

EPHRAIM MOGALE LOCAL MUNICIPALITY



SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS

CIDB: 2EP or HIGHER

BID NUMBER: EPMLM/08/03/411

Supply Chain Management Unit: Procurement Document

PREPARED BY: MUNICIPAL MANAGER Matladi S.T. P.O. Box 111 MARBLE HALL 0450 Tel: 013 261 8400 Fax: 013 261 2985	ISSUED BY: THE MUNICIPAL MANAGER EPHRAIM MOGALE LOCAL MUNICIPALITY P.O. BOX 111 MARBLE HALL 0450 Tel: (013) 261 8400 Fax: (013) 261 2985
Closing Date: 25 February 2022 Closing Time: 12H00	
Name of Bidder in Full:	
CRS (CIDB) NO:	
CSD REGISTRATION (MAAA):	
Tel: Fax:	
Bid Amount VAT Included:	

EPHRAIM LOCAL MUNICIPALITY



SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS

EPMLM/08/03/411

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EPHRAIM MOGALE LOCAL MUNICIPALITY
SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS
BID NUMBER: EPMLM/08/03/411

VERY 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 Bids in accordance with the Preferential Procurement Policy Framework Act 5/2000 and revised Preferential Procurement Regulation January 2017 on 100 points functionality and on a 80/20 points system, where 80 points are for the price and 20 points for B-BBEE according to the said legislation. Bids are required to submit valid B-BBEE status level verification certificates.

1. 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. Failure to complete the schedule of quantities as required, i.e. only lump sums provided.
2. Scratching out, writing over or painting out rates, without initialling next to the amended rates or information, affecting the evaluation of the bid.
3. The use of correction fluid (i.e. tippex) or any erasable ink, e.g. pencil.
4. Non-attendance of mandatory/compulsory: N/A
 - o Site inspections or;
 - o Information/Clarification meetings
5. The Bid has not been properly signed by a party having the authority to do so, according to the example of "Authority for Signatory".
6. No authority for signatory submitted – See example, where it is stated that a duly signed and dated original or certified copy of the company's relevant resolution (**for each specific bid**) of their members or their board of directors, must be submitted.
7. Particulars required in respect of the bidder's B-BBEE status level of contribution have not been completed, the bid will not be disqualified but no preference points will be awarded.
8. **Very important notice** Bidders must note that only information filled in at the spaces provided therefore in the bid document will be considered for evaluation purposes unless additional space is required and then only if the location of the additional information in the attachments is properly referred to by page number and section heading. Information supplied anywhere else will be disregarded which **may** lead to the rejection of the bid. **The attachment or inclusion of information not specifically asked for is not desirable and lead to delays in the awarding of bids.**
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 bid box or after the relevant closing date and time.

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12. Failure to provide a valid certificate from the Department of Labour, or a declaration (Specific goals – “Equity ownership”) by a designated employer that it complies with the Employment Equity Act 55 of 1998.
13. If any municipal rates and taxes or municipal service charges owed by the bidder **and** any of its directors to the municipality, or to any other municipality or municipal entity, are in arrears for more than three months.
14. If any bidder who during the last five 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.
15. The accounting officer must ensure that irrespective of the procurement process followed, no award may be given to a person –
 - (a) who is in the service of the state, or;
 - (b) 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;
 - (c) who is an advisor or consultant contracted with the municipality in respect of contract that would cause a conflict of interest.
16. **Failure to provide: A copy of valid registration with the CIDB, in an appropriate contractor grading designation (category), as required in the bid documentation (or in the case of a joint venture, of all the partners in the joint venture).**
17. Bid offers will be rejected if the bidder or any of his directors is 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.
18. Bid offers will be rejected if the bidder has abused the EPMLM's Supply Chain Management System and action was taken in terms of paragraph 38 of the EPMLM SCM Policy.
19. Form of offer not completed and signed by the authorised signatory.

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

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T1.1: BID NOTICE AND INVITATION TO BID**EPHRAIM MOGALE LOCAL MUNICIPALITY****BID NUMBER: EPMLM/08/03/411**

Bids are hereby invited for the: **SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS in Ephraim Mogale Local Municipality in Limpopo. The Contract entails the supply and installation of new NRS 048 compliant quality of supply recorders with the software to produce the NERSA required NRS 048 reports and communication equipment to enable remote communication in the three 11kV substations in Marble Hall.**

Bid documents are available from the office of the Cashier's Office, Ephraim Mogale Local Municipality.

It is estimated that tenderers should have an estimated CIDB contractor grading of 2EP or higher.

Only bidders who comply with the following requirements are eligible to submit bids:

- Register with CIDB and having an estimated grading of 2EP or Higher
- Bids will be evaluated on the 80/20 points system
- Bids will be evaluated on the functionality with a minimum qualifying score of 60 points.

Criteria	Maximum Weights
Company Experience–Identical Service	40
Company Experience–Similar Service	20
Specific personnel knowledge	25
Financial Capacity	10
Registration as electrical contractor	5
Total Points for Functionality	100

Bid documents will be obtainable as from **Friday, 11 February 2022** at the offices of Ephraim Mogale Local Municipality in Marble Hall, upon of a non-refundable amount of **R620** only cash or bank guaranteed cheque made out to Ephraim Mogale Local Municipality will be acceptable and can also be downloaded for free on www.etenders.gov.za.

All bids will remain valid for a period of ninety days after the time and date of opening. Late submissions, telegraphic, telegraphic or e-mail transmission bid 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 a bid as a whole or in part.

All bids and supporting documents must be sealed in a cover clearly marked **“BID No. EPMLM/08/03/411: SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS”** and must be deposited in the bid box at **ground floor Finance Department, Ephraim Mogale Local Municipality, Marble Hall, not later than 12:00 on 25 February 2022.**

Supply Chain Management related enquiries can be directed to Mr. J. Madisha from the procurement office of Ephraim Mogale Local Municipality on 013 261 8400 / ephmlmsupplychain@emogalelm.gov.za. Technical related enquiries can be directed to Mr. J. Durie from Electrical Services office of Ephraim Mogale Local Municipality on 013 261 8454.

MATLADI S.T.

MUNICIPAL MANAGER

Contractor

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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 8454 Fax: (013) 261 2985

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;



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- (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 **2EP** or higher **2EP** or a combined grading (in the case of a joint venture) equal or higher than **2EP** 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.2.1	Only those Bidders who have in their employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for Supervisory and management staff are eligible to submit bids.
F.2.18	The Bidder shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labor-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.

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.

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.



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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 **25 February 2022**. 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;
- SANAS Accredited B-BBEE Verification certificate or sworn affidavit
- Copies of Appointment letters and Completion certificate of relevant project
- Valid proof of registration with the compensation for occupational injuries and Diseases Act (COIDA)
- Registration as Electrical Contractor with the Department of Labour
- Municipal Account not older than 3 months for both company and directors.

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:

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Time 12:00 hrs.
 Date: **25 February 2021**
 Location / Venue: Bid Box
 Payment office/Cashiers
 2 Ficus Street
Finance Building
EPHRAIM MOGALE LOCAL MUNICIPALITY
Marble Hall
 Tel No (013) 261 8400

F.3.5 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 and methodology will be evaluated. Each Bid will be assessed and awarded points for Functionality. **Failure to achieve 60 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, 90/10 or 80/20. (refer to 2(c) below)

1(e) Fifth

Points for BBBEE will be awarded in accordance with the status level of contribution. 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 BBBEE status, 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

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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 on site inspection attendance register.
- 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 in particular. 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

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Functionality Scorecard				
Criteria	Scoring guide			Maximum Weights
Company Experience: NB: The tender must submit two (2) identical <u>(Supply and Install Quality of Supply Recorders)</u> successfully completed projects with a minimum value of R200 000.00 per project in the past 5 years. Note 1: Points are allocated not based on the number of relevant project but confirmation of the mentioned criteria Note 2: referees provided, to be contactable to confirm the value and the completion certificates provided.	No	SCORING CRITERIA	WEIGHT	40
	1	Tender scores zero (0) points where no information regarding the company's relevant past experience indicated	0	
	2	Tenderer scores quarter points per project, where information regarding the company's experience is provided but with no supporting documents provided (i.e. Appointment letters and Completion letters)	5/project	
	3	Tenderer scores half points per project, where information regarding the company's experience is provided but with incomplete supporting documents provided (i.e. Appointment letters and no Completion letters)	10/project	
	4	Tenderer scores full points per project, where information regarding the company's relevant experience is indicated, and copies of appointment letters and completion letters is submitted.	20/project	
		TOTAL	40	
Company Experience: NB: The tender must submit two (2) similar <u>(Medium voltage substation protection relay installation)</u> and successfully completed projects with a minimum value of R200 000.00 per project in the past 5 years. Note 1: Points are allocated not based on the number of relevant project but confirmation of the mentioned criteria Note 2: referees provided, to be contactable to confirm the value and the completion certificates provided.	No	SCORING CRITERIA	WEIGHT	20
	1	Tender scores zero (0) points where no information regarding the company's relevant past experience indicated	0	
	2	Tenderer scores quarter points per project, where information regarding the company's experience is provided but with no supporting documents provided (i.e. Appointment letters and Completion letters)	5/project	
	3	Tenderer scores half points per project, where information regarding the company's experience is provided but with incomplete supporting documents provided (i.e. Appointment letters and no Completion letters)	7.5/project	
	4	Tenderer scores full points per project, where information regarding the company's relevant experience is indicated, and copies of appointment letters and completion letters is submitted.	10/project	
		TOTAL	20	
Specific Personnel Knowledge – certified copies of Academic qualification certificates needs to be attached for functionality points scoring otherwise no points will be allocated Site Agent	Designation			25
	Project Manager	<u>Project Manager: Maximum Points : 15</u>		
		No formal Education – not allowed	0	
		Certificate N6 Electrical Engineering (heavy current) with 2 - 3 years relevant experience	3	
		N. Dip: Electrical Engineering (heavy current) with 2 - 3 years relevant MV experience.	6	
		N. Dip: Electrical Engineering (heavy current) with more than 3 years' exp.	9	
		Electrical graduate engineer (heavy current) with more than 2 - 3 years relevant experience	12	
		Pr. Eng: Electrical, Pr. Technician: Electrical: (Heavy current) with more than 3yrs exp.	15	
	Site Agent	<u>Site Agent: Maximum Points: 10</u>		
		No formal qualification – not allowed	0	
Electrician, 1 to 3 years MV experience and ORHVS		2		



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		Electrician, more than 3 years MV experience and ORHVS	4	
		Certificate N6 Electrical Engineering Heavy Current with 1-3 years relevant MV experience	6	
		National Diploma Electrical Engineering with 1 – 3 years relevant MV experience	8	
		N6 or Nat Dip Electrical Engineer with more than 3 years relevant MV experience	10	
Financial Capacity- Tenderer to submit proof of bank of rating not older than three (3) months. Bank rating should be of the Lead Partner in case of Joint Venture.	Bank Rating		Weighting	
	Bank Rating = A,B, C		10	
	Bank Rating = D		5	
	Bank Rating = E		2	
	Bank Rating = F to G		0	
	TOTAL		10	
Proof must be submitted of registration as an electrical contractor with the Department of Labour.	Required		Weighting	
	No registration – not allowed		0	
	Registration as an Electrical Contractor		5	
	TOTAL		5	
Functionality Threshold(Minimum score)				60
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 60 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 60 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 90 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.

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

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: BBBEE (Ph)

The Bidders will then be evaluated in terms of the Construction industry scorecard and the PPPFA regulation 34350 issued on 8 June 2011 with the values of Ph indicated as the number

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of points shown below.

FOR BEE EVALUATION: Kindly complete and sign the MBD.6.1 and attach ORIGINAL or CERTIFIED BBEE certificates or the sworn affidavit.

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

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:

- the bid offer is signed by a person authorized to sign on behalf of the Bidder;
- a valid original Tax Clearance Certificate is included with his bid;
- 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;
- a bidder who submitted a bid as a Joint Venture has included an acceptable Joint Venture Agreement with his bid;
- the bidder or a competent authorized representative of the contractor who submitted the bid has attended the compulsory clarification meeting or site inspection;
- 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;
- 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;
- 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;

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- (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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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.



Contractor



Witness 1



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Employer



Witness 1



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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.



Contractor



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Witness 2



Employer



Witness 1



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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.

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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:

- Detrimentially 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



Contractor



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Witness 2



Employer



Witness 1



Witness 2

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	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	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

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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:

- Addenda issued during the bid period,
- Inclusion of some of the returnable documents,
- Other revisions agreed between the employer and the successful bidder, and
- 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.

Contractor

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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.

*Contractor**Witness 1**Witness 2**Employer**Witness 1**Witness 2*

PART T2: RETURNABLE SCHEDULES

TABLE OF CONTENTS		Page	Colour
T2.1:	LIST OF RETURNABLE DOCUMENTS.....	T.21	White
T2.2:	RETURNABLE SCHEDULES TO BE COMPLETED BY TENDERER	T.22	Yellow

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Employer

Witness 1

Witness 2

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	MDB 8 - PAST SCM PRACTICES	
E	MDB 9 - CERTIFICATE OF INDEPENDENT BID	
F	AUTHORITY OF SIGNATORY	
G	BANKING DETAILS AND RATING	
H	MUNICIPAL UTILITY ACCOUNT	
I	SCHEDULE OF PROPOSED SUBCONTRACTORS	
J	RECORD OF ADDENDA	
K	SCHEDULE OF TENDERER'S EXPERIENCE	
L	KEY PERSONNEL	
M	CENTRAL SUPPLIER DATABASE	
N	CONSTRUCTION INDUSTRY DISTRIBUTION BOARD	
O	COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT1993 - COIDA	
P	REGISTRATION AS ELECTRICAL CONTRACTOR	
Q	ISO 9001 QUALITY CERTIFICATION	
R	IEC CERTIFICATION	
S		

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 (both company and directors)
	Appointment and completion letters
	Key personnel CV's
	CIDB registration
	Letter of good standing - COIDA letter
	CSD
	B-BBEEE Certificate
	Registration as Electrical Contractor
	ISO 9001 Quality certification
	IEC 61000-4-30 Ed 3.0 Class-A Certificate
	IEC 62589 Part 2 Test Certificate

3 The offer portion

Part C1 Agreements and Contract Data

Part C2 Pricing Data



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

T2.2 RETURNABLE SCHEDULES

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/8/3/411	CLOSING DATE:	25-02-2022	CLOSING TIME:	12:00
DESCRIPTION	SUPPLY AND INSTALL QUALITY SUPPLY RECORDERS				
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		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT ☐ Yes ☐ No		
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED? ☐ Yes ☐ 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:			TECHNICAL INFORMATION MAY BE DIRECTED TO:		
DEPARTMENT	SCM		CONTACT PERSON	JOHAN DURIE	
CONTACT PERSON	JOSEPH MADISHA		TELEPHONE NUMBER	013 261 8454	
TELEPHONE NUMBER	013 261 8450/ 8462		FACSIMILE NUMBER	013 261 2985	
FACSIMILE NUMBER	013 261 2985		E-MAIL ADDRESS	JDURIE@EMOGALELM.GOV.ZA	
E-MAIL ADDRESS	JMADISHA@EMOGALELM.GOV.ZA				



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

PART B

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR ONLINE**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, 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)? ☐ YES ☐ NO
- 3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO
- 3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO
- 3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO
- 3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ NO

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

**NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.
NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.**

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

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Contractor

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Witness 1

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Witness 2

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Employer

--

Witness 1

--

Witness 2

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:

.....

--

Contractor

--

Witness 1

--

Witness 2

--

Employer

--

Witness 1

--

Witness 2

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM C : MBD 6.1**MBD 6.1****PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL
PROCUREMENT REGULATIONS 2017****1.**

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

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

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

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

1.2

- a) The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the **80/20** preference point system shall be applicable; or
- b) Either the 80/20 or 90/10 preference point system will be applicable to this tender

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

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

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

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

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

80/20

or

90/10

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

Where

P_s = Points scored for price of bid under consideration

P_t = Price of bid under consideration

$P_{\min}$ = Price of lowest acceptable bid

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

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

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

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

5. BID DECLARATION

- 5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

- 6.1 B-BBEE Status Level of Contributor: = (maximum of 10 or 20 points)
(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.)

7. SUB-CONTRACTING

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

(Tick applicable box)

YES	☐	NO	☐
-----	--------------------------	----	--------------------------

- 7.1.1 If yes, indicate:

- What percentage of the contract will be subcontracted.....%
- The name of the sub-contractor.....
- The B-BBEE status level of the sub-contractor.....
- Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES	☐	NO	☐
-----	--------------------------	----	--------------------------

- v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations, 2017:

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

Designated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

8.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.7 MUNICIPAL INFORMATION

Municipality where business is situated:

.....

Registered Account Number:

Stand Number:.....

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

8.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES

- 1.
- 2.

.....

SIGNATURE(S) OF BIDDERS(S)

DATE:

ADDRESS

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM D: 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	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? (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). 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.	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? 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.	Yes ☐	No ☐

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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 ☐	No ☐
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 ☐	No ☐
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 ☐	No ☐
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

--

Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

FORM E: 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 9**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

MBD 9

41

*Contractor**Witness 1**Witness 2**Employer**Witness 1**Witness 2*

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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 9

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM F: 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

FORM G: 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.....

--

Contractor

--

Witness 1

--

Witness 2

--

Employer

--

Witness 1

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Witness 2

FORM H: 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.

NAME OF MUNICIPALITY – DIRECTOR(S)	ACCOUNT NUMBER	OWNER
NAME OF MUNICIPALITY - COMPANY	ACCOUNT NUMBER	OWNER

(Affidavits and proof of address is not proof that there is no outstanding balance)

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.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM I: 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.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM J: 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.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM K: SCHEDULE OF TENDERER'S EXPERIENCE (FOCUS ON IDENTICAL QUALITY OF SUPPLY PROJECTS TO CLAIM FUNCTIONALITY POINTS)

The following is a statement of similar work successfully executed by myself/ourselves in the last five years: The bidder shall provide references to projects where the data analysis, visualisation and reporting system was successfully implemented.

INSTITUTION NAME	RELEVANT PROJECT NAME	CONTACT PERSON	LAND LINE CONTACT NO.	CELL CONTACT NO.	PROJECT START & END DATE

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) The listed projects should Focus on relevant projects that will qualify for functionality points.

Signature..... Date

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

50

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM K: SCHEDULE OF TENDERER'S EXPERIENCE (FOCUS ON SIMILAR MEDIUM VOLTAGE SUBSTATION PROTECTION RELAY INSTALLATION PROJECTS TO CLAIM FUNCTIONALITY POINTS)

The following is a statement of **similar** work successfully executed by myself/ourselves in the last five years: The bidder shall provide references to projects where protection relays was supplied and installed in medium voltage substations was successfully implemented.

INSTITUTION NAME	RELEVANT PROJECT NAME	CONTACT PERSON	LAND LINE CONTACT NO.	CELL CONTACT NO.	PROJECT START & END DATE

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) The listed projects should Focus on relevant projects that will qualify for functionality points.

Signature..... Date

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

51

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM L: 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	NATIONAL ITY:	SUMMARY OF			NQF Level
	(i) NOMINEE (ii) ALTERNATE		QUALIFICAT -IONS	EXPERIENCE OCCUPATION	AND PRESENT	
<u>HEADQUARTERS</u> Project manager						
<u>CONSTRUCTION MONITORING</u> Site Agent						
<u>CONSTRUCTION MONITORING</u> Safety Officer						

Signature..... Date

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

Tenderer

Contractor

Witness 1

Witness 2

Employer

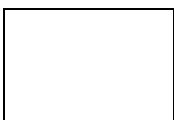
Witness 1

Witness 2

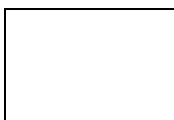
FORM M: CENTRAL SUPPLIER DATABASE REGISTRATION

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

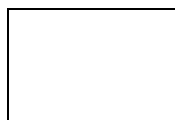
This will be verified during evaluation and again during adjudication. Bidders should ensure that their status stays compliant.



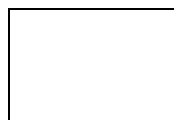
Contractor



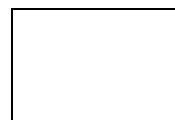
Witness 1



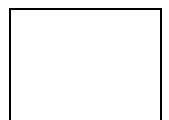
Witness 2



Employer



Witness 1



Witness 2

FORM N: 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 projects is 2EP (Electrical Infrastructure) or higher and the bidder must attach proof of registration.

Unfortunately the Municipality don't have the capacity to appoint bidder Emerging into 2EP and bidders must already be registered for 2EP.

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.....



Contractor



Witness 1



Witness 2



Employer



Witness 1

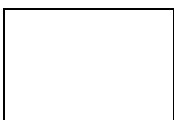
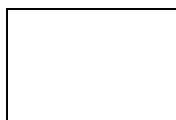
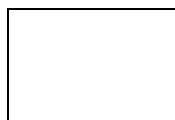
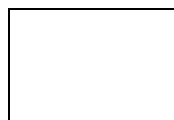
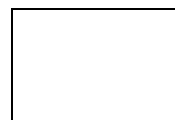
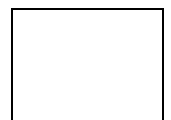


Witness 2

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

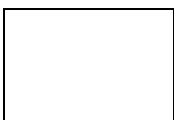
The bidder shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).

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.

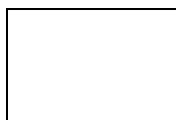
*Contractor**Witness 1**Witness 2**Employer**Witness 1**Witness 2*

FORM P: REGISTRATION AS ELECTRICAL CONTRACTOR

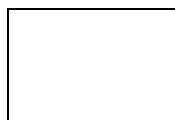
Only bidder that can proof that they are registered as Electrical Contractors with the Department of Labour will be considered.



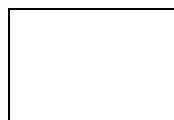
Contractor



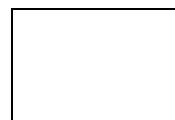
Witness 1



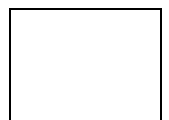
Witness 2



Employer



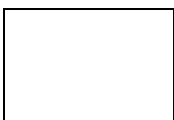
Witness 1



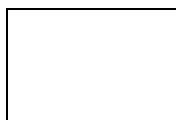
Witness 2

FORM Q: ISO 9001 QUALITY CERTIFICATION

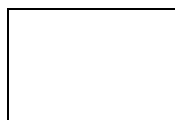
Only bidders that can provide proof that the manufacturer of the recorders obtained ISO 9001 quality certification for manufacturing and support issued by an internationally recognised accreditation organisation will be considered.



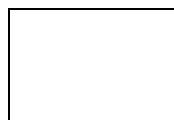
Contractor



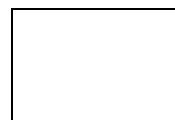
Witness 1



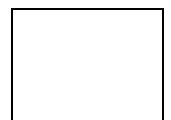
Witness 2



Employer



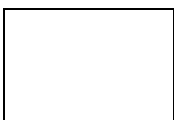
Witness 1



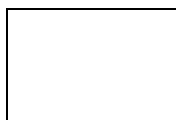
Witness 2

FORM R: IEC CERTIFICATION

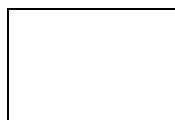
Only bidders that can provide proof that the recorders have been IEC 61000-4-30 Ed 30 Class A certified for voltage and current inputs (Tested according to IEC 62589 Part 2 protocol) will be considered,



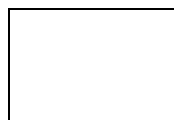
Contractor



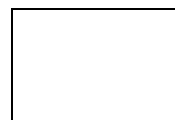
Witness 1



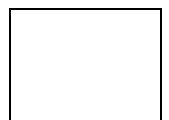
Witness 2



Employer



Witness 1



Witness 2

THE CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

PART C2: PRICING DATA

PART C3: SCOPE OF WORK

PART C4: SITE INFORMATION



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

EPHRAIM MOGALE LOCAL MUNICIPALITY

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C1.2: CONTRACT DATA

C1.2.1: CONDITIONS OF CONTRACT

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

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C4.2: CONDITIONS ON SITE:

C4.3: BID DRAWINGS



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

EPHRAIM MOGALE LOCAL MUNICIPALITY**SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS****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/08/03/411: SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS.

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	

*Contractor**Witness 1**Witness 2**Employer**Witness 1**Witness 2*

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	



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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:

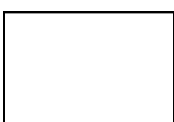
Signature(s) _____

Name(s) _____

Capacity _____

(Name and address of organization)

Name &
Signature of
Witness



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

EPHRAIM MOGALE LOCAL MUNICIPALITY
SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS
Situated in
Ephraim Mogale Local Municipality

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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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)

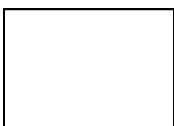
Delete the words "without the written consent of the other".

2.1.2 Contractor's Superintendence (CL 4.12)

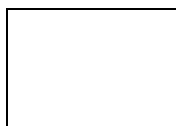
Add the following sub-clause 4.12.4 to Clause 4.12:

"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.

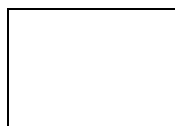
The Contractor's Site Agent shall be on Site at all times when work is being performed.



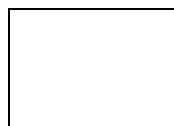
Contractor



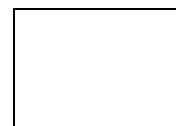
Witness 1



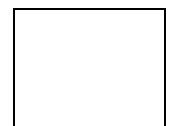
Witness 2



Employer



Witness 1



Witness 2

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.

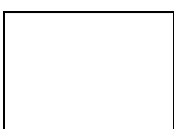
If the Contractor subsequently receives full payment of the amount due under such Interim Payment Certificate before giving a notice of cancellation of the Contract, the Contractor shall resume normal working as soon as is reasonably practicable."

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

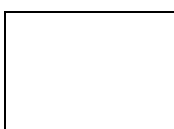
Add the following to sub-clause 5.12.2.2 :

"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 :

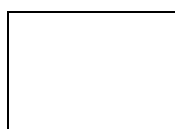
$$V = (Nw - Nn) + \frac{Rw - Rn}{x}$$



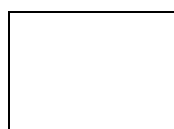
Contractor



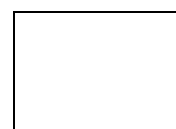
Witness 1



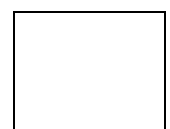
Witness 2



Employer



Witness 1



Witness 2

- 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

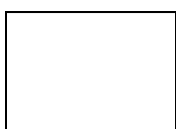
Month	Average rainfall for calendar month Rn	Average number of days for calendar month on which a rainfall of 10 mm or more were recorded Nn
	(mm)	(days)
January	66.7	10.6
February	57.8	8.1
March	51.2	8.2
April	32.2	5.5
May	10.3	2
June	3.2	1.8
July	2.5	1.6
August	2.5	0.4
September	3.7	1.9
October	37.2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

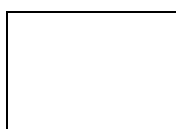
The total extension of time shall be the algebraic sum of all monthly totals for the contract period, but if the algebraic sum is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for a part of a month shall be calculated using pro rata values of Nn and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

2.1.7 Guarantee (Security) (CL 6.1)

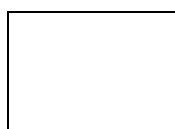
Delete the contents of the first paragraph of Clause 6.2 and insert:



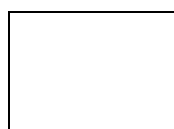
Contractor



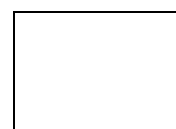
Witness 1



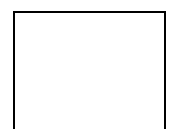
Witness 2



Employer



Witness 1



Witness 2

"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,



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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

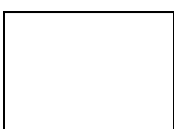
9.2.2.4 Has failed to remove materials from the Site or to pull down and replace work within fourteen (14) days after receiving from the Engineer written notice that the said materials or work have been condemned and rejected by the Engineer in terms of these conditions, or

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

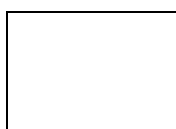
9.2.2.6 Has, to the detriment of good workmanship or in defiance of the Engineer's instructions to the contrary, sublet any part of the Contract, or

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.

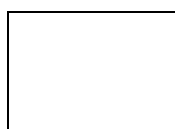
9.2.3 If the Contractor, having been given notice to rectify a default in terms of 55.2 above, rectifies said default, but later repeats the same or substantially the same default, then the Employer may notify



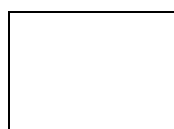
Contractor



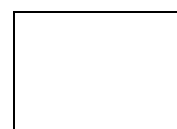
Witness 1



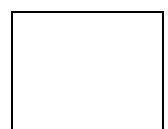
Witness 2



Employer



Witness 1



Witness 2

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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

rights, title and interest in and to the materials and goods, for which evidence of bona fide ownership is attached hereto, unto and in favor 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.

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.

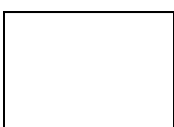
This certificate of Transfer of Rights applies only to the materials and goods as listed in the following table:

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

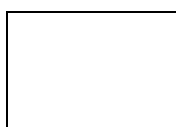
Signed by: **Date:**
for and on behalf of the Contractor.

Witnessed by: **Date:**

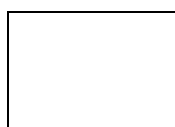
NOTE: This form, together with the documentary proof of ownership or proof of payment by the Contractor to the supplier, shall accompany the Contractor's claim for payment for materials on site in terms of **Clause 6.10.1.5 of the General Conditions of Contract 2010**.



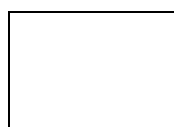
Contractor



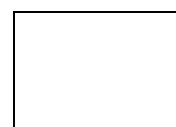
Witness 1



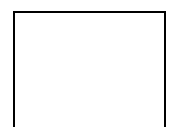
Witness 2



Employer



Witness 1



Witness 2

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 2985

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 8484

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 5% 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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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 0.01 % 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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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).

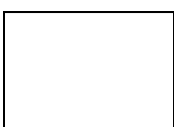
Clause 6.8.3: The variation in cost of all special materials is to be provided in the table SM 1 for special materials.
The rates and prices for the special materials shall be furnished by the Bider, which rates and prices shall not include VAT but shall include all other obligatory taxes and levies. **The quoted price is the ruling price on the Month prior to close of bid.**

TABLE: SM1

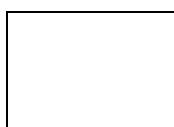
Special Materials*	Unit	Rate or Price for the base month
.....		
.....		
.....		
.....		
.....		

*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.

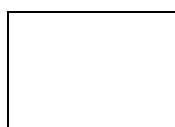
N.B. Diesel, reinforcing steel, and cement will not be accepted as special material.



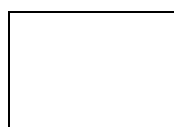
Contractor



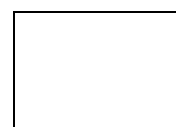
Witness 1



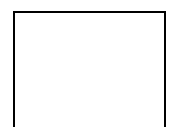
Witness 2



Employer



Witness 1



Witness 2

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 **SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS** 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

.....



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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

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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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:

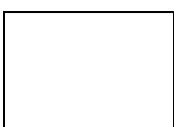
(Signature): (Signature): (Signature):

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

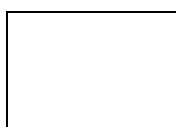
who warrants that he/ she is
 duly authorised to sign for and
 on behalf of the **First Party** in

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

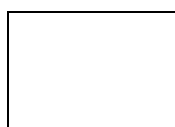
the **Adjudicator** in the
 presence of



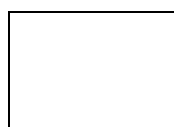
Contractor



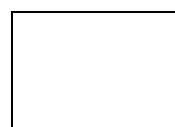
Witness 1



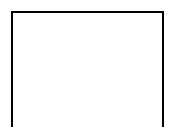
Witness 2



Employer



Witness 1



Witness 2

the presence of

Party in the presence of

Witness: (Signature).....	Witness: (Signature).....	Witness: (Signature).....
Name:	Name:	Name:
Address:	Address:	Address:
.....		
.....		
Date:	Date:	Date:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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: SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS 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 OHSA 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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

EPHRAIM MOGALE LOCAL MUNICIPALITY

SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS

In

EPHRAIM MOGALE LOCAL MUNICIPALITY

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.

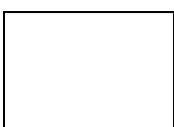
2. DOCUMENTS MUTUALLY EXPLANATORY

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.

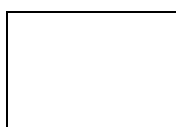
3. DEFINITIONS

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

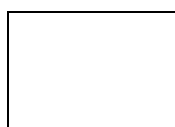
Unit	:	The unit of measurement for each item of work as defined in the pricing schedule and bill of quantities.
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of measurement at which the Bidder Bids to do the work.
Amount	:	The product of the quantity and the rate Bided 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



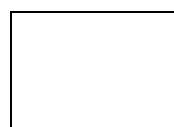
Contractor



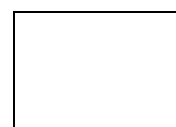
Witness 1



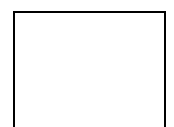
Witness 2



Employer



Witness 1



Witness 2

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.

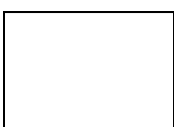
A price or rate is to be entered against each item in the schedule of quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the schedule

6. UNITS OF MEASUREMENT

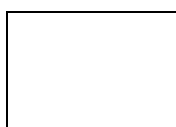
The units of measurement indicated in the Bill of Quantities are metric units.

The following abbreviations are used in the Bill of Quantities:

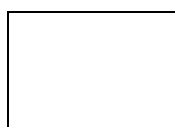
%	=	per cent
h	=	hour
ha	=	hectare



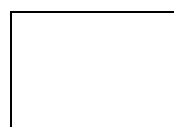
Contractor



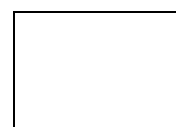
Witness 1



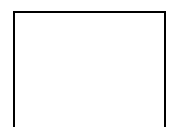
Witness 2



Employer



Witness 1



Witness 2

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.

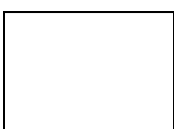
The Contract Amount to be determined in accordance with the conditions of contract identified in the Contract Data shall be computed from the actual quantities of authorized work done, value at rates determined in terms of the Contract Data, against the respective items in the Bill of Quantities.

9. **CURRENCY**

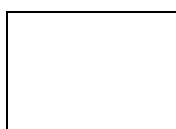
All rates and sums of money quoted in the Bill of Quantities shall be in Rand and whole cents. Fractions of a cent shall be discounted.

10. **VALUE ADDED TAX**

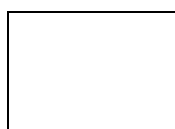
Value Added Tax shall be excluded from the rates and sums contracted for the various items of work included in the Bill of Quantities. VAT will be added as a single entry to the summary.



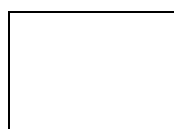
Contractor



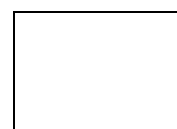
Witness 1



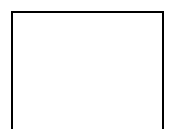
Witness 2



Employer



Witness 1



Witness 2

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.

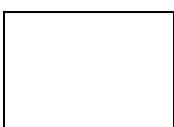
11.2 "Rate only" items

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.

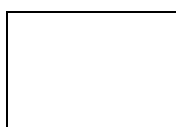
11.3 Arithmetic

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.

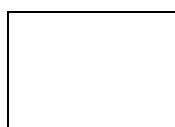
If there is an error in the line item resulting from the product of the unit rate and the quantity, the rate shall be binding and the error of extension as entered in the Bid offer will be corrected by the Employer in determining the Contract Price.



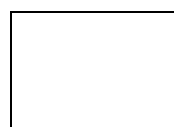
Contractor



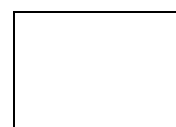
Witness 1



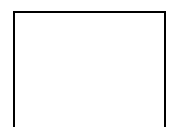
Witness 2



Employer



Witness 1



Witness 2

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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

C2.2 Bill of Quantities

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	<u>SITE ESTABLISHMENT</u>				
1.1	Site establishment and all company related overhead costs – travelling, transport, accommodation, storage, generator hire etc.	sum	1		
2	<u>ADMINISTRATIVE</u>				
2.1	Contractors obligation in respect of compliance with health and safety requirements	sum	1		
2.2	Submission of the Health and safety file/plan	sum	1		
Total for Bill No. 1 Carried forward to summary page					



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

BILL NO. 2 : MATERIAL

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

Item	Location and Description of work	Unit	QTY	Rate	Amount
1	All material and equipment to measure, record, communicate and report the performance and compliance of the 11kV electrical supply at the incomers in the three 11kV substations according to NRS 048.				
1.1	Power quality recorder with mounting bracket as specified in C 4.2.1	No	6		
1.2	Antenna, including 15meter lead with connector.	No	6		
1.3	Modem for GPRS communication with sim card including connector if modem is not included in recording device.	No	6		
1.4	Software to communicate with devices and to generate NRS 048 compliance reports according to NERSA requirements including 12 month license(see details on license requirements in C 4.2.1)	No	1		
1.5	Miscellaneous: Screws, bolts nuts, wire, terminals, heat shrink, rails, tape labels etc	Sum	1		
Total for Bill No. 2 Carried forward to summary page					



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

BILL No. 3 : LABOUR					
Item	Description	Unit	QTY	Rate	Amount
1	Complete installation of hardware (recorders, brackets, wiring, antenna, sim cards as well as communication and software).				
1.1	Installation of hardware in substations: Recording device, bracket, modem, antenna with wiring	No	6		
1.2	Installation of software: Installation of all required software, configuration/set-up of instruments and software, link with modems and generating NRS 048 reports to proof compliance	Sum	1		
Total for Bill No. 3 Carried forward to summary page					

BILL No. 4 : OTHER					
Item	Description	Unit	QTY	Rate	Amount
1.1	Software license for a single user for 1 year (if license is required)	no	1		
1.2	Extended warranty – 5 years (on instruments/recorders)	no	6		
1.3	Product Training – 2 persons for 4 hour session	Sum	1		
Total for Bill No. 4 Carried forward to summary page					



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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	
	TOTAL	
5	CONTINGENCIES 10% of project value	
	TOTAL FOR BILLS OF QUANTITIES SECTION C (excl. VAT)	
		VAT
		TOTAL

CARRIED FORWARD TO FORM OF OFFER

90

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

EPHRAIM MOGALE LOCAL MUNICIPALITY

SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS

In

EPHRAIM MOGALE LOCAL MUNICIPALITY

C3: SCOPE OF WORK

Table of Contents:

C3.1 STANDARD SPECIFICATIONS

C3.2 PROJECT SPECIFICATIONS

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 - 2.5 Preliminary Hazard Identification and Risk Assessment
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3. Financial Provision for Health and Safety
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Employer

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EPHRAIM MOGALE LOCAL MUNICIPALITY

SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS In EPHRAIM MOGALE LOCAL MUNICIPALITY

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 2EP rating and relevant experience is already familiar with the relevant electrical construction environment and its applicable standards.

The instruments shall meet and exceed the requirements as set out in NRS 048 and must measure all the parameters of a 11 000volt three phase network. The sampling and incident recording speed is critical.

OHS Act	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) including the Electrical Machinery Regulations.
NRS 013	Medium Voltage Cables
NRS 033	Electricity distribution
NRS 040	High-Voltage operating regulations
NRS 047-1	Quality of service – minimum standards
NRS 047-2	Quality of service – reporting guidelines
NRS 048-1	Quality of Supply – Overview on implementation of standards and procedures
NRS 048-2	Quality of supply-Voltage characteristics, compatibility levels, limits and assessment methods.
NRS 048-3	Quality of Supply – Procedures for measurement and reporting
NRS 048-4	Quality of supply-Application guidelines for utilities
NRS 048-5	Quality of supply-Instrumentation and transducers for voltage quality monitoring and recording
NRS089-1	Maintenance of Electrical Networks – Underground distribution systems
NRS089-2-1	Maintenance of Electrical Networks – Overhead distribution systems
SANS A	General
SANS 1885/NRS003	AC, metal enclosed switchgear and control gear for rated voltages above 1kV and up to and including 36kV.
SANS 10396:	Implementing Preferential Construction Procurement Policies using Targeted Procurement Procedures
SANS 10142-Past 1	Wiring of premises – Low Voltage Installations
SANS 10142-Part2	Wiring of premises – Medium-voltage installations above 1kV a.c. not exceeding 22kV a.c. and up to and including 3 MVA installed capacity
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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

EPHRAIM MOGALE LOCAL MUNICIPALITY

SUPPLY AND INSTALL QUALITY OF SUPPLY RECORDERS In 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 measure the performance of the 11 000volt distribution network which includes compliance with NRS048(all parts). Phase one is to install adequate recording and communication equipment in the three 11 000volt indoor substations. Measurement inputs will be from the existing measurement CTs and VTs. The information on the recording devices must be remotely accessible from the offices of the Municipality. The communication equipment to achieve this must be supplied and installed. The necessary software and license must be provided, installed and configured to link with all the instruments. On completion the installed system must be able to generate the specific reports as required in NRS048 to prove compliance and performance within NRS048 specifications as well as general network data for load assessment and energy consumption. The existing Vodacom GPRS sim cards must be used and if necessary must be converted to the correct size. The existing equipment must be removed and handed over to the Municipality.

The aim is also to limit the inconvenience /losses experienced by customers by scheduling work that require a shutdown or supply interruption to after hours or weekends. A three day notice will have to be served on customer who will be affected by shutdowns and supply interruptions.

Extent of works

The scope of work comprise of the following:

- Source required material
- Remove old equipment

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- Install new recording devices and communication modems
- Connect and label all the equipment
- Convert sim cards if necessary
- Supply and install the necessary software
- Configure instruments modems and software
- Commission and test
- Generate reports – NRS 048 format and network load data
- Provide training to two officials on the usage of the system

Note: The description of the works is not necessarily limited to the above items.

PS-2 DESCRIPTION OF THE SITE AND ACCESS

1.1 Location of site

The following details provide the key elements of the project area.

- Limpopo Province, Sekhukhune District
- Municipal Area : Ephraim Mogale local Municipality
- Marble Hall town

The actual sites will be the three indoor substations located in the town of Marble Hall. The direct line distance between the substations is ± 1 km. The work will be done inside the substation buildings and the weather should therefore not impact the implementation of the project. The sites are always accessible and the coordinates will assist with the exact location. The site shall not only be the building 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.

Main Substation 24°58'10.19"S, 29°18'03.12"E

OTK Substation 24°58'24.69"S, 29°17'33.24"E

Industrial Substation 24°58'57.64"S, 29°17'08.83"E

2.2 Access to site

Access to the substations can be obtained from the street but the Main Substation have a 320meter gravel access road. The Municipality will assist with the arrangement of access. There is no time limit on access to the sites but where interruptions will cause the interruption of production or business the shutdowns need to be arranged in advance with approval of the Electrical Department. The Electrical Department will issue a permit to work for each site.

PS-3 DETAILS OF THE WORKS

The project will have the following main items:

- Source required material

Determine what material will be required and purchase/order all material and equipment.

- Remove old equipment



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

The existing recording equipment must be removed:

Main Substation: 2 x IMPEDOGRAPH and modem

OTK Substation: 2 x IMPEDOGRAPH and modem

Industrial Substation: 1 x Vectograph and modem

If the existing brackets will not be required or will not be suitable they must also be removed.

- Install new recording devices and communication modems

Fit mounting brackets and rails for the new recording devices and modems. There will not be enough space inside the breaker panels.

- Connect and label all the equipment

Wiring must be installed from the existing CT and VT panel terminals with suitable terminals, connectors and wiring. The antenna cables might have to be extended to achieve adequate signal strength. If should be necessary to move the antennas outside the building they must be mounted high enough to prevent easy tampering. Suitable brackets might then be required. The wiring must be labelled/marked and the recorders and modems must be marked with the relevant IP addresses and sim numbers.

- Convert sim cards if necessary

The existing sim cards is the standard size and if that will not be suitable the cards must be trimmed if possible and if not a sim swap must be done.

- Supply and install the necessary software.

The necessary software must be provided to enable local downloading of instruments with a laptop and software for remote downloading. The software must be installed with at least a 12 month license. If the remote software requires an annual license a free software package for onsite downloads must also be provided for onsite downloads (excluding support, updates and subcontracted management)

- Configure instruments modems and software

The new recorders must be setup according to the requirements of the Municipality as well as the NRS 048 requirements. The communication must then be set-up to link to the remote monitoring PC. The software must be configured for the specific installation.

- Commission and test

The system must then be tested to ensure reliable recording and communication with easy access and downloads.

- Generate reports – NRS 048 format and network load data

The software must be configured to use the downloaded for testing to generate samples of the NRS 048 reports in soft and hardcopy.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

- Provide training to two officials on the usage of the system

The service provider must provide training for two Municipal official on the proper use of the system to enable them to recover the data on site and remotely and how to then access the data in a usable format. The trainees must be able to generate reports especially the NRS 048 require reports.

3.1 Roadwork's

There should be no road works.

3.2 Structures

No major structure was identified.

3.3 Ancillary works

None

3.4 Traffic

Most of the work will be on pavements next to roads/street constantly in use by pedestrians, vehicles and in some cases heavy vehicles. The contractor must be careful. Sites must be supervised at all times while work is being done.

3.5 Nature of ground conditions and subsoil conditions

Not applicable.

3.6 Climatic conditions

Climatic conditions should not have impact because the work are is in the substation buildings. This are 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:

Nearly all work will be done indoors except the mounting of the antennas if signal strength is a problem. 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.

3.7 Labour recruitment conditions

It is assumed that the work will be carried out by experienced staff with special training and no local labour requirement is specified for this project.

4.11 Construction in confined Areas

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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. For the servicing of pole mounted transformers the Municipality will make its aerial platform available at no cost if the aerial platform is available and operational. This does not relieve the Contractor from the responsibility to service the specific units within the set time frames and it is not imposing an contractual obligation on the Municipality.

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)

There will be no drawings supplied for the bidding process except for the drawings included in the bid documentation. Drawings of the substation panels will be available for the implementation of the project. The Contractor will be supplied with a town map to assist in the location of the equipment and will be assisted by Municipal officials in doing so. The contractor will update the relevant panel drawings.

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

4.3.1 There will be no additional design required for the project as it is only placement of equipment. The Municipality and Contractor shall agree on site as to the best placement of equipment.

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 material delivery times 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) The scheduling of work to limit the impact on business and industry

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:

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

- (a) 2 weeks must be allocated at the start of the project for the inspection, planning and scheduling of the work.
- (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.

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)*

Not applicable

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

4.7.1 Borrow pits and spoil areas

Not applicable.

4.8 Testing

All the supplied and installed equipment must be tested, This includes the recorders, modems software and communication.

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 the work complies with the specification of the Municipality as



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

well as the certificates for the safe disposal of electronic equipment.

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 arrange suitable storage for material and accommodation for his personnel and labourers. This must include all services and 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 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 work site.

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.

There are no ablution facilities at the work sites and employees should have transport to use the ablution at their accommodation or public facilities during working hours. The distance to facilities will be around 1km.

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

Not applicable.

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 wiring and equipment operation on site before drilling, mounting, cutting, disconnecting or connecting anything. It is the contractor's responsibility to identified equipment that will interact with the construction work. Should any construction work require an interruption of existing services the contractor will be responsible to do the necessary application for the interruption of the service and where such an interruption will impact customers the customers must be notified 3 days in advance.

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.

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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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

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Witness 1



Witness 2



Employer



Witness 1



Witness 2

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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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.

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 OHS : OHS 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 OHS 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 OHS 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

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Witness 1



Witness 2



Employer



Witness 1



Witness 2

- 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 OHS 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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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.

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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

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(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 OHS 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 (OHS 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 (OHS 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)

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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.



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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



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(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

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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.

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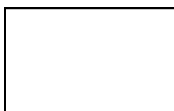
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(b) Records and Registers

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.

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C4: SITE INFORMATION

- C4.1 LOCALITY PLAN
- C4.2 TENDER DATA

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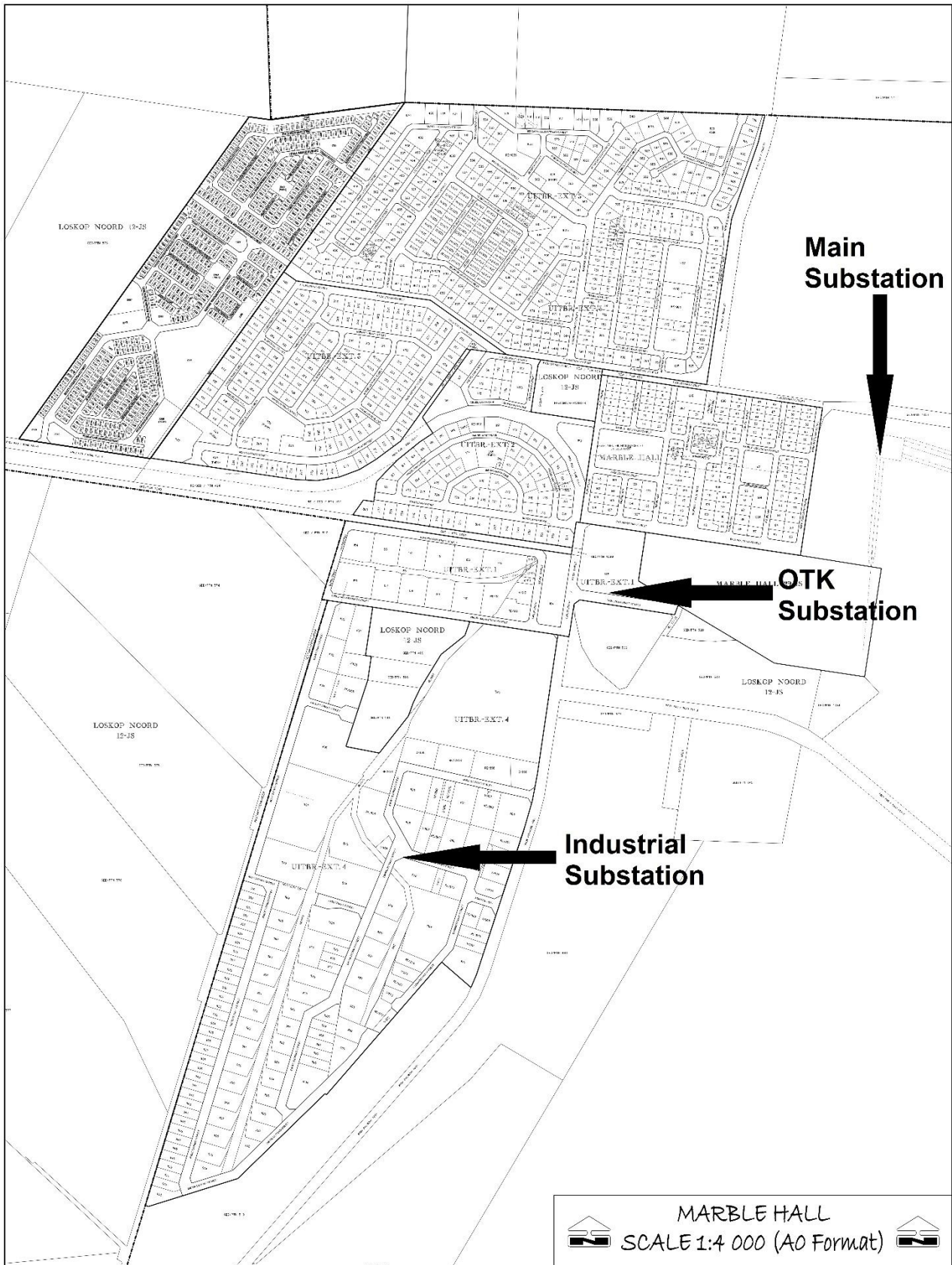
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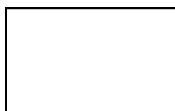
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C4.1 LOCALITY PLAN



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C4.2 TENDER DATA

DESCRIPTION	DOCUMENT NO.
EQUIPMENT SPECIFICATION	C4.2.1
EXISTING EQUIPMENT IN SUBSTATIONS	C4.2.2

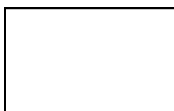
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C4.2.1 EQUIPMENT SPECIFICATION

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1. Safety Standards Compliance
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 - 4.1. Power Supply
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 - 4.6. Digital inputs
 - 4.7. Ethernet Ports
 - 4.8. WIFI

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1 Safety Standards Compliance

The instrument shall comply to the IEC61010-1 safety standard:

1.1 Pollution: Degree 2

1.2 Over-voltage category: CAT III

1.3 Measurement category: CAT III

The instrument shall comply to the IEC60529 protection standard:

1.4 Penetration of dust & water: Class I

1.5 IP Rating: IP52

1.6 Inadvertent contact

2 Product Description

Comprehensive multi-function IEC 61000-4-30 Class power quality recorder with GPS-locked time synchronisation.

2.1 The single feeder instrument shall have:

2.2 4x voltage,

2.3 4 x current sensor and

2.4 4 x powered current transducer inputs.

2.5 on-board GPS,

2.6 2 x Gigabit Ethernet ports,

2.7 a USB2.0 (HS) expansion port,

2.8 4 x digital inputs (5V power available) and

2.9 4 x digital outputs.

3 Instrument Overview**3.1 Key Features**

VOLTAGE INPUTS	
Number of channels	4 x differential (3/4 Wire + 4th Diff)
Measurement input range	0-600VAC ±850VDC
Input impedance	> 1MΩ
CURRENT INPUTS	
Number of channels	4 x galvanically isolated
Measurement input range	0-6AAC ±8ADC
Max continuous current	10ARMS
3 sec Overcurrent withstand	50ARMS
VA burden @ 5ARMS	< 1VA
Galvanic isolation	1kV



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CURRENT TRANSDUCER INPUTS	
Number of channels	4 x differential
Measurement input range	0-1VAC $\pm$ 1.5VDC
Input impedance	> 200k Ω
DIGITAL INPUTS	
Number of channels	4 x galvanically isolated
Max voltage input	300VDC
DIGITAL OUTPUTS	
Number of channels	4 x galvanically isolated
Max voltage, current	300VAC, 100mAAC
ACCURACY & BANDWIDTH	
Overall accuracy	0.1% on reading (10%-100%)
Power frequency measurement range	DC, 40-60Hz, 50-70Hz
Harmonic & interharmonic bandwidth	1-64th, 2-9kHz
Synchronised data sampling rate	500kHz
Fast transient capturing	>20 μ s
ADC Resolution	16-bit

The system shall record both voltages and currents of a single 3-phase feeder with IEC 61000-4-30 Class A performance.

3.1.1 Voltage inputs:

3.1.1.1 Class A performance over all of the input range inclusive of 63.5 V (if L- N measurements are done in a 110 V line-line VT circuit)

3.1.1.2 6 terminals are used for 4 voltage input channels with maximum input ratings of 600 V.

3.1.1.2.1 The first 4 terminals connect 3 different phase voltages such as in a 3-phase system.

3.1.1.2.2 Input channel 1-3 is referenced to a neutral (4th terminal) connection. This 4th terminal acts as a reference channel and can be any phase voltage if a 3-phase line-line voltage circuit is measured.

3.1.1.2.3 If it is a 3-phase line-neutral voltage circuit, then the 4th terminal will be connected to the neutral voltage.

3.1.1.2.4 The 5th and 6th terminal is the 4th channel and a fully differential (2 terminal) input channel.

3.1.2 Current inputs:

3.1.2.1 4 X 1/5 A CT inputs

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3.1.2.2 4 X 1 Vrms differential voltage transducer inputs with a 5 V power supply (to be used to power Rogowski coils).

3.1.3 Digitisation of input signals

3.1.3.1 500 kHz sampling of primary input signals.

3.1.3.2 50 kHz is digitally retained and subjected to the IEC 61000-4-30 Class A signal processing requirements.

3.1.4 Power supply

3.1.4.1 PoE and/or a 90-300 V AC/DC power factor corrected power supply

3.1.4.2 1/2 hour power failure ride-through via an internal LiFePO4 battery.

3.1.5 Data storage

3.1.5.1 4 GB on-board storage providing data storage of all IEC 61000-4-30 voltage and current 10-minute values up to the 63rd harmonic component.

3.1.6 Time stamping

3.1.6.1 GPS time synchronization resulting in a time-stamping certainty better than 1 μ s

3.1.6.2 PTP time synchronization resulting in a time-stamping certainty better than 100 μ s.

3.1.6.3 NTP time synchronization as an option.

3.1.7 Communication

3.1.7.1 Communication is via Ethernet

3.1.7.2 Modbus over Ethernet

3.1.7.3 DNP3 over Ethernet.

3.1.7.4 IEC 61850 – optional.

3.1.8 Advanced triggering

3.1.8.1 User-configurable triggering between different instruments: the patented Xross-Trigger feature

3.1.9 Configuration of instrument

3.1.9.1 has to be configured by means of an Ethernet connection to a local laptop with Osprey Lite installed.

3.1.10 Data analysis and reporting

3.1.11 Must support Osprey Lite.

3.1.12 generates both NRS 048 and EN 50160 PQ reports.

3.1.13 allows basic and advanced analysis of PQ waveform events and trends.

3.1.14 Data can be exported to in .csv and PQDIF format for additional analysis in third party software packages.

3.1.15 Data downloading can be automated by configuration of the Vecto III with Osprey Lite

3.2 External Interfaces

3.2.1 Voltages

The voltage inputs must interface directly to 110 V VT circuits or directly to a mains connection, which has to be less than 600 V line to neutral.

3.2.1.1 Voltage measurements are differential.

3.2.1.2 6 input terminals for voltages are used.

3.2.2 Currents

Permanently installed 1 A or 5 A CT's, or clamp-on CT's interface directly to the galvanatically isolated current inputs.

3.3 Power source

The system/ instrument shall be powered from a power factor corrected AC supply input (90–300 V AC/DC).

It can also be powered from an IEEE 802.3-2008 compliant PoE Plus (< 12 W) source.

3.4 Communication

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Two (2) Gigabyte Ethernet ports facilitate local and networked external communication. One port is used to interface with corporate networks (DHCP or fixed IP support). The second Ethernet port is used to create a local network by means of being a local DHCP server. Please refer to Section 2.4.10 for more detail.

The instrument supports WIFI communication.

3.5 Osprey Pro (Enterprise Support)

When connected, each instrument in the system shall automatically establishes a permanent secure communication link to a corporate server (local or internet based). An instrument management system (IMS) keeps track of each instrument's location, configuration, health (telemetry) and PQ data recorded.

Downloading of data is automated and recorded data can be accessed via the Internet in graphical, tabled and report form as and when it becomes available. Raw data can be analysed in Osprey Lite™ or exported for further analysis in for example Microsoft Excel™ or Matlab™.

Osprey Lite™ simplify the analysis of waveform events such as dips and swells by the time-aggregation of multiple waveform events to single network incidents.

Osprey Lite™ classify and report on recorded data according to industry standards such as NRS048, EN50160 and IEE1158. All communications are encrypted and each instrument is password protected.

3.6 Sampling Rate

The instrument shall sample all analog input signals at a rate of 500 kHz (10 000 samples per cycle) and then digitally down-sample the data to 50 kHz (1000 samples per cycle). All IEC 61000-4-30 parameters are calculated based on this 50 kHz resolution for both voltage and current.

Waveform and other events are triggered from the 500 kHz digitised waveforms. These waveforms are locked to the fundamental frequency to prevent multiple zero crosses.

Captured waveform data can be further subsampled to reduce stored data size. The user can configure the waveform-sampling rate from 1 kHz to 50 kHz.

3.7 The 1/6th Sense

The system shall calculate a complete set of 1-cycle sliding RMS and fundamental phasor parameters on each of the 3 voltage phases resulting in a resolution of 6 values per cycle per phase. The IEC 61000-4-30 Class A requirements are based on a $\frac{1}{2}$ cycle sliding approach. This higher resolution data improves the detail of the event profile and enable more accurate depth/duration calculations.

3.8 Event Recording

Users can customise the recording of an event.

Upper and/or lower thresholds to define an event can be set by the user based on waveform, 1/6th sense, 10/12-cycle block and aggregated parameters.

Single-phase and multiple-phase triggers can be defined.

3.9 10/12-Cycle Block Recording

The system shall record all RMS and harmonic data from each 10/12-cycle block (≈ 200 ms block) for both voltage and current as prescribed the Class A performance requirements of the IEC 61000-4-30, edition 3.

These block values contain both amplitude and angle information of all voltage and current harmonic components up to the 63th harmonic order.

Each block is time-stamped with a 20 μ s time resolution and within a 1 μ s time uncertainty¹.

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The user can average N x blocks to reduce the sampling rate for the number of blocks up to 299 blocks².

3.10 Variable time interval trends

10/12-Cycle block RMS and harmonic parameters are aggregated according to IEC 61000-4-30 requirements over a user-defined time interval (1 to 30 minutes).

Clock synchronised parameters are time-stamped with a 1 second time resolution.

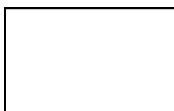
3.11 Synchrophasors

The system shall also act as a phasor measurement recorder, with the option of recording of 50 Hz (or 60 Hz) synchrophasors

3.12 Measured parameters

MEASURED PARAMETERS	Waveforms	1/6 th Cycle	10/12 - Cycle block	10/12 - Cycle	10/12 - Cycle Inter-	Aggregated	Aggregated	Aggregated
VOLTAGE								
Frequency (Hz)		✓	✓			✓		
Voltage (Volt)	✓	✓	✓	✓	✓	✓	✓	✓
Voltage (% of Nominal)		✓	✓	✓	✓	✓	✓	✓
Voltage (% of Fundamental)				✓	✓		✓	✓
Voltage Phase Angle (Degrees)		✓	✓	✓				
Voltage Unbalance (%)		✓	✓	✓		✓	✓	
V-Positive Amplitude (Volt)			✓			✓		
V-Positive Angle (Degrees)			✓					
V-Negative Amplitude (Volt)			✓			✓		
V-Negative Angle (Degrees)			✓					
V-Zero Amplitude (Volt)			✓			✓		
V-Zero Angle (Degrees)			✓					
Voltage Under-Deviation			✓			✓		
Voltage Over-Deviation			✓			✓		
Voltage THD			✓			✓		
Flicker (Pst)			✓			✓		
Flicker (Plt)						✓		

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Witness 1



Witness 2



Employer



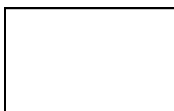
Witness 1



Witness 2

MEASURED PARAMETERS	Waveforms	1/6 th Cycle	10/12 - Cycle block	10/12 - Cycle	10/12 - Cycle Inter-	Aggreg ated	Aggreg ated	Aggreg ated
CURRENT								
Current (Ampere)	✓	✓	✓	✓	✓	✓	✓	✓
Fundamental Current		✓	✓	✓	✓	✓	✓	✓
Current Phase Angle (Degrees)		✓	✓	✓				
Current Unbalance (%)		✓	✓	✓		✓	✓	
I-Positive Amplitude (Ampere)			✓			✓		
I-Positive Angle (Degrees)			✓					
I-Negative Amplitude (Ampere)			✓			✓		
I-Negative Angle (Degrees)			✓					
I-Zero Amplitude (Ampere)			✓			✓		
I-Zero Angle (Degrees)			✓					
Current THD			✓			✓		
Current TDD (%)			✓			✓		
Crest Factor		✓	✓			✓		
K-Factor			✓			✓		

MEASURED PARAMETERS	Waveforms	1/6 th Cycle	10/12 - Cycle block	10/12 - Cycle	10/12 - Cycle Inter-	Aggreg ated	Aggreg ated	Aggreg ated
POWER								
Active Power (Watt)		✓	✓	✓	✓	✓	✓	✓
Reactive power (VAR)		✓	✓	✓	✓	✓	✓	✓



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Witness 1



Witness 2



Employer



Witness 1



Witness 2

Apparent Power (VA)		✓	✓	✓	✓	✓	✓	✓
Power Angle (Degrees)		✓	✓	✓	✓	✓	✓	✓
Power Factor		✓	✓	✓	✓	✓	✓	✓
POWER – IMPORT								
Imported Active Power (Watt)			✓			✓		
Imported Reactive Power (VAR)			✓			✓		
Imported Apparent Power (VA)			✓			✓		
Imported Power Angle (Degrees)			✓			✓		
Imported Power Factor			✓			✓		
POWER – EXPORT								
Exported Active Power (Watt)			✓			✓		
Exported Reactive Power (VAR)			✓			✓		
Exported Apparent Power (VA)			✓			✓		
Exported Power Angle (Degrees)			✓			✓		
Exported Power Factor						✓		

4 Technical Specification

VOLTAGE INPUTS	
Number of channels	4 x differential inputs (3/4 Wire + 4 th Diff)
Measurement input range	0 – 600 V _{RMS} (V _{LN}), 0 – 1000 V _{RMS} (V _{LL})
Voltage measurement	Single Phase, 3-Phase (Star, Delta), DC
Input impedance/channel	> 1 M Ω
CURRENT INPUTS	
Number of channels	4 x galvanically isolated inputs
Measurement input range	0 - 5.0 A _{RMS}



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Witness 1



Witness 2



Employer



Witness 1



Witness 2

Maximum continuous current	6.0 A _{RMS}
3 sec over-current withstand	50 A
VA Burden @ 5A	< 1 VA
Galvanic isolation	1,000 V
CURRENT TRANSDUCER INPUTS	
Number of channels	4 differential inputs
Measurement input range	0 – 1.0 V _{RMS} ($\pm$ 1.414 V Peak)
Input impedance/channel	> 1 M Ω
DIGITAL INPUTS	
Number of Channels	2 sets of 2 galvanically isolated digital outputs

Switch Rating	0.1 A _{RMS} , 300 V _{RMS} (max)
ACCURACY & BANDWIDTH	
Power frequency range	DC, 50 Hz (40-60 Hz), 60 Hz (50-70 Hz)
Harmonic bandwidth	1-64 th (harmonic and inter-harmonic)
Measurement sampling rate	0.5 MHz (simultaneously sampled)
Waveform storage rate	1 kHz – 50kHz (user configurable)
ADC Resolution	16-Bit
Overall accuracy class	0.1%
Fast Transient Capturing	$\geq$ 20 μ s
COMMUNICATION	
Ethernet	2 x Gigabit Ethernet – IEEE 802.3.2008 compliant
USB	USB 2.0 – 480 Mbit (powered)
CLOCKS	
On-Board GPS	On-board 3V3 power for active external antennae
Overall accuracy Class	$\pm$ 1 μ s from absolute time

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Witness 1



Witness 2



Employer



Witness 1



Witness 2

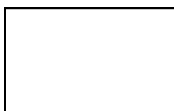
On-Board RTC drift	10 ppm (320 seconds per annum)
	NTP, PTP
POWER	
Maximum Power Consumption	< 15 W

AC / DC supply voltage input range	90-300 V _{RMS} 42-69 Hz (power factor corrected)
Power over Ethernet	IEEE 802.3 compliant (35-60 V _{DC})
On-board battery	LiFePO ₄ (2,000 charge/discharge cycles)
PHYSICAL	
Construction	Aluminium, 250 x 135 x 65 (L x W x H)
Mounting options	3U-19" Rack, Panel Mount, Portable Case
Electrical connections	Pluggable screw type (screw lock-down)
Electrical isolation class	600 V Class II
Operating temperature	-10 °C to 55 °C (ambient) 0 °C to 70 °C (device internal)
Storage temperature	-10 °C to 70 °C
Operating humidity	0-95% (non-condensing)
Weight	1.9 kg
COMPLIANCE	
PQ Measurement	IEC 61000-4-30, Class A
Harmonics	IEC 61000-4-7
Flicker	IEC 61000-4-15
SCADA	IEC 61850

4.1 Power Supply

The instrument shall be powered and charged directly from mains (90 – 300 V AC/DC) via a power factor corrected internal power supply, or can also be powered and charged via an IEEE

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

802.3-2008 compliant Power over Ethernet (PoE) power supply.

The system shall have a built in battery that will power the instrument for up to a half an hour in the absence of power.

4.2 Voltage Inputs

The system shall have 4 resistive differential voltage inputs made up of 6 terminals. Input voltages can be up to 600 VAC-RMS. The 20 mV resolution results in accurate recording of all harmonic components up to the 63rd harmonic component.

4.3 Current Inputs

The system shall have 4 galvanically isolated resistive current shunt inputs with input impedance of 20 m Ω and a full-scale measurement range of 6 AAC-RMS.

4.4 Current Transducer Inputs

The system shall have 4 voltage-output current transducer inputs with a full-scale rating of 1.4 VAC-RMS.

4.5 Relay Outputs

The system shall have four digital relay outputs (100 mAAC-RMS, 350 VAC-RMS) to provide digital output information or to control external processes.

4.6 Digital inputs

The system shall have digital inputs that are arranged into two clusters (1 kV isolation); each containing two digital inputs (300 VAC-RMS) and a 5 V power source with a common. These inputs are to be used to attain information like breaker position or disturbance information that can be added to the PQ events/data.

4.7 Ethernet Ports

The system shall have 2 Gigabit Ethernet ports with IEEE 802.3-2008 compliant Power over Ethernet (PoE) on both Ethernet ports. USB Peripheral Port

The system shall have a powered USB2.0 compliant (450 MBit) USB port is used to interface to external peripherals such as Memory sticks, WiFi dongles, GPRS modems, RS485 serial ports, external I/O modules.

4.8 WIFI

The system shall be able to communicate via WIFI either as an access point or with existing supported infrastructure access points Built-in GPRS Modem (Optional)



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

C4.2.2 EXISTING EQUIPMENT IN SUBSTATIONS**MAIN SUBSTATION:**

7 Breakers of which one is the bus bar coupler – RPS Switchgear

Manufacturer: RPS Switchgear
 Type: LMVP/RPM1/QMRO
 Rated V: 12kV
 Normal Current Rating: 630A
 Current Rating: 25kA
 Protection relays: Reyrolle Relays TJM10 (6 relays)
 Reyrolle Relays TAA 408J43R (6 relays)

Quality of supply instruments: (two instruments)

Manufacturer: CT Lab
 Type: Impedo Graph
 Quantity: 2

Capasitor Bank

Manufacturer: ABB
 Type: 1 ABB VM1 / P 17.12.32 – Vacuum
 Ser No: 1VC1BD00055357
 Protection Relay: Strike Technologies, RLC 04
 Controller: Nokian, NC-12

Capacitors:

Manufacturer: ABB South Africa
 TYPE: FILM-VAR
 Voltage: 11000V
 Rated Output: 300kVAr
 Phases: 3

Battery Charger:

Manufacturer: Static Power
 Type: IV 0323
 Ser no: 85/1029
 Supply V: 110/220V AC
 Load V: 32V DC
 Batteries: KPL 10, 10Ah, 1.2V

OTK SUBSTATION:

10 Breakers of which one is the bus bar coupler – RPS Switchgear

Manufacturer: RPS Switchgear
 Type: LMVP/RPM1/QMRO
 Rated V: 12kV
 Normal Current Rating: 630A
 Current Rating: 25kA
 Protection: Reyrolle Relays TJM10 (8 relays)
 Reyrolle Relays TAA 408J43R (8relays)
 Schneider SEPAM 20 (1 relay)

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

Quality of supply instruments: (two instruments)

Manufacturer: CT Lab
 Type: Impedo Graph
 Quantity: 2

Battery Charger:

Manufacturer: Static Power
 Type: IV 0323
 Ser no: 85/1029
 Supply V: 110/220V AC
 Load V: 32V DC
 Batteries: KPL 10, 10Ah, 1.2V

INDUSTRIAL SUBSTATION

6 Breakers – Vacuum (one breaker is the bus coupler)

1 bus raiser panel section

Manufacturer: ABB
 Type: VD4/C 17.06.32
 Rated V: 17.5kV
 Normal Current: 630A
 Protection: Relays IM 30AP Microelectrica – Scientifica Milano Italya.(4 relays)
 Relay MCOM P123 – Schneider Electrical (1 relay)

Quality of supply instruments: (two instruments)

Manufacturer: CT Lab
 Type: Vecto Graph
 Quantity: 1

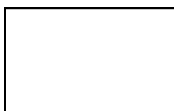
Battery charger/Tripper unit - NEW UNIT 19/02/2019

Manufacturer: Aztec Electronics
 Type: 110 Tripper
 Serial No: 7707
 Job No: 1N07707
 Date: 18/02/2019

INPUT:
 Voltage: 110/220
 Current: 9
 Phase: 1
 Freq: 50

OUTPUT:
 Voltage: 124V (Float)
 Current: 13A
 Rating: Continuous

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Witness 1



Witness 2



Employer



Witness 1



Witness 2

TEST LOAD:

Current: 3A
Resistor: 47

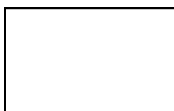
BATTERIES:

Type Gensis
Manufacturer: EnerSys
Capapcity: 13Ah
Cell Type: 12
QTY Cells: 9

Installed in separate metal enclosure.

END OF DOCUMENT

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Witness 1



Witness 2



Employer



Witness 1



Witness 2

