminations</u>				
	Installation of cable end in minisubstation and clamp, connect core to circuit breakers with lugs and neutral to neutral bar with lugs and bolts.				
4.1	95mm ² , 4 core, PVC, SWA, PVC, 600V	no	1		
4.2	Install 120mm ² , 4 core, PVC, SWA, PVC, 600V	no	1		
4.3	Install 35mm ² , 4 core, PVC, SWA, PVC, 600V	no	1		
5	<u>Jointing of cables</u>				
	Installation of resin cast joints in low voltage cables with hydraulic crimp or torque shear ferrules				
5.1	Install cable joint, resin casts, for 95mm ² , 4 core, PVC, SWA, PVC, 600V	No	1		
5.2	Install cable joint, resin casts, for 120mm ² , 4 core, PVC, SWA, PVC, 600V	No	1		
5.3	Install cable joint, resin casts, for 35mm ² , 4 core, PVC, SWA, PVC, 600V	No	1		
6	<u>Earthing</u>				
6.1	Extend earth wires and connect to Minisubstation earth bar.				
6.1	70 mm ² bare copper earth conductor	no	3		
6.2	35 mm ² bare copper earth conductor	no	2		
Total for Bill No. 5 Carried forward to summary page					

SECTION D - OTHER**BILL NO.6 : Roadworks, driveways, gardens and other**

(Note : These prices shall be firm and not subject to price adjustment)

Item	Description	Unit	QTY	Rate	Amount
1	<u>REMOVAL AND TRANSPORT</u>				
1.1	Repair paving	sum	1		
1.2		sum	1		
Total for Bill No. 6 Carried forward to summary page					

Item	Description	Sub-Total
1	TOTAL FOR BILL NO. 1	
2	TOTAL FOR BILL NO. 2	
3	TOTAL FOR BILL NO. 3	
4	TOTAL FOR BILL NO. 4	
5	TOTAL FOR BILL NO. 5	
6	TOTAL FOR BILL NO. 6	
7	CONTINGENCIES 5% of project value	
	TOTAL FOR BILLS OF QUANTITIES SECTION C (excl. VAT) Carried forward to SUMMARY	
		VAT
		TOTAL

EPHRAIM MOGALE LOCAL MUNICIPALITY APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD

C3: SCOPE OF WORK

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B2.2.	All electrical material to be SABS or IEC approved in the absence of a SABS specification.
B2.3.	There must be a test certificate from the manufacturer for the Ring Main Unit and transformer.
B2.4.	Equipment specification
B2.4.1	Minisubstation - see ANNEXURE with specification detail and drawings
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6. Measurement and Payment

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1. Introduction and Background
2. Pre-construction Health and Safety specification
 - 2.1 Scope
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 - 2.3 Minimum Administrative requirements
 - 2.4 Health and Safety Induction, Training and Equipment
 - 2.5 Preliminary Hazard Identification and Risk Assessment
 - 2.6 Permits
 - 2.7 Incentives and Penalties
 - 2.8 Specific Project Requirements
3. Financial Provision for Health and Safety
4. Guidelines for the preparation of a Typical OH&S Plan

C3.1 STANDARD SPECIFICATIONS

The following specifications, standards and ACTs are applicable and referred to in this document and the Contractor is advised to obtain them and familiarize himself with them obtain them. Not all relevant standards could be listed and it is assumed that a bidder that is compliant with a 3 EP rating is already familiar with the relevant electrical construction environment and it's applicable standards.

The cable shall be of the Paper Insulated Lead Sheathed Cable (PILC) type in conformity with NRS 013 and SANS 97. Fully impregnated, general purpose, 150mm², copper, three core, belted or steel wire armored, 6.35/11kV cable.

OHS Act	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) including the Electrical Machinery Regulations.
NRS 013	Medium Voltage Cables
NRS 040	High-Voltage operating regulations
SANS 97	Electrical cables – Impregnated paper insulated metal sheathed cables for rated voltages 3,3/3,3kV to 19/33kV
SANS	1091
SANS 1885/NRS003	AC, metal enclosed switchgear and controlgear for rated voltages above 1kV and up to and including 36kV.
SANS 10198-1	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 1: Definitions and statutory requirements
SANS 10198-2	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 2: Choice of cable type and methods of installation
SANS 10198-3	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 3: Earthing systems-general provisions
SANS 10198-4	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 4: Current ratings
SANS 10198-5	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 5: Determination of thermal and electrical resistivity of soil
SANS 10198-6	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 6: Transportation and storage
SANS 10198-7	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 7: Safety and precautions
SANS 10198-8	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 8: Cable laying and installation
SANS 10198-10	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 10: jointing and termination of paper insulated cables
SANS 10198-12	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 12: installation of earthing system.
SANS 10198-13	The selection, handling and installation of electric power cables of ratings not exceeding 33kV Part 13: testing, commissioning and fault location.
SANS 61936-1	power installations exceeding 1kV a.c.-Part 1: Common rules

SANS 10396:	Implementing Preferential Construction Procurement Policies using Targeted Procurement Procedures
SANS 1914-1 to 6	Targeted Construction Procurement
SANS 1921 – 1	Construction and Management Requirements for Works Contracts Part 1: General Engineering and Construction Works
SANS 1921-5	Generic Labour Intensive Specification Part 5: Earthworks.

and where accommodation of traffic is involved:

SANS 1921-2	Construction and Management Requirements for Works Contracts Part 2: Accommodation of Traffic on Public Roads Occupied by the Contractor.
IEC 60055	Paper insulated metal-sheathed cables for rated voltages up to 36kV
IEC 608502	Power cables with extruded insulation and their accessories for rated voltages from 1kV up to and including 36kV.

APPOINTMENT OF A SERVICE PROVIDER FOR REPLACEMENT OF A MINI SUBSTATION – 1028 MAIN ROAD EPHRAIM MOGALE LOCAL MUNICIPALITY

C3.2: PROJECT SPECIFICATIONS

STATUS

The Project Specification, consisting of two parts, forms an integral part of the contract and supplements the Standard Specifications.

Part A contains a general description of the works, the site and the requirements to be met.

Part B contains variations, amendments and additions to the Standardized Specifications and, if applicable, the Particular Specifications.

In the event of any discrepancy between a part or parts of the Standardized or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Engineer before the execution of the work under the relevant item.

The standard specifications which form part of this contract have been written to cover all phases of work normally required for electrical distribution contracts, and they may therefore cover items not applicable to this particular contract.

PART A: GENERAL

PS-1 PROJECT DESCRIPTION

The Ephraim Mogale Local Municipality needs to replace an old 300kVA minisubstation at stand 1028 in Marble Hall. This project is to supply and install a new, 315kVA, 11kV/400V minisubstation to replace the old unit. The new minisubstation will be installed on the existing foundation. The existing cables must be carefully excavated to allow for re-routing and extension. The final change-over must be completed in one day to limit the supply interruption in the area and the risk of theft. The minisubstation supplies two low voltage cables and it might be necessary to do short re-routing of the cables. All the cables on the low voltage side will need to be extended to reach the new location. It might happen that rerouting of a cable will also make it necessary to extend the cable to reach the new location. The old minisubstation must be removed and taken to the Municipal stores. The minisubstation, cables and circuit breaker must be SABS approved and comply with the Department of Trade and Industry minimum local content requirements. There will be many other services in the same area. These services should be identified, confirmed and protected.

The works will comprise of the following:

- Earthworks – excavation, bedding compaction filling
- Supply and installation of a minisubstation
- Supply, installation, jointing terminating, connection and testing of electrical cables and earth wire

- Removal of old minisubstation
- Rehabilitation of all areas – road surface, paving, gardens, pavements, drive ways etc.

PS-2 DESCRIPTION OF THE SITE AND ACCESS

2.1 Location of site

The installation will be on the pavement next to a four lane street in the CBD in Marble Hall. Traffic volumes are fairly high and adequate safety measures must be implemented for traffic safety as well as preventing unauthorised access to the site. Traffic control, fencing and road signage will be critical. The pavement is shared by several service providers and proper identification of existing services will be required. The following authorities will have to be contacted for assistance:

Electrical Cables	Ephraim Mogale Local Municipality
Water and sewer lines	Sekhukhune District Municipality
Communication lines	Telkom/ Open Serve, Herotel
Signage	Ephraim Mogale Local Municipality
Roads	Roads and Stormwater Department of the Ephraim Mogale Local Municipality
Pavements	Roads and Stormwater Department of the Ephraim Mogale Local Municipality, land Owners and tenants

The site is always accessible which will assist construction. The attached drawings will assist in the exact location of the site. Coordinates of the site: lat -24° 58' 12.68"S, lon 29° 17' 42.08"E.(Bidders should familiarise themselves with the terrain.)

The site shall not only include the proclaimed road reserve but shall be extended in the broader sense to take account of all areas occupied by the Contractor, be it deliberate or unintentional, in the execution of the contract.

Incidental intrusion into private property outside the road reserve shall not be permitted without the owner's written authority. Any such agreement reached with a private landowner shall include the proviso that any material or equipment on that site shall remain the exclusive property of the Employer in terms of the contract.

2.2 Access to site

Access to the site can be obtained from Main Road. There is no time limit on access to the site but access to the minisubstation will only be with advanced arrangement and approval of the Electrical Department as it is operational.

The contractor shall be responsible for the maintenance and reinstatement of damage caused by him or his agents/deliveries to vehicular access tracks and rights of way. No damage to fauna and flora located outside the limits of the road reserve will be permitted on the contract.

The contractor shall take cognizance of the aforementioned items concerning roads and tracks and allow for any costs in his Bid under the relevant section in the Bill of Quantities.

PS-3 DETAILS OF THE WORKS

The project will have the following main items:

- Locate all existing services

The site is on the pavement which is shared with other service providers and there will be water pipelines, sewer lines, Telkom lines and also possibly Herotel lines. The Contactor must notify

these authorities of the planned excavation work and request their assistance to locate and identified these services.

- Excavate existing services

Once the services have been identified it must be opened up very carefully where the new cable route will intersect or be very close to them. Where it is necessary to expose existing buried cables, pipes etc. every care is to be exercised and only labourers experienced in such work, and duly warned by the Contractor, shall be employed thereon. The Contractor shall be responsible for the making good any damage caused by his work. Where the Contractor damage any services it must be repaired to the satisfaction of the relevant service authority at the cost of the Contractor. All excavations must be properly fenced off for safety.

- New Minisub

The plinth must be adequately stabilised so that excavation in close proximity will not cause it to sag or move. It must be safe to excavate close to it and might require additional support. Once the plinth have been secured and stabilised the new Minisubstation must be placed on the plinth with the LV doors facing the street.

- Transfer of cables

All the cables connected to the existing minisubstation must be transferred and connected to the new minisubstation. Some cable will have to be extended by making a joint and adding cable.

- Excavate all additional sections

After the existing services have been identified the cables connected to the old minisubstation must be carefully excavated and the new routes must be excavated to a depth of 1.2meter for MV and 0.75 meter for LV cables and at least 0.5meter wide. Where multiple cables will share the trench it must be at least 0.8 meter wide. All excavations must be properly fenced off for safety. Trenches shall be as straight as possible, and the bottom of the trench shall have a smooth contour and shall have no sharp dips or rises which may cause tensile forces in the cable during backfilling.

- Bedding

Bedding shall consist of a 200mm thick layer of loam bedding of suitable material below the cable and a 200mm layer of loam covering cover over the cable. In certain sections the excavated material will be suitable provided that it is sifted as per SANS 10198.

- Install new cables and earthing

The contractor must satisfy himself that the levels of the trenches are suitable and are wide enough to enable him to carry out the work in accordance with SANS 10198. The contractor shall be responsible to draw in, lay, thread through pipes, circumvent obstacles, fix in position and clamp and saddle where require to switchgear. It is important to remember:

- Cable drums shall not dropped off from transport but shall be lowered with suitable lifting equipment.
- Cables shall be rolled of drums that is suitably supported to allow the drums to turns.
- Cables being pulled shall be supported on rollers at suitable distances and around bends to protect the cable.
- Cables shall not be twisted, kinked or bend in a radius smaller than 15 x cable radius.
- Cables must be rolled from the drums in the same direction to prevent crossing of phases at joints.

- Cable joints, terminations and connection of cables

Approved heat shrink cable joints and terminations must be installed for MV cables and resin cast joints can be used for the LV cables. Phase crossing must be avoided. All MV joints must be

marked with cable markers. The correct termination equipment and material must be used in compliance with the specifications of the switchgear manufacturer. Bushing terminals shall be covered to avoid contact, discharge, flashover or corona. Enough extra cable will be installed at the termination point to allow for the future replacement of the termination. Manufacturer approved termination bots must be used.

○ Testing

The cable joints and termination must be tested according to SANS 10198-13 and certified.

○ Backfill and soil compaction according to specification

After the bedding layer of 250mm the trench can be filled with a proper grading material to ensure settling without voids and material is to be compacted in layers of 200mm. The excavated material might not be suitable in all section and might have to be sifted or replaced.

○ Restore paving, roads and road reserve to original condition including curb stones

The paving must be installed **where missing and where it was removed**. If a road and or curb stone is damaged it must be restored to the original condition. Pictures must be taken before and after. The curb stones must also be restored, repaired or replaced.

○ Install cable markers

The cable markers should be manufactured from concrete with a tapered shape in accordance with the attached detail drawings. A stamped plate must be on top with the information. Cable markers

3.1 Roadwork's

The surfacing will be 30mm Asphalt and curb stones must be premanufactured identical to the existing units.

3.2 Structures

No major structure was identified except for the different pavement/road reserve coverings applied by customers.

3.3 Ancillary works

The following ancillary works shall form part of this contract:

- installation of kerbing where damaged or removed
- construction of concrete side drains if damaged or removed
- Restoration of all entrances and pavements to condition before construction.

3.4 Traffic

Table below depict the estimated traffic Volume:

Road Section	Average daily traffic (No. of vehicles)	Average daily truck traffic (No. of trucks/ heavy vehicles)
Internal street	7668	10% of AADT

3.5 Nature of ground conditions and subsoil conditions

In general the materials in the cable route can be utilized again for back filling but it is estimated that about 30% will be unsuitable. The route is along an existing cable route or just adjacent to it and it is not anticipated that blasting will be necessary although there is provision for a rate.

3.6 Climatic conditions

This route falls within the summer rainfall region of Limpopo in South Africa, with the rainy season lasting from approximately November to April.

Temperature:

This area experiences a hot semi-arid climate with an average temperature of 19.9° C. Summer days are hot with temperatures varying between 26.3° - 27.8° C in October to March. Summer night temperatures are cool to mild between 13.4° - 16.6° C in October to March. Winter day temperatures are mild to hot varying between 19.6° - 25.2° C in April to September. Winter nights are cold with temperatures of 4.3° - 12.1° C in April to September.

Rainfall:

The average rainfall up to 2004 (10 years) is 542.7mm/year with a maximum of 959mm in 1996 and a minimum of 196mm in 2003.

4.11 Construction in confined Areas

It may be necessary for the Contractor to work within confined areas. Except where provided for in the specifications, no additional payment shall be made for work done in restricted areas. In certain places the width of the fill material and pavement layers may decrease to zero and the working space may be confined. The method of construction in these confined areas largely depends on the Contractor's constructional plant.

However, the Contractor shall note that, unless provided for in terms of the scheduled payment items in the COLTO Standard Specifications or these project specifications, measurement and payment shall be in accordance with the specified cross sections and dimensions only, irrespective of the method used for achieving these cross sections and dimensions, and that the Bided rates and amounts shall include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths, and at or around obstructions, and that no extra payment shall be made nor shall any claim for additional payment be considered in such cases.

PS-4 CONSTRUCTION AND MANAGEMENT REQUIREMENTS

4.1 General

The Contractor is referred to **SANS 1921: 2004 parts 1, 2 and 3: Construction and Management Requirements for Works Contracts**. These specifications shall be applicable to the contract under consideration and the Contractor shall comply with all requirements relevant to the project.

Certain aspects however require further attention as described hereafter.

4.2 Drawings (Read with SANS 1921 – 1: 2004 clauses 4.1.7; 4.1.11 and 4.1.12)

The reduced drawings which form part of the Bid documents shall be used for Bidding purposes only and is attached at the back of this document under section C4.3.

The contractor shall be supplied with three complete paper copies of the construction drawings free of charge. The Contractor shall at his own expense re-produce further paper prints required for the construction of the work.

At the completion of the Contract, the Contractor shall return to the Engineer all drawings, provided or made, during the contract period.

Any information which the Contractor has control over and which is required by the Resident Engineer to complete the as-built drawings shall be made available to the Resident Engineer before the Certificate of Completion is issued.

Only written dimensions may be used. Dimensions are not to be scaled from drawings unless ordered by the Engineer. The Engineer will supply all figures / dimensions which are not shown on the drawings. The levels or dimensions given on the drawings are subject to confirmation on site. The Contractor shall submit all levels and dimensions to the Engineer for confirmation before he commences with any structural construction work. The Contractor shall also check all clearances which are given on the drawings and inform the Engineer of any conflicting dimensions.

Any destination names on road signs which may be indicated on the drawings are subject to confirmation by the Engineer before these signs are manufactured.

4.3 Responsibilities for design and construction *(Read with SANS 1921 – 1:2004 Clause 4.2)*

4.3.1 The responsibility strategy followed in this contract shall be A.

4.3.2 The Municipality is responsible for the design.

4.4 Planning, Programme and Method Statements *(Read with SANS1921-1:2004 clause 4.3)*

4.4.1 Preliminary programme

The Contractor shall include with his Bid a programme in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

The Contractor shall be deemed to have allowed fully in his Bided rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions and special non-working days as specified in the Special Conditions of Contract, in the Project Specifications and in the Contract Data.

The following constraints shall be taken into account in preparing the preliminary construction programme which must be submitted with the Bid. These same constraints shall apply to the final construction programme.

- a) The Contract will be as Bided by the contractor. Plant and personnel requirements to complete the project must be incorporated in the Bid and shown on the programme.
- b) A high standard of traffic accommodation
- c) The relocation of services
- d) Ancillary works by Emerging Contractors

4.4.2 Programme in terms of Clause 5.6 of the General Conditions of Contract

It is essential that the construction programme, which shall conform in all respects to Clause 5.6 of the General Conditions of Contract, be furnished within the time stated in the Contract Data. The preliminary programme to be submitted with the Bid shall be used as basis for this programme..

The following must be stated on the programme:

- (a) 2 weeks must be allocated at the start of the project for the setting out of existing services and confirmation of such services. No work will be allowed prior to the confirmation process being completed.
- (b) The quantity of work applicable to each bar item as well as the rate at which the work will be completed.
- (c) A budget of the value of completed work, month by month, for the full contract period.
- (d) The critical path.
- (e) Work to be undertaken by Local Contractor (if applicable)
- (f) Schedule of plant and resources to be utilized

The Contractor's attention is also drawn to clause 5.7 of the General Conditions of Contract 2010.

4.4.3 Time for Completion

The Time for Completion shall be **03 months** as indicated under section C1.2. Contract Data.

4.4.4 Delay in Completion

The Contractor shall organise the Works in such a manner that no delays occur. Delays due to faulty organisation or lack or shortage of materials or labour or co-operation with other parties or to any other cause within the control of the Contractor will not be counted and full power is reserved by the Engineer to order the Contractor to expedite the work should the work, in the opinion of the Engineer, not progress in a satisfactory way.

4.5 Quality Assurance (QA) *(Read with SANS 1921 – 1: 2004 clause 4.4)*

The Contractor will be solely responsible for the production of work that complies with the Specifications to the satisfaction of the Engineer. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site. The Engineer will audit the Contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to ensure that the Contractor's own control is sufficient to identify any possible quality problems which could cause a delay or failure.

The Contractor shall ensure that efficient supervisory staff, the required transport, instruments, equipment and tools are available to control the quality of his own workmanship in accordance with his QA-system. His attention is drawn to the fact that it is not the duty of the Engineer or the Engineer's representative to act as foreman or surveyor.

4.6 Management and disposal of water *(Read with SANS 1921 – 1 : 2004 clause 4.6)*

The Contractor shall pay special attention to the management and disposal of water and storm water on the site. It is essential that all completed works or parts thereof are kept dry and properly drained. Claims for delay and for repair of damage caused to the works as a result of the Contractor's failure to properly manage rain and surface water, will not be considered.

4.7 Earthworks *(Read with SANS 1921 – 1 : 2004 clause 4.10)*

4.7.1 Borrow pits and spoil areas

The borrow pits to be used for this contract shall be pointed out at the Site Inspection. The Contractor shall be permitted to use only those borrow pits approved by the Engineer.

The spoil sites shall be the Marble Hall Municipal Dump site. The Contractor shall be permitted to use only those spoil areas approved by the Engineer.

Should the Contractor wish to use any other spoil area for the disposal of soil, rubble, vegetation, etc, its use shall be subject to the approval of the Engineer and the landowner.

4.8 Testing

Testing according to SANS 10198 – 13 with certification.

4.8.1 Process control

The Contractor shall arrange for his own process control.

4.8.2 Acceptance control

The Contractor will submit the proof that material complies with SABS standards as well as the test certificates for the cable joints and termination.

4.9 Site Establishment *(Read with SANS 1921 – 1 : 2004 clause 4.14)*

4.9.1 Contractor's camp site and depot

The Contractor is responsible to provide a suitable site for his camp and to provide accommodation for his personnel and laborers. If the Employer can make any specific site available to the Contractor, such site will be pointed out to the Contractor.

Possible locations for a campsite shall be pointed out at the Site inspection. The Contractor shall conform

to all local authority, environmental and industrial regulations.

The Contractor shall make his own arrangements concerning the supply of electrical power and all other services. No direct payment shall be made for the provision of electrical and other services. The cost thereof shall be deemed to be included in the rates and amounts Bided for the various items of work for which these services are required.

The Contractor shall provide security watchmen for the contract as he deems fit at no extra cost for the Employer. The Contractor must ensure that all his employees as well as the employees of his subcontractors are able to identify themselves as members of the construction team.

4.9.2 Accommodation of Employees

No employees except for security guards will be allowed to sleep or be accommodated on the site in urban areas.

No housing is available for the Contractor's employees and the Contractor shall make his own arrangements to house his employees and to transport them to site.

No informal housing or squatting will be allowed.

The Contractor shall provide the necessary ablution facilities at his camp site and the site of the works for the use of his employees. Chemical toilets will only be allowed where temporary facilities have to be provided.

4.10 Survey beacons *(Read with SANS 1921 – 1 : 2004 clause 4.15)*

The Contractor shall take special precautions to protect all permanent survey beacons or pegs such as bench-marks, stand boundary pegs and trigonometrical beacons, regardless whether such beacons or pegs were placed before or during the execution of the Contract. If any such beacons or pegs have been disturbed by the Contractor or his employees, the Contractor shall have them replaced by a registered land surveyor at his own cost.

4.11 Existing Services *(Read with SANS 1921 – 1: 2004 clause 4.17)*

The Contractor shall make himself acquainted with the position of all existing services before any excavation or other work likely to affect the existing services is commenced.

It is the contractors responsibility to identified services that will interact with the construction work. The contractor will be responsible to do the application and negotiation on the relocation of the sifting of services.

The Contractor will be held responsible for any damage to known existing services caused by or arising out of his operations and any damage shall be made good at his own expense. Damage to unknown services shall be repaired as soon as possible and liability shall be determined on site when such damage should occur.

Services belonging to the following service owners will be encountered.

SERVICE OWNER	TYPE OF SERVICE
Ephraim Mogale Local Municipality	Electrical cables
Telkom(Open Serve)	Telephone lines, cables and fibre optic cables
Herotel	Fibre optic cables
Sekhukhune District Municipality	Waterlines and sewer reticulation
Sekhukhune District Municipality	Bulk water lines
Ephraim Mogale Local Municipality	Land owner
Ephraim Mogale Local Municipality	Main Road and road reserve
Private owners	Drive ways, paving, beautification, and gardens

A provisional amount is included in the bill of quantities for the protection and/or shifting restoration of services.

Two weeks prior to commencing construction activities in a particular area, the Contractor shall also

diligently enquire of local landowners as to whether there are any other known services which have not been shown on the drawings but which may be affected by the construction activities in that area, and any such services shall be brought to the attention of the Engineer immediately. The contractor shall make provision in his programme for the location and/or shifting of services.

The Contractor shall take note of the requirements of clause 1202 of the standard specifications with regard to services.

4.12 Health and Safety (Read with SANS 1921 - 1: 2004 clause 4.18)

4.12.1 General statement

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act (OHSA) No 85 and Amendment Act No 181 of 1993, and the OHSA 1993 Construction Regulations 2014 issued on 7 February 2014 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of the Occupational Health and Safety Act in the form as included in section C1.5.

4.12.2 Health and Safety Specifications and Plans

(a) Employer's Health and Safety Specification

The Employer's Health and Safety Specification is included in Section C3.3, of the Bid documents as part of the Particular Specifications.

(b) Bidder's Health and Safety Plan

The Bidder shall submit with the bid his own documented Health and Safety Plan he proposes to be implement for the execution of the work under the contract. The Health and Safety Plan must at least cover the following:

- (i) a proper risk assessment of the works, risk items, work methods and procedures in terms of Regulations 9 to 30;
- (ii) pro-active identification of potential hazards and unsafe working conditions;
- (iii) provision of a safe working environment and equipment;
- (iv) statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 7*);
- (v) monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;
- (vi) details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 8 and other applicable regulations; and
- (vii) details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2014.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan, shall not be used as a reason to claim for extension of time or standing time and related costs

4.12.3 Cost of compliance with the OHSA Construction Regulations

The rates and prices Bided by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract.

Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable

for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

4.13 Requirements for Accommodation of Traffic *(Read with SANS 1921 - 2 : 2004)*

4.13.1 General

The Contractor will be responsible for the safe and easy passage of public traffic past and on sections of roads of which he has occupation or where work has to be done near traffic.

The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

Accommodation of traffic, where applicable shall comply with SANS 1921-2: 2004: Construction and Management Requirements for Works Contracts, Part 2: Accommodation of Traffic on Public Roads occupied by the Contractor. The Contractor shall obtain this specification from Standards South Africa if accommodation of traffic will be involved on any part of the construction works.

4.13.2 Basic Requirements

The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

The Contractor shall ensure that all road signs, barricades, delineators, flagmen and speed controls are effective and that courtesy is extended to the public at all times.

Failure to maintain road signs, warning signs or flicker lights, etc, in a good condition shall constitute ample reason for the Engineer to suspend the work until the road signs, etc, have been repaired to his satisfaction.

The Contractor may not commence constructional activities affecting existing roads before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.

The Contractor shall construct and maintain all temporary drainage works necessary for temporary deviations.

The Contractor shall provide and grant access to persons whose properties fall within or adjoin the area in which he is working.

4.13.3 Payment

The Contractor's Bided rates for the relevant items in the Bill of Quantities shall include full compensation for all possible additional costs which may arise from this, and no claims for extra payment due to inconvenience as a result of the *modus operandi* will be considered.

4.14 Management of the environment *(Read with SANS 1921 - 1 : 2004 clause 4.19)*

Respect for the environment is an important aspect of this contract and the Contractor shall pay special attention to the following:

4.14.1 Natural Vegetation

The Contractor shall confine his operation to the limits of the road reserve for the purpose of constructing the works and where applicable detours, shall be sited in consultation with the Engineer and the local communities.

Only those trees and shrubs directly affected by the works and such others as the Engineer may direct I writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer.

4.14.2 Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

4.14.3 Environmental Management Plan

In addition to the above all requirements according to the Environmental Management Plan as detailed in C3.3, Particular Specifications, will be adhered to.

PART B: AMENDMENTS TO THE STANDARD SPECIFICATIONS

Project Specifications Relating to the material and equipment and Other Additional Specifications

- B1. Only new equipment may be supplied (no refurbished or re-manufactured units): Ring Main Unit, circuit breakers, cables, cubicle and meter kiosk.
- B2. All electrical material to be SABS or IEC approved in the absence of a SABS specification.
- B3. There must be a test certificate from the manufacturer for the Ring Main Unit every circuit breaker.
- B4. Equipment specification
 - B4.1 Ring Main Unit – SF6, fused feeder with two isolators
 - B4.2 Minisubstation

B.4.1: Ring Main Unit Specification – SF6 Isolator, Isolator, Fused switch**Ring Main Unit Specification – 630A circuit breaker**

The unit provided should be similar to the Schneider RM6 units in appearance and operation and must be fully compliant with the requirements of metal clad medium voltage switchgear:

General conditions

These specifications apply to a factory-built, RMU type, metal-enclosed indoor switchgear installed in an arch vented metal cubicle.

The equipment to be supplied shall come in the form of a compact switchboard and shall meet the following requirements:

- Compact
- Safe and easy to operate
- Low maintenance
- Easy to install

The supplier shall be capable of proving that he has extensive experience in the field of MV switchgears and shall provide proof that he has already supplied equipment of the equivalent type and brand which has been in operation for at least three years.

Standards

The switchgear shall comply with the latest requirements of the following IEC standards except where specifically defined otherwise:

IEC 62271-1	- Common specification for high voltage switchgear and control gear
IEC 62271-200	- AC metal-enclosed switchgear and control gear for rated voltages above 1 kV and up to and including 52 kV
IEC 62271-103	- Switches for rated voltage above 1 kV and less than 52 kV
IEC 62271-102	- High voltage AC disconnectors and earthing switches
IEC 62271-100	- High voltage AC circuit breakers
IEC 60529	- Degrees of protection procured by enclosures (IP code)
IEC 60255	- Electrical relays
IEC 60694	- common clauses for MV switchgear standards
IEC 60265	- 1 MV switches

Service conditions

The RMU shall be suitable for continuous operations under the basic service conditions indicated below:

- Altitude: maximum 1000 m above sea level
- Ambient air temperature: - 25 ° C to + 40 ° C
- Maximum ambient temperature average value during 24 h: 35 °C
- Maximum relative humidity: maximum 95%

Manufacturer shall declare whether current de-rating is necessary.

The RMU shall be capable of being operated in electrically exposed locations.

The RMU shall be capable of being exposed to high relative humidity and ambient air pollution.

The RMU shall be capable of being installed in either concrete indoor substations or in compact metal substations and kiosks with an IP54 rating. Manufacturer shall give all details regarding its solution for free-standing outdoor installations when requested.

System parameters

Type of construction	Metal enclosed switchgear
Insulating gas	SF6
Expected operating lifetime	30 years
Switchgear classification	PM
Loss of service continuity class	LSC2A
Degree of protection	
High voltage life parts	IP67
Front face	IP3X
Low voltage control compartment	IP3X
Mechanism	IP2XC
Cable compartment	IP2XC
Outdoor enclosure	IP54
Protection against mechanical impact	IK07

The hereunder values are for working temperatures from - 25 ° C to + 40° C and at an altitude below 1000 m.

Number of phases	Three
Rated Current Switch Branch circuit breaker feeder	630 A 100 A
Rated current cable charging on switch	20 A
Rated current no-load transformer breaking capacity	16 A
Internal arc class	A-FL up to 20 kA 1 s (with option)
Number of mechanical operations Switch and earthing switch Circuit breaker	1000 CO 2000 CO
Number of electrical operations at full loop current	100 CO
Number of operations at rated short-circuit current on circuit breaker	3 breaking operations

Rated voltage	Ur	(kV)	12		17.5	24			
Frequency	f	(Hz)	50 / 60						
Rated short-time withstand current	Ik	(kA rms)	21	25	21	12.5	16	20	
	Duration tk	(s)	1		1 or 3	1 or 3			
Making capacity of switch and earthing switch	I _{ma}	(kA peak)	52.5	62.5	52.5	31.25	40	50	
Short-circuit breaking capacity of circuit breaker	I _{sc}	(kA)	21	25	21	12.5	16	20	
Insulation level Industrial frequency 50 Hz 1min.	Insulation U _d Phase-phase, phase-earth	(kV rms)	28		38	50			
	Isolation U _d Across isolating distance	(kV rms)	32		45	60			
Insulation level Impulse 1.2/50μs	Insulation U _p Phase-phase, phase-earth	(kV peak)	75		95	125			
	Isolation U _p Across isolating distance	(kV peak)	85		110	145			

Function requirements

The following functions shall be available for the compact RMU:

- Switch-disconnector
- Disconnecting circuit breaker 630 A for network points
- Bus coupler by switch-disconnector
- Bus coupler by disconnecting circuit breaker
- Direct cable connection to busbars
- MV Metering

General stipulations regarding design and development of switchgear

a) Introduction

It shall include, within the same metal enclosure, the number of MV functional units required for connection, power supply and protection of transformers.

b) Switchboards

The switchgear and busbar shall all be contained in a stainless steel enclosure filled with SF6 at maximum 0.3 bar relative pressure to ensure the insulation and breaking functions. Sealed for life, the enclosure shall meet the "sealed pressure system" criterion in accordance with the IEC 62271-1 standard, with a service life time of 30 years. In addition, manufacturer shall confirm that maximum leakage rate is lower than 0.1 % per year. No refilling of the gas shall be required during the whole service life time.

It shall provide full insulation, making the switchgear insensitive to the environment (temporary flooding, high humidity...). Assembled, the active parts of the switchgear shall be maintenance-free and the switchboard shall be low-maintenance.

The tank shall be made of at least 2 mm AISI 304 unpainted stainless steel and be able to withstand an accidental internal overpressure of at least 3 bars. The colour shall be RAL 9002 for the enclosure and RAL9005 for the mimic panel.

The switchboards shall be suitable for mounting on a trench, utilities space or base. Each switchboard shall be identified by an appropriately sized label which clearly indicates the functional units and their electrical characteristics.

The switchgear and switchboards shall be designed so that the position of the different devices is visible to the operator on the front of the switchboard and operations are visible as well.

In accordance with the standards in effect, the switchboards shall be designed so as to prevent access to all live parts during operation without the use of tools.

c) Dielectric medium

SF6 gas is the preferred dielectric medium for MV RMUs. Oil filled switchgear will not be considered. SF6 gas used for the filling of the RMU shall be in accordance with IEC 60376.

It is preferable to fit an absorption material in the tank to absorb the moisture from the SF6 gas and to regenerate the SF6 gas following arc interruption.

The SF6 insulating medium shall be able to be constantly monitored via analog manometer or pressure switch. Both of them shall be temperature compensated. Pressure switch shall provide 2 levels of indication that are low level and critical level. Auxiliary contacts shall be provided with the pressure switch for remote indication or local electrical interlocking.

d) Earthing of metallic parts

There shall be continuity between the metallic parts of the switchboard and cables so that there is no electric field pattern in the surrounding air, thereby ensuring the safety of people. The main earth bar shall be designed for connection to substation frames without dismantling any bars.

e) Earthing of the main circuit

The cables shall be earthed by an earthing switch with short-circuit making capacity, in compliance with IEC 62271-102 standard. The earthing switch can only be operated when the switch is open.

The earthing switch shall be fitted with its own operating mechanism and manual closing shall be driven by a fast-acting mechanism, independent of operator action.

The moving contacts of the earthing switch shall be visible in the closed position through transparent covers.

Mechanical interlocking systems shall be provided to prevent all incorrect operations such as closing the earthing switch when the switch is closed.

f) Switch-disconnector

They shall be maintenance-free with breaking in low pressure SF6 gas. The position of the power and earthing contacts shall be clearly visible on the front of the switchboard. The position indicator shall provide positive contact indication in accordance with IEC 62271-103 standard. In addition, manufacturer shall prove reliability of indication in accordance with IEC 60129 standard.

The switches shall be of the high operating frequency in accordance with IEC 60265-1 standard. They shall have 3 positions, open-disconnected, closed and earthed, and will be constructed in such a way that natural interlocking prevents unauthorized operations.

They shall be fully mounted and inspected in the factory. Manual opening and closing will be driven by a fast-acting mechanism, independent of operator action.

Each switch can be fitted with an electrical operating mechanism in a specially reserved location, without any modification of the operating mechanism and without de-energizing the switchboard.

The switch and earthing switch operating mechanism shall have a mechanical endurance of at least 1000 operations.

g) Transformer Protection

The MV/LV tee-off transformer shall be protected by circuit-breaker.

h) Disconnecting circuit breaker

The circuit breakers shall be low pressure SF6 or vacuum interrupter type. It shall be maintenance free. The position of the power and earthing contacts shall be clearly visible on the front of the switchboard. The position indicator shall provide positive contact indication in accordance with IEC 62271-103 standard. In addition, manufacturer shall prove reliability of indication in accordance with IEC 60129 standard.

The circuit breakers shall have 3 positions: open-disconnected, closed and earthed and shall be constructed in such a way that natural interlocks prevent all unauthorised operations. They shall be fully mounted and inspected in the factory.

The rated current of circuit breaker as network points shall be of 630 A. The rated current of circuit breaker as transformer feeder shall be of 200 A.

An operating mechanism can be used to manually close the circuit breaker and charge the mechanism in a single movement. It shall be fitted with a local system for manual tripping by an integrated push button. There will be no automatic reclosing.

i) Circuit-Breaker Protective Relay (similar to VIP 400)

The circuit breaker shall be associated with an integrated electronic/ micro-processor type protection unit. The system shall be self-powered (from current sensors) for the basic overcurrent protection; ie. Phase-phase and phase-earth overcurrent.

The current sensors shall be mounted on the bushings, in order to protect cable termination, and be independent of the MV cables.

The minimum activation current of the relay shall be:

- 15A for 630A feeder
- **5A** for special application on small size transformer feeders

Each relay shall have following features:

- Phase-phase overcurrent protection
- Phase-earth overcurrent protection
- Display with indication of flow current, peak current
- Feature to neutralize the inrush current of power transformer (so as not to trip the phase-earth current)
- Trip indication, with origin of the fault

The complete system shall have Trip circuit supervision (ANSI 74TC).

The protection system shall be all mounted, wired, tested at factory.

As option the relay can have:

- Communication link (Modbus RS485)
- Thermal overload (ANSI49)
- Load history
- Breaking current history
- Event history
- External trip input
- Very sensitive earth fault

It is accepted that relay is dual powered for these additional options (ie self-power for basic protections and auxiliary powered for the options).

j) MV Metering

No additional customer metering equipment required

k) RMU bushings

It is preferable to have all bushings accessible from the front of the RMU. Bushings along the sides or the rear of the RMU are not acceptable. The bushings should be conveniently located for working with cables specified and allow the termination of these cables in accordance with the instructions supplied.

The profiles of the cable connection bushings shall be in compliance with IEC-60137 standard.

l) RMU cable clamps

A non ferro-magnetic cable clamp arrangement must be provided for all network cables terminated on the RMU.

m) Padlocking facilities

Circuit breakers, switches and earthing switches can be locked in the open or closed position by 1 to 3 locks.

n) Voltage indicators and phase comparators

Each function shall be equipped with a Voltage Presence Indicator System on the front cover to indicate whether there is voltage in the cables. The voltage indicator shall be in compliance with IEC 62271-206 standard. The capacitive dividers will supply low voltage power to the lamps. The lamps shall be of high performance LED technology to insure high visibility and long life duration. Three inlets will be used to check the phase concordance. As an option, the voltage Presence Indicator shall be able to provide an analog output signal. For all models, the lamp visibility shall not be altered by a fault on the connection to the phase concordance unit, even a short circuit. It shall be possible to replace the voltage presence indicator while unit remains energized, guaranteeing the safety of people. Manufacturer shall provide the phase concordance checking unit.

o) Fault Passage Indicators

Load break switch functions shall be equipped with a fault passage indicator (FPI), in order to detect and localise the faulty part of the network.

The FPI shall indicate short circuit and earth faults with a high performance red LED on the front panel. It shall indicate permanently the load currents of each phase and memorise the maximeters of each phase with a resolution of 1 A and the accuracy of 2%.

It indicates both phase-to-phase and phase-to earth faults.

In order to guarantee a fault validation on cable with low load value, a validation by voltage presence shall be provided.

In case of low value of earth fault current (compensated network), the FPI will discriminate the capacitive backward current.

The FPI shall be delivered with automatic setting mode. Nevertheless specific setting shall be possible.

The FPI fault detection core function shall be self-powered.

Dual power device with external power supply or built-in batteries, provide additional functionalities.

The FPI shall provide an output for external lamp gathering short circuit and earth fault remote indication as well as a relay or transistor output for SCADA interface.

The FPI degree of protection against mechanical impact shall be IK07.

The current sensors will be mounted onto the RMU bushing. Split core sensors shall be also available for retrofitting RMUs.

As an option, it shall be possible to add a serial line for communication in Modbus protocol.

The FPI shall indicate permanently that it is in operation, it could be by means of the permanent load indication.

p) Load management

Load break switch functions shall be equipped with an ammeter to display permanently the load currents and memorise the maximeters with a resolution of 1 A and the accuracy of 2%. The ammeter shall be self-powered, or it could be integrated into the FPI.

q) Voltage detection

Load break switch shall be able to be equipped with voltage detection device to provide information of the presence and the absence of voltage with 2 relays. The voltage signal shall be taken from the Voltage Presence Indicator System. The voltage detection device shall display the MV network voltage in percentage of the network service voltage. It is not allowed to use a voltage measuring tool to calibrate the device.

Presence of voltage is used for safety function such as earth switch locking, and absence of voltage is used for Automatic Transfer function.

Various combination of voltage detection shall be possible: Ph-N or Ph-Ph voltage and unbalanced voltage.

In case both fault passage indication and voltage detection functions are required, one single device integrating both functionalities shall be used.

r) Safety of people

Any accidental overpressure inside the sealed chamber will be limited by the opening of a pressure limiting device in the lower part of the enclosure. Gas will be released to the rear of the switchboard away from the operator.

Manufacturer shall provide type test report to prove compliance with IEC 62271-200, internal arc classification class A-FL with 20kA 1s for the SF6 enclosure.

s) Operating lever

An anti-reflex mechanism on the operating lever shall prevent any attempts to reopen immediately after closing of the switch or earthing switch. All manual operations will be carried out on the front of the switchboard.

The effort exerted on the lever by the operator should not be more than 250 N for the switch and 250N for the circuit breaker.

t) Front plate

The front plate shall have an IP3X degree of protection. The front shall include a clear mimic diagram which indicates the different functions. The position indicators shall give a true reflection of the position of the main contacts. They shall be clearly visible to the operator. The lever operating direction shall be clearly indicated in the mimic diagram. The manufacturer's plate shall include the switchboard's main electrical characteristics.

u) Cable insulation testing

It must be possible to test the core or the sheath insulation of the network cables while the RMU remains energized at rated voltage. It shall be possible to carry out the phase by phase testing through a built-in facility without necessity to have an access to cable compartment. The maximum test voltage shall be 42 kV DC for 10 minutes.

v) Finishing

The device shall be low-maintenance. Manufacturer shall provide type test report to prove salt fog withstand for at least 200 hours on operating mechanism according to IEC 68-2-2 standard.

All metallic parts shall have rust protection. Two lifting rings shall be installed on the top of the switchboards for handling.

Routine tests

The routine tests carried out by the manufacturer shall be backed by test reports signed by the factory's quality control department. They shall include the following:

- Conformity with drawings and diagrams
- Measurement of closing and opening speeds
- Measurement of operating torque
- Checking of filling pressure
- Checking of gas-tightness
- Checking of partial discharges on individual components
- Power frequency dielectric testing and main circuit resistance measurement

B4.2: Specification – 315kVA MINI-SUBSTATIONS**General**

This specification covers the manufacture, testing at works, supply and delivery to the site, stand 1028, of a new non-extensible outdoor pavement mounted three compartment mini-substation, complete with MV Ring Main Unit, transformer, streetlight and L V compartment. It

shall comply with SANS 1029 – 2010, NRS 004 - 2010 and DSP 34-1621. All equipment must be newly manufactured and marked with the relevant SANS or IEC mark.

1. All doors shall be hinged properly and shall have a gasket, packing or seal to prevent the entry of dust.
2. The all doors shall be equipped with a suitable latch to accept a standard padlock with an anti-tamper box as protection.
3. Shoot bolts to be mounted on LHS MV door top and bottom. Log book holder to be fitted in LV compartment.
4. All doors to be earthed with tinned copper braids (50mm Sq). Doors to be double louvred top and bottom
5. All doors shall be marked according to the applicable Regulations of the Occupational Health and Safety Act. MV and LV Warning signs to be mounted on Comp, Doors as per ESKOM D-DT 3202
6. The Minisub rating must be stencilled on the front lip of the canopy to read 315kVA
7. The metalwork of the substation shall be well treated and all rust and scale shall be removed before a suitable metal primer is applied. A final coat of avocado green (C12) oil-based paint shall be applied.
8. Four in one safety procedure inside the RMU compartment main door.
9. The MV compartment must have a chimney type arch venting mechanism

Medium Voltage Compartment

The medium voltage switchgear shall consist of a 11kV, SF6 compliant with IEC 60420, IEC 60265-1, IEC 60129:

1. Only SF 6 isolators manufactured according to IEC 60298 will be accepted.
2. Internal arc withstand must be in conformity with IEC 60298.
3. Two – 11KV, 630A, ON-Load, Isolator switches and a Circuit breaker to supply the transformer.
4. Protection relay, (VIP400 type)
5. Visible earth when switches are on earth position
6. The isolators shall be fitted with readily available test sockets. "ON", "OFF", "EARTH" and "TEST" and interlocks are to be provided to prevent incorrect operation.
7. Isolator switches must have cable test facilities.
8. Two - cable boxes suitable for a 70 mm² PILC, SWA or Belted, cable entering vertically upwards and connected with heat shrink terminations or manufacturers special connection sleeves/tubes(should be provided for two cables terminations).
9. The above equipment to form one complete ring main unit and shall be complete with operating handles, labels, manual and test rods.
10. Cable Earth fault indicator

Transformer Compartment

315kVA transformers to the following specification to be housed in this compartment.

General Arrangement of Windings

1. Transformers will be three phases with winding arrangement of the vector group Dyn 11, to comply with SANS 780/1979 as amended and NRS 005/1990, for low loss transformers.
2. Copper windings-MV and LV.

Voltage Ratings

The voltage rating at no load must be:

High voltage 11 000 volt
Low voltage 420 / 240 volt

Type

The transformers must be double wound, oil immersed, naturally cooled, suitable for mini-substations.

Terminals

All terminals shall be suitable for mini-substations and shall be complete with all nuts and lock nuts.

The low voltage neutral point of the windings must be brought out to an insulated terminal. All terminals shall be clearly and indelibly marked.

Tappings

The transformers must be provided with an external manually operated off load tap changing switch with 5 positions to give a plus minus 2½ % variation in the voltage ratio per tap.

The switch handle must be provided with a clear indication showing which tap is selected and arranged to be lockable in any position.

The tappings must be symmetrically arranged and the transformers must be capable of giving the full rated output continuously with any tapping in use.

Load

The transformers will operate into a mixed lighting and power load of the average power factor of 0,80.

Temperature Rise

The temperature rise shall be in accordance with SANS 780.

Accessories

1. The transformers must be furnished with an earthing terminal so arranged that the core and all external metal work can be earthed by means of this terminal.
2. Lifting lugs must be provided sufficiently strong to support the weight of the transformer complete with oil and all accessories.
3. The transformers must be supplied complete with an oil level indicator marked to show the hot and cold levels, a filling cap, a dehydrating breather and a drain plug or as a sealed unit.
4. A rating plate must be mounted on the tank in a conspicuous position giving all the relevant data.
5. It must be a non-sealed transformer equipped with a drain and filling valve on the tank to permit filtration of oil while the transformer is on load. The drain valve must enable the tank to be completely drained. Both valves further to be provided with a sealing plug.

LV Compartment

1. Main Circuit Breaker, 500A, 30kA installed in the transformer's LV terminal side with adequate cover to prevent injury in case of flashing when switched on.
2. LV main isolator to be barricaded by transparent polycarb shroud. Toggle to be glued on operating handle of LV main isolator
3. Hard drawn, high conductivity copper bus bars, rated 500 amps, 50kA for the 315 KVA mini-substation. Barrier to close off access to LV Busbars. 315kVA busbars tinned – (A B C N). MV and LV to be stamped MV-E & LV-E & colour coded. Earth 25x6x1530LG. Mount Jumper between neutral-earth & minisub-earth bar. Mount 2 insulated jumpers between gland-plate support & neutral-earth bar
4. Five 200A, 25kA, 3Phase Circuit breakers complete with supply tails readily wired to the bus bars.

5. Voltmeter, 96 mm x 96 mm, flush pattern to measure line voltage.
6. Voltmeter switch to select the different line voltages and phase voltages.
7. 500/5 current transformers 10 VA class CM for 315 KVA mini-substation.
8. Amp meters, combined instantaneous and maximum demand with a time lag of 15-minutes, to match the abovementioned current transformers.
9. Ammeter & CT's to be earthed to LV N-E Green bar
10. CT Test block shall have shorting strips on the incoming side of the CT supply
11. Tumbler switch for manually operating the street lighting contactor.
12. 9 x 30 amp single phase MCB's for protecting the outgoing street light cables.
13. Terminal strip for the metering and street lighting circuits.
14. Neutral bar for the metering and street lighting circuits.
15. Light with a door switch.
16. Day light switch supplied and mounted with steel covered to let sunlight in but protects it agent's vandalism.
17. The street light section and wiring between the transformer and bus bars shall be complete with all wiring. The wiring must be of adequate current carrying capacity and shall be carried out neatly. The equipment shall include:
 - a. Streetlight main supply 1 x 240V/400V, 80A Circuit breaker, 6kA
 - b. 9 x 230-415V 30A, 6kA single pole circuit breakers
 - c. 1 x 415V 80A, 3 pole contactor with 230-240V coil
 - d. 1 x 3 Phase polyphase, electronic, kWh meter for streetlight consumption
 - e. Daylight Bypass switch
18. A meter must be installed to measure the streetlight circuit consumption.
19. All MCB's and switches fitted must have a fault current rating of at least 15 KA for the 315kVA,
20. Socket outlet, 16A, supplied from earth leakage and circuit breaker.
21. Polyphase electronic energy meter with CT's to measure total energy, ampere, voltage, and maximum demand supplied by the transformer
22. All live parts in the LV compartment must be covered to avoid any inadvertent contact when any cubicle door is opened.
23. Unistrut system for low voltage cable terminations

Drawings

The tender shall be accompanied by such drawings, as is necessary to describe adequately the various items of the equipment offered.

In the event of a firm order being placed, a complete schematic diagram and a diagram showing the foundations required, must be approved by the Municipality before manufacturing commences.

Minisubstation Data Sheet:

General Data		
1	Transformer type	Type "B", Three phase, Distribution (SABS 780 & NRS 004)
2	Rating	315kVA
3	Cooling	ONAN
4	Phase	3
5	Vector Group	DYN11
6	MV Volts	11000
7	LV Volts	420 (SABS No load)
8	Frequency	50Hz
9	LV/MV windings	Cu/Cu
10	Oil/Winding degrees	60/65 °C
Transformer Mechanical Data		
1	Core material	Steel

2	Tank Material	Mild steel
3	MV Bushing type	Type C
4	Oil gauge	Yes
Housing Construction Data		
1	Roof Material	Mild Steel
	Roof design	Arch ventilation
2	Housing material	Mild Steel
3	Panel material	Mild Steel
4	Base	Channel – Epoxy TAR treated/Galvanised
	Door locking	3 point locking with lever lock that can be locked with a padlock with lock protection box(anti tamper box)
	Earth straps on doors	Yes
	Earth straps on housing	Yes
	All fasteners	Yes
	Door locking rods	Yes
	Door handles	Yes
	Final colour	AVOCADO
MV Equipment Data		
1	MV Switchgear	SF6 Ring Main Unit, 630A, Isolator –Isolator-Circuit breaker, Schnieder RM6, Actom, ABB
2	Earth Fault indicator	Yes
LV Equipment Data		
	Main Circuit Breaker	Yes, 500A, 30kA
	Feeder Circuits	Yes, 1 x 250A, 25kA and 1 x 160A, 25kA Feeders
	Busbars	Tinned Copper
	Earth bar	Insulated
	Cable termination	Unistrut System
Metering Data		
	kVA/kWh meter	Elster A1140 – measure total transformer load
	Ammeter	3 – PCI or equivalent 15min integration Maximum and instantaneous Ct ration 500/5A Class 10VA Scale 500+20%
	Voltmeter	1 – PCI or equivalent
		Scale at least 420 + 20%
		Seven position selector switch
		Supply fuses – NS2
Streetlight Equipment Data		
	Mains	3Ph, 80A, 6kA, 400/230V, Circuit breaker
	Contactor	TeSys 80A, 3 Phase with 230V coil
	kWh meter	Electronic, polyphase, programmable meter
	Feeders	9 x 30A single phase circuit breakers 6kA
	Phot Cell & Cover	Yes
	Switch socket outlet	Yes
	Earth leakage unit	Yes

C3.3 PARTICULAR SPECIFICATIONS

In addition to the Standardized and Project Specifications the following Particular Specifications shall apply to this contract and are bound in hereafter.

SECTION PS	PARTICULAR PROJECT SPECIFICATIONS
SECTION EMP	ENVIRONMENTAL MANAGEMENT SPECIFICATION
SECTION OHS	OHS 1993 SAFETY SPECIFICATION

e-tender

PART C3.3.1

Particular Project Specifications

In the event of any discrepancy between the Project Specifications and a part or parts of the Standardized Specifications, the Schedule of Quantities or the Drawings, the Project Specifications shall take precedence. Where discrepancies arise with regard to the units of the payment items only, the units stated in the Schedule of Quantities shall prevail.

PS 1	CONSTRUCTION PROGRAMME
PS 2	SITE FACILITIES AVAILABLE
PS 3	SITE FACILITIES REQUIRED
PS 4	FEATURES REQUIRING SPECIAL ATTENTION
PS 5	INFORMATION SUPPLIED BY EMPLOYER
PS 6	EXTENSION OF TIME ARISING FROM ABNORMAL RAINFALL
PS 7	CERTIFICATES OF PAYMENT
PS 8	CONSTRUCTION IN LIMITED AREAS
PS 9	NON-WORKING DAYS
PS 10	SPOIL MATERIAL
PS 11	DRAWINGS
PS 12	LENGTH OF TRENCHES
PS 13	SAMPLES
PS 14	MANUFACTURER'S INSTRUCTIONS
PS 15	MATERIALS AND PLANT
PS 16	NOTICES, SIGNS, BARRICADES AND ADVERTISEMENTS
PS 17	SETTING OUT OF WORK
PS 18	WORKMANSHIP AND QUALITY CONTROL
PS 19	TRANSPORT OF MATERIAL
PS 20	LIAISON WITH LOCAL AUTHORITIES
PS 21	LOCAL LABOUR AND LOCAL SUBCONTRACTORS
PS 22	TRAINING SCHEMES
PS 23	PRESCRIPTIONS IN RESPECT OF EXISTING SERVICES

PS 1: CONSTRUCTION PROGRAMME

It is a prerequisite of this contract that minimal disruption of the public is ensured during construction. Construction methods must be of such a nature that no property or life is endangered. The Municipality accepts no responsibility for any work done outside the site boundaries without the Engineer's approval. The Contractor himself is responsible for liaison and arrangements with the Engineer in connection with the finalization and approval of the construction programme.

The Contractor is responsible for liaison with residents and business owners via the Project Steering Committee in respect of the programming of construction through private erven and the crossing of driveways to erven. No additional payment will be made in this regard and it shall be deemed to be covered by the relevant items.

Sufficient digital photographs of all existing structures and obstructions in the pipe line routes must be taken by the Contractor, compiled electronically, indexed and handed over to the Engineer before construction commences.

The Contractor shall submit a programme of work to the Engineer/Municipality not later than 14 (fourteen) days after the Contractor has been notified of the acceptance of his tender. This programme must take into account, and allow for phased completion of the work. The Engineer may instruct the Contractor to stop construction work at any stage and time, as may be dictated by financial constraints highlighted by the Clients Cost Control Programme.

If necessary, the Engineer may instruct the Contractor to adjust his programme to suit other activities.

The programme shall not be in the form of a bar chart only, but shall clearly show the anticipated quantities, the production rates and value of work to be performed each month.

A network-based programme according to the precedence method shall also be provided showing the various activities and critical path in such detail as may be required by the Engineer. The programme shall be updated monthly in accordance with the progress made by the Contractor.

Failure to comply with these requirements will entitle the Engineer to use a programme based on his own assumptions for the purpose of evaluating claims for extension of time or additional payments.

If the programme submitted by the Contractor in terms of Clause 15 of the General Conditions of Contract, has to be revised because the Contractor is falling behind in his programme, he shall submit a revised programme of how he intends to regain lost time to ensure completion of the Works within the period defined in Clause 45 of the General Conditions of Contract or within a granted extension of time. A proposal to increase the tempo of work must incorporate positive steps to increase production either by more labour and plant on the site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the Contractor to submit or to work according to the programme or revised programmes shall be sufficient reason for the Engineer to take steps as set out in Clause 58 of the General Conditions of Contract.

The approval by the Engineer of a programme shall have no contractual significance other than the Engineer will be satisfied if the work is carried out according to the programme. The said approval shall not limit the right of the Engineer to instruct the Contractor to vary the programme if necessary. The Contractor shall allow for the effect of normal rainfall and special non-working days in his programme. **(CRITICAL PATH MUST BE INDICATED ON PROGRAMME)**

PS 2: SITE FACILITIES AVAILABLE

PS 2.1: Camp site

The Contractor shall negotiate with property owners and make his own arrangements to obtain sites for the erection of offices, laboratories, yards, etc. Written approval must be obtained from the owners on whose property the camp is to be situated. The choice of all sites for the establishment of camps is subject to the approval of the Engineer. Campsites within the road reserve will not be permitted.

PS 2.2: Water, electricity and sewage

The Contractor shall make his own arrangements concerning the supply of electrical power, water, telephone and all other services, both for use at the site establishment area as well as for the use in the construction of the Works. No direct payment shall be made for the provision of any service and the cost thereof shall be deemed to be included in the rates tendered for the various items of work for which these services are required.

PS 2.3: Rain gauge

The contractor must set up his own rainfall gauge. This item is included in the Schedule of Quantities under other fixed-charge obligations.

PS 3: SITE FACILITIES REQUIRED

PS 3.1: Facilities for the Engineer

No separate office is required for the Engineer's representative of the Municipality.

PS 3.2: Equipment for Engineering staff

The Contractor will not be required to provide protective clothing for the engineering staff of the Municipality.

PS 3.3: Water, electricity and sewage

The Contractor shall, at his own expense, be responsible for obtaining and distributing the water and electricity required for construction and domestic use. The distribution of water and electricity shall be carried out in accordance with the applicable laws and regulations.

No separate payment will be made for obtaining and distributing water and electricity, the cost of which will be deemed to be included in the tendered rates.

PS 3.4: Site instruction book

A triplicate book shall be provided by the Contractor to be used for site instructions. It shall at all times be kept on the site.

PS 4: FEATURES REQUIRING SPECIAL ATTENTION

PS 4.1: Access to properties

The Contractor shall organize the work in such a manner as to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work included in this contract.

If, as a result of restricted road reserve widths and the nature of the works, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions in order to provide access to the erven and properties.

The Contractor may, with the approval of the Engineer, make arrangements with the occupiers of the affected erven and properties to close off a portion of a street, road, footpath or entrance temporarily, provided the Contractor duly notifies the occupiers of the intended closure and its probable duration and shall, as punctually as possible, re-open the route at the prescribed time. Where possible, the road shall be made safe and re-opened to traffic overnight. Any such closure shall be made by arrangement between the Contractor and the occupiers and shall not absolve the Contractor from his obligations under the contract to provide access at all times. Barricades, traffic signs and drums shall be provided by the Contractor to suit the specific conditions. The Contractor shall also comply with all the requirements of the Local Authority with regard to safety, signage and notices to the public.

PS 4.2: Existing industrial/business areas

Access to the adjacent industrial/business areas shall be maintained at all times, as shall access to individual businesses.

Electricity and water supply interruptions to existing business areas shall be kept to a minimum. Whenever it is necessary to interrupt these supplies, the Engineer's approval shall first be obtained. The affected customers shall then be notified in writing at least 3 days, but not more than 5 days in advance. Supplies shall be normalized by 16:00 on the same day.

Cognisance shall be taken by the Contractor of the possibility of residents from the adjacent residential areas having access, whether authorized or not, to the works. It is strongly emphasized that under no circumstances shall any claims be considered for delays or disruptions as a result of the presence of residents from the adjacent occupied areas.

PS 4.3: Facilities to other Contractors

In addition to the requirements of clause 21 of the general conditions of contract, the Contractor must make allowance for the presence of other Contractors engaged on other contracts on the site, which may involve, inter alia, the adoption of his programme to fit in with work to be done by the other Contractors, as well as assuring other Contractors access to their sites along prescribed routes which may fall within the site of this contract.

PS 4.4: Contractor's vehicles

All equipment and vehicles used by the Contractor shall be roadworthy at all times and all drivers and operators shall be in possession of valid drivers' licences.

PS 4.5: Site maintenance

During the progress of the work and upon its completion, the site of the works shall be kept and left in a clean and orderly condition. The Contractor shall at all times store materials and equipment for which he is responsible in an orderly manner, and shall keep the site free from debris and obstruction. Workers shall lunch or have tea breaks only in a designated area with approved refuse and toilet facilities.

No open fires shall be permitted on the site.

Vehicles and workers must adhere to property demarcated access routes and not take or make short cuts.

PS 4.6: Testing and quality control

The Contractor shall engage the services of an approved independent testing laboratory for the testing of materials and the quality testing of layer works, to ensure that his work conforms to the specifications.

No separate payment will be made for such testing by an approved independent laboratory,

the costs of which will be deemed to be included in the Contractor's tendered rates for the various items of work requiring testing in accordance with the specifications.

Certificates shall be submitted to the Engineer for all materials and equipment included in the works, where applicable.

PS 4.7: Subcontractors

The Contractor is responsible for work carried out on his behalf by subcontractors. The Engineer will not liaise directly with such subcontractors, and all problems relating to payments, programming, workmanship, etc, shall be the concern of the Contractor and the subcontractor, and the Engineer will not be involved.

PS 4.8: Existing Services

Before the Contractor commences operations, he must discuss with and have the approval of the Employer, authority or owner concerned regarding the method he proposes to use for relocating or safe-guarding any services and existing works he may encounter during construction.

The positions of existing services shown on the Drawings are given in good faith and no guarantee can be given that:

- (a) These services actually are in the approximate positions indicated.
- (b) That these are the only services in the vicinity, and
- (c) That the nature and description of these services are correct.

The Contractor shall be responsible to locate and safeguard any existing service or works he may encounter during construction and shall obtain clearance from the Employer, authority and the Engineer before commencing work in the proximity of existing services or works.

The Contractor shall be responsible for any damage to such existing services and works in the execution of this contract and shall reimburse the Employer, authority or the owner concerned for any repairs required and for damages.

The Contractor shall be responsible for immediately notifying the Engineer and the authorities concerned regarding any damage caused to public services and existing works.

Any alteration to public services shall be carried out by the Authority concerned unless the Contractor is instructed otherwise.

The Contractor shall provide the necessary assistance during any operations necessary in connection with the removal, alteration or safe-guarding of any public service.

PS 4.9 Safety

The Contractor shall apply suitable proven methods for construction so that his activities will not constitute a hazard to the public or any adjacent property. All excavations shall be suitably safeguarded and barricaded especially during night time, weekends or holidays and any other day of inactivity by the Contractor.

PS 5: INFORMATION SUPPLIED BY EMPLOYER

Certain information contained in these contract documents, or provided separately, is being offered in good faith. However, in the circumstances pertaining to the type of information supplied, no guarantee can be given that all the information is necessarily correct or representative. More specifically this applies to all material surveys and reports and similar information, the accuracy of which is necessarily subject to the limitation of testing, sampling, the natural variation of material or formations being investigated and the measure of confidence with which conclusions can be drawn from any investigations carried out. It also

applies to the positions of existing services as indicated on the drawings.

The Employer accepts no liability for the correctness or otherwise of the information supplied or for any resulting damages, whether direct or consequential, should it prove during the course of the contract that the information supplied is either incorrect or not representative. Any reliance placed by the tenderer on this information shall be at his own risk.

PS 6: EXTENSION OF TIME ARISING FROM ABNORMAL RAINFALL

If abnormal rainfall or wet conditions occur during the course of the Contract, the Employer may grant an extension of time in accordance with Clause 45 of the General Conditions of Contract, calculated in accordance with the formula given below for each calendar month or part thereof:

$$V = (Nw - Nn) + (Rw - Rn)/X$$

If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.

The symbols shall have the following meanings:

V = Extension of time in calendar days for the calendar month under consideration. When the value of V for any month exceeds the number of days in the particular month, V will be the number of days in the month.

Nw = Actual number of days in the calendar month on which a rainfall of Y mm or more were recorded.

Nn = Average number of days, derived from existing rainfall records, on which a rainfall of Y mm or more were recorded for the calendar month.

Rw = Actual rainfall in mm recorded on the Site in an approved rain gauge for the calendar month under consideration.

Rn = Average rainfall in mm for the calendar month, derived from existing rainfall records.

The total extension of time is the algebraic sum of all the monthly totals for the period under consideration, but if the total is negative, the time for completion will not be reduced on account of subnormal rainfall. Extensions of time for part of a month will be calculated by using pro rata values for Nn and Rn.

The factor (Nw - Nn) is considered a fair allowance for variations from the average number of days during which the rainfall exceeds Y mm.

The factor (Rw - Rn)/X is considered a fair allowance for variations from the average number of days during which the rainfall did not exceed Y mm but wet conditions prevented or disrupted work.

The average rainfall record for the past 10 years at the nearest rainfall station shall be for the purposes of this Contract are taken as normal rainfall. Rn and Nn for this period shall be used and the values of X and Y are 20 and 10 respectively.

PS 7: CERTIFICATES OF PAYMENT

It was agreed that the master copy of the payment certificates would be drawn up and processed by the Contractor. All costs to this effect, as well as reproduction costs shall be to

the account of the Contractor. It was agreed that the first month's certificate will be evaluated and if in order, the same format will be used throughout the contract.

PS 8: CONSTRUCTION IN LIMITED AREAS

In certain cases working space may be limited. The method of construction in these restricted areas will depend largely on the Contractor's plant. However, the Contractor must note that measurement and payment will be according to the specified cross-sections and dimensions irrespective of the method used to achieve these cross-sections and dimensions, and that the rates and prices tendered shall be deemed to include full compensation for any difficulty encountered while working in limited areas and narrow widths, and that no extra payment will be made, nor will any claim for payment due to these difficulties be considered.

PS 9: NON-WORKING DAYS

The Contractor shall not work on Sundays or on the following statutory Public Holidays: New Years Day, Human Rights Day, Good Friday, Family Day, Freedom Day, Workers Day, Youth Day, National Women's Day, Heritage Day, Day of Reconciliation, Christmas Day and Day of Goodwill. Whenever any of the above statutory Public Holidays fall on a Sunday, the following Monday shall be a Public Holiday.

PS 10: SPOIL MATERIAL

No indiscriminate spoiling of material will be allowed. All surplus or unsuitable material shall be spoiled in designated areas as directed by the Engineer. Spoiling shall comply with the applicable statutory and municipal regulations.

PS 11: DRAWINGS

All "as built" information, as listed below, must be submitted to the Engineer's Representative before a certificate of completion will be issued. No separate payment will be made for the "as built" drawings

List of "as built" information required

- (a) Exact distance of cable from existing erf boundaries at 20m intervals or where it changes and positions of crossing other services.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Engineer.

The Engineer will supply any figured dimensions which may have been omitted from the drawings.

PS 12: LENGTH OF TRENCHES

Where no limitations are imposed by construction stages and unless otherwise permitted in writing by the Engineer, not more than 300 m of trench in any one place shall be opened in advance of cable laying operations.

No trench may be left open over the builders' holidays.

PS 13: SAMPLES

The Contractor shall at his own cost, supply all samples that may be required. Material or work not conforming to the approved samples shall be rejected. The Engineer reserves to himself the right to submit samples to any tests to ensure that the material represented by the

sample conforms to the requirements of the specifications. The cost of all tests failed shall be for the Contractor's account.

PS 14: MANUFACTURER'S INSTRUCTIONS

The recommendations of the manufacturers of patented materials must be strictly adhered to regarding the use, mixing, application, fastening, etc. thereof except when otherwise instructed in writing by the Engineer.

PS 15: MATERIALS AND PLANT

The contractor, when using materials that are required to comply with any standard specification, shall, if so ordered, furnish the engineer with certificates of compliance.

Where so specified, materials shall bear the official mark of the appropriate authority. Samples ordered or specified shall be delivered to the engineer's office on the site free of charge.

Where proprietary products have been specified, similar products may be used subject to the prior written approval of the engineer.

Unless otherwise specified, all proprietary materials shall be used and placed in strict accordance with the relevant manufacturer's current published instructions.

Unless anything to the contrary is specified, all manufactured articles or materials supplied by the contractor for the permanent works shall be unused.

Existing structures on the site shall remain the property of the employer and except as and to the extent required elsewhere in the contract, shall not be interfered with by the contractor in any way.

Materials to be included in the works shall not be damaged in any way and, should they be damaged on delivery or by the contractor during handling, transportation, storage, installation or testing they shall be replaced by the contractor at his own expense.

All places where materials are being manufactured or obtained for use in the works, and all the processes in their entirety connected therewith shall be open to inspection by the engineer (or other persons authorised by the engineer) at all reasonable times, and the engineer shall be at liberty to suspend any portion of work which is not being executed in conformity with these specifications.

The contractor shall satisfy himself that any quarry selected for use provides the necessary mined material in accordance with the specification.

PS 16: NOTICES, SIGNS, BARRICADES AND ADVERTISEMENTS

The Contractor shall erect the necessary signs, notices and barricades for the duration of the contract in order to safeguard both the works and the public.

Notices, signs and barricades as well as advertisements may be used only upon approval by the Engineer, and the Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Engineer shall have the right to have any sign, notice or advertisement moved to another position or to have it removed from the site of the works, should it in any way prove to be unsatisfactory, inconvenient or dangerous to the general public.

Such notices, signs and barricades shall be provided and erected at the Contractor's own expense.

PS 17: SETTING OUT OF WORK

The existing services and possible positions will be shown to the Contractor by the Engineer at the commencement of the Contract and the Contractor will be responsible for transferring the data to the Site of Works.

The Contractor shall check the condition and accuracy of all reference and beacons and satisfy himself as to their position and level. The Contractor shall thereafter be held entirely responsible for the protection of all services and structures.

The Engineer shall be informed immediately should any discrepancy be discovered between the position or dimensions obtained by the Contractor and those shown on the drawings.

Where a survey beacon is likely to be disturbed during construction operations, the Contractor shall establish suitable reference beacons at locations where they will not be disturbed during construction. No beacons shall be covered over, disturbed or destroyed before accurate reference beacons have been established and details of the positions and levels of such beacons have been submitted to the Engineer. The Contractor's reference beacons shall be of at least the same accuracy and sturdiness of construction as the existing beacons.

The Contractor shall submit the method of setting out he proposes to employ to the Engineer. Accurate control of line and level shall be provided by the Contractor at all stages of construction.

Work set out by the Contractor may be checked by the Engineer and any errors found shall be rectified by the Contractor at his own expense. The Contractor shall supply any instrument, equipment, material and labour required by the Engineer for this survey work. Any assistance, including checking given to the Contractor by the Engineer or any setting out done by the Engineer for Contractor shall not be held as relieving the Contractor of his responsibility for the accurate construction of the Works.

Survey work shall not be measured and paid for directly and compensation for the work involved in setting out shall be deemed to be covered by the rates tendered and paid for the various items of work included under the contract.

PS 18: WORKMANSHIP AND QUALITY CONTROL

The onus to produce work which conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality-control system and provide experienced Engineers, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment, to ensure adequate supervision and positive control of the works at all times.

The costs of all supervision and process control, including testing thus carried out by the Contractor shall be deemed to be included in the rates tendered for the related items of work.

The Contractor's attention is drawn to the provisions of the various standardized specifications regarding the minimum frequency of testing that will be required for process control. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion of every part of the work and submission thereof to the Engineer for examination, the Contractor shall furnish the Engineer with the results of all relevant tests, measurements and levels to indicate compliance with the specifications.

PS 19: TRANSPORT OF MATERIAL

All costs of transporting material, including overhaul, shall be included in the applicable tendered rates. All references in the specifications to transport, overhaul and haul distances shall be deleted irrespective of whether or not the deletion is included in these project specifications.

PS 20: LIAISON WITH LOCAL AUTHORITIES

The Contractor will have to liaise with local authorities regarding the following matters:

- (a) Dealing with traffic.
- (b) Locating of existing underground services.
- (c) Protection of existing services during construction.

All the relevant authorities were notified of above operations. It is then the Contractor's onus to immediately contact all these authorities and to accommodate their involvement in his programme of work. The Contractor should also warn the authorities at least 48 hours before the actual work commences. Compensation for delays, losses or accidents will not be considered should the Contractor at any time have failed to keep the local authorities informed.

The Engineer or Employer must immediately be notified, should the Contractor experience any problem regarding work which involve a local authority.

PS 21 LOCAL LABOUR AND LOCAL SUBCONTRACTORS

PS 21.1 Introduction

It is envisaged that the works will be constructed by one Contractor employing skilled labour to construct the work.

PS 21.2 Workload

The Contractor is required to execute certain components of this contract with labour-based construction methods where it is close to existing services as described in relevant sections.

PS 21.3 Assisting ABE's

Not applicable

PS 21.4 Local Labour

Not applicable due to the risk. The project construction phase will be only a few days in close proximity to live electrical equipment so only specialised experience labour will be allowed.

PS 21.5 Contractors Obligations

The Contractor is to supply the Engineer with copies of the agreements between himself/herself and his/her subcontractors within twenty-one (21) days of the contract being awarded.

Should the Contractor be unable to or unwilling to:

- i) Subcontract the required Works as detailed in his/her tender document;
- ii) Submit the necessary documentation to prove that he/she is subcontracting the work as specified in paragraph PS 10.6.
- iii) Implement his/her proposed training scheme or any other scheme agreed to by the relevant parties;

The Municipality reserves the right to:

- a) Nullify the said contract and re-issue it to tender;
- b) Nominate available local subcontractors for the required Works;
- c) Deduct payment from the monthly certificates, the value of which will be calculated as follows:

X = Y - Z
 X = Amount of deduction from the monthly certificate
 Y = Value of the work that should have been undertaken by the subcontractor during the month
 Z = Value of the work actually undertaken by the Subcontractor during the month;
 (d) = Nominate agents to undertake the proposed training at the expense of the Contractor.

PS 21.6 Work considered to be Labour Based

It is a condition of this contract that the following components of work must be executed using labour based construction methods.

- 1) Excavation of soft/ intermediate / hard material in trenches not deeper than 1,3 m if the uninterrupted trench length of soft material is greater than 50 m, and the total depth of the trench consists of soft material.
- 2) Excavation of soft/ intermediate/ hard material in all trenches for cable installation with no limitations.
- 3) Preparation of cable bedding.
- 4) Laying of cables and earthing.
- 5) Backfilling of all trenches assisted by machines for security reasons. Compaction excluded.
- 6) Placing of concrete markers.
- 7) Brickwork at paving restoration.
- 8) All earthworks required for exposing and/or relocating services.
- 9) Removal and planting of grass and plants
- 10) Location of existing services.

Items excluded from labour based items:

- 1) Excavation in Boulders and rock material - Mechanical excavators and blasting allowed.
- 2) Compaction of bedding and backfilling - Rollers and plate compactors allowed.
- 3) Transport of materials LDV, dumpers and other transport equipment allowed.
- 4) Mixing of concrete - Mechanical mixers allowed.
- 5) Vibration of concrete - Vibrators compulsory.
- 6) Precast concrete manholes.
- 7) Crane for removal and placement of the minisubstations

PS 22 TRAINING SCHEMES

Due to the short duration of the project no training will be required.

PS 23 PRESCRIPTIONS IN RESPECT OF EXISTING SERVICES

The scope of works for this contract could be affected by existing services. Where necessary the contractor must familiarize himself with the position and extent of existing services and to carry out the works in such a manner as not to cause damage to existing services.

PS 23.1 Water and Storm Water Services

All manhole covers in the route must be clearly referenced and absolutely no spilling/covering shall be allowed on any manhole cover.

Any cost of repairs, replacement and/or installation of services and equipment resulting from the contractor's negligence or unauthorized action shall be to the contractor's account.

PS 23.2 Electrical Services

The following procedures will apply:

1. The Contractor will be assisted by the Electrical Department of the Municipality as the Electricity Supply Authority (ESA) to indicate known electrical services. These drawings will in all instances be available on site during the construction period or in the possession of the supervisor of the construction workers.
2. The cable's precise position on the terrain, with reference to the approximate position as indicated on the drawing, must be confirmed on terrain by means of cable tracing equipment to be supplied or arranged by the Contractor for this purpose. In the case of primary cables (11 kV) as indicated on the drawings, it is essential that cable tracing be conducted by ESA. The Contractor will provide sufficient white lime to mark the cable on the ground. The contact persons and telephone numbers for cable tracing personnel shall be obtained from ESA by the Contractor.
3. The Contractor must thereafter, very carefully, open up the cable by hand on at several places, of which the in between distances will not exceed 50 meters and where the direction changes.
4. At any position, between any two points of the exposed cable as described in 1.3 above, that cable shall be identified as a known service if it lays within 0,5 meters of a straight line drawn between these two points
5. If the cable lays further than 0,5 meters away from a straight line drawn between the two exposed points, it shall be identified as an unknown service.
6. With reference to the approximate position of cables on the drawing, the Contractor will be responsible for confirming the location of such cables on terrain by means of the equipment referred to in 1.2 above, and by careful digging by hand. If the exact position of the cables cannot be determined without doubt, ESA can be approached for help.
7. When existing electrical cables fall within the excavation area of the new service, the Contractor will be responsible for protecting and supporting such cable. During backfilling of the trench, the Contractor will ensure that the cable is not damaged and repositioned at the original position and depth with the necessary bedding and marker tape.
8. Before any exposed cables are backfilled, such cables shall be inspected for possible damage by the terrain agent, in the presence of the Engineer or his/her representative. A complete record of all positions where cables were exposed must be indicated on the drawing.
9. The Contractor is responsible for keeping a complete record of incidents where electrical cables (known or unknown) were damaged that includes the following:
 - Date when damaged and the reason
 - Date when repaired
 - The extent of repairs, for instance cable size, number of joints necessary, the length of cable replaced etc
 - The exact cable position and depth indicated on the plan

10. The Engineer's representative must check these records. The above-mentioned record will be an annexure to the minutes of the monthly site meetings. All repairs of damaged cables (known or unknown) will be supervised by ESA. The Contractor shall provide the necessary material and a qualified joiner or qualified subcontractor for the repair work. The account for repairs done will be for the Contractor. The repair cost of a known service (electrical cable) that was damaged, will be recovered from the Contractor's certificate.
11. **Electrical Cables**
In no instances will any Contractor be allowed to excavate with a machine near an electrical cable. Excavation of a cable or near a cable must be by hand and after 2000 mm (mechanical excavation) from the centre of an electrical cable. ESA will confirm these distances when required by the Contractor.
12. **Overhead Services**
Excavation and backfill shall be such that no foundation of overhead structures (power lines, streetlights, high mast lights, stays etc.,) will be disturbed. If disturbed, the Contractor will inform ESA in writing and will reinstate the foundation to its original state.
13. **Maintenance Period**
During the maintenance period the Contractor's responsibility shall include:
All electrical cables that were exposed or handled by him
Excavations in the vicinity of poles and stays, at the time of the construction activities

This makes provision for instances where damaged cables were covered up without informing ESA that may cause many problems later on. The Contractor is responsible to repair all disturbed pole and stay foundations and to reinstate it to its original condition (electrical and structural), as they are disturbed.

SECTION EMP: ENVIRONMENTAL MANAGEMENT SPECIFICATION

EMP.1 General

In order to ensure that the construction works is carried out in an environmentally sensitive matter, strict compliance to the Environmental Management Plan (EMP) guidelines is required. The EMP is bounded to this document under Part C4: **Site Information**. The purpose of the EMP is to:

- Encourage good management practices through planning and commitment to environmental issues,
- Provide rational and practical environmental guidelines to:
 - i. Minimize disturbance of the natural environment,
 - ii. Prevent pollution of land, air and water,
 - iii. Prevent soil erosion and facilitate re-vegetation.
- Adopt the best practicable means available to prevent or minimize adverse environmental impact,
- Develop waste management practices based on prevention, minimization, recycling, treatment or disposal of wastes,
- Train employees and contractors with regard to environmental obligations.

EMP.2 Training and Induction of Employees

- The Contractor has a responsibility to ensure that all those people involved in the project are aware of and familiar with the environmental requirements for the project (this includes sub-contractors, casual labour, etc.). The EMP shall be part of the terms of reference for all contractors, sub-contractors and suppliers.

EMP.3 Complaints Register and Environmental Incident Book

Any complaints received by the project team from the public will be recorded. The complaint should be brought to the attention of the site manager, who will respond.

The following information must be recorded:

- Time, date and nature of the complaint,
- Type of communication (telephone, letter etc),
- Name, contact address and telephone number of the complainant,
- Response and investigation undertaken and
- Actions taken and by whom.

All complaints received will be investigated and a response given to the complainant within 14 days.

All environmental incidents occurring on the site will be recorded. The following information will be provided:

- Time, date, location and nature of the incident,
- Actions taken and by whom.

EMP.4 Site Cleanliness and Neatness

- Location of a construction camp is to be approved by the Engineer and is to be restored to its previous condition after completion of construction.
- The construction camp should preferably be fenced with a 1.8m bonnox fence or similar approved.
- All materials, equipment, plant and vehicles must be stored within the construction camp.
- A dedicated area must be made available for construction staff to change and store their personal belongings.

EMP.5 Access

- Access to existing roads, schools, buildings, shops and residential properties must not be impeded during construction.
- Access roads utilised by the Contractor must be maintained in good condition.

EMP.6 Borrow Pits

- Mining authorizations (permits) for borrow pits must be obtained from the Department of Minerals and Energy (DME) in consultation with the Department of Water Affairs and Forestry (DWAF).
- Spoil dumps resulting from borrow pits must not interfere with any natural surface drainage.
- Borrow pits must be rehabilitated after use in accordance with the requirements of DME and DWAF.
- Borrow pits will be fenced and the necessary warning signs will be erected.

EMP.7 Dust Control / Air Quality

- Dust suppression measures must be implemented during construction by ensuring that all surfaces prone to dust generation are kept damp (e.g. use of water tanker).
- Ensure that vehicles and equipment are in good working conditions and that emissions are not excessive.
-
- Ensure that vehicles and equipment are in good working conditions and that emissions are not excessive.
- Special care must be taken in areas where the route passes close to schools and residential areas.
- The speed of construction vehicles must be reduced.

EMP.8 Fauna

- Contractor staff may not chase, catch or kill animals encountered during construction.

EMP.9 Fire Prevention and Control

- Smoking is prohibited in the vicinity of flammable substances.
- The contractor must ensure that fire-fighting equipment is available on site, particularly where flammable substances are being stored or used, and that construction staff are aware of where it is kept and how it is operated.
- Fires started for comfort (warmth) are prohibited, due to the risk of veld fires and risk to adjacent property owner's lands.

EMP.10 Grave Sites

- Gravesites in close proximity to the road must not be disturbed during construction.

EMP.11 Materials Handling and Spills Management

- Any hazardous materials to be used during construction (e.g. lime, fuel, paint, etc) are to be stored in a designated area at the campsite.
- The storage containers/facilities (including any diesel/petrol tanks) must be placed on an impermeable surface and surrounded by a bund wall, in order to ensure that accidental spillage does not pollute the environment.
- Workers must at all times be made aware of the health and safety risks associated with any hazardous substances used (e.g. smoking near fuel tanks), and must be provided with appropriate protective clothing/equipment in case of spillages or accidents.
- Ensure all staff and contractors undergo relevant training in the maintenance of equipment to prevent the accidental discharge or spill of fuel, oil, lubricants and other chemicals.
- Any spill of potentially hazardous materials must be cleaned up immediately (Potentially hazardous materials on site include paint, oil, grease, fuel, turpentine, etc).
- The area of contaminated soil or spill must be deposited into the hazardous waste container(s).
- The contractor should keep Peat, Sorb or a similar absorbent on site to clean up any spills. The absorbent must be stored in a designated area and be available for inspection.
- All spills are to be recorded in the environmental incident book.

EMP.12 Noise

- Noise generating activities must be restricted to between 07:00 and 17:00 Monday to Friday, unless otherwise approved by the appropriate competent person in consultation with adjacent landowners/affected persons.
- All equipment, vehicles and machinery must be in good working condition and be equipped with sound mufflers if necessary.
- Construction staff must be trained and made aware of not creating unnecessary noise such as hooting and shouting.

EMP.13 Pollution Control

- Soil and water pollution through usage of fuel, oil, paint, bitumen or other hazardous substances must be avoided.
- All construction vehicles are to be maintained in good working order so as to prevent soil or water pollution from oil, fuel or other leaks, and to reduce noise pollution.

EMP.14 Rivers and Streams

- During construction of bridge structures, there must be no obstruction of the water flow of rivers and streams.
- Excavated material must not be stockpiled on or near riverbanks, in order to prevent sedimentation occurring.
- Erosion control measures must be employed both during and after construction.
- No impediments to natural surface water flow, other than approved erosion control measures, must occur.

EMP.15 Safety

- Safety measures, such as detour signs, must be implemented during construction to ensure the safety of workers, pedestrians and drivers/passengers in vehicles in the vicinity of construction work.
- Special care must be taken in the vicinity of schools to ensure the safety of children wishing to cross the road under construction.
- The relevant signage (e.g. speed control signs) must be erected alongside the road during the operation phase in order to control traffic.
- Accommodation must be made for pedestrian pathways alongside the road during the construction and operation phases.

EMP.16 Soil Management

- Stormwater drainage pipes must be installed alongside the road in all areas susceptible to soil erosion.
- Erosion should be minimized by the construction of meadow drains and the planting of indigenous vegetation on the side slopes and drains to reduce flow velocity of stormwater.
- Spoil from cuts may be used in existing erosion galleys.
- Stone pitching and gabions should be constructed at pipe culvert outlets.
- Accidental spills of contaminants onto the ground e.g. oil, concrete, fuel and chemicals should be removed together with the contaminated soil.
- If necessary an absorbent such as Peat Sorb should be used the aid in cleaning up the spill. The contaminated soil should be disposed of in an appropriate container, depending on its classification.
- Servicing and re-fuelling of vehicles must only be carried out at construction camp.

EMP.17 Worker Conduct

Code of Conduct for Construction Personnel:

- Do not leave the construction site untidy and strewn with rubbish which will attract animal pests.
- Do not set fires.
- Do not cause any unnecessary, disturbing noise at the construction camp/site or at any designated worker collection/drop off points.
- Do not drive a construction-related vehicle under the influence of alcohol.
- Do not exceed the national speed limits on public roads or exceed the recommended speed limits on the site.
- Do not drive a vehicle which is generating excessive noise or gaseous pollution (noisy vehicles must be reported and repaired as soon as possible).
- Do not litter along the roadsides, including both the public and private roads.
- Do not pollute any water bodies (whether flowing or not).
- No member of the construction team is allowed to enter the areas outside the construction site.

EMP.18 Traffic Disturbances and Diversions

- Any traffic diversions must be undertaken with the approval of all relevant authorities and in accordance with all relevant legislation.
- Wherever possible, traffic diversion must only take place on existing disturbed areas and remain within the existing road reserve.
- Traffic diversion routes must be rehabilitated after use.

EMP.19 Vegetation

- Only vegetation falling directly on the route must be removed where necessary.
- Alien vegetation within the road reserve must be eradicated, and management measures must be implemented for future control of these species.
- Vegetation that has been removed from large areas (e.g. on traffic diversion routes) during construction must be replaced with indigenous vegetation after construction has been completed.

EMP.20 Waste Management

- All general, non-hazardous waste must be placed in a skip container and disposed of at a registered waste disposal site.

- The contractor is to ensure that the portable toilet facilities at the campsite are properly maintained and in working order.
- No disposal, or leakage, of sewage must occur on or near the site.
- All hazardous waste (e.g. oil, paint, empty lime bags, contaminated wash water, etc) must be stored in leak proof containers and disposed of at a registered hazardous waste disposal site.
- The contents of waste storage containers must, under no circumstances, be emptied to the surrounding area. In general, littering, discarding or burying of any materials is not allowed on site or along the route.
- Adequate waste receptacles must be available at strategic points around the construction camp and site for all domestic refuse and to minimize the occurrence of littering.
- Concrete rubble must be collected and disposed of as directed by the Project Manager.
- Each working area must be cleared of litter and building waste (e.g. rubble, wood, concrete packets etc) on completion of the day's work.
- Any spill around the container(s) should be treated as per Section EMP11 and EMP16.

E-tender

SECTION OHS : OHSA 1993 HEALTH AND SAFETY SPECIFICATION

OHS.1 SCOPE

This specification covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy environment for all workers, employees and subcontractors under his control and for all other persons entering the site of works.

This specification shall be read with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993, and the corresponding Construction Regulations 2014, and all other safety codes and specifications referred to in the said Construction Regulations.

In terms of the OHSA Agreement in Section C1.2.4 of the Contract document, the status of the Contractor as mandatory to the Employer (client) is that of an employer in his own right, responsible to comply with all provisions of OHSA 1993 and the Construction Regulations 2014.

This safety specification and the Contractor's own Safety Plan as well as the Construction Regulations 2014, shall be displayed on site or made available for inspection by all workers, employees, inspectors and any other persons entering the site of works.

The following are possible risks associated with this project:

- Working high above the ground on top and below the bridge, most of the time in a restricted environment with limited landings (working platforms)
- Working above a continuously flowing river and in an flood plain environment subject to flooding
- Lifting and lowering of materials and equipment from the ground to the bridge and vice versa, exposed to cross winds
- Steep and restricted access to the lower flood plain below the bridge
- Potentially dangerous existing services, i.e. gas lines, water and sewerage mains, electrical high voltage cables, on the bridge, buried and overhead
- Deep excavations in soils requiring shoring or reducing of slopes
- Blasting of hard rock or demolition of concrete
- High pressure during testing of the relocated pipe lines, which could result in potentially dangerous situations in the event of the pipeline or fittings failing
- Potentially harmful gasses when tying into the existing sewer mains
- Movement of construction vehicles on site, taking into consideration steep slopes, other traffic and existing services
- Exposure to possible injuries due to mishandling or failure of power and hand tools
- Falling debris, tools and materials from bridge
- Non-conformance to specifications with regards to fasteners and materials
- Risks related to general safety and security on site

Additional risks may arise from specific methods of construction selected by the Contractor which are not necessary covered in the above.

OHS.2 DEFINITIONS

For the purpose of this contract the following shall apply:

- (a) **Employer** where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract and it shall have the exact same meaning as **client** as defined in the Construction Regulations 2014. **Employer** and **client** is therefore interchangeable and shall be read in the context of the relevant document.
- (b) **Contractor** wherever used in the contract documents and in this specification, shall have the same meaning as **Contractor** as defined in the General Conditions of Contract.

In this specification the terms **principal contractor** and **contractor** are replaced with **Contractor** and **subcontractor** respectively.

For the purpose of this contract the **Contractor** will, in terms of OHSA 1993, be the

mandatory, without derogating from his status as an employer in his own right.

- (c) “**Engineer**” where used in this specification, means the Engineer as defined in the General Conditions of Contract. In terms of the Construction Regulations the Engineer may act as agent on behalf of the Employer (the client as defined in the Construction Regulations).

OHS.3 TENDERS

The Contractor shall submit the following with his tender:

- (a) a documented Health and Safety Plan as stipulated in Regulation 7 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations 2014 and will be subject to approval by the Employer;
- (b) a declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Construction Regulations 2014;
- (c) a declaration to the effect that he made provision in his tender for the cost of the health and safety measures envisaged in the Construction Regulations.
- (d) Failure to submit the foregoing with his tender, will lead to the conclusion that the Contractor will not be able to carry out the work under the contract safely in accordance with the Construction Regulations.

OHS.4 NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

After award of the contract, but before commencement of construction work, the Contractor shall, in terms of Regulation 4, notify the Provincial Director of the Department of Labour in writing if the following work is involved:

- (a) the demolition of structures and dismantling of fixed plant of height of 3,0m or more;
- (b) the use of explosives;
- (c) construction work that will exceed 30 days or 300 person-days;
- (e) excavation work deeper than 1,0m; or
- (f) working at a height greater than 3,0m above ground or landings.

The notification must be done in the form of the pro forma included under Section 9 (Forms to be Completed by Successful Tenderer) of the tender document.

A copy of the notification form must be kept on site, available for inspection by inspectors, Employer, Engineer, employees and persons on site.

OHS.5 RISK ASSESSMENT

Before commencement of any construction work during the construction period, the Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 9 of the Construction Regulations 2014).

The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

OHS.6 APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

6.1 Health and Safety plan

The Contractor shall appoint his employees and any subcontractors to be employed on the contract, in writing, and he shall provide them with a copy of his documented Health and Safety Plan, or relevant sections thereof. The Contractor shall ensure that all subcontractors and employees are committed to the implementation of his Safety Plan.

6.2 Health and safety induction training

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo a health and safety induction training course by a competent person before commencement of construction work. No visitor or other person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety training pertaining to hazards prevalent on site.

The Contractor shall ensure that every employee on site shall at all times be in possession of proof of the health and safety induction training issued by a competent person prior to commencement of construction work.

OHS.7 APPOINTMENT OF SAFETY PERSONNEL

7.1 Construction Supervisor

The Contractor shall appoint a full-time **Construction Supervisor** with the duty of supervising the performance of the construction work.

He may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

7.2 Construction safety officer

Taking into consideration the size of the project and the hazards or dangers that can be expected, the Contractor shall appoint in writing a full-time or part-time **Construction Safety Officer** if so decided by the Inspector of the Department of Labour. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision shall be made by the Contractor in his rates, to cover the cost of this dedicated construction safety officer appointed after award of the contract.

7.3 Health and safety representatives

In terms of **Section 17 and 18 of the Act (OHSA 1993)** the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a **health and safety representative** whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 100 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery etc. on a regular base, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

7.4 Health and safety committee

In terms of **Sections 17 and 18 of the Act (OHSA 1993)** the Contractor (as employer), shall establish one or more **health and safety committee(s)** where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals, but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, and to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

7.5 Competent persons

In accordance with the Construction Regulations the Contractor has to appoint in writing **competent persons** responsible for supervising construction work on each of the following work situations that may be expected on the site of the works.

- (a) Risk assessment and induction training as described in Regulation 9 of the Construction Regulations;
- (b) Fall protection as described in Regulation 10;
- (c) Excavation work as described in Regulation 13;
- (d) Demolition work as described in Regulation 14;
- (e) Scaffolding work as described in Regulation 16;
- (f) Suspended platform operations as described in Regulation 17;
- (g) Material hoists as described in Regulation 19;
- (h) Bulk Mixing plant operations as described in Regulation 20;
- (i) Explosive actuated fastening device as described in Regulation 21;
- (j) Cranes as described in Regulation 22;
- (k) Construction vehicle and mobile plant inspections on a daily basis by a competent person as described in Regulation 23(1);
- (l) Control of all temporary electrical installation on the construction site as described in Regulation 24;
- (m) Stacking and storage on construction sites as described in Regulation 28; and
- (n) Fire precautions on construction sites as described in Regulation 29.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work on all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities to comply with **all** requirements of the Construction Regulations.

OHS.8 RECORDS AND REGISTERS

In accordance with the Construction Regulations the Contractor is bound to keep records and registers related to health and safety on site for periodic inspection by inspectors, the Engineer, the Employer, trade union officials and subcontractors and employees. The following records and registers must be kept on site and shall be available for inspection at all times.

- (a) A copy of the OHSA 1993 Construction Regulations 2014;
- (b) A copy of this Health and Safety Specification;
- (c) A copy of the Contractor's Health and Safety Plan (Regulation 7);
- (d) A copy of the Notification of Construction Work (Regulation 4);
- (e) A health and safety file in terms of Regulation 7(1b) with inputs by the Construction Safety Officer (Regulation 8(5));
- (f) A copy of the risk assessment described in Regulation 9;
- (g) A full protection plan and the corresponding records of evaluation and training of employees working from elevated positions as described in Regulation 10;
- (h) Drawings pertaining to the design of structures (Regulation 11(1c)) and temporary works (Regulation 10) must be kept on site;
- (i) Pronouncement of the safety of excavations must be recorded in a register to be kept on site (Regulation 13(2)(h));
- (j) A copy of the certificate of the system design for suspended platforms (Regulation 17(3));
- (k) A notice must be affixed around the base towers of material hoists to indicate the maximum mass load, which may be carried at any one time by material hoists (Regulation 11(2));
- (l) Maintenance records of material hoists and inspection results must be kept in a record book to be kept on site (Regulation 19(8));
- (m) A record of any repairs to or maintenance of a batch plant must be kept on site (Regulations 19(8));
- (n) A warning notice must be displayed in a conspicuous manner when and wherever an explosive powered tool is used (Regulation 21(2));
- (o) A register for recording of findings by the competent person appointed to inspect construction vehicles and mobile plant (Regulation 23(1) (k)).

OHS.9 CONTRACTORS RESPONSIBILITIES

For this contract the Contractor will be the mandatory of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2014.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) to confirm his status as mandatory (employer) for the contract under consideration.

The Contractor's duties and responsibilities are clearly set out in the Construction Regulations 2014, and are not repeated in detail but some important aspects are highlighted hereafter, without relieving the Contractor of any of his duties and responsibilities in terms of the Construction Regulations.

(a) Contractor's position in relation to the Employer (Client) (Regulation 5)

In accordance with Section 4 of the Regulations, the Contractor shall liaise closely with the Employer or the Engineer on behalf of the Employer, to ensure that all requirements of the Act and the Regulations are met and complied with.

(b) The Principal Contractor and Contractor (Regulation 7)

The Contractor is in terms of the definition in Regulation 2(b) the equivalent of Principle Contractor as defined in the Construction Regulations, and he shall comply with all the provisions of Regulation 7.

Any subcontractors employed by the Contractor must be appointed in writing, setting out the terms of the appointment in respect of health and safety. An independent subcontractor shall however provide and demonstrate to the Contractor a suitable, acceptable and sufficiently documented health and safety plan before commencement of the subcontract. In the absence of such a health and safety plan the subcontractor shall undertake in writing that he will comply with the Contractor's safety plan, the health and safety specifications of the Employer and the Construction Regulations 2014.

(c) Management Supervision of construction work (Regulation 8)

The Contractor shall appoint the safety and other personnel and employees as required in terms of Regulation 8 and as set out in paragraph 7 above. Appointment of those personnel and employees does not relieve the Contractor from any of the obligations under Regulation 8.

(d) Risk assessment for construction works (Regulation 9)

The Contractor shall have the risk assessment made as set out in paragraph 3 above before commencement of the work and it must be available on site for inspection at all times. The Contractor shall consult with the health and safety committee or health and safety representative(s) etc. on a regular basis to ensure that all employees, including subcontractors under his control, are informed and trained by a competent person regarding health hazards and related work procedures.

No subcontractor, employee or visitor shall be allowed to enter the site of works without prior health and safety induction training, all as specified in Regulation 9.

(e) Fall protection (Regulation 10)

Fall protection, if applicable to this contract shall comply in all respects with Regulation 10 of the Construction Regulations.

(f) Structures (Regulation 11)

The Contractor will be liable for all claims arising from collapse or failure of structures

if he failed to comply with all the specifications, project specifications and drawings related to the structures, unless it can be proved that such collapse or failure can be attributed to faulty design or insufficient design standards on which the specifications and the drawings are based.
In addition the Contractor shall comply with all aspects of Regulation 11 of the Construction Regulations.

(g) Temporary works (Regulation 12)

The Contractor will be responsible for the adequate design of all formwork and support structures by a competent person.

All drawings pertaining to formwork shall be kept on site and all equipment and materials used in formwork, shall be carefully examined and checked for suitability by a competent person.

The provisions of Regulation 12 of the Construction Regulations shall be followed in every detail.

(h) Excavation (Regulation 13)

It is essential that the Contractor shall follow the instructions and precautions in the Standard Specifications and Project Specifications as well as the provisions of the Construction Regulations to the letter as unsafe excavations can be a major hazard on any construction site. The Contractor shall therefore ensure that all excavation work is carried out under the supervision of a competent person, that inspections are carried out by a Professional Engineer or Technologist, and that all work is done in such a manner that no hazards are created by unsafe excavations and working conditions.

Supervision by a competent person will not relieve the Contractor from any of his duties and responsibilities under Regulation 13 of the Construction Regulations.

(i) Demolition work (Regulation 14)

Whenever demolition work is included in a contract, the Contractor shall comply with all the requirements of Regulation 14 of the Construction Regulations. The fact that a competent person has to be appointed by the Contractor does not relieve the Contractor from any of his responsibilities in respect of safety of demolition work.

(j) Tunneling (Regulation 15)

The Contractor shall comply with Regulation 15 wherever tunneling of any kind is involved.

(k) Scaffolding (Regulation 16)

The Contractor shall ensure that all the provisions of Regulation 16 of the Construction Regulations are complied with. [Note: Reference in the Regulations to "Section 44 of the Act" should read "Section 43 of the Act"].

(l) Suspended platforms (Regulation 17)

Wherever suspended platforms will be necessary on any contract, the Contractor shall ensure that copies of the system design issued by a Professional Engineer are submitted to the Engineer for inspection and approval. The Contractor shall appoint competent persons as supervisors and competent scaffold erectors, operators and inspectors and ensure that all work related to suspended platforms are done in accordance with Regulation 17 of the Construction Regulations.

(m) Rope Access (Regulation 18)

Where rope access are required on the construction site, the Contractor shall comply with Regulation 18.

(n) Material Hoists (Regulation 19)

Wherever applicable, the Contractor shall comply with the provisions of Regulation 19 to the letter.

(o) Bulk Mixing plants (Regulation 20)

Wherever applicable, the Contractor shall ensure that all lifting machines, lifting tackle, conveyors, etc. used in the operation of a batch plant shall comply with, and that all operators, supervisors and employees are strictly held to the provisions of Regulation 20. The Contractor shall ensure that the General Safety Regulations (Government Notice R1031 of 30 May 1986), the Driven Machinery Regulations (Government Notice R295 of 26/2/1988) and the Electrical Installation Regulations (Government Notice R2271 of 11/10/1995) are adhered to by all involved.

In terms of the Regulations, records of repairs and maintenance shall be kept on site.

(p) Explosive actuated fastening devices (Regulation 21)

The Contractor shall ensure that, wherever explosive-powered tools are required to be used, all safety provisions of Regulation 21 are complied with.

It is especially important that warning notices are displayed and that the issue and return of cartridges and spent cartridges be recorded in a register to be kept on site.

(q) Cranes (Regulation 22)

Wherever the use of tower cranes becomes necessary, the provisions of Regulation 22 shall be complied with.

(r) Construction vehicles And mobile plant (Regulation 23)

The Contractor shall ensure that all construction vehicles and plant are in good working condition and safe for use, and that they are used in accordance with their design and intended use. The vehicles and plant shall only be operated by workers or operators who have received appropriate training, all in accordance with all the requirements of Regulation 23.

All vehicles and plant must be inspected on a daily basis, prior to use, by a competent person and the findings must be recorded in a register to be kept on site.

(s) Electrical installation and machinery on construction sites (Regulation 24)

The Contractor shall comply with the Electrical Installation Regulations (Government Notice R2920 of 23 October 1992) and the Electrical Machinery Regulations (Government Notice R1953 of 12 August 1993). Before commencement of construction, the Contractor shall take adequate steps to ascertain the presence of, and guard against dangers and hazards due to electrical cables and apparatus under, over or on the site.

All temporary electrical installations on the site shall be under the control of a competent person, without relieving the Contractor of his responsibility for the health and safety of all workers and persons on site in terms of Regulation 24.

(t) Use of temporary storage of flammable liquids on construction sites (Regulation 25)

The Contractor shall comply with the provisions of the General Safety Regulations (Government Notice R1031 of 30 May 1986) and all the provisions of Regulation 25 of the Construction Regulations to ensure a safe and hazard-free environment to all workers and other persons on site.

(u) Water environments (Regulation 26)

Where construction work is done over or in close proximity to water, the provisions of Regulation 26 shall apply.

- (v) Housekeeping and general safeguarding on construction sites (Regulation 27)
Housekeeping on all construction sites shall be in accordance with the provisions of the environment Regulations for workplaces (Government Notice R2281 of 16 October 1987) and all the provisions of Regulation 27 of the Construction Regulations.

- (w) Stacking and storage on construction sites (Regulation 28)

The provisions for the stacking of articles contained in the General Safety Regulations (Government Notice R1031 of 30 May 1986) as well as all the provisions Regulation 28 of the Construction Regulations shall apply.

- (x) Fire precautions on construction sites (Regulation 29)

The provisions of the Environmental Regulations for Workplaces (Government Notice R2281 of 16 October 1987) shall apply.

In addition the necessary precautions shall be taken to prevent the incidence of fires, to provide adequate and sufficient fire protection equipment, sirens, escape routes etc. all in accordance with Regulation 29 of the Construction Regulations.

- (y) Construction welfare facilities (Regulation 30)

The Contractor shall comply with the construction site provisions as in the Facilities Regulations (Government Notice R1593 of 12 August 1988) and the provisions of Regulation 30 of the Construction Regulations.

- (z) Non-compliance with the Construction Regulations 2014

The foregoing is a summary of parts of the Construction Regulations applicable to all construction projects.

The Contractor, as employer for the execution of the contract, shall ensure that all provisions of the Construction Regulations applicable to the contract under consideration are complied with to the letter.

Should the Contractor fail to comply with the provisions of the Regulations 4 to 30 as listed in Regulation 33, he will be guilty of an offence and will be liable, upon conviction, to the fines or imprisonment as set out in Regulation 33.

The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations.

OHS.10 MEASUREMENT AND PAYMENT

10.1 Principles

It is a condition of this contract that Contractors, who submit tenders for this contract, shall make provision in their tenders for the cost of all health and safety measures during the construction process. All associated activities and expenditure are deemed to be included in the Contractor's tendered rates and prices.

- (a) Safety personnel

The Construction Supervisor, the Construction Safety Officer, Health and Safety Representatives, Health and Safety Committee and Competent Persons referred to in clauses 9.1 to 9.5 shall be members of the Contractor's personnel, and no additional payment will be made for the appointment of such safety personnel.

(b) Records and Registers

The keeping of health and safety-related records and registers as described in 8 is regarded as a normal duty of the Contractor for which no additional payment will be considered, and which is deemed to be included in the Contractor's tendered rates and prices.

E-tender

C4: SITE INFORMATION

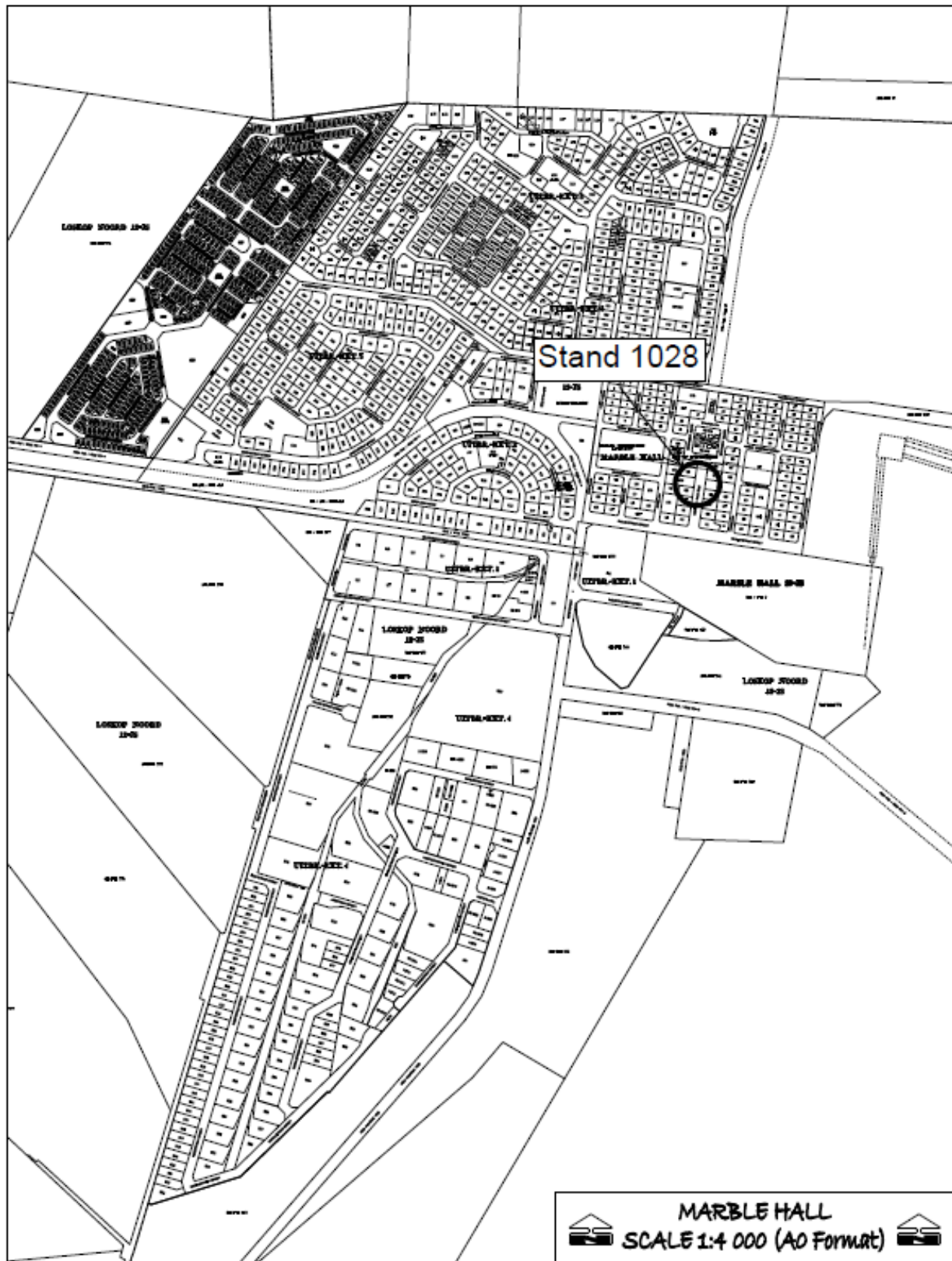
C4.1 LOCALITY PLAN

C4.2 TENDER DRAWINGS

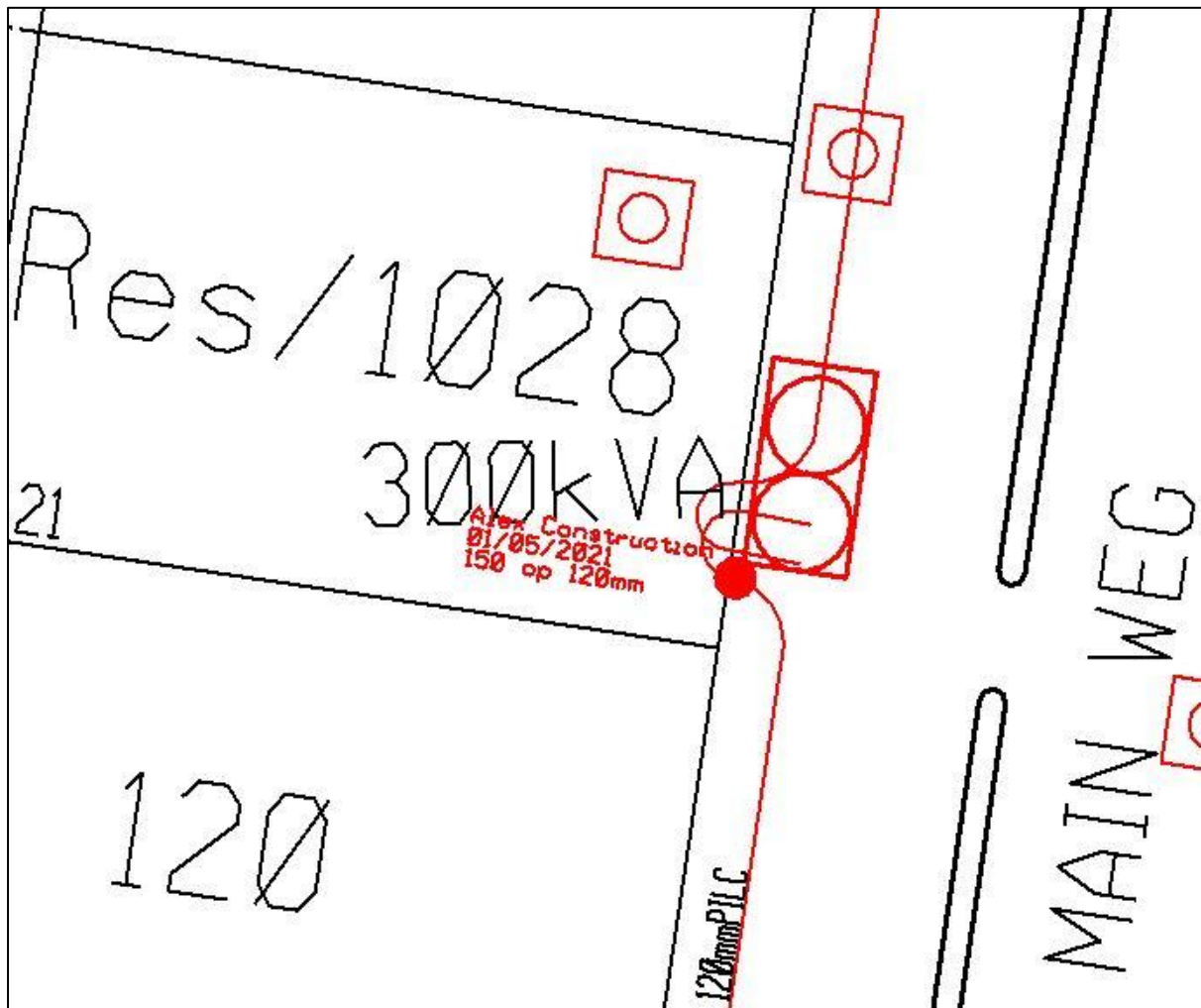
DESCRIPTION	DRAWING NO.
Project Site Plan	C4.2.1
Existing MV network	C4.2.2
Existing LV network	C4.2.3
Existing Water network	C4.2.4
Existing Sewer network	C4.2.5
Cable Trench	C4.2.6
Basic Minisubstation Design	C4.2.7
Basic minisubstation low voltage layout	C4.2.8
Basic plinth design	C4.2.9

C4.3 CONDITIONS ON SITE

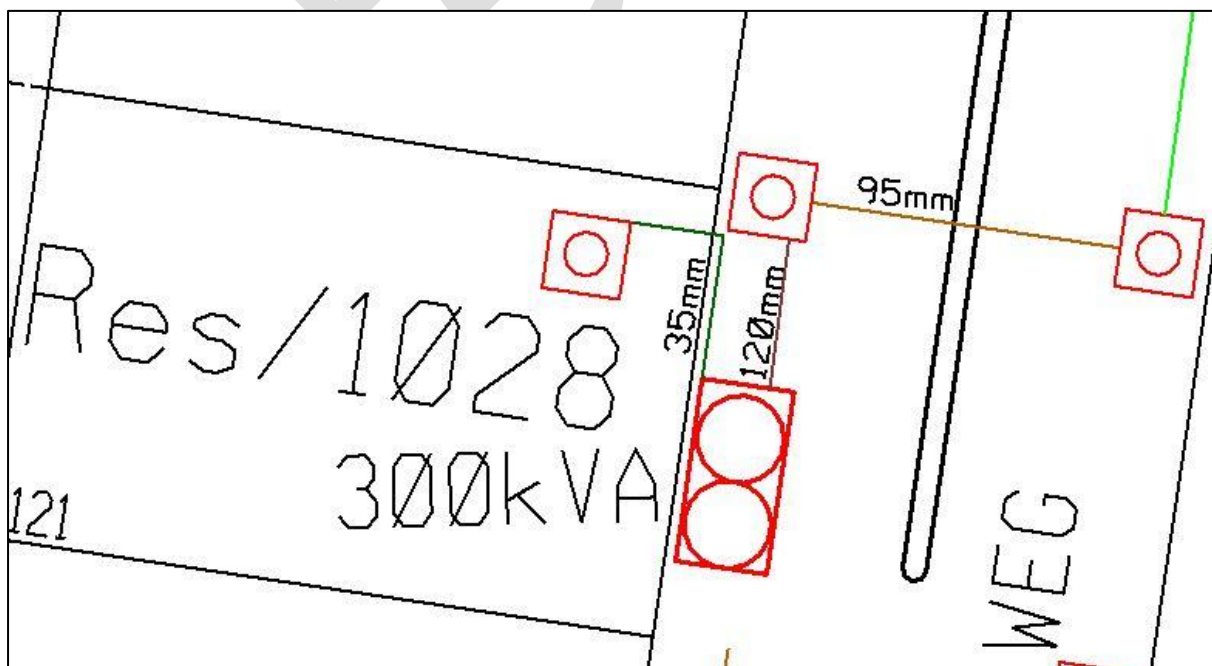
C4.1 LOCALITY PLAN



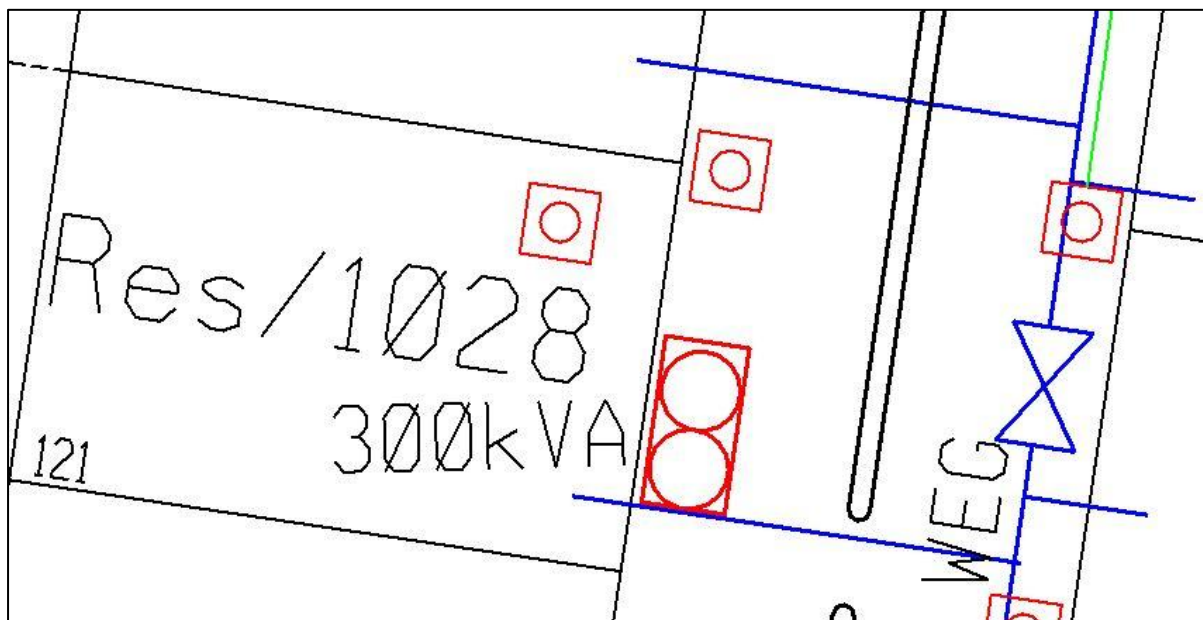
C4.2.1 PROJECT SITE PLAN – EXISTING MV AND LV



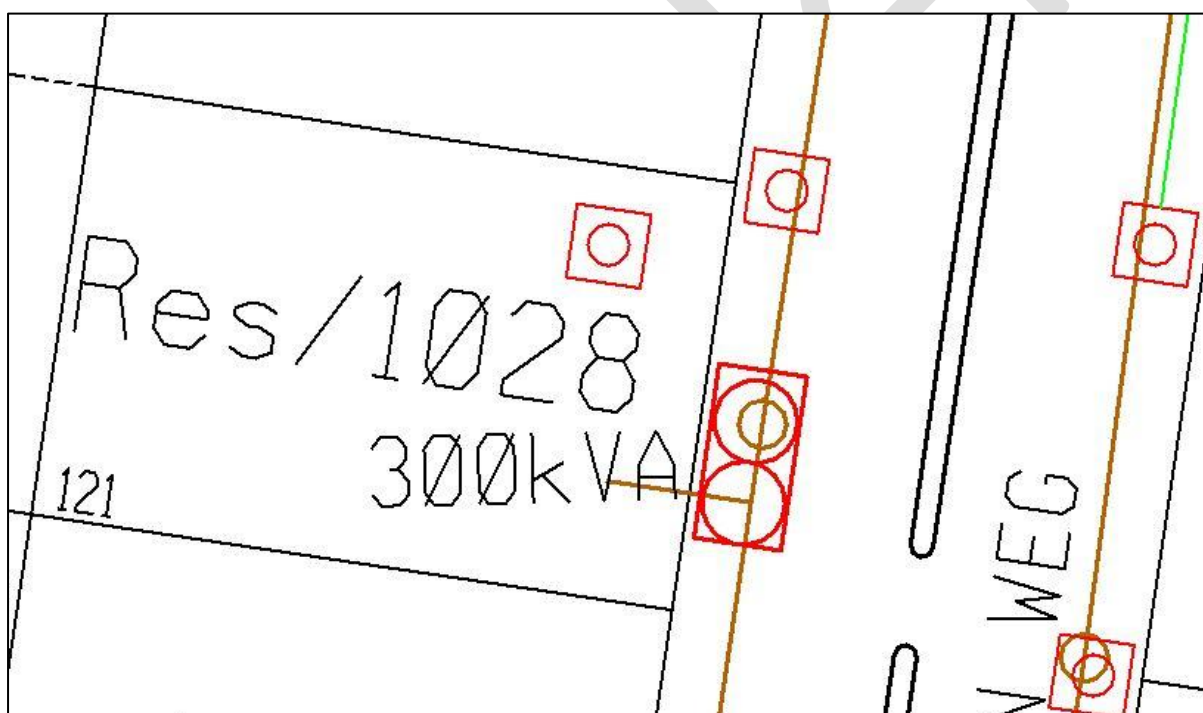
C4.2.3 EXISTING LV NETWORK



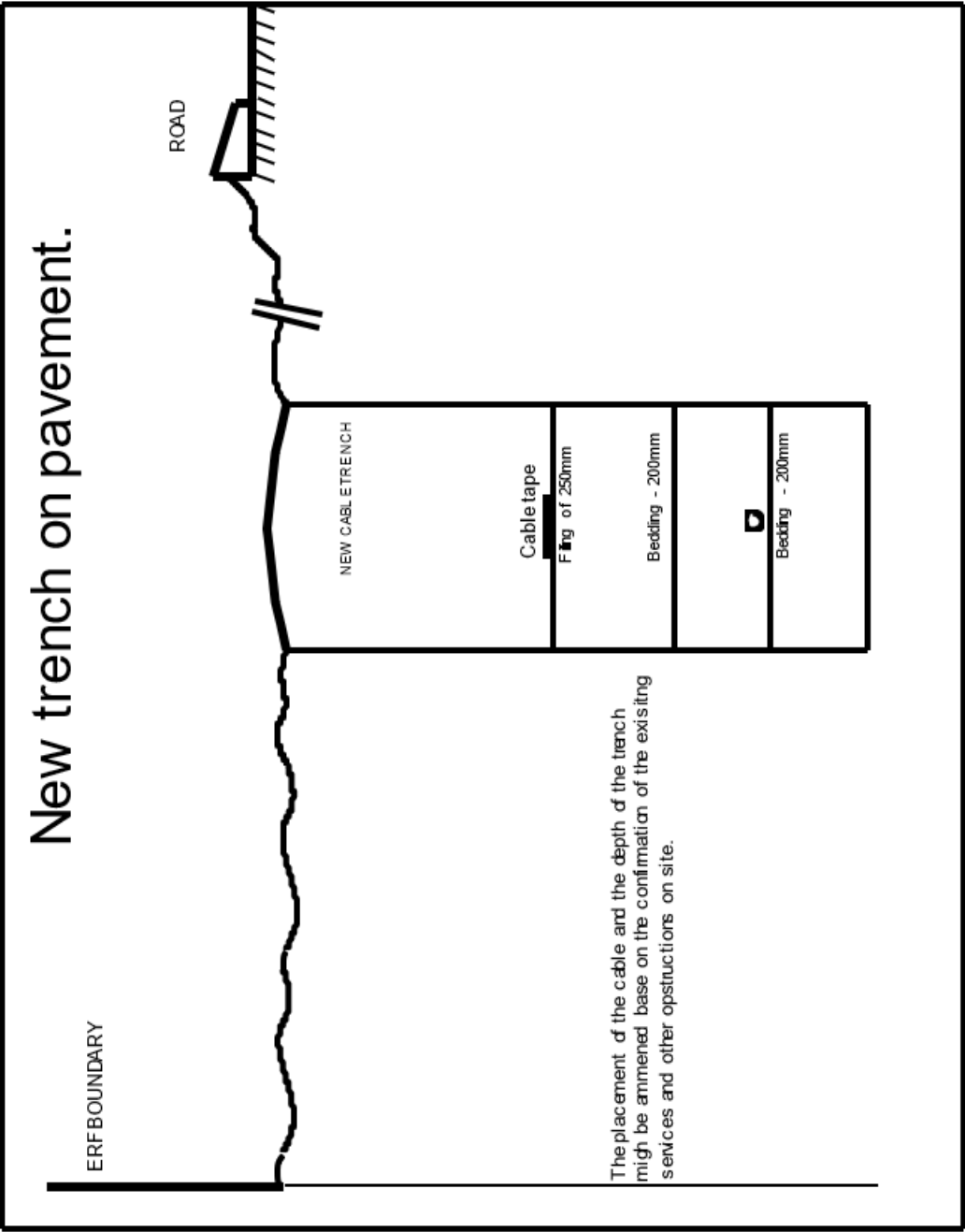
C4.2.4 EXISTING WATER MAIN LINE



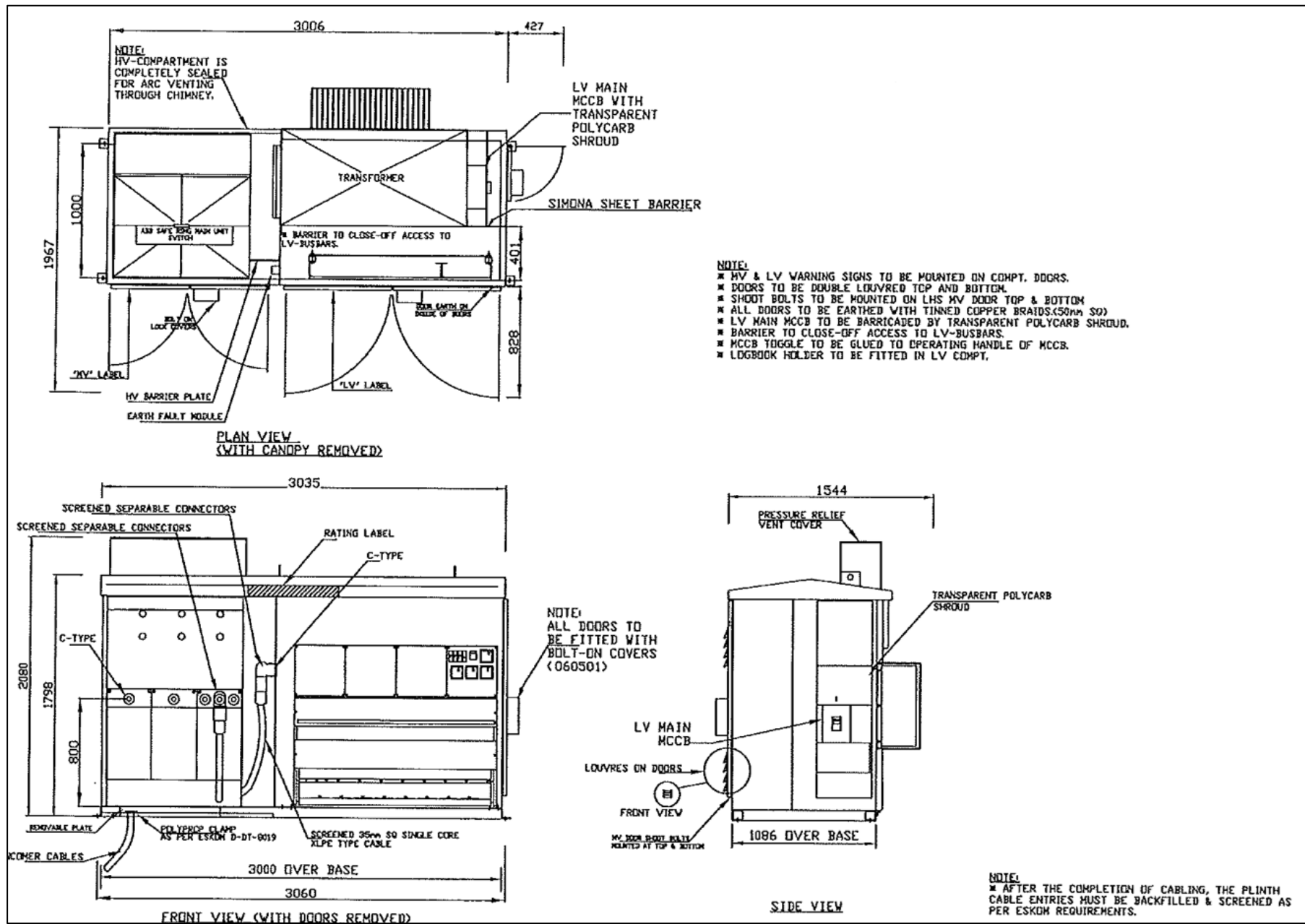
C4.2.5 EXISTING SEWER NETWORK



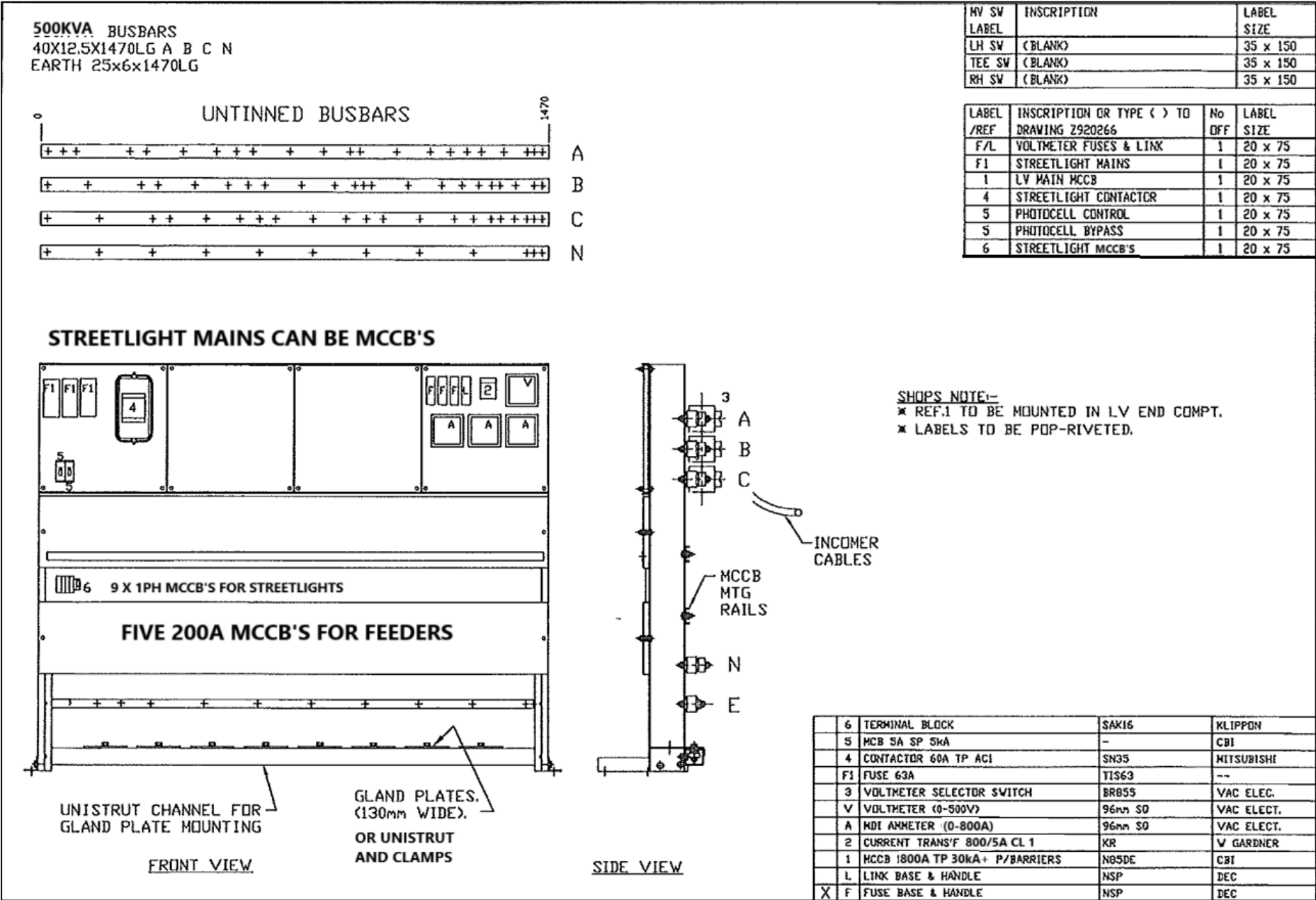
C4.2.6 CABLE TRENCH DETAIL



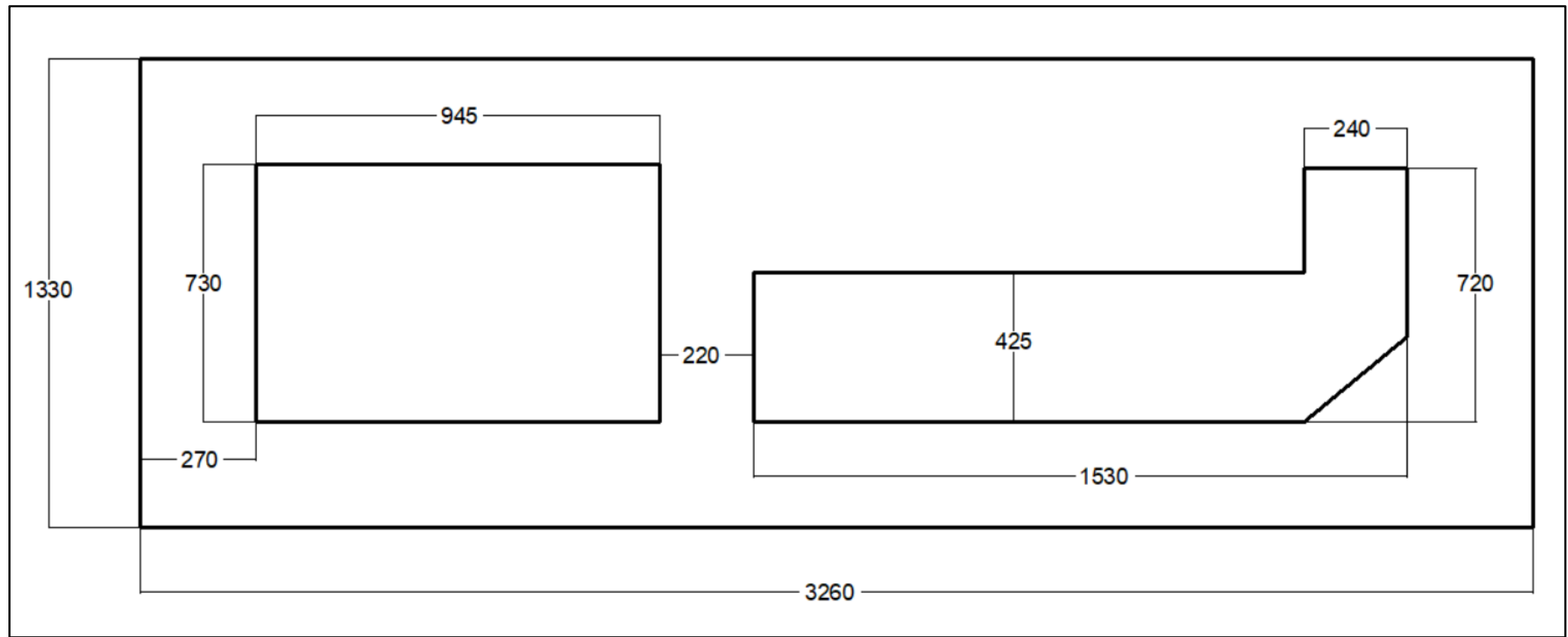
C4.2.7 BASIC MINISUBSTATION DESIGN



C4.2.8 BASIC LOW VOLTAGE LAYOUT



C4. 2.12 Plinth on site



C4.3 Conditions on site:

The site is in the Central Business District of Marble Hall. The minisubstation is on a pavement of a street in front of stand 1028. There is open access at all times to this short section. There will be limited space to work after excavations. There will be vehicle and pedestrian traffic. There will be no road crossings of any kind. The amount of work required for the final change over might be two days and might require security during the night. There will be a lot of pedestrians and children in the area and securing the site will be very important. On the pavements/road reserves work will be in proximity of vehicle traffic and adequate safety measure must be implemented. The minisubstation will be installed next to the existing 11kV cables and several low voltage electrical cables. The site might be in very close proximity of existing Telkom and Herotel networks. Care must be taken not to damage the services and adequate screening/protection must be installed between services. If unsuitable soil have to be removed it can be dumped at the Municipal Dump site (Solid Waste Site).

END OF DOCUMENT
