

Description of the service	APPOINTMENT OF A SERVICE PROVIDER FOR ELECTRICAL INFRASTRUCTURE UPGRADE PROJECT: SUPPLY AND INSTALL A 1250 KVA TRANSFORMER, REMOVAL OF EXISTING TRANSFORMER, DB REWIRING, LIGHTING AND SMALL POWER RECTIFICATION, EARTHING & LIGHTNING PROTECTION UPGRADES WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION
Date of issuance	29/03/2026
Closing date and time	29/06/2026@11:00
RFP number	CIDB/004/2627
Telephone number	012 482 7200

CONTACT PERSONS	
All enquiries may be directed to:	Ulizwi Mngoma 012 482 7252 Ulizwim@cidb.org.za
TERMS	
Delivery terms	RFPs response documents to be deposited in the box situated at delivery address
Validity period	90 days
Briefing session	A compulsory briefing session to be held at the cidb Centurion Office Date: 12/06/2026 Time: 11:00
LOGISTICAL (DELIVERY) INFORMATION	
Name of the Office	Construction Industry Development Board (cidb)
Contact Telephone Number	012 482 7200
Physical street address	1267 Gordon Hood Road, Centurion, Pretoria, South Africa Next to Centurion Mall and Anew Hotel
City and Province	Centurion, Gauteng
Name of bidder	

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PART T1: TENDERING PROCEDURE

T1.1 Tender Notice and Invitation to Tender

The Construction Industry Development Board invites tenderers for the Electrical Installation upgrades, 1250Kva Transformer replacement, and the three-year long-term maintenance at the CIDB head office in centurion in centurion. It is estimated that tenderers must have a CIDB contractor grading designation of 5EP or higher.

Project Name	APPOINTMENT OF A SERVICE PROVIDER FOR ELECTRICAL INFRASTRUCTURE UPGRADE PROJECT: SUPPLY AND INSTALL A 1250 KVA TRANSFORMER, REMOVAL OF EXISTING TRANSFORMER, DB REWIRING, LIGHTING AND SMALL POWER RECTIFICATION, EARTHING & LIGHTNING PROTECTION UPGRADES WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION	
Tender Number	CIDB/004/2627	
Tender documents availability	Bid documents are available at no cost in electronic format, downloadable from the cidb website as well as the eTender portal of National Treasury. Bidders must have access to MS Office 2007 and acrobate Adobe 9.0 or later or similar compatible software.	
Address for submission of tenders	1267 Gordon Hood Road, Centurion, Pretoria, South Africa Next to Centurion Mall and Anew Hotel	
Closing date of the tender	29 June 2026	
Closing time of the tender	11:00 am	
Compulsory briefing meeting (<i>Tenderers must sign the attendance register in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance register</i>)	Yes ☒ No ☐	
	Meeting venue	1267 Gordon Hood Road Next to Centurion Mall and Anew Hotel Centurion
	Date	12 June 2026
	Time:	11:00am
Evaluation criteria	1. First stage Mandatory 2. Second stage Administrative 3. Third stage: Functionality 4. Fourth stage: Price and Preferential Procurement 5. Applicable preference points system 80/20	
Mandatory or Compulsory Requirements (<i>failure to submit or comply with these requirements will lead to automatic disqualification</i>)	1. Only those tenderers who are registered with the CIDB or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 5EP or higher class of Electrical Installation, Transformer Works, and Generator Services , are eligible to have their tenders evaluated. 2. Joint ventures are eligible to submit tenders provided that: a) every member of the joint venture is registered with the cidb; b) the lead partner has a contractor grading designation in the EP class of construction work; or not lower than one level below the required grading designation in the class of works construction	

	works under considerations and possess the required recognition status. c) 3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 5EP class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. 3. Bid proposals must be submitted as follows: - Each bid participant must provide one (1) original hard copy document of the entire tender, including all the documentation referred to in this document, in the format as specified. One (1) copy of a flash drive or memory stick containing the bid submission and its documentation, these will become the property of the cidb's and will not be returned. - The original copy must be signed and dated in ink by the bidder or authorized representative of the bidder and initialed on each page.
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T1.2 Tender Data

Clause number	Tender Data
	The conditions of tender are the Standard Conditions of Tender as contained in Annex C of Board Notice 423 of 2019 in Government Gazette No. 42622 of 08 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of tenderers as an Annex to this Tender Data. The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies. The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender.
C.1.3	Wherever reference is made in the documentation to Bill of Quantities it shall also mean Pricing Schedule. Wherever reference is made in the documentation to Service Provider it shall also mean the Tenderer or bidder or contractor.
C.1.1	The Employer is the Construction Industry Development Board
C.1.2	The Tender Part T1: Tendering procedures T1.1 Tender notice and invitation to tender T1.2 Tender data Part T2: Returnable documents T2.1 List of returnable documents T2.2 Returnable schedules The Contract Part C1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Acceptance C1.3 Schedule of Deviations Joint Venture Agreement (If Applicable)

	C1.4 Contract Data The Contract Part C2: Pricing data C2.1 Pricing instructions C2.2 Bills of Quantities Part 3: Scope of work C3.1 Special Notes to Bidders C3.2 OHS Specifications Part 4: Site information C4 Drawings Part D1: Procurement Requirements	
C.1.4	The employer's representative is: Name : Ulizwi Mngoma Tel No. : 012 482 7252 Email : Ulizwim@cidb.org.za However, all communications related to this bid should be directed to the persons indicated under Enquires on this tender document. Attention is also drawn to the fact that verbal information, given by the Employer's agent during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer. Only information issued formally by the Employer in writing to Tenderers will be regarded as amending the Tender Documents	
C.1.5	The employer reserves right to cancel the tender prior to the award of the tender due to the following: a) Funds are no longer available to cover the envisaged expenditure b) Tender irregularities c) The services are no longer required d) No acceptable bids received	
C.1.6	A competitive negotiation procedure will not be followed.	
C.2.1	Eligibility a) Only those tenderers who are registered with the cidb or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 5EP or higher class of Electrical Installation, Transformer Works, and Generator Services , are eligible to have their tenders evaluated. b) Proof of CIDB Grading designations Tenderers are required to provide proof of registration with the CIDB register of contractors indicating the category of registration, grading as well as the CRS number of the tenderer.	

	c) Letter of Good Standing with COIDA Tenderers are required to submit, bound with the tender submission, a letter of good standing from the compensation commissioner indicating that the bidder is in good standing. d) Registered on National Treasury Central Supplier Database. Tenderers, or in the event of a Joint Venture or a Targeted Enterprise, each member of the Joint Venture or Targeted Enterprise, shall be registered on the National Treasury Central Supplier Database at the closing date for tender submissions. Failure to satisfy the eligibility criteria will result in a non-responsive tender
C2.2	Cost of tendering The tenderer accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements
C.2.6	Failure to apply instructions contained in addenda may render a tenderer's offer non-responsive in terms of Condition of Tender C.3.8.2
C.2.7	Compulsory site briefing Compulsory briefing meeting will be held as per Tender invite Tenderers must sign the attendance list in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance list
C.2.8	Request clarification of the tender documents, if necessary, by notifying the employer at least five (5) working days before the closing time stated in the tender data.
C.2.9	No insurance is provided by the cidb
C.2.10	Tenderers are required to state the rates and currencies in Rand. The tenderer is required to submit balanced unit rates for rate only items in the pricing schedule. The rates submitted for these items will be considered in the evaluation of tenders. All rates and/or sums tendered shall not be negative or zero.
C.2.11	Alterations to the documents Bidders are required not to make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations
C.2.12	Alternative tender offer No alternative tender offer is permitted in this tender.

C.2.13.2	<i>Replace sub-clause C.2.13.2 with the following.</i> Return all returnable documents to the employer after completing them in their entirety by writing in non-erasable black ink
C.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original a) The following information must be submitted on hard copy document and a USB flash drive: i) Ensure that all documentation related to the Bid submission is in a printed and bound hardcopy and electronically completed on a flash drive. ii) Wherever it is a requirement to attach certificates or letters to the returnable schedules, these should be included in the hard copy and scanned in, on the flash drive in .pdf format. b) The 1st file in pdf format which contains; i) Scanned copy of Form of Offer (pdf), ii) Scanned copies of all returnable schedules and attachments (pdf), iii) Scanned copy of Pricing Schedule (pdf). c) The 2nd file in Excel format which contains: i) Completed pricing schedule Failure to submit the bid submission in the prescribed format will result in the bid being disqualified.
C.2.13.4	The tender shall be signed by a person duly authorized to do so.
C.2.13.5	The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are: Location of tender box: cidb Head Office Physical address: 1267 Gordon Hood Road, Centurion Identification details: Sealed Tender with Tender reference number, Title of Tender and the closing date and time of the tender.
C.2.15.1	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
C.2.16.1	The tender offer validity period is 12 weeks or 90 days.
C.2.16.2	The tender accepts that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).
C.2.17	Any clarification requested under this clause must be provided within two (2) working days of date of request. Where required during tender evaluation, cidb shall seek clarification from tenderers. No change in the competitive position of tenderers or substance of the tender offer is sought, offered or permitted.

C.2.18	Any additional information requested under the clause must be provided within 5 (five) working days of date of request.
C.3.1	cidb shall respond to clarifications received up to 7 (seven) working days before tender closing date.
C.3.2	cidb shall issue addenda until 5 (five) working days before tender closing date. Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.
C.3.7	Prior to disqualification, cidb shall inform the tenderer and give the tenderer an opportunity to make representations within fourteen (14) days as to why the tender submitted should not be disqualified and as to why the tenderer should not be restricted by the National Treasury from conducting any business with any organ of state for a period not exceeding 10 years. In the event of disqualification, cidb may, at its sole discretion, claim damages from the tenderer and impose a specified period during which tender offers will not be accepted from the offending tenderer and, cidb shall inform the National Treasury in writing.
C.3.8	A Substantially responsive tender is a tender in which all of the material information and documentation submitted at close of tender contains non-material and non-conformities to the bid specifications but are not related to price. The correction of any such documentation or information, or the condonement for the non-inclusion of any such document or information may not be prejudicial towards the offer and claimed preference of any responsive tender or be construed to be giving an unfair advantage to any tender. A responsive tender is also one that conforms to all the terms, conditions, and scope of work of the tender documents, without material omissions. The test for a material omission is the same as the test for a material deviation or qualification. Amongst reasons for tender cancellation, cidb will cancel the tender should all tenders be non-responsive in terms of Clause C1.5 and no negotiations will be conducted.
C.3.9	Arithmetical errors, omissions, discrepancies and imbalanced unit rates Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount appearing in the summary to the Pricing Schedule shall govern. Check responsive tender offers for: a) the gross misplacement of the decimal point in any unit rate; b) omissions made in completing the Pricing Schedule or Bills of Quantities; or c) arithmetic errors in: i. line item totals resulting from the product of a unit rate and a quantity in Bills of Quantities or Schedules of Prices; or ii. the summation of the prices; (d) imbalanced unit rates. Notify shortlisted tenderers of all errors, omissions or imbalanced rates that are identified in their tender offers. Where the tenderer elects to confirm the errors, omissions or re-balancing of imbalanced rates the tender offer shall be corrected as follows: (a) if Bills of Quantities or Pricing Schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the unit rate shall govern and the line item total shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted and the unit rate shall be corrected. (b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall be corrected.

	(c) Where the unit rates are imbalanced, the tenderer shall adjust such rates by increasing or decreasing them and selected others while retaining the total of the prices derived after any other corrections made under (a) and (b) above. Where there is an omission of a line item, no correction is possible, and the offer may be declared non-responsive. Declare as non-responsive and reject any offer from a tenderer who elects not to accept the corrections proposed and/or fails to justify or balance the imbalanced rates to the satisfaction of the employer and subject the tenderer to the sanction under 4.16.2. The tenderer is required to submit balanced unit rates for Rate Only items in the Pricing Schedule. The rates submitted for these items will be taken into account in the evaluation of tenders.
C.3.11	The tenderers will be evaluated in four stages (i) First stage Mandatory (ii) Second stage Administrative (iii) Third stage: Functionality (iv) Fourth stage: Price and Preferential Procurement (v) Applicable preference point system 80/20 Contractors will be required to declare the status of their key staff and any administrative compliance. In cases where there are changes in the key staff, the contractor should provide CVs and qualifications of the new similar competent staff to the cidb. The new staff should have similar skills, qualifications and experience as the staff submitted during tender. Similarly, the contractors will be expected to provide an update on any changes in their administrative compliances – and should submit the required SBD document in such cases. The award will only be issued to contractors with valid Tax Clearance certificates, active CIDB grading and the contractor who meets all the legislative requirement – this shall be verified by SCM in line with the cidb's SCM Policy.
C.3.11	The tenderer is required to indicate how they claim points for each preference point system and attached relevant supporting documents. The specific goals for claiming preference points include the following: - 51% owned by people who are black women (ownership) - 51% owned by Black people (ownership) - 30% owned by black youth (ownership) - 5% owned by people living with disabilities
C.3.11	The conditions stated in clauses C3.11(a) to (f) of the Conditions of Tender shall be applied as objective criteria in terms of section 2(1)(f) of the Preferential Procurement Policy Framework Act, 2000 and as compelling and justifiable reasons in terms of Conditions of Tender clause C3.11: a) the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; and b) the tenderer has not abused the Employer's supply chain management system; and c) the tenderer has not failed to perform on any previous contract and has not been given a written notice to this effect. d) the tenderer is tax compliant. The recommended tenderer who becomes non-compliant, prior to award, shall be notified and must become compliant within 7 working days of the date of being notified. A recommended tenderer who remains non-compliant after the 7 working days of being notified, shall be declared non-responsive. In addition to the requirements under paragraph (c) of the Conditions of Tender, in the event that a due diligence is performed as part of the tender evaluation, the due diligence report will be used to evaluate the tenderer's ability to perform the contract as stated in sub-clause (c). The due diligence will evaluate the overall risk associated with the tender. The due diligence will take

into consideration the following:

- Assessment of financial statements to assess the financial position of the tenderer and its ability to obtain the necessary guarantees or insurances;
 - Evaluation of managerial and technical ability and available resources in relation to the proposed tender;
 - Integrity risk evaluation;
 - Operations, activities, locations and key customers;
 - Reference checks from previous clients; and
- Risk rating (i.e. high risk, medium to high risk, medium risk or low risk) of the tenderer.

PART T2: RETURNABLE DOCUMENTS

T2.1 : LIST OF RETURNABLE DOCUMENTS

The following documents will form part of the documents submitted to the Contractors as part of the Request for Proposals:

- 2.1 Fully completed Form of Offer
- 2.2 Bills of Quantities
- 2.3 Proof of specific goal for award of the preference points as determined on the Request for Proposal
- 2.4 SBD 4
- 2.5 SBD 6.1.
- 2.6 Declaration on the status of Administration compliance.
- 2.7 Proof of CIDB grading designations
- 2.8 Letter of good standing with COIDA
- 2.9 CSD Report
- 2.10 Tax clearance certificate
- 2.11 Declaration of current projects

Failure by the service provider to submit or complete item 2.1 or 2.2 will render their proposal not responsive and will not be considered.

The bidder should also not appear on the National Treasury's list of blacklisted entities

T 2.2 : RETURNABLE SCHEDULE

	Document Name	Returnable document
1.	Fully completed Form of Offer	☐ Yes ☐ No
2.	Priced bills of quantities	☐ Yes ☐ No
3.	Proof of specific goal for award of the preference points as determined on the Request for Proposal	☐ Yes ☐ No
4.	SBD 4: Bidder's Disclosure	☐ Yes ☐ No

5.	SBD 6.1: Preferential Procurement Claim Form	☐ Yes ☐ No
6.	Declaration on the status of Administration compliance	☐ Yes ☐ No
7.	Proof of CIDB grading	☐ Yes ☐ No
8.	Letter of good standing with COIDA	☐ Yes ☐ No
9	CSD summary report	☐ Yes ☐ No
10.	Original tax clearance certificate or tax pin	☐ Yes ☐ No
11.	Declaration of current projects	☐ Yes ☐ No

T 2.2.1 Declaration on the status of administrative compliance

Please indicate, by circling either **Yes** or **No**, whether the administrative information submitted with the original framework tender documents has changed or not. If yes, kindly provide the particulars below and any supporting documents.

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.....

.....

.....

Signed Date

Name Position

Enterprise

T 2.2.2 Record of Addenda to tender documents

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 or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed

.....

Date

.....

Name

.....

Position

.....

Tenderer

.....

T 2.2.3 Proposed amendments and qualifications

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause 5.8 of SANS 10845-3 regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal

Signed _____

Date

Name _____

Position

Tenderer _____

T 2.2.4 SBD 1

INVITATION TO BID (SBD 1)

Bidder's Information

Name of Company	
Physical address	
Postal Address	
Telephone number	
e-mail address	
VAT number	
Total Bid Price	

Bidder Compliance Status

Tax Compliance PIN		OR	Central Supplier Database number	MAAA
B-BBEE Status Level Verification Certificate		OR	B-BBEE Status level sworn affidavit	

PLEASE NOTE: A valid B-BBEE status level verification certificate / sworn affidavit (for EME's and QSE's) must be submitted in order to qualify for preference points for B-BBEE.

	YES	NO
Is the entity a resident of the Republic of South Africa (RSA)?		
Does the entity have a branch in the RSA?		
Does the entity have a permanent establishment in the RSA?		
Does the entity have any source of income in the RSA?		

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Is the entity liable in the RSA for any form of taxation?

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)

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 IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
- 1.3. THIS BID WILL BE PROCESSED IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022 WHICH STATES THAT THE BIDDER WHO SCORES THE HIGHEST NUMBER OF POINTS AND COMPLY WITH THE SPECIFICATIONS SHOULD BE AWARDED THE CONTRACT.
- 1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).

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 VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:
of authority must be submitted e.g. company resolution)

..... (Proof

DATE:

.....

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T 2.2.5 BIDDER'S DISCLOSURE (SDB 4)

1.1. Purpose of the form

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

1.2. Bidder's declaration

1.2.1. Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

1.2.2. If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

1.2.3. If so, furnish particulars:

.....

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

.....

1.2.4. Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

1.2.5. If so, furnish particulars:

.....

.....

1.3. DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 1.3.1. I have read and I understand the contents of this disclosure;
- 1.3.2. I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 1.3.3. 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 consortium² will not be construed as collusive bidding.
- 1.3.4. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 1.3.5. 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.
- 1.3.6. There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 1.3.7. 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

² 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.

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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

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 5.1,5. 2 and 5,3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....

Signature

.....

Date

.....

Position

.....

Name of bidder

T2.2.6 PREFERENTIAL PROCUREMENT CLAIM FORM (SBD 6.1)

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

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

6.1. General Conditions for the preference point systems

6.1.1. The following preference point systems are applicable to all bids:

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

6.1.2. To be completed by the organ of state

- (a) The applicable preference point system for this tender is the 80/20 preference point system.
- (b) The 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

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

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

6.1.4. To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

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

6.1.6. The cidb reserves the right to require of a Bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim with regards to preferences, in any manner required by the cidb.

6.2. Definitions

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the

--

organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and

- (e) “the Act” means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

6.3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

6.3.1. POINTS AWARDED FOR PRICE

6.3.1.1. THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

6.3.1.2. 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

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

6.4.1. POINTS AWARDED FOR PRICE

6.4.1.1. THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

80/20

or

90/10

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

Where:

P_s = Points scored for price of tender under consideration

P_t = Price of tender under consideration

$P_{\max}$ = Price of highest acceptable tender

6.5. Points awarded for specific goals.

- 6.5.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the bid. For the purposes of this bid the bidder will be

allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

6.5.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

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

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

Table 6: Specific goals

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
51% owned by people who are black women (ownership)	7	
51 % owned by Black people (ownership)	5	
30% owned by youth (ownership)	5	
5% owned by people living with disabilities	3	

6.5.3. Name of company/firm.....

6.5.4. Company registration number:

6.5.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

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

- (i) The information furnished is true and correct;
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 6.1.4 and 6.4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- (iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary

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

NAME AND
SURNAME.....

--

DATE:

ADDRESS.....
.....
.....

Bidders Initials

PART C1: AGREEMENT AND CONTRACT DATA

C1.1. FORM OF OFFER AND ACCEPTANCE (INCOPORATING SBD7)

OFFER

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

APPOINTMENT OF A SERVICE PROVIDER FOR ELECTRICAL INSTALLATION UPGRADES, 1250 kVA TRANSFORMER REPLACEMENT, AND THREE-YEAR LONG-TERM MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION

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

By the representative of the tenderer, deemed to be duly authorized, signing this part of the Form of Offer and Acceptance, the tenderer 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 PRICE INCLUSIVE OF VALUE ADDED TAX IS (CONTRACT PRICE)

Rand (in words); R.....N/A.....

.....

... (in figures) R.....

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

Signature(s)

.....

Name(s)

.....

Capacity

.....

**For the
tenderer:**

Name &
signature of
witness

Date

Name and address of organization

Signature and Name of Witness

Signature

Name

Capacity

C1.2 Acceptance (To be completed by the employer – not the bidder)

To (Name of the successful bidder)

Dear Sir/Madam

APPOINTMENT OF A SERVICE PROVIDER FOR ELECTRICAL INSTALLATION UPGRADES, 1250 kVA TRANSFORMER REPLACEMENT, AND THREE-YEAR LONG-TERM MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION

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

The terms of the contract, are contained in:

- | | |
|---------|--|
| Part C1 | Agreements and Contract Data, (which includes this Form of Offer and Acceptance) |
| Part C2 | Pricing Data |
| Part C3 | Scope of Work |

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the *Employer* during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the tenderer (now *Consultant*) 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.

For the Employer

Signature

Name

Capacity

Name and address of organization

Signature and Name of Witness

Signature

Name

Capacity

C1.3 Schedule of Deviations

1 Subject

Details

2 Subject

Details

3 Subject

Details

4 Subject

Details

By the duly authorised representatives signing this agreement, the *Employer* and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer 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 tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

C1.4 CONTRACT DATA

The General Conditions of Contract comprise the **NEC3 Term Service Contract, April 2013**, published

by the NEC, and the following “Particular Conditions”, which include amendments and additions to such General Conditions.

Precedence in interpretation of the contract:

In the event of any ambiguity, inconsistency or conflict between the General Conditions of Contract, Special Conditions, Pricing Data, Service information, or other, the order of precedence shall be as follows:

- **Firstly**, the Contract Data and Conditions of Contract
- **Secondly**, the General Conditions of Contract (NEC3)
- **Thirdly**, any schedules, including service information, drawings and other documents included with this agreement
- **Lastly**, the Pricing data

Contract Data and Conditions of Contract by the employer

CLAUSE	STATEMENT	DATA
1. GENERAL		
	SCHEDULE OF OPTIONS The conditions of contract are the core clauses and the clauses for main Option:	A: Priced contract with price list W1: Dispute resolution procedure X1: Price Adjustment for inflation X2: Changes in the law X17: Low service damages X18: Limitation of Liability (as amended in Option Z) X19: Task Order X20: Key performance indicators Z: Additional conditions of contract
10.1	The Employer is: Address:	CIDB – Construction Industry Development Board 1267 Gordon Hood Road, Centurion, Pretoria, South Africa Next to Centurion Mall and Anew Hotel

	Tel No: Service and Maintenance Manager is:	012 482 7200 Ms Nontokozo Sithole
11.2(2)	The <i>Affected Property</i> is:	CIDB – Centurion Head Office
11.2(13)	The <i>service</i> is:	ELECTRICAL INFRASTRUCTURE UPGRADE PROJECT: SUPPLY AND INSTALL A 1250 KVA TRANSFORMER, REMOVAL OF EXISTING TRANSFORMER, DB REWIRING, LIGHTING AND SMALL POWER RECTIFICATION, EARTHING & LIGHTNING PROTECTION UPGRADES WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION NB: Service Information., as more fully set out in the detailed scope of works
11.2(15)	The <i>Service Information</i> is:	Included in the provided Service Information and all documents other specifications to which it refers included in this document.
12.2	This contract is governed by the <i>law</i> of:	the Republic of South Africa
13.1	The language of this <i>contract</i> is:	In English
13.3	The <i>period for reply</i> is:	Maximum of 48 Hours on non-urgent items
2. THE CONTRACTORS' MAIN RESPONSIBILITIES		
21.1	The Contractor submits a first plan for acceptance within:	30 calendar days from Contract Date
3. TIME		
30.1	The <i>starting</i> date is	TBC
30.2	The <i>Service period</i> is:	3 YEARS after signing of the contract by the CIDB
4. TESTING AND DEFECTS		
	Testing and Defects	When the Service Manager assesses the cost incurred by the Employer in repeating a test inspection after Defect is found, he does not include the Contractor's cost of carrying out the repeat test or inspection
5. PAYMENT		
50.1	The <i>assessment interval</i> is on the	The last day of every month
51.1	The <i>currency</i> of this contract is the	South African Rand (ZAR)

51.2	The <i>period</i> within which payments are made is	1 Calendar month
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PART C2: PRICING DATA

FINANCIAL CONSIDERATION “ANNEXURE A”

PRICING INSTRUCTIONS

C2.1.1 Measurement and payment shall be in accordance with the relevant provisions of the project specifications.

C2.1.2 The units of measurement described in the Pricing Schedule are metric units. Abbreviations used in the Pricing Schedule are as follows:

%	=	percent
hr	=	hour
km	=	kilometre
No.	=	number
R/only	=	Rate only

C2.1.3 For the Pricing Schedule, the following words shall have the meanings assigned to them:

Unit:	The unit of measurement for each item of work as defined in the Project Specification.
Quantity:	The number of units of work for each item.
Rate:	The payment per unit of work for which the Service Provider tenders to do the work.
Amount:	The product of the quantity and the rate tendered for an item.

C2.1.4 It will be assumed that prices included in the bills of quantities take into account the implications of all Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders.

C2.1.5 The prices and rates in the Pricing Schedule are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out. A complete breakdown of all rates in electronic format (Excel) on a separate flash drive or memory stick must be submitted with the completed pricing schedule. The rates are to be clearly referenced to the relevant pay item numbers, with each rate broken down into its labour, materials, equipment, transport costs, overhead charges and profit components.

- C2.1.6 Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items.
- C2.1.7 An item against which no price is entered will be covered by the other prices or rates in the Pricing Schedule. A single lump sum will apply should many items be grouped together for pricing purposes.
- C2.1.8 The quantities set out in the Pricing Schedule 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 Pricing Schedule.
- C2.1.9 Reasonable compensation will be considered in the sole discretion of the Employer where no pay item appears in the Pricing Schedule in respect of work required in terms of the Contract and which is not covered in any other pay item but which is included in scope of work.
- C2.1.10 The short descriptions of the items of payment given in the Pricing Schedule are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
- C2.1.11 The pricing schedules are provided electronically. A printout of the entire completed pricing schedule must be signed and attached to the tender as well as an electronic copy of the priced pricing schedule together with the breakdown of rates. In the event of any discrepancy between the signed printed copy, and the electronically submitted copy, the tender rates in the signed copy will govern. The item numbers and description of the PDF document will govern. For all addenda issued relating to the pricing schedule, the item numbers, description and quantities of the issued document will govern.
- C2.1.12 The terms "Schedule of Quantities", (used throughout the Standard Specifications) and "Bill of Quantities", (used in all other documents forming part of this contract), and "Pricing Schedule" are synonymous.
- C2.1.13 All costs will be stated, invoiced and paid in South African Rand and will be inclusive of VAT.
- C2.1.14 Payment of undisputed amounts will be effected by the cidb within thirty (30) days from the date of receipt of a valid tax invoice, provided that the cidb is satisfied that the Services for which payment is claimed have indeed been rendered and that such invoice is accurate, complete and meets the cidb's invoicing requirements as more fully set out hereunder, which requirements may be subject to amendment by the cidb from time to time.
- C2.1.15 If the cidb disputes any invoiced amount ("the affected invoice"), then the cidb will, within ten (10) Business Days of receipt thereof, notify the Service Provider in writing, specifying the affected invoice, the disputed amount, and its reasons for such dispute. Such amounts will not be regarded as 'payable', provided such dispute is bona fide. If the Parties are unable to resolve such dispute, it will be referred for determination in accordance with the Arbitration clause

PART C2.2: BILLS OF QUANTITIES

REFER TO ANNEXURE

B

PART C3 SCOPE OF WORKS

APPOINTMENT OF A SERVICE PROVIDER FOR ELECTRICAL INFRASTRUCTURE UPGRADE PROJECT: 1250 KVA TRANSFORMER REPLACEMENT, DB REWIRING, LIGHTING AND SMALL POWER RECTIFICATION EARTHING & LIGHTNING PROTECTION UPGRADES WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION

1. BACKGROUND

The Construction Industry Development Board (CIDB) is a Schedule 3A public entity established in terms of Act 38 of 2000 to lead and promote infrastructure development across South Africa. With a mandate to facilitate and enhance the construction industry's contribution to national social and economic growth, the CIDB plays a strategic role in driving sustainable development.

A comprehensive condition assessment of the CIDB facility was conducted in July 2024 to evaluate the state of the existing electrical installations. The assessment identified a range of deficiencies across multiple areas of the building, including basements, office floors, plant rooms, roof level, and exterior installations. Thereafter, further electrical testing was conducted to verify and add to the findings of the condition assessment, and several deficiencies were identified in the electrical installations and reticulation at the CIDB Centurion Office Facility.

The findings highlighted that many of the electrical systems are in a worn, outdated, or non-compliant condition, creating both safety risks and operational inefficiencies as per SANS 10142-1 and the Occupational Health and Safety Act requirements. Key issues included:

- **Lighting Systems:** Inadequate illumination levels in basements and ground floor entrances or exits ramps, emergency exits, stairways, some DB shafts, and offices, with several luminaires non-functional or poorly maintained. Occupancy sensors in some office and conference areas were malfunctioning, leading to user dissatisfaction and non-compliance with lighting standards.
- **Small Power Installations:** Insufficient provision of socket outlets in offices, with many staff resorting to extension cords, presenting safety hazards. Existing installations do not fully comply with SANS 164 requirements for workstation power provision.
- **Distribution Boards (DBs) and Cable Management:** Several DBs were missing danger signage, legend cards, and blanking plates. Cables leading to DBs were found to be exposed or untidily managed, creating safety risks.
- **Circuit Tracing Findings:** Through an electrical circuit tracing exercise, it was discovered that some loads are untraceable and could not be identified. Distribution boards were found to be over-equipped with miniature circuit breakers (MCBs), leading to confusion in operation and maintenance.

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- **Power Supply Configuration:** With the exception of the central air conditioning system (roof), all other DBs and loads are supplied through emergency power (generator). UPS distribution boards are fed by the UPS unit, which in turn is supplied by the generator, ensuring continuity of critical services.
- **Plant Rooms and Equipment:**
 - I. Switchgear and transformer installations, although operational, showed signs of wear (including oil leakage on one transformer) and outdated components such as meters requiring replacement.
 - II. In addition, the existing ageing 1250 kVA 11 kV/400 V distribution transformer, requires replacement to ensure system reliability and compliance with current safety standards.
 - III. Cable networks in ceilings and plant rooms are poorly secured and require proper concealment.
- **Exterior Lighting:** Lighting levels in exterior areas were insufficient for safety and security, with several fittings defective. Exposed cables were also observed, requiring insulation and containment.
- **Roof Works:** Lightning protection system was found in a poor condition, and not fully connected.

Overall, the report concluded that extensive upgrades, replacements, and compliance works are required to bring the electrical installations up to standard. These works are necessary to ensure compliance with the OHS Act, SANS 10142-1 (Wiring Code), SANS 10114 (Interior Lighting), and SANS 10389 (Exterior Lighting), as well as to improve safety, reliability, and operational efficiency of the facility.

2. PURPOSE

The purpose of this project is to appoint a qualified and experienced electrical service provider to undertake the required electrical upgrade works at the CIDB Head Office facility, followed by ongoing maintenance services. The appointed contractor will be responsible for carrying out the necessary supply, installation, rectification, and compliance works within the first year, after which a structured maintenance program will be implemented for a period of three years to ensure continued operational reliability, safety, and compliance of the electrical infrastructure. The scope includes general electrical upgrades, transformer replacement, system improvements, and associated statutory requirements, with all works executed in accordance with applicable standards, codes, and client specifications:

- Replace the 1250KVA 11kV/400V Dyn11 transformer.
- Rectify electrical installation defects.
- Reinstate earthing and bonding on all cable trays and trunking installed and verify continuity.
- Replace faulty or broken equipment (isolators, lighting fittings, sockets, meters).
- Improve efficiency through replacement of obsolete light fittings with LEDs.
- Ensure installation complies with statutory and client requirements.
- Provide valid Certificate of Compliance (CoC).
- Ensure that preventative maintenance of all rectified electrical installation and transformer is implemented for a period

of three-years post supply and installation works.

3. SCOPE OF SERVICES

- Decommissioning, removal and disposing of existing transformer
- Supply, installation and commissioning of 1250 KVA 11KV/400V Dyn11 transformer
- Electrical installation including
 - Rewiring of DBs and load balancing.
 - Replacement of fluorescent fittings with LED linear and panel fittings, and all missing light fixtures with corresponding LEDs.
 - Replacement of floodlights with LED units.
 - Installation of isolators, sockets, and earth leakage devices where required.
 - Earthing and bonding works (all required gauges).
 - Installation of PVC pipes, trunking, cable trays, and ladders.
- Re-issue compliant as-built drawings and CoC upon completion.
- Maintenance of the new transformer and electrical installations for a period of three-years.

4. DELIVERABLES

- Fully compliant electrical installation.
- Updated single-line diagrams and as-built drawings.
- Valid Certificate of Compliance.
- Operation and maintenance manuals for new installations.
- Maintenance reports shall be prepared in accordance with the approved maintenance schedule and the stipulated deliverables outlined in the three-year maintenance plan.

5. STANDARDS & CODES

- SANS 10142-1: Wiring of Premises – LV Installations.
- SANS 10299: Lightning Protection.
- SANS 780 / IEC 60076: Power Transformers.
- SANS 10292: Earthing of power installations exceeding 1 kV.
- SANS 10198: Power cables with extruded solid dielectric insulation.
- OHS Act and Regulations.
- Municipal or Eskom supply authority requirements.
- OHS Act, 1993 (Electrical Installation Regulations)
- Manufacturer installation manuals

6. ROLES & RESPONSIBILITIES

- **CONTRACTOR:** Execute works, provide supervision, safety compliance, commissioning, and CoC.
- **CONSULTANT OR ENGINEER:** Verify designs, witness tests, and issue completion certification.

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- **Client (CIDB):** Provide access, approve variations, and oversee handover.

7. SCOPE OF WORKS

7.1 TRANSFORMER INSTALLATION

7.1.1 Decommissioning, removal and disposal of existing Transformer

Pre-decommissioning (planning, design and permits)

The purpose is to identify risks, ensure continuity of supply, obtain approvals, coordinate logistics and prepare site. Deliverables or actions include:

- Detailed site survey and site access plan (showing crane placement and lifting route from street to ground floor).
- Structural assessment of transformer plinth and building floor load capacity; confirmation that floor can support transformer, oil, lifting forces (or design or approval of new plinth).
- Confirm physical route and capacity of MV and LV cable ducts, draw-up cable routing and clearances, confirm conduit or fire-stop requirements.
- Utilities and services identification: locate underground services, sprinkler systems, telecoms, drainage, HVAC penetrations.
- Temporary supply plan: how loads will be supplied during outage (temporary generator, temporary LV feed, phased load transfers). Include single-line diagrams showing temporary connections.
- Program and outage plan: proposed outage window(s) with duration, contingency windows and critical path (must coordinate with building management and tenants if any).
- Lifting and transport plan: crane specification, lift study, certified slings or shackles, rigging plan. If crane on street, arrange road or footpath closures and permits.
- Spill and environmental plan: oil containment trays, bunding, absorbents, waste oil handling and disposal plan by licensed waste contractor.
- Fire safety plan: coordinate with building fire officer; ensure fire detection or suppression is unaffected; provide hot work permits plan.
- Traffic or parking plan for basement parking: how vehicles and crane access will be managed, relocation or notification of tenants if needed.
- Confined space ventilation plan if needed.
- Permits required: building owner approval, municipal road or crane permit, fire department notification (if required), electrical utility (distributor or Eskom) outage approval, environmental or waste disposal permits as needed.
- Health and Safety: Method Statements, JSA (Job Safety Analysis), emergency response plan, first-aid, PPE requirements, signed permit to work system.
- Check materials that could be disturbed.
- Communications: nominate site representative, client project manager, contractor PM, emergency contact list.
- Service provider shall submit a disposal methodology including a minimum of three market-based quotations

demonstrating the potential earnings from the disposal of the existing transformer. Each quotation must include a detailed breakdown of the estimated recoverable value, including but not limited to scrap metal, reusable components, and any other recoverable elements. This amount to be recovered by the employer through the service provider and the service provider being compensated through a handling fee.

Pre-work documents to submitted to the client / client reprehensive for approval:

- Risk Assessment and Method Statement (RAMS)
- Lifting plan and certificate of crane operator
- Electrical isolation and switching plan
- Temporary supply scheme and single line
- Traffic or parking and site logistics plan
- Waste oil removal and disposal contract details
- Competency certificates for MV technicians (registration, licenses)
- Insurance certificates

Decommissioning (safe removal of old transformer)

The purpose is to safely isolate and remove existing transformer while protecting building and maintaining required temporary supplies. Steps to be taken when decommissioning:

1. Pre-isolation checks

- Confirm all permits and “permit to work” signed.
- Confirm outage window and notify tenants or occupants.
- Ensure temporary supply is active (if required) and loads have been transferred.

2. Electrical isolation

- De-energize and lock or tag MV incoming switchgear and LV switchgear by authorized persons.
- Verify absence of voltage with calibrated test equipment and PPE protocols.
- Open and earth where required (MV cable ends earthed).

3. Drain transformer oil

- Pump down transformer oil into suitable IBCs or drums with filtration as required.
- Implement containment (drip trays, bund) and continuous spill monitoring.
- Sample oil for disposal or for testing and record.

4. Disconnect cables and labelling

- Disconnect MV and LV cables, label every conductor/phase and take photos.
- Cap or insulate cable ends safely and place in temporary protective sleeves or boxes.

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5. **Remove auxiliary services**

- Remove sensors, alarms, cooling fans, OBLs, earthing connections (retain earthing bars as required)

6. **Mechanical removal**

- Follow lifting plan: rigging, lift to street and transport off site.
- Where movement through basements or doors required, confirm clearances and protect finishes (timber, concrete) with temporary boards.

7. **Site cleaning and containment**

- Clean spill areas, confirm no contamination.
- Secure exposed cable ends and openings to prevent ingress of water or debris.

8. **Documentation**

- Decommissioning report with photos, oil volumes collected, serial no. of transformer removed, MV/LV cable IDs, and signed certificate of isolation.

Acceptance criteria post decommissioning:

- No live circuits remaining; all MV/LV cable ends safely isolated and documented.
- No oil spills or, if spills occurred, fully remediated with receipts for disposal.
- Structural condition confirmed post removal.

7.1.2 Installation of the new Transformer

The purpose is to install the new transformer, verify mechanical/civil/electrical installations, energize and test protection or controls.

7.1.2.1. Mechanical and civil installation

- Verify new plinth dimensions, grouting and anchor bolts in accordance with structural design.
- Place transformer using certified lifting procedure and record lift certificates.
- Install drip trays or bunding under transformer sized for full oil volume (and secondary containment).
- Provide safe access to transformer with erection of cable trenches and removal of unnecessary obstructions.
- Ensure ventilation and drainage are not obstructed.

7.1.2.2. Electrical installation

- Install MV and LV cable terminations per manufacturer and utility requirements (cable glands, stress cones, heat shrink where required).

- Ensure proper phase rotation on LV side; label phases clearly.
- Install and connect CTs or PTs and protective relays; connect alarms to building management system if required.
- Earthing: bond transformer tank, neutral, LV star point and MV earth points to building earthing network; measure earth resistances.
- Lightning protection and bonding checks where applicable.

7.1.2.3. Pre-energization tests (factory and site checks)

Contractor to perform and provide test reports for:

i. Mechanical checks

Physical inspection for transit damage, oil leaks, cooling fan connection, bushings intact, breather fitted with silica gel.

ii. Insulation and electrical tests (typical tests and acceptance criteria — contractor to adapt to equipment rating and standards)

- **Transformer winding resistance** — measured and recorded versus manufacturer values (within manufacturer tolerance).
- **Turns ratio (Vector group)** — measured and matching nameplate within tolerance (usually $\pm 0.5\%$ to 0.25% depending on spec).
- **Insulation resistance (Megger)** — between phases and to earth. Typical acceptance: for power transformers, megger $> 1 \text{ G}\Omega$ is desirable; at minimum conform to manufacturer and standards, record test voltage and values.
- **Dielectric / Power factor ($\tan \delta$) / Dissipation factor** — per manufacturer spec.
- **Oil dielectric strength** (if oil filled before energization): breakdown voltage $>$ minimum specified (eg. $> 30 \text{ kV}/2.5 \text{ mm}$ — check spec). Also submit oil DGA if applicable.
- **No-load loss and exciting current** (if required) — measured.
- **Protection relays secondary injection tests** — confirm pickup, time settings, CT polarity.
- **CT ratio and polarity checks** — record.
- **MV/LV cable insulation resistance** — acceptable limits per cable spec (typically $> 1 \text{ G}\Omega$ for new cables).
- **Contact resistance of LV jointing/bolted connections** — measured ($\text{m}\Omega$ range) and within acceptable limits.
- **Transformer neutral grounding resistance** — measured acceptance per design.

iii. Functional and integration tests

- Set and verify all protection settings (overcurrent, Earth fault/neutral, differential if fitted, Buchholz if fitted).
- Protection coordination verification with upstream and downstream devices and write up SEL/Siemens/Schneider relay setting sheet.
- Verify operation of tap changer (if OLTC fitted) — manual and automatic functions.
- Verify alarms and remote telemetry (SCADA) tags, communication configuration and testing.
- Verify operation of cooling fans, alarm contact outputs, temperature monitoring.
- Check LV switchgear (incoming and outgoing) operation, interlocks and metering accuracy.

7.1.2.4. Energization procedure (controlled)

- Prepare stepwise energization plan and carry out final isolation verification.
- Energize no-load first: energize low or high voltage side as per plan, monitor currents, voltages, oil temperature and alarms for at least a minimum monitoring window (e.g. 1 hour).
- Gradual transfer of load from temporary supply to new transformer following load transfer procedure to avoid inrush and imbalance; coordinate with client.
- Monitor LV busbar voltages, phase rotation, harmonic distortion and any unexpected alarms.

7.1.2.5. Acceptance criteria at energization

- No abnormal heating, unusual noise or oil leaks.
- Voltages within $\pm 5\%$ of nominal at rated load (or per contract).
- Protection relays operate correctly during test injections and do not nuisance trip during energization and initial load transfer.
- Earth resistance values meet design.

7.1.2.6. Supply and Installation of New Transformer

- Supply and install a new 1250 kVA, 11 kV/400 V, ONAN cooled, 3-phase, 50 Hz transformer, compliant with IEC 60076 / SANS 780.
- Install HV and LV terminations, neutral earth links, and ensure earthing system integrity.
- Provide fire safety provisions in the plant room (oil bunding, signage, ventilation, etc.) as required.

7.1.3 Post-commissioning (handover, documentation and monitoring)

The purpose is to formally hand over to client, ensure asset records, training and warranty support are delivered.

Deliverables

- Full test and commissioning pack (electronic + hard copy) including:
 1. All test reports (megger, ratio, winding resistance, oil tests, protection tests).
 2. As-installed single-line diagrams and wiring diagrams.
 3. Relay setting sheets and coordination study.
 4. Manufacturer's nameplate details, serial numbers, oil batch numbers.
 5. Lifting certificates and installation photographs (before/during/after).
 6. Certificates for earthing and cable tests.
 7. Copies of permits, waste disposal receipts, and completion certificates.
 8. Commissioning certificate signed by Contractor and Client (showing date or time of energization).
- As-built drawings and O&M manual, including preventive maintenance schedule (recommended frequency for tap changer, oil testing, bushings, fans).
- Warranty certificates and details of service support and response times.
- Training: Operator training session(s) for client's electrical team — operation, emergency isolation and routine checks.
- Update asset register: enter transformer details, warranty, test baselines.
- RAMS, lifting plan, crane certificates
- Approved outage and switching schedule signed by authorized parties

- All test certificates and commissioning records
- Evidence of proper disposal of old transformer oil and waste
- Final acceptance certificate signed by client

Initial monitoring and acceptance period

- Define a monitoring period (e.g., 30 days or as per contract) during which contractor remains on-call for faults related to installation.
- Post-energization thermal imaging survey of connections after 1 week and after 1 month under load.
- Schedule oil sampling for DGA (if applicable) at commissioning and after 6 months to establish baseline.

Final acceptance

- After successful monitoring period and resolution of any snags, client issues final acceptance certificate and releases retention monies per contract.

7.2 TRANSFORMER INSTALLATION - THREE YEARS MAINTENANCE PLAN

YEAR 1: BASELINE MAINTENANCE AND CONDITIONAL ASSESSMENT

Activity & Description	Frequency	Deliverables	Responsible Person
Visual Inspection: Check for oil leaks, corrosion, damaged paintwork, nameplate legibility, and cleanliness.	Quarterly	Inspection checklist & report	Maintenance Technician
Electrical Testing: Measure insulation resistance (HV, LV, and core-to-earth), winding resistance, and ratio test.	Annually	Test results vs previous records	Test Engineer
Oil Analysis: Perform Dissolved Gas Analysis (DGA), moisture content, and dielectric strength test.	Annually	Lab report & interpretation	Laboratory Technician
Thermographic Scan: Detect abnormal temperature rise in bushings, terminations, or cooling fins.	Annually	Thermal image report	Thermography Specialist
Earthing System Test: Verify transformer earthing integrity and measure resistance values.	Annually	Earth resistance record	Protection Technician
Cleaning & Tightening: Clean external surfaces, retighten cable terminations, gland plates, and bolts.	Annually	Maintenance log	Electrician
Functional Test: Verify operation of Buchholz relay, temperature indicators, and alarm circuits.	Annually	Test and calibration record	Commissioning Engineer
Reporting: Compile annual maintenance and test summary.	Annually	Signed engineer's report	Senior Electrical Engineer

YEAR 2: PREVENTETIVE MAINTENANCE AND TREND MONITORING

Activity & Description	Frequency	Deliverables	Responsible Person
Visual Inspection: Repeat quarterly inspection for oil leaks, rust, and damage.	Quarterly	Reports with photo evidence	Maintenance Technician

Oil Top-Up (if approved): Check oil level; top up if below manufacturer's mark (upon approval).	As required	Oil usage log	Electrician
Oil Analysis (DGA): Perform DGA and dielectric test to compare with Year 1 results.	Annually	Comparative trend report	Laboratory Technician
Thermographic Survey: Repeat and compare hot-spot data with Year 1.	Annually	Trend chart	Thermography Specialist
Electrical Tests: Re-check insulation resistance and winding resistance for degradation.	Annually	Data comparison	Test Engineer
Functional & Alarm Testing: Test Buchholz relay, oil temperature trip, and PRV indicators.	Annually	Functional test record	Commissioning Engineer
Earthing System Check: Verify and record continuity.	Annually	Earth test certificate	Protection Technician
Reporting: Prepare annual maintenance report with recommendations.	Annually	Engineer-signed report	Senior Electrical Engineer

YEAR 3: COMPREHENSIVE INSPECTION AND RECONDITIONING PHASE

Activity & Description	Frequency	Deliverables	Responsible Person
Visual & Detailed Inspection: Perform full visual and mechanical inspection.	Quarterly	Inspection sheets	Maintenance Technician
Oil Analysis (Full): Conduct DGA, moisture, furan, acidity, and dielectric tests.	Annually	Full oil health report	Laboratory Technician
Transformer Oil Filtration (if required, upon approval): Filter oil to restore dielectric properties if DGA indicates deterioration.	As required	Filtration report	Oil Treatment Specialist
Electrical & Thermal Testing: Repeat insulation, ratio, and thermal tests to assess performance.	Annually	Final test results	Test Engineer

Protective Devices Testing: Test Buchholz relay, temperature indicators, PRV, and alarm circuits.	Annually	Function test record	Commissioning Engineer
Earthing System Verification: Verify resistance and bonding continuity.	Annually	Test record	Protection Technician
Final 3-Year Condition Assessment: Consolidate all reports and issue 3-year performance summary.	Once	Engineer's condition report	Senior Electrical Engineer
Reporting: Prepare annual maintenance report with recommendations.	Annually	Engineer-signed report	Senior Electrical Engineer

7.3 ELECTRICAL INSTALLATIONS – NEW WORKS

7.3.1. Lighting Systems

Scope: Basements, ground floor entrances or exits, ramps, emergency exits, stairways, some DB shafts, offices, conference rooms, and exterior areas.

Requirements:

1. Provide adequate illumination levels in all areas in compliance with SANS 10114 and SANS 164:
 - I. Basements & ramps: ≥ 100 lux
 - II. Emergency exits & stairways: ≥ 50 lux (maintained)
 - III. Offices: ≥ 300 -500 lux for general lighting
 - IV. Conference rooms: ≥ 500 lux at work surfaces
 - V. Exterior areas (security & safety): ≥ 50 lux along pathways and parking areas
2. Replace or repair all non-functional or poorly maintained luminaires.
3. Supply and install occupancy sensors in offices, conference or boardroom areas, stairways and parking area to ensure proper functionality, energy efficiency, and compliance with lighting standards.
4. Ensure all emergency lighting complies with SANS 10114: emergency luminaires must operate during power outages, with a minimum duration of 60 minutes.
5. Exterior lighting must be IP65 rated for outdoor exposure and installed with proper containment and protection for wiring.
6. Ensure that all luminaire installed have a 5year warranty or 50,000 hrs. lifespan.

7.3.2. Small Power Installations (Socket Outlets)

Scope: Offices and general work areas.

Requirements:

1. All socket outlets must be installed with proper earthing and protective devices.
2. All circuits must be clearly labeled and documented for easy maintenance and load balancing.

7.3.3. Distribution Boards (DBs) and Cable Management

Scope: All existing DBs, sub-DBs, and main switchboards.

Requirements:

1. Install missing danger signage, legend cards, and blanking plates on all DBs to ensure safety and compliance with SANS 10142.
2. Ensure all cable terminations are properly insulated and contained in trunking, conduit, or cable trays. Exposed cables must be re-routed and secured to prevent safety hazards.
3. Conduct a full audit of DBs to confirm correct MCB rating and avoid over-equipping boards, improving operational clarity.
4. Document and label all circuits clearly, including load descriptions, emergency power circuits, and UPS-supplied loads with proper DB color coding, replace or install missing or incorrect signage, missing legend cards, and missing blanking plates, ensure the re-installation of proper naming of DB engraving to indicate where they are sub-fed from.
5. Rewiring of the existing cable to ensure neatness and compliance of the all the existing distribution boards on each floor including the transformer plant room DB panels. Except where required and approved new cable installation will be implemented.
6. Isolate or remove untraceable loads where identification is not possible to prevent operational and safety risks.

7.3.4. Power Supply Configuration

Scope: Emergency power system, UPS, and generator-fed loads.

Requirements:

1. Maintain generator supply to all non-UPS loads, except for central air conditioning (roof system).
2. Ensure UPS feeds all prescribed critical loads, with generator supply as backup, maintaining continuity of essential services.
3. Verify coordination between UPS and generator to prevent overload, reverse feed, or downtime during transitions.

7.3.5. Exterior Lighting

Scope: Parking areas, pathways, perimeter, and access routes.

Requirements:

1. Replace defective fittings and provide sufficient lighting levels to meet safety and security requirements.
2. Insulate and contain all exposed cables using approved conduits or cable trays.
3. Ensure luminaire height, spacing, and type provide uniform lighting and minimize glare.

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7.3.6. Roof Works – Lightning Protection System

Scope: Entire roof area.

Requirements:

1. Inspect, repair, and fully connect the lightning protection system to SANS 10299 standards.
2. Ensure proper bonding to all metallic roof structures, electrical systems, and grounding electrodes.
3. Provide inspection certificates and verification that the system complies with local regulations.

7.3.7. General Requirements

1. All electrical installations shall comply with:
 - I. **SANS 10142:** Code of Practice for Electrical Installations
 - II. **SANS 164:** Code of Practice for Workstation Power and Lighting
 - III. Local municipal electrical regulations
2. All works shall be documented, including as-built drawings, circuit diagrams, and test certificates.
3. All installation and maintenance personnel must be qualified and certified.
4. Provide preventive maintenance plan for all lighting, DBs and lightning protection system.

7.4 ELECTRICAL INSTALLATIONS – THREE YEARS MAINTENANCE PLAN

The appointed Service provider will be responsible for maintenance work of all electrical installation (existing and new works). All maintenance work is to be recorded on check sheets and submitted to the Client or client representatives. The Contractor is required to submit a monthly OR quarterly etc. (state time frame) report as per the recommended activities detailing activities carried out and system status. Some activities are conditional (“as required”) depending on faults, failures, or wear. PM schedule assumes a routine inspection combined with corrective actions to extend installations life.

YEAR 1: ESTABLISH AND AUDIT

System / Scope	Activity & Description	Deliverable	Frequency	Responsible Person
Lighting Systems (Basement, Offices, Exterior)	Full site inspection of all luminaires, cleaning, lux level measurement, and fault identification. Replace emergency light batteries and repair non-functional units if required.	Initial lighting audit report and fault log.	Quarterly	Electrical Technician
Small Power Installations (Sockets, Work Areas)	Inspect and test all socket outlets for earthing, RCD/MCB functionality, and labelling accuracy.	Initial electrical test report and updated circuit schedule.	Annual	Electrical Technician

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Distribution Boards (DBs) & Cable Management	Conduct comprehensive audit and inspection of all Distribution Boards (DBs) within the building, including DB panels located in the transformer plant room and DBs installed on each floor. The audit comprised inspection for missing or incorrect signage, absence of legend cards, missing blanking plates, loose or improperly terminated connections, and identification of overloaded circuits, with findings recorded for corrective action as required.	DB audit report and fault list.	Annual	Electrical Engineer
Exterior Lighting (Parking, Perimeter, Pathways)	Inspect all poles, fittings, and cabling for corrosion and insulation damage. Replace defective fittings and test photometric performance.	Exterior lighting inspection report.	Semi-Annual	Electrician
Roof Lightning Protection System	Full inspection and testing of down conductors, air terminals, bonding, and grounding resistance per SANS 10299 .	Initial lightning protection compliance report.	Annual	Specialist Contractor
Documentation & Compliance	Prepare initial maintenance reports, CoCs, and update as-built documentation.	Year 1 maintenance dossier.	Annual	Project Administrator

YEAR 2: ROUTINE AND CORRECTIVE

System / Scope	Activity & Description	Deliverable	Frequency	Responsible Person
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Lighting Systems (Basement, Offices, Exterior)	Continue quarterly inspections, replace defective luminaires/sensors, optimize lighting levels, and verify occupancy sensors for energy efficiency.	Updated maintenance log and performance report.	Quarterly	Maintenance Supervisor
Small Power Installations (Sockets, Work Areas)	Bi-annual re-testing and tightening of connections. Update load documentation and correct labelling errors.	Mid-term test and corrective action report.	Bi-Annual	Electrician
Distribution Boards (DBs) & Cable Management	Perform cleaning and tightening, rewire identified circuits, replace faulty breakers, and maintain all floor and transformer plant room DB panels documentation.	Quarterly maintenance and corrective report.	Quarterly	Electrician
Exterior Lighting (Parking, Perimeter, Pathways)	Continue inspections and replacement of failed units. Repaint poles and secure wiring as needed.	Quarterly maintenance records.	Quarterly	Facility Maintenance
Roof Lightning Protection System	Mid-term re-testing, repair corroded joints, ensure continuity of all connections.	Mid-term LPS maintenance certificate.	Annual	Specialist Contractor

Documentation & Compliance	Submit quarterly and annual reports, update fault logs, and document replacements.	Updated asset registers and quarterly reports.	Quarterly	Admin & Supervisor
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YEAR 3: OPTIMIZE AND CERTIFY

System / Scope	Activity & Description	Deliverable	Frequency	Responsible Person
Lighting Systems (Basement, Offices, Exterior)	Confirm compliance with SANS 10114 lighting standards, re-test emergency lights, and replace remaining end-of-life fittings.	Final lighting compliance certificate.	Annual	Electrical Engineer
Small Power Installations (Sockets, Work Areas)	Final full inspection and certification for compliance. Rectify any remaining defects.	Final CoC and compliance report.	Annual	Senior Electrician
Distribution Boards (DBs) & Cable Management	Conduct final inspection, verify load balancing, and verify that all legend cards and DB labels for each floor DBs and transformer plant room DBs are up to date for handover certification.	Certified DB compliance and labelling record.	Annual	Electrical Engineer
Exterior Lighting (Parking, Perimeter, Pathways)	Reassess illumination levels, optimize control systems (timers/sensors), and confirm compliance.	Final compliance and performance report.	Annual	Electrical Engineer

Roof Lightning Protection System	Final system test, re-certify grounding ($<10\Omega$), issue compliance report.	Final SANS 10299 certificate.	Annual	Specialist Contractor
Documentation & Compliance	Final handover report with CoCs, updated drawings, and system performance summary.	Complete project close-out file.	Annual	Project Engineer

PART C3.1: SPECIAL NOTES TO BIDDERS

Cidb/004/2627: APPOINTMENT OF A SERVICE PROVIDER FOR ELECTRICAL INFRASTRUCTURE UPGRADE PROJECT: SUPPLY AND INSTALL A 1250 KVA TRANSFORMER, REMOVAL OF EXISTING TRANSFORMER, DB REWIRING, LIGHTING AND SMALL POWER RECTIFICATION, EARTHING & LIGHTNING PROTECTION UPGRADES WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION

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Bidders Initials

The following special conditions are for compliance and attention to bidders:

- 1.1. CIDB reserve the right to call interviews with short-listed bidders before final selection.
- 1.2. CIDB reserve the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include surprise site visits.
- 1.3. CIDB reserve the right to appoint the bidder that proves to be fully capable and qualified to handle and execute the job.
- 1.4. The proposals submitted must be in line with the detailed specification.
- 1.5. CIDB reserve the right to cancel or withdraw this bid if:
 - i. Due to changed circumstances, there is no longer a need for these services; or
 - ii. Funds are no longer available to cover the total envisaged expenditure; or
 - iii. No acceptable bids are received; or
 - iv. There is a material irregularity in the Bid process.
- 1.6. In the case of sub-contracting or joint venture agreement, CIDB will enter into a single contract with the principal bidder.
- 1.7. Bidders who are not registered on Central Supplier Database (CSD) must register before submission of bids.
- 1.8. Any completion of the bid document in pencil or erasable ink will not be acceptable and will automatically disqualify the submitted bid.
- 1.9. Successful bidder will be required to sign and enter into a formal contract upon the award.
- 1.10. Notwithstanding shortcomings and/or inconsistencies, if any, in this specification, which is only a minimum specification, a bidder shall make provision for a complete solution that will deliver the required service efficiently and cost-effectively.
- 1.11. Bid documents must be submitted physically to the closing address as reflected on the Tender document.
- 1.12. Bids received after the closing date and time will not be accepted for consideration.
- 1.13. This request for bid document contains confidential information about CIDB, which has been provided to supply potential bidders with the data necessary to provide a holistic response.
- 1.14. No part of the contents may be used, copied, disclosed or conveyed in whole or in part to any party, in any manner whatsoever without the prior written permission of CIDB.
- 1.15. Any reproduction or transmission of information contained in this document except for the sole purpose of responding to this bid is strictly prohibited.

References to CIDB must not be made in any literature, promotional material, and brochures or sales presentations without the express written consent of CIDB

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PART C3.2: OHS BASELINE RISK ASSESSMENT AND SPECIFICATIONS

BASELINE RISK ASSESSMENT

**AS PER CONSTRUCTION REGULATION 5(1)9a), 2014
OCCUPATIONAL HEALTH AND SAFETY ACT, NO. 85 OF 1993**



DEVELOPMENT THROUGH PARTNERSHIP

PROJECT NAME:

**APPOINTMENT OF A SERVICE PROVIDER FOR ELECTRICAL
INFRASTRUCTURE UPGRADE PROJECT: 1250 KVA TRANSFORMER
REPLACEMENT, DB REWIRING, LIGHTING AND SMALL POWER
RECTIFICATION, EARTHING & LIGHTNING PROTECTION UPGRADES
WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD
OFFICE IN CENTURION**

This document is prepared on behalf of the Client in terms of Construction Regulation 5(1)(a). The Baseline Risk Assessment is conducted to obtain a benchmark of type and size of potential hazards pertaining to the project. The aim is to identify all major and significant risks.

1. INTRODUCTION

The Construction Industry Development Board (CIDB) has proposed the General Electrical Installation and Transformer and MV Feeder Replacement project, for a period of one year (01) at the CIDB head office in Centurion. Following a comprehensive condition assessment conducted in July 2024, extensive electrical deficiencies were identified across multiple areas of the building, necessitating urgent remedial action to ensure compliance with safety standards and operational efficiency.

The CIDB is responsible for the health and safety of the people that will be working on site during the critical electrical infrastructure upgrades including rewiring of distribution boards, replacement of a 1250 kVA 11Kv/400V transformer, installation of new 11kV feeder cables, LED lighting retrofits, earthing and bonding works, and lighting protection system repairs. These works are essential to achieve compliance with SANS 10142-1 (Wiring Code), SANS 10114 (Interior Lighting), SANS 10299 (Lighting Protection), and the Occupational Health and Safety Act requirements. In addition, CIDB is not only responsible for the people who are working on site but is also responsible for the health and safety and wellbeing of the public surrounding the site and must ensure that the activities that are undertaken during the construction do not expose people working on site and surrounding areas to safety and other risks.

The aim of this Baseline Risk Assessment is to highlight the construction health and safety risks and hazards on the General Electrical Installation and Transformer and MV Feeder Replacement project on CIDB head office. The Principal Contractor and his or her subcontractors shall identify hazardous and potentially hazardous work operations within their scope of work. The Principal Contractor needs to demonstrate that the site hazards, the contractor's activity risks, and the mitigating measures have been considered in his risk assessments. Emerging risks and hazards shall be managed during construction work.

Activity-based risk assessments must be conducted by an appointed and competent person of the Principal Contractor. This will be verified when reviewing the Contractor, SHE files. This Baseline Risk Assessment shall assist the Principal Contractor in conducting preliminary hazard identification prior to work beginning on site. Contractor Baseline Risk Assessments shall be conducted to profile the project risks and shall be approved by the Principal Contractors Competent Person that is, Risk Assessor and the Construction Health and Safety Agent before the construction work commences and shall be updated regularly to ensure its relevance to changing scope.

Risks and hazards associated with the planning and installation stage for the General Electrical Installation and Transformer and MV Feeder Replacement project, has been identified basing on the scope of work, design drawings and locality maps for CIDB head office site. Risks and hazards have also been pointed out based on the anticipated activities that will be conducted throughout the construction period. Mitigation measures have been highlighted to reduce incidents during the planning and construction period.

Reason for this Risk Assessment

Section 9(1) of the Occupational Health and Safety Act 1993 (Act no. 85 of 1993), requires inter alia that the employer shall establish as far as is reasonably practicable, what the hazards to the health and safety of persons are attached to any work which is performed, further establish what precautionary measures should be taken with respect to such work and he shall provide the necessary means to apply such precautionary measures. The Construction Regulations 2014 further requires that a baseline risk assessment for an intended construction work project be compiled and a suitable, sufficiently documented and coherent site-specific health and safety specification for the intended construction work based on the baseline risk assessment to be prepared.

2. DEFINITIONS

Term	Description
Hazard	Source or situation with a potential for harm in terms of human injury or ill health, damage to property, damage to the workplace environment, or a combination of these (exposure to danger = potential source of harm)
Risk	Combination of the frequency (likelihood) and consequence (severity) of a specified hazardous event occurring
Reasonably practicable	The degree of risk created by a particular activity balanced against time, cost and physical difficulty of taking measures to avoid the risk, taking into account current technical knowledge and best industry practices
As Low as Reasonably Practicable	A level risk that is not intolerable and cannot be reduced further without the expenditure of costs that are grossly disproportionate cost, in relation to the benefit gained.
Acceptable risk	A level of risk that is so low as to not require actions to reduce its magnitude further, but which will be managed and monitored by the site using its own management system.
Competent Person	Person who is qualified because of knowledge, training and experience to organize work and its performance; is familiar with applicable Health and Safety legislation that applies to the work; and has knowledge of any potential or actual danger to or effect on health, or safety in the workplace.
Due Diligence	Systematic, comprehensive and demonstrable approach to the management of OH&S issues, which is based on an assessment of the likely risks and potential legal liabilities arising from the issues and is reasonably designed and operated to control and reduce those risks and prevent those liabilities from being incurred.

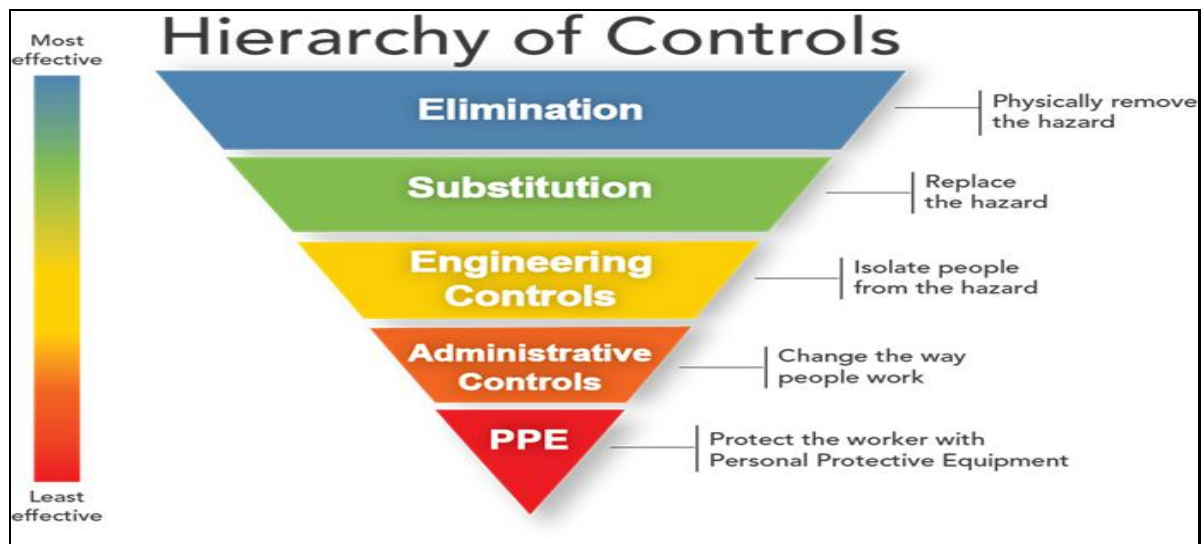


Figure 1: Hierarchy of Control

The various control measures are listed in order of decreasing effectiveness, thus the measures closest to the top should be adopted first wherever possible

The hierarchy of control is a method of hazard management for the worksite and must always be evaluated during risk assessments. The concept is that higher-level methods are always preferred over lower-level methods. The hierarchy of control for hazards is as below:

- **Elimination** - the work is performed by different means that does not expose the worker to the hazard.
- **Substitution** – substituting or replacing a hazard or hazardous work practice with a less hazardous one.
- **Engineering control** – if the hazard cannot be eliminated, substituted an engineering control is the next preferred measure.
- **Administrative Control** – this includes introducing work practices that reduce the risk, such as implementing measures to ensure that procedures, instruction, training and warning signs are in place to warn and protect workers exposed to hazards. This could also include limiting the amount of time a worker is exposed to a particular hazard. These controls should be used in conjunction with physical controls and appropriate supervision.
- **Personal protective equipment** – this is the very last control used in the hierarchy of controls and must only be considered when all other controls have been considered.

3. EXECUTIVE SUMMARY

In accordance with Section 9(1) of the Occupational Health and Safety Act 1993, Act No. 85 of 1993 and the associated Construction Regulations 2014, a baseline risk assessment is conducted to identify and evaluate the potential hazards and assess the associated risks for the General Electrical Installation and Transformer and MV Feeder Replacement project at CIDB head office.

4. OBJECTIVE

- To conduct a risk assessment to identify the hazards and evaluate the associated risks with regard to the General Electrical Installation and Transformer and MV Feeder Replacement project at CIDB head office.
- To provide management with the necessary information to institute reasonably practicable measures to eliminate or minimize the identified significant risks and effectively manage and protect persons against them.

5. SCOPE

The scope of work will include the following:

- Decommissioning, removal and disposing of existing transformer
- Supply, installation and commissioning of 1250 KVA 11KV/400V Dyn11 transformer
- Electrical installation including
 - Rewiring of DBs and load balancing.
 - Replacement of fluorescent fittings with LED linear and panel fittings, and all missing light fixtures with corresponding LEDs.
 - Replacement of floodlights with LED units.
 - Installation of isolators, sockets, and earth leakage devices where required.
 - Earthing and bonding works (all required gauges).
 - Installation of PVC pipes, trunking, cable trays, and ladders.
- Re-issue compliant as-built drawings and CoC upon completion.
- Maintenance of the new transformer and electrical installations for a period of three-years.

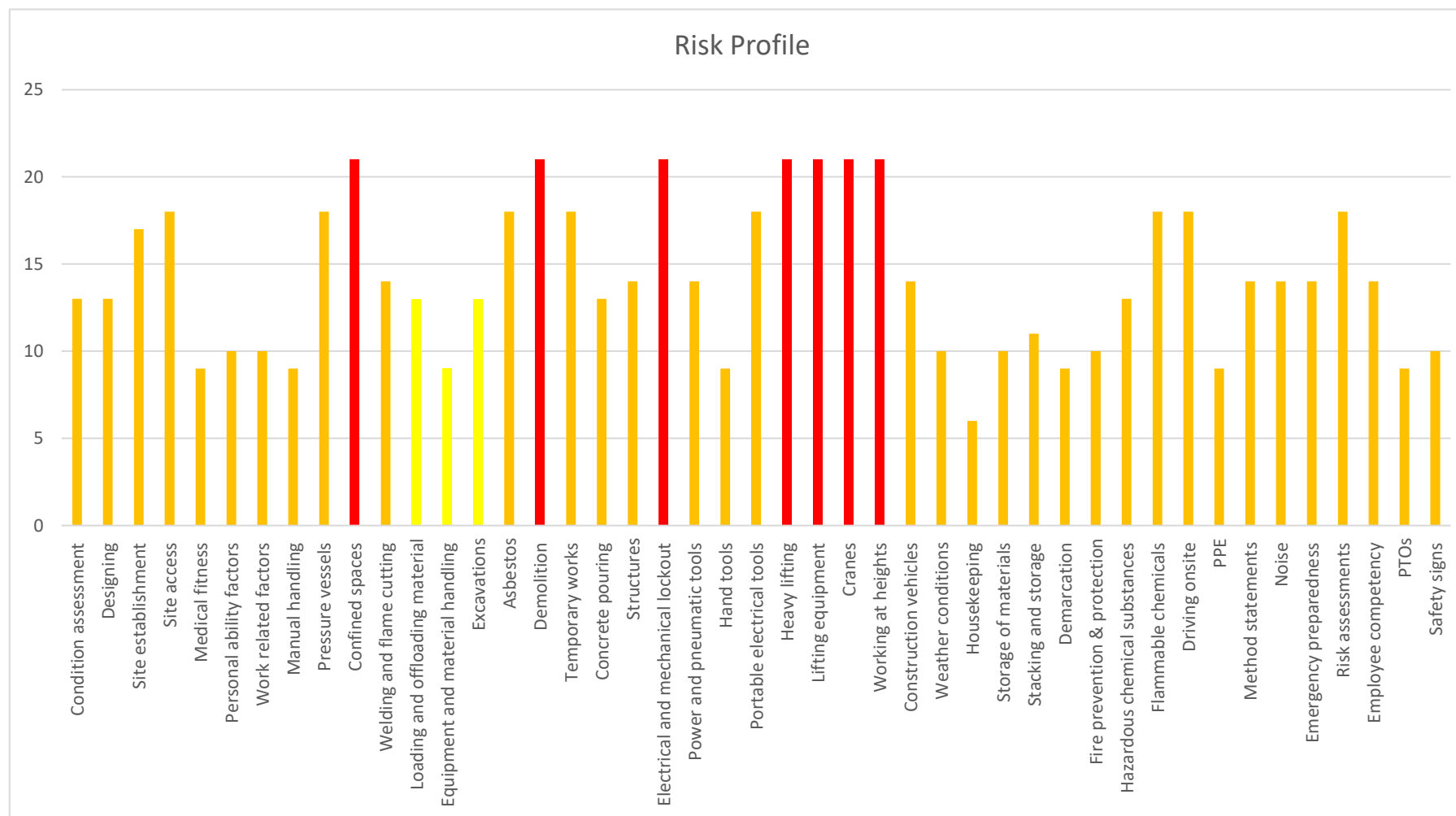
6. STANDARD RISK MATRIX

Section 9: Standard Risk Matrix

		Hazard Effect / Consequence				
Loss Type		1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
(S/H) Harm to People (Safety / Health)		Slight injury or health effects - first aid / minor medical treatment level	Minor injury or health effects - restricted work or minor lost workday case	Major injury or health effects - major lost workday case / permanent disability	Permanent total disabilities, single fatality	Multiple fatalities
(Ei) Environmental Impact		Minimal environmental harm	Material environmental harm	Serious environmental harm	Major environmental harm	Extreme environmental harm
(AD) Business Disruption / Asset Damage & Other Consequential Losses		No disruption to operation / R120k to less than R600k	Brief disruption to operation / R600k to less than R6M	Partial shutdown / R6m to less than R60M	Partial loss of operation / R60M to less than R450M	Substantial or total loss of operation / R450M and higher
(L&R) Legal & Regulatory		Low level legal issue	Minor legal issue; non compliance and breaches of the law	Serious breach of law; investigation/report to authority, prosecution and/or moderate penalty possible	Major breach of the law; considerable prosecution and penalties	Very considerable penalties & prosecutions. Multiple law suits & jail terms
(R) Impact on Reputation/Social/Community		Slight impact - public awareness may exist but no public concern	Limited impact - local public concern	Considerable impact - regional public concern	National impact - national public concern	International impact - international public attention
Likelihood	Likelihood Examples (use as guide only)	Risk Rating				
5 Almost Certain	The unwanted event has occurred frequently; occurs in order of one or more times per year & is likely to re-occur within 1 year	11 (M)	16 (H)	20 (H)	23 (Ex)	25 (Ex)
4 Likely	The unwanted event has occurred infrequently; occurs in order of less than once per year & is likely to re-occur within 5 years	7 (M)	12 (M)	17 (H)	21 (Ex)	24 (Ex)
3 Possible	The unwanted event could well have occurred in the business at some point within 10 years	4 (L)	8 (M)	13 (H)	18 (H)	22 (Ex)
2 Unlikely	The unwanted event has happened in the business at some time; or could happen within 20 years	2 (L)	5 (L)	9 (M)	14 (H)	19 (H)
1 Rare	The unwanted event has never been known to occur in the business; or is highly unlikely that it could ever occur beyond 20 years	1 (L)	3 (L)	6 (M)	10 (M)	15 (H)
Risk Rating		Guidelines for Risk Matrix				
21 to 25		(Ex) – Extreme (AA) Eliminate, avoid, implement specific action plans / procedures to manage & monitor				
13 to 20		(H) – High (A) Proactively manage via appropriate management system				
6 to 12		(M) – Medium (B) Actively manage via appropriate management system				
1 to 5		(L) – Low (C) Monitor & manage as appropriate via management system				



7. RISK ASSESSMENT REPORT



No	Category	Task to be performed	Hazard	Possible cause	Consequences	C	L	R	Recommended
1.	Site Establishment	Project mobilization	Incompetent personnel	Inadequate vetting process	Electrocution, project delays	4	3	12M	Verify electrical contractor registration, ECSA certification, and relevant trade certificate. Conduct competency assessments. Ensure valid occupational health certificates.
	Site Establishment	Equipment delivery	Crane/lifting incidents	Inadequate lifting plan	Equipment damage, injury	3	3	9M	Develop lifting and rigging plan. Use certified lifting equipment with valid load test certificates. Appoint qualified crane operators and riggers.
		Site access control	Unauthorized entry	Inadequate security	Public injury, theft	3	4	12M	Install physical barriers and warning signage. Implement access control system. Deploy security personnel during high-risk activities.
2.	Electrical Installation	Live electrical work	Electrocution	Failure to isolate supply	Fatal shock, severe burns	5	4	20 Ex	Implement strict LOTO procedures. Use qualified electricians only. Apply PTW system. Verify isolation with approved test equipment. Use

									insulated tools and appropriate PPE.
		Switchgear maintenance	▪ Arc flash incident	▪ Working on energized equipment	▪ Severe burns, fatality	5	3	15H	▪ Conduct arc flash hazard analysis. Use arc-rated PPE including face shields and flame-resistant clothing. Maintain safe working distances. De-energize equipment when possible.
		DB rewiring	▪ Electrical fire	▪ Short circuit, overloading	▪ Fire, property damage	3	3	9M	▪ Ensure proper circuit design and load calculations. Use appropriately rated cables and protective devices. Maintain fire extinguishers suitable for electrical fires. Test all circuits before energization.
3.	Small Power Installations	Socket outlet installation	▪ Electrical shock from live circuits	▪ Working on energized circuits	▪ Electrocution, burns	4	3	12M	▪ De-energize all circuits before socket installation. Use SANS 164 compliant installations for workstation power provision. Install appropriate earth leakage protection. Label all circuits clearly. Test all installations before energization.
		Cable routing for socket circuits	▪ Damage to existing services	▪ Inadequate service location	▪ Service disruption, electrical faults	3	3	9M	▪ Obtain as-built drawings from

									facility management. Use cable detection equipment. Install cables in designated routes only. Use appropriate cable containment systems. Coordinate with other services in ceiling voids.
4.	Distribution Boards Work	Distribution Boards Work	Arc flash incident	Working on live switchboards	Severe burns, fatality	5	3	15H	- Conduct arc flash hazard analysis before work. Use arc-rated PPE including face shields and flame-resistant clothing. - De-energize equipment where possible. Maintain safe working distances. Install missing danger signage and legend cards on all 23 distribution boards.
		Cable management and trunking	Fire due to poor cable management	Overloaded circuits, poor terminations	Electrical fire, property damage	4	3	12M	Ensure proper circuit design and load calculations. Install appropriate cable containment systems. Use correctly rated protective devices. Isolate untraceable loads as required. Maintain fire

									extinguishers suitable for electrical fires.
		Circuit labelling and documentation	Operational confusion	Poor documentation practices	Maintenance difficulties, safety risks	2	4	8M	Install blanking plates on all unused ways. Provide clear circuit descriptions and load documentation. Use proper DB colour coding for emergency and UPS circuits. Update as-built drawings. Train facility personnel on new DB layouts.
5.	Electrical Installation	Isolator and earth leakage installation	Electrocution during installation	Failure to isolate supply	Fatal shock, severe burns	5	3	15H	Implement strict isolation procedures. Verify isolation with approved testing equipment. Use insulated tools and appropriate PPE. Apply permit-to-work system for all electrical work. Ensure proper earthing of all new installations.
	Electrical Installation	PVC pipe and trunking installation	Manual handling injuries	Heavy materials, poor lifting technique	Back injuries, strains	2	4	8M	- Use mechanical aids for material handling. Train workers in proper lifting techniques. Use team lifting for heavy trunking sections. - Provide back support where appropriate.

									Ensure clear pathways for material movement.
6.	Transformer Works	Existing transformer decommissioning	Oil spill and environmental contamination	Improper oil drainage procedures	Environmental damage, clean-up costs	3	3	9M	Install oil containment barriers around work area. Use licensed waste disposal contractor for transformer oil. Have spill response kit available. Train personnel in spill response procedures. Conduct soil testing if contamination occurs.
		Transformer commissioning	Equipment damage during energization	Incorrect connections, phase rotation	Equipment damage, project delays	3	3	9M	Conduct comprehensive pre-commissioning tests per IEC 60076 and SANS 780. Verify correct wiring, polarity, and vector group. Perform insulation resistance and ratio tests. Coordinate energization with supply authority. Have fire suppression equipment available.
		1250kVA transformer installation	Crane overturn during lifting	Inadequate ground preparation	Multiple fatalities, major damage	5	2	10M	Conduct ground bearing capacity assessment. Use appropriate outrigger pads and crane mats. Develop detailed lift plan with certified lifting

									supervisor. Maintain exclusion zones during lifting operations. Use certified lifting gear with valid certificates.
		Plant room fire safety provisions	Fire/explosion in plant room	Oil leakage, ignition sources	Fire, property damage, injuries	4	2	8M	Install oil bunding and drainage systems. Provide adequate ventilation as per SANS requirements. Install appropriate fire detection and suppression systems. Use explosion-proof lighting in plant room. Remove all ignition sources during oil handling.
7.	MV Feeder Cable Installation	11kV cable installation	High voltage electric shock	Inadequate isolation from supply authority	Fatal electrocution	5	2	10M	Coordinate with City of Tshwane/Eskom for MV isolation and permit-to-work. Establish formal communication protocol with utility. Use multiple lockout points. Verify isolation with approved HV testing equipment. Maintain constant communication during work.
		Cable trenching for 11kV feeder	Trench collapse	Inadequate shoring in deep excavations	Burial, fatality	5	2	10M	Conduct soil analysis before excavation. Install appropriate shoring systems for

									depths>1.2m. Maintain safe egress points every 8m. Have rescue equipment available. Daily trench inspection by competent person. Use SANS 10198 compliant MV cables.
		Road access for MV cable work	Vehicle collision with public	Inadequate traffic control	Multiple fatalities, public exposure	5	2	10M	Obtain road closure permits from municipality. Use certified traffic control officers. Install appropriate signage and barriers. Coordinate with emergency services. Have traffic management plan approved by authorities.
8.	Working at Heights	Lightning protection system repair	Fall from roof level	Inadequate fall protection	Fatality, serious injury	5	3	15H	Develop comprehensive fall protection plan. Install temporary guardrails and safety netting. Use certified full-body harnesses and lifelines. Ensure workers are medically fit for heights. Comply with SANS 10299 for lightning protection work.

		Cable tray and ladder installation	Falling objects	Inadequate securing of tools and materials	Head injuries, fatalities below	4	3	12M	Use tool lanyards and secure all equipment. Establish exclusion zones below work areas. Provide hard hats for all personnel. Use debris nets where necessary. Prefer scaffolding for extended work periods.
		Rooftop electrical work	Electrocution at height	Contact with overhead lines	Fatal electrocution, fall	5	2	10M	- Identify all overhead power lines before roof access. - Maintain safe clearance distances. Use non-conductive ladders and tools. Implement rescue procedures for electrical incidents at height. Monitor weather conditions.
9.	Earthing and Bonding Works	Cable tray earthing installation	Inadequate earthing system	Poor installation practices	Electric shock, equipment damage	3	3	9M	Use appropriate conductor gauges as specified. Ensure continuity of all earthing connections. Conduct earth resistance testing. Comply with SANS 10292 for installations exceeding 1kV. Verify bonding to all metallic

									cable containment systems.
		Equipment bonding verification	Electric shock from unbonded equipment	Missed bonding connections	Electrocution, equipment damage	4	2	8M	Develop comprehensive bonding checklist. Test continuity of all bonding connections. Document all earthing and bonding installations. Ensure proper connection to main earth grid. Provide earthing certificates upon completion.
10.	Occupancy Sensor Installation	Installation of occupancy sensors in offices, conference rooms, stairways, parking	Electrical shock during sensor wiring	Working on live circuits	Electrocution, burns	4	3	12M	De-energize circuits before sensor installation. Use appropriate access equipment (ladders/scaffolding with 3-point contact). Conduct functional testing per manufacturer specifications. Provide training on sensor programming. Verify occupancy detection zones meet SANS 10114 requirements.
		Ceiling-mounted sensor installation	Falls from ladders/heights	Inadequate access equipment, loss of balance	Serious injury, fractures	4	2	8M	Use stable ladders or mobile scaffolding. Ensure three points of contact. Work in pairs for ceiling installations. Maintain clear work

									area below. Use fall arrest systems where heights exceed 2m.
		Sensor programming and calibration	System malfunction, energy inefficiency	Incorrect sensor settings, poor calibration	Energy inefficiency, user complaints, non-compliance	2	4	8M	Follow manufacturer programming procedures. Test detection zones with occupancy simulation. Adjust sensitivity and time delays appropriately. Document all sensor settings. Provide user training on override functions.
11.	11kV MV Cable Works (Extended)	MV cable termination with stress cones	Flashover during termination	Contamination of stress cones, moisture ingress	Arc flash, equipment damage, fire	5	2	10M	Work in clean environment free from dust and moisture. Use manufacturer-approved termination kits only. Follow exact installation procedures for stress cones per SANS 10198. Verify cleanliness of cable insulation. Test terminations before energization.
		Underground cable route survey	Damage to existing services (water, gas, telecoms)	Inadequate service location	Service disruption, electrocution, gas leak	5	2	10M	Obtain comprehensive as-built drawings from all service providers. Use Ground Penetrating Radar (GPR) for service location. Hand-dig trial holes to verify services.

									Mark all located services clearly. Coordinate with
		MV cable installation in ducts/vaults	Confined space hazards	Oxygen deficiency, toxic gases, poor ventilation	Asphyxiation, unconsciousness, fatality	5	2	10M	Conduct atmospheric testing before entry (O₂, LEL, H₂S, CO). Implement confined space entry procedures per OHS Act. Use continuous air monitoring. Provide forced ventilation. Ensure rescue equipment and trained personnel available.
12.	Pre-Decommissioning Planning	Structural assessment for transformer	Inadequate floor load capacity	Insufficient structural analysis	Floor collapse, multiple fatalities	5	2	10M	Engage qualified structural engineer for assessment. Verify floor load capacity for transformer weight (1250kVA) plus dynamic lifting forces. Design new plinth if required with engineering calculations. Obtain building owner approval for structural works.
		Temporary supply planning	Power outage to critical systems	Inadequate temporary supply design, load shedding	Data loss, system damage, business interruption	3	4	12M	Design temporary supply with adequate capacity for critical loads. Prepare single-line diagrams showing temporary connections. Test temporary supply under load before main outage. Coordinate with

									IT and facilities management. Have backup generator on standby.
		Crane access and lift planning	Public safety during crane operations	Inadequate traffic management, crane radius over public	Public injury, traffic accidents, property damage	5	2	10M	Obtain road closure permits from municipality. Develop detailed lift study with exclusion zones. Use certified lift supervisor and crane operator. Coordinate with emergency services. Provide advance notice to building occupants and public. Use spotters and barriers.
13.	Transformer Oil Management	Oil draining from old transformer	Oil spill during drainage	Equipment failure, overflow, hose rupture	Environmental contamination, soil pollution	3	3	9M	Use purpose-built oil containment bunds (>110% capacity). Install drip trays under all connection points. Use certified pumps with flow control. Monitor oil level continuously during drainage. Have spill response kits immediately available (absorbents, booms).
		Oil storage and transport	Fire from oil spillage	Ignition sources near oil, smoking	Fire, injuries, property damage	4	3	12M	Store oil in approved metal containers in designated area away from ignition sources. Keep away from electrical equipment.

									Provide Class B fire extinguishers. Bond and ground all containers during transfer. Use only approved vehicles for oil transport.
		Waste oil disposal	Illegal disposal, environmental prosecution	Use of unlicensed contractor	Environmental fines, legal liability	3	3	9M	Engage only licensed hazardous waste contractors (verify license). Obtain waste disposal manifest and certificates. Conduct oil sampling and analysis per regulations. Keep disposal certificates on file. Verify disposal at licensed facility.
14.	Transformer Testing & Commissioning	Insulation resistance testing (Megger)	Electric shock during testing	High voltage test equipment (>1000V)	Electrocution, burns	4	2	8M	Use only qualified test engineers with IEC 60076 training. Verify test equipment calibration (within 12 months). Establish safety perimeter during testing. Use insulated test leads and proper PPE. Discharge equipment after testing. Follow manufacturer test procedures.
		Ratio and polarity testing	Incorrect test results leading to equipment damage	Faulty test equipment, wrong connections	Equipment damage during energization, fire	3	3	9M	Use calibrated test equipment. Verify manufacturer nameplate data. Compare results with

									factory test reports (acceptance: $\pm 0.5\%$). Conduct multiple measurements for verification. Document all test results with photos. Correct any discrepancies before energization.
15.	Transformer Energization	Initial no-load energization	Inrush current damage	Incorrect energization sequence	Transformer damage, nuisance tripping	3	4	12M	Follow manufacturer energization procedure. Energize HV side first (or as specified). Monitor inrush current and magnetizing current. Allow 1-hour stabilization period. Check for abnormal noise, vibration, or heating. Verify oil level and temperature.
		Load transfer from temporary supply	Overload or reverse power flow	Inadequate load sequencing, simultaneous transfer	Equipment damage, power outage	3	4	12M	Transfer loads gradually per approved sequence. Monitor voltages ($\pm 5\%$ nominal) and currents continuously. Verify phase rotation before each load transfer. Keep temporary supply energized as backup. Document load transfer timeline. Have isolation procedures ready.

16.	Post-Commissioning Monitoring	Thermal imaging survey (1 week, 1 month)	Undetected hotspots at connections	Delayed thermal survey, poor technique	Connection failure, fire	3	3	9M	Conduct first thermal survey after 1 week under load. Repeat after 1 month under full load. Compare images against manufacturer limits (<10°C rise acceptable). Focus on all terminations, bushings, tap changer. Document all hotspots and corrective actions. Use qualified thermographer.
		Documentation and handover	Incomplete commissioning records	Poor documentation practices, lost records	Warranty issues, compliance gaps, liability	2	4	8M	Compile comprehensive commissioning pack (electronic + hard copy). Include all test reports, certificates, and photos. Provide as-installed drawings and relay settings. Deliver O&M manual with maintenance schedule. Conduct training session for client personnel. Update asset register.
17.		Year 1 - Baseline establishment (quarterly, annual inspections)	Inadequate baseline data	Poor initial documentation, missed inspections	Unable to track deterioration, warranty issues	3	3	9M	Conduct comprehensive inspections per schedule: quarterly (lighting, visual checks), bi-annual (UPS/generator), annual (electrical tests, oil analysis, thermographic,

	Three-Year Maintenance Program								earthing). Establish baseline values for trend analysis. Document all findings with photos. Create maintenance database. Train personnel on inspection procedures.
		Year 2 - Routine and corrective maintenance	Missed maintenance intervals	Inadequate scheduling, resource constraints	Equipment degradation, failures, safety hazards	3	3	9M	Follow approved maintenance schedule strictly. Conduct quarterly inspections of lighting, DBs, UPS. Perform bi-annual power outlet testing. Execute annual transformer maintenance (oil top-up if approved, DGA, thermographic). Compare results with Year 1 baseline. Report trending deterioration immediately. Maintain fault registers.
		Year 3 - Final certification and compliance	Non-compliance at handover	Incomplete rectification, missing CoCs	Regulatory violations, client rejection, liability	3	3	9M	Conduct final comprehensive inspections of all systems. Perform final SANS compliance testing (10114, 10142-1, 10299, 780). Issue all required Certificates of Compliance. Compile complete 3-year

									performance summary with trend analysis. Provide recommendations for ongoing maintenance. Deliver close-out documentation to client
18.	Personnel Competency Management	ECSA registration verification for engineers	Unregistered engineers signing off work	Inadequate verification process	Professional misconduct, legal liability, invalid CoCs	4	2	8M	Verify current ECSA registration (Pr.Eng, Pr.Tech.Eng, Pr.Techni.Eng). Check registration is valid and in good standing via ECSA website. Verify electrical engineering qualification (BEng/BTech/National Diploma). Ensure 8-10 years relevant experience. Confirm knowledge of SANS 10142-1, SANS 10280, SANS 10281, NRS 097-2. Maintain copies of registration certificates on site.
		Wireman License and IE/MIE verification	Illegal electrical work by unlicensed persons	Use of unlicensed electricians	Regulatory prosecution, fatality, invalid CoCs	5	3	15H	Verify valid Wireman License from Department of Labour. Confirm Registration as Installation Electrician (IE) or Master Installation Electrician (MIE). Check Trade Test Certificate (Section

									13/26D). Ensure 5 years post-registration experience. Verify authority to issue CoC per SANS 10142-1. Maintain license register on site accessible for inspection.
		MV switching authorization (11kV work)	Unauthorized HV work on 11kV system	Unqualified personnel working on MV	Fatal electrocution, arc flash	5	3	15H	Verify MV Switching Authorization Certificate from Eskom/accredited training provider. Confirm 5 years MV switching experience in substations. Check appointment as "Competent Person (MV)" under OHS Electrical Regulations by employer. Ensure current medical fitness certificate. Maintain authorization certificates on site. Provide refresher training.
19.	Permit & Regulatory Compliance	Construction Work Permit (CWP)	Working without valid permit	Permit not obtained from client	Project shutdown, legal action, contractor liability	4	3	12M	Obtain Construction Work Permit from CIDB before mobilization. Verify all permit conditions are understood by site team. Display permit prominently at site entrance. Ensure all

									personnel aware of permit requirements and conditions. Keep permit in H&S file. Renew if work extended beyond permit period.
		Eskom/City of Tshwane utility isolation permit	Working on live 11kV supply	No utility isolation approval obtained	Fatal electrocution, arc flash, prosecution	5	3	15H	Coordinate with supply authority for formal outage approval minimum 2 weeks in advance. Obtain formal Permit-to-Work for MV isolation. Establish communication protocol with utility control room. Verify isolation before work commences using HV test equipment. Maintain communication throughout work. Follow utility clearance procedures exactly. Document all communications.
		Road closure and crane operating permits	Illegal road occupation	No municipal approval for road works	Fines, work stoppage, public complaints	3	3	9M	Apply for road closure permits from municipality well in advance (minimum 14 days). Obtain crane operating permits showing crane specifications and lift plan. Coordinate with

									traffic department and metro police. Provide advance notice to affected parties (residents, businesses). Display permits during crane operations. Follow all permit conditions strictly.
20.	Traffic & Public Safety Management	Traffic management for MV cable works on public roads	Vehicle collisions with workers/public	Inadequate traffic control, missing signage	Multiple fatalities, injuries, public outcry	5	3	15H	Develop traffic management plan per SARTSM Chapter 13, Volume 2. Use certified traffic control officers (TCOs with valid certificates). Install proper road signage (TW1, TW2, TW16 series warning signs). Provide adequate delineation (cones, barriers, barricades). Use flag persons at intersections. Coordinate with SAPS and metro police. Schedule work during off-peak hours where possible.
		Crane operations over public areas/roads	Falling loads onto public	Rigging failure, operator error, wind	Multiple fatalities, vehicle damage	5	2	10M	Establish exclusion zones under entire crane radius. Use certified crane operator (with valid license) and qualified rigger (NCPLI). Follow approved lift

									plan exactly (no deviations). Conduct pre-lift safety briefing with all personnel. Use multiple tag lines for load control during lift. Post spotters at exclusion zone perimeter. Have emergency procedures ready. Monitor wind speed (<40 km/h).
		Public notification and access control	Public entering active work zones	Inadequate barriers, curious bystanders	Public injury, project liability, delays	4	3	12M	Install physical barriers (heras fencing, concrete barriers) around all work areas. Provide clear warning signage in multiple languages (English, Afrikaans, local languages). Notify building occupants and neighbors minimum 48 hours in advance. Maintain pedestrian access routes with clear signage. Post security during high-risk operations. Have public liaison officer available for complaints/queries.

HEALTH AND SAFETY SPECIFICATIONS

AS PER CONSTRUCTION REGULATIONS 5(1)(b), 2014
OCCUPATIONAL HEALTH AND SAFETY ACT, NO. 85 OF 1993



DEVELOPMENT THROUGH PARTNERSHIP

PROJECT:

APPOINTMENT OF A SERVICE PROVIDER FOR ELECTRICAL INFRASTRUCTURE UPGRADE PROJECT: SUPPLY AND INSTALL A 1250 KVA TRANSFORMER, REMOVAL OF EXISTING TRANSFORMER, DB REWIRING, LIGHTING AND SMALL POWER RECTIFICATION, EARTHING & LIGHTNING PROTECTION UPGRADES WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION

1. PREAMBLE

In terms of Construction Regulation 5(1) of 2017 of the Occupational Health and Safety Act, (Act 85 of 1993), The Construction Industry Development Board, hereinafter referred to as 'CIDB' as the Client, is responsible to prepare health and safety specifications for the intended upgrade and construction of substations including emergency works and provide the Principal Contractor who is making a bid or appointed to perform construction work for CIDB with the same.

CIDB's further duties are as described in the Occupational Health and Safety Act, (Act 85 of 1993), and the Regulations made there-under. The Principal Contractor shall be responsible for the health and safety policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the health and safety plan for the project.

This 'Health and Safety Specification' document is governed by the "Occupational Health and Safety Act, (Act No. 85 of 1993), hereinafter referred to as 'the Act'. Notwithstanding this, cognizance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of health and safety specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document, this requirement is limited to all health and safety issues pertaining to the site of the project as referred to here-in.

Due to the scope and the nature of the intended construction work, every construction activity will be different, and circumstances and conditions may change even daily. Therefore, due caution is to be taken by the Principal Contractor when drafting the health and safety plan based on these health and safety specifications. Prior to drafting the health and safety plan, and in consideration of the information contained here-in, the contractor shall set up a risk assessment program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. This risk assessment and the steps identified will be the basis or point of departure for the health and safety plan. The health and safety plan shall include applicable methods statements, e.g., for demolition work, detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the risk assessment.

CIDB intends to appoint a Contractor for the General Electrical Installation and Transformer and MV Feeder Replacement project, for a period of one year (01) at the CIDB head office in Centurion, for a period of one year (01) at the CIDB head office in Centurion. In this, a high premium is to be placed on the health and safety of the most valuable assets of CIDB. These are its personnel, the personnel of its stakeholders and the physical assets of which it is the custodian and may also include the public as well. The responsibilities CIDB and relevant stakeholders have towards its employees and other people present on the site are captured further in this specification document. These responsibilities stem from both moral, civil and a variety of legal obligations. The Principal Contractor is to take due cognizance of the above statement.

Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Principal Contractor from his responsibilities and accountability in respect of the project to which this specification document pertains. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of CIDB.

2. PROJECT SCOPE

The scope of work will include the following:

- Decommissioning, removal and disposing of existing transformer
- Supply, installation and commissioning of 1250 KVA 11KV/400V Dyn11 transformer
- Electrical installation including
 - Rewiring of DBs and load balancing.
 - Replacement of fluorescent fittings with LED linear and panel fittings, and all missing light fixtures with corresponding LEDs.
 - Replacement of floodlights with LED units.
 - Installation of isolators, sockets, and earth leakage devices where required.
 - Earthing and bonding works (all required gauges).
 - Installation of PVC pipes, trunking, cable trays, and ladders.
- Re-issue compliant as-built drawings and CoC upon completion.
- Maintenance of the new transformer and electrical installations for a period of three-years.

3. SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT

These specifications should be read in conjunction with the Act, the Construction Regulations 2014, and all other regulations and safety standards which are in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to countermand or nullify any stipulation of the Act, regulations and safety standards which are promulgated under, or incorporated into the Act.

CIDB is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments and is further obligated to monitor that these measures are structured and applied according to the requirements of these health and safety specifications.

The purpose of this specification document is to provide the relevant Principal Contractor with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work for CIDB. The Principal Contractor is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements on inter alia:

- Safety considerations affecting the site of the project and its environment;
- Health and safety aspects of the associated structures and equipment;

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- Submissions on health and safety matters required from the Principal Contractor; and
- The Principal Contractor's health and safety plan.

4. DEFINITIONS

“Purpose of the Act” – To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

“Health and Safety Specification” – means a document that includes information required under the construction regulation and obtained from the clients and designers during the early planning and design stage for a specific project on a specific site for use by the contractors when preparing their tenders or bids to clients.

“Health and Safety Plan” – means a document which is site specific and includes all identified hazards, safe work procedures to mitigate, reduce and control the hazards identified in a project.;

“Agent” – means any person who acts as a representative for a client;

“CIDB” – means Construction Industry Development Board ;

“Construction Health and Safety Agent (SACPCMP)” – The person or entity appointed by the client through the Agent and who has a full authority and obligation to act on the client's behalf in terms of the construction regulations;

“Construction Work” is defined as any work in connection with –

- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

“Contractor” – means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors;

“Accident” – means unplanned occurrence that happens due to the unsafe condition and may cause injury to a person, damage to the property, material, plant, equipment and the environment;

“Hazard” – means anything including work activities and practices with the potential to cause harm;

“Risk” – means the likelihood that harm will occur and the subsequent consequences.

“Risk assessment” – means a process to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to mitigate, reduce or control such hazards.

Health and Safety File” – means a file, or other record in permanent form, containing the information required a contemplated in the regulations;

5. RESPONSIBILITIES

5.1 CIDB

- a) CIDB or its appointed Agent on its behalf will appoint each Principal Contractor for this project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations.
- b) CIDB or its appointed Agent on its behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of both Principal Contractor and Contractor for approval.
- c) CIDB or its appointed Agent on its behalf will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.
- d) CIDB or its appointed Agent on its behalf, will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:
 - have failed to have complied with any of the administrative measures required by the Construction Regulations 2014 in preparation for the construction project or any physical preparations necessary in terms of the Act;
 - have failed to implement or maintain their health and safety plan;
 - have executed construction work which is not in accordance with their health and safety plan; or
 - act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

5.2 Principal Contractor

- a) The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work ensure that they receive a copy of the construction work permit from CIDB or its appointed Agent. A copy of the construction work permit shall be made available in the Health and Safety file
- b) The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation.

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- c) The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.
- d) The Principal Contractor shall provide and demonstrate to CIDB or its appointed Agent a suitable and sufficiently documented health and safety plan based on this specification, the Act and the Construction Regulations 2014, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all sub-contractors for which he has to take responsibility in terms of this contract.
- e) The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.
- f) The potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations. (See Annexure A: Bill of Quantities for Health and Safety)
- g) The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- h) The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to CIDB, an Inspector, employee or sub-contractor.
- i) The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this specification, the Act and the Construction Regulations 2014, is opened and kept on site and made available to CIDB or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to CIDB.
- j) The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.
- k) The Principal Contractor shall from time to time evaluate the relevance of the health and safety plan and revise the same as required, following which revised plan shall be submitted to CIDB for approval.

5.3 Contractor

The Contractor must demonstrate to the Principal Contractor that he has the necessary competencies and resources to perform the construction work safely.

6. GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS

6.1 Health and Safety Plan

A health and safety plan must be developed, implemented, maintained and kept up to date during the construction project.

The Principal Contractor should prepare a health and safety plan that includes

- Project information;
- CIDB requirements for health and safety management on the project; as specified in this health and safety specification

The health and safety plan should include the following information:

- Details of the Client, that is the person commissioning the construction work, for example their name, representative and contact detail, details of the Principal Contractor;
- Details of the construction project, the address of the workplace, anticipated start and end date and a brief description of the type of construction work that the health and safety plan will cover;
- Details on how subcontractors will be managed and monitored, including how the Principal Contractor intends to implement and ensure compliance with the health and safety plan such as checking on the performance of subcontractors and how non-compliance will be handled; and
- Details on how the risks associated with traffic volumes, construction vehicles and mobile plant and all high-risk construction work that will take place on the construction project will be managed.

The health and safety plan should also include information on:

- the provision and maintenance of a hazardous chemicals register, safety data sheets and hazardous chemicals storage;
- the safe use and storage of plant;
- workplace security and public safety; and
- ensuring workers have appropriate competences and training to undertake the construction work.

The health and safety plan must contain:

- A general description of the type of work activities involved in the project and not just a description of the infrastructures to be constructed;
- The project program or schedule details, including start and finish dates, showing principal activities;
- Details of Client, Design Team, Principal Contractor, Subcontractors, and major suppliers; and
- Extent and location of relevant existing records, surveys, site investigation, etc

6.2 Health and Safety File

The Principal Contractor must, in terms of Construction Regulation 7(1)(b), keep a health and safety file on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done.

The health and safety file will remain the property of CIDB on its behalf throughout the period of the project and shall be consolidated and handed over to CIDB on its behalf at the time of completion of the project.

6.3 Construction Work Permit

CIDB shall ensure that the Construction Work Permit (CWP) is available prior to any Principal Contractor commencing any form of construction work on site. CIDB will provide a copy of the CWP to keep in the health and safety file. All construction health and safety aspects as they relate to the overall requirements will be managed through the CIDB Project Manager. The Project Manager will ensure that all the statutory requirements are adhered to by the Principal Contractors and their Contractors at all times.

6.4 Structure and Responsibilities

6.4.1 Overall supervision and responsibility for occupational health and safety

The Principal Contractor [appointed in terms of Construction Regulation 5(1)(k)] is responsible to implement and maintain the health and safety plan approved by the Client.

The Chief Executive Officer (in terms of Section 16(1) of the Act) of the Principal Contractor is to ensure that the Employer (as defined in the Act) complies with the Act.

The Principal Contractor's Chief Executive Officer may appoint any person reporting to him/her as Designated Person in terms of Section 16(2) of the Act. Such Designated Person is responsible to assist the Chief Executive Officer to ensure that the Employer complies with the requirements of the Act.

The Construction Manager, Assistant Construction Manager, Construction Supervisor and Assistant Construction Supervisor(S) appointed in terms of Construction Regulation 8 are responsible for supervising the construction work and in specific to ensure that all work undertaken comply with the requirements of the Act, its Regulations and these health and safety specifications.

6.4.2 Operational responsibilities for Occupational Health and Safety

The Principal Contractor shall appoint designated competent employees and/or other competent persons as outlined in the following list to assist with the operational responsibilities for occupational health and safety. This list is only the minimum requirement and is therefore in no way exhaustive.

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Appointment	Legal Reference
Assistant to Chief Executive Officer	Section 16.2
Construction Manager	Construction Regulation 8(1)
Assistant Construction Manager	Construction Regulation 8(2)
Construction Supervisor	Construction Regulation 8(7)
Assistant Construction Supervisor	Construction Regulation 8(8)
Construction Health and Safety Officer	Construction Regulation 8(5)
Construction Vehicle, Mobile Plant and Machinery Supervisor	Construction Regulation 23
Drivers of Construction Vehicles and Operators of Plant	Construction Regulation 23
Electrical Installation and Appliances Inspector	Construction Regulation 24
Emergency, Security and Fire Coordinator	Construction Regulation 29
Excavation Supervisor	Construction Regulation 13
First-aiders	General Safety Regulation 3
Firefighting equipment inspector	Construction Regulation 29
Hazardous Chemical Substances Supervisor	Hazardous Chemicals Substances Regulations 10
Incident Investigator	General Administrative Regulation 9
Ladder Inspector	General Safety Regulation 13(a)
Lifting Machines and Equipment Inspector	Construction Regulation 22
Occupational Health and Safety Committee	OHSACT Section 19
Occupational Health and Safety Representatives	OHSACT Section 17

Person Responsible for Machinery	General Machinery Regulation 2
Risk Assessor	Construction Regulation 9(1)
Stacking and Storage Supervisor	Construction Regulation 28

These appointments must be in writing and the responsibilities clearly stated together with the period for which each appointment is made. This information must be communicated to and agreed with the appointees.

Copies of appointments must be submitted to CIDB together with concise CVs of the appointees as part of the Principal Contractor's health and safety plan, and if appointed, copies of the appointments included in the health and safety file. All appointments must be approved by CIDB and any changes of appointees or appointments must be communicated to CIDB and agreed upon before being implemented.

The Principal Contractor must, furthermore, provide CIDB with a list of all contractors that he/she has appointed or intends to appoint and keep this list updated on a weekly basis.

6.4.3 Construction Health and Safety Officer

This project requires the appointment of a full-time Construction Health and Safety Officer, appointed in terms of Construction Regulation 8(5). This appointee should be duly registered and in good standing with a statutory body approved by the Chief Inspector as is required by Construction Regulation 8(6).

The South African Council for Project and Construction Management Professions (SACPCMP) is currently the statutory body responsible for the professional registration of construction health and safety officers and a copy of the appointee's SACPCMP's registration certificate should be submitted as part of the Principal Contractor's health and safety plan and be readily available in the health and safety file to be kept and maintained on site.

6.4.4 Designation of Occupational Health and Safety Representatives

Where the Principal Contractor employs more than 20 persons [including the employees of other contractors (sub-contractors) and its supervisors] he has to appoint one occupational health and safety representative for every 50 employees or part thereof. General Administrative Regulation 6 requires that the election, appointment and subsequent designation of the occupational health and safety representatives be executed in consultation with employee representatives or employees. (Section 17 of the Act as well as General Administrative Regulation 6 and 7 refer).

Occupational health and safety representatives have to be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

6.4.5 Duties and functions of the Occupational Health and Safety Representatives

The Principal Contractor must ensure that the designated occupational health and safety representatives conduct a weekly inspection of their respective areas of responsibility, using a checklist, and report thereon to the Principal Contractor.

Occupational health and safety representatives must be included in accident and/or incident investigations.

Occupational health and safety representatives must attend all occupational health and safety committee meetings.

6.4.6 Appointment of Occupational Health and Safety Committee

The Principal Contractor must establish an occupational health and safety committee consisting of all the designated occupational health and safety representatives together with a number of management representatives that are not allowed to exceed the number of occupational health and safety representatives on the committee and a representative of CIDB who shall act as the chairperson without voting rights. The members of the occupational health and safety committee must be appointed in writing and copies of the appointments included in the occupational health and safety file.

The occupational health and safety committee must meet as a minimum on a monthly basis and consider, at least, the following agenda items:

- Opening and welcome.
- Members present, apologies and absent.
- Minutes of previous meeting.
- Matters arising from the previous meeting.
- Occupational health and safety representatives' reports.
- Incident and/or accident reports and investigations.
- Incident, accident and/or injury statistics.
- Other matters.
- Endorsement of registers and other statutory documents by a duly authorised representative of the principal contractor.
- Close and next meeting.

6.5 Compensation of Occupational Injuries and Diseases Act 130 of 1993

The Principal Contractor shall submit a letter of good standing with its Compensation Insurer, to the client or his appointed representative, as proof of registration. Contractors shall submit proof of registration to the Principal Contractor before they commence work on site

6.6 Occupational Health and Safety Policy

The Principal Contractor and all other Contractors shall submit to CIDB and to the Architect, a copy of their organisation's health and safety policy signed by their Chief Executive Officer. Each policy must include a description of the organisation and

state the health and safety objectives and how they will be achieved and implemented by the organisation. Copies of these policies shall be attached to the health and safety plan

6.7 Health and Safety Organogram

The Principal Contractor and all Contractors shall submit an organogram, outlining the health and safety site management structure including the relevant appointments/competent persons and shareholders. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram shall be updated when there are any changes in the site management structure. A copy shall be attached to the health and safety plan.

6.8 Hazard Identifications and Risk Assessment

The Contractor shall cause a hazard identification to be performed by a competent person before commencement of construction work, and the assessed risks shall form part of the construction phase health and safety plan submitted for approval by CIDB or its appointed Agent

The risk assessment must include;

- A list of hazards identified as well as potentially hazardous tasks;
- A documented site-specific risk assessment based on the list of tasks and associated hazards;
- Method statements and a set of safe working procedures to eliminate, reduce and/or control the risks assessed;
- A monitoring and review procedure of the risks assessment as the risks change

The Principal Contractor shall ensure that all employees and or Contractors are competent to perform the work and informed, instructed and trained by a competent person regarding any hazards, risks and related safe work procedures before any work commences and thereafter at regular intervals as the risks change and as new risks develop. Proof of this shall be kept on the health and safety file.

The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by its operations are informed and trained according to the hazards and risks and are conversant with the safe work procedures, control measures and other related rules (toolbox talk strategy to be implemented). Appropriate signage regarding the dangers attached to the work and hazards identified must be posted at strategic places for everyone to see and be included in the method statement to be provided in the health and safety plan.

6.9 Health and Safety Training/Induction

6.9.1 Induction

The Principal Contractor shall ensure that all site personnel undergo a risk-specific health and safety induction training session before starting work. A record of attendance shall be kept in the health and safety file. All visitors to the site shall also receive risk-specific health and safety induction training and a record of such shall be kept. All employees to be informed, instructed and trained by a competent person regarding the hazards and work procedures as prescribed.

6.9.2 Awareness

The Principal Contractor shall ensure that, on site, periodic toolbox talk take place at least once per week. These talks should deal with risks relevant to the construction work at hand. A record of attendance shall be kept in the health and safety file. All Contractors have to comply with this minimum requirement. The contractor shall inform all residence and or members of the public, who may be affected by the activities and who will most likely be exposed to the hazards identified of all precautionary measures to be taken.

6.9.3 Competency

All competent persons shall have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control or carry out. This will have to be assessed on regular basis e.g., periodic audits by CIDB, progress meetings, etc. The Principal Contractor is responsible to ensure that competent Contractors are appointed to carry out construction work.

6.10 Medical Certificates of Fitness

The Principal Contractor must ensure that all his or her employees have valid medical certificates of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 of the Construction Regulations 2014.

6.11 Public and Site Visitor Health and Safety

Both CIDB and the Principal Contractor have a duty in terms of the OHS Act to do all that is reasonably practicable to prevent members of the public and site visitors from being adversely affected by the construction activities.

The Principal Contractor shall ensure that every person working on or visiting the site, as well as the public in general, shall be made aware of the dangers likely to arise from site activities, including the precautions to be taken to avoid or minimise those dangers. A record of these inductions or briefings shall be kept in the project health and safety file in accordance with the Construction Regulations. Appropriate health and safety notices and signs shall be posted up, but this shall not be the only measure taken. The construction site shall be suitably and sufficiently fenced off or barricaded and or provided with controlled access points to prevent the entry of unauthorized persons.

6.12 General Record Keeping

The Principal Contractor and all Contractors shall keep and maintain health and safety records to demonstrate compliance with this specification, with the OHS Act 85/1993, Construction Regulations 2014 and any other legislation applicable on site. The Principal Contractor shall ensure that all records of incidents/accidents, training, inspections, audits, etc. are kept in a health and safety file held in the site office. The Principal Contractor must ensure that every Contractor opens its own health and safety file, maintains the file and makes it available on request. The Principal Contractor shall maintain an up-to-date register of each Contractor engaged in construction work on site giving the Contractors' name and the Responsible Persons'

contact details and the number of employees on site. As these details may be subject to frequent change, the register must be updated at least weekly. The register is to be available for inspection

6.13 Health and Safety Audits, Monitoring and Reporting

CIDB will conduct at least once monthly, a health and safety audit of the work operations including a full audit of physical site activities as well as an audit of the administration of health and safety. The Principal Contractor is obligated to conduct similar audits on all contractors appointed by it. Detailed reports of the audit findings and results shall be reported on at all levels of project management meetings/forums. Copies of the Client audit reports shall be kept in the project health and safety file while the Principal Contractor audit reports shall be kept in their file, a copy being forwarded to CIDB. Contractors shall audit their sub-contractors and keep records of these audits in their health and safety files, available on request. These audits must be conducted by a competent person.

6.14 Accident / Incident Reporting and Investigation

Injuries are to be categorized into first aid; medical; disabling; and fatal. The Principal Contractor must stipulate in its construction phase health and safety plan how it will handle each of these categories. When reporting injuries to CIDB, these categories shall be used. All injuries shall be investigated by the Principal Contractor, with a report being forwarded to CIDB forthwith. All Contractors have to report on the 4 categories of injuries to the Principal Contractor at least monthly. The Principal Contractor must report all injuries to CIDB in the form of a detailed injury report at least monthly. The Client's Agent must be informed forthwith of any recordable incident or accident.

6.15 Hazards and Potential Situations

The Principal Contractor shall immediately notify other Contractors as well as CIDB Agent of any hazardous or potentially hazardous situations that may arise during performance of construction activities.

6.16 Contractors and Sub-contractors

The Principal Contractor shall ensure that all Contractors under its control comply with this specification, the OHS Act of 1993, Construction Regulations 2014, and all other relevant legislation that may relate to the activities directly or indirectly. The Contractor, when appointing other Contractors as 'Sub-contractors', shall mutatis mutandis ensure compliance, and a section 37(2) agreement must be put in place.

7. OPERATIONAL CONTROL

7.1 Emergency Procedures

The Principal Contractor shall prepare a detailed emergency procedure prior to commencement of work on site and it shall be included in, and form part of, the health and safety plan. The procedure shall be updated whenever changes occur, and it

shall detail the emergency response plans. The emergency procedures shall not be limited to, but shall include, the following key elements:

- List of key competent personnel on site;
- Details of the nearest emergency services, including their physical addresses and phone numbers;
- Actions or steps to be taken in the event of each specific type of emergency;
- Information on hazardous materials/situations that may be encountered on site.

Emergency procedures shall include, but shall not be limited to, fire, spills, accidents to employees, bomb threats, and major incidents/accidents.

A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and be readily available to site personnel at all times that there are persons on site i.e., it must not be in an area which may be inaccessible outside of normal working hours.

The Principal Contractor shall advise CIDB and the Architect in writing forthwith, and thereafter at the project and health and safety meetings, of any emergencies that occurred, together with a record of the action taken. Copies of all reports on emergencies shall be kept in the project health and safety file.

7.2 Development of a Lifting Plan

- A clear and detailed description of the lifting operation to be provided
- A step-by-step method statement detailing the sequence of the lift from start to finish to established. This should include pre-lift checks, the actual lifting and moving of the load, and the final placement and securing of the load.
- The names and roles of all personnel involved in the lifting operation, including the lifting supervisor, crane operator, rigger, and signal person to be posted.
- Documentary proof of competency for each individual, including valid training certificates and medical fitness certificates as required by the Driven Machinery Regulations and the National Code of Practice for the Training Providers of Lifting Machine Operators to be provided.
- A comprehensive list of all lifting machinery and tackle to be used (e.g., cranes, hoists, slings, shackles) to be available.
- Valid and up-to-date inspection and load test certificates for all lifting equipment, as mandated by the Driven Machinery Regulations. This includes a register of all examinations and performance tests should be provided.
- Confirmation that the safe working load (SWL) of the equipment is appropriate for the lift.

7.3 First Aid Boxes and First Aid Equipment

The Principal Contractor and all other Contractors shall appoint first aider(s) in writing. All Contractors with more than 10 employees shall have a trained, certified first aider on site at all times. The appointed first aider(s) are to be sent for accredited first aid training. Copies of the valid first aid certificates for each First Aider are to be kept in the project health and

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safety file. The Principal Contractor shall provide an on-site first aid station with first aid facilities, including first aid boxes adequately stocked at all times. All Contractors with more than 5 employees shall supply their own first aid box(es).

7.4 Security

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must, among others, include the rules that nonemployees will not be allowed on site unaccompanied.

The Principal Contractor must develop a set of project applicable security rules and procedures and maintain these throughout the construction period.

7.5 Accommodation of traffic

The Principal Contractor shall ensure that appropriate and a sufficient number of road signs be posted as per Chapter 13, Volume 2 of the South African Road Traffic Signs Manual (SARTSM) and these signs also be actively maintained to protect employees against traffic and to warn road users of the presence of construction activities and related risks next to and in the road surface. These signs should be repeated as actual construction work and risk are approached.

The maintenance of the road signs including after hour's management shall also be actively managed.

Flag persons shall be provided, where applicable with suitable road marking and flags to ensure the effectiveness of this risk mitigation measures.

7.6 Working at Heights

The Contractor shall ensure that a site-specific Fall Protection Plan is developed by a competent person, appointed in writing as per Construction Regulation 10.

The Fall Protection Plan must take into consideration the following:

- A risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location
- The processes for the evaluation of the employees' medical fitness necessary to work at a fall risk position and the records thereof
- A programme for the training of employees working from a fall risk position and the records thereof
- The procedure addressing the inspection, testing and maintenance of all fall protection equipment
- A rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure the rescue procedure is implemented immediately following the incident.

Training Pertaining to Work at Height

- Fall protection plan developer to be competent (US 229994)

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- Install, use and perform rescues from fall arrest systems (US 229995). This competency to be obtained by at least one person who will be full-time on site (e.g. Supervisor)
- All personnel who will be conducting working at heights, will attend Working at Heights (W@H) training
- First Aid Training – first aider to be available at hand when working at heights take place

7.7 Stacking of materials

The Principal Contractor and other relevant contractors shall ensure that there is an appointed stacking and storage supervisor and all materials, all equipment is stacked and stored safely in a demarcated area.

7.8 Speed Restrictions, Signage and Protection

The Principal Contractor shall ensure that all persons in its employ, all Contractors, and all those that are visiting the site are aware and comply with the site speed restriction(s). Separate vehicle and pedestrian access routes shall be provided, maintained, controlled, and enforced. Signage shall be provided and should comply as per Occupational Health and Safety Act and SANS standards

7.9 Hazardous Chemical Substances (HCS)

The Principal Contractor and other relevant Contractors shall provide the necessary training and information regarding the use, transport, and storage of hazardous chemical substances. The Principal Contractor shall ensure that the use, transport, and storage of hazardous chemical substances are carried out as prescribed by the hazardous chemical substance regulations. The Contractor shall ensure that all hazardous chemicals on site have Safety Data Sheets (SDS) and the users are made aware of the hazards and precautions that need to be taken when using the chemicals. The First Aiders must be made aware of the SDS and how to treat hazardous chemical substance incidents appropriately.

7.10 Construction Vehicle and Mobile Plant Operators

The following requirements will apply to construction vehicles and mobile plant operators:

- Only certified and/or competent employees may be allowed to operate any construction vehicle and mobile plant.
- Every lifting machine operator must be trained specifically for the type of lifting machine that he or she is operating.
- Only employees duly authorised to do so may operate any construction vehicle and mobile plant.
- Only employees physically and psychologically fit, i.e. in possession of a medical certificate of fitness, may be allowed to operate any construction vehicle and mobile plant.

7.11 Construction Vehicles and Mobile Plant

Construction vehicles and mobile plant should be formally and duly inspected by a competent person appointed by the Principal Contractor prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment must be required to comply with this specification as well as the Act and Regulations.

Construction vehicles and mobile plant must be:

- Of acceptable design and construction;
- Maintained in good working order;
- Used in accordance with their design and intention for which they were designed;
- Operated and/or driven by trained, competent and authorised operators/drivers. No unauthorised persons to be allowed to drive construction vehicles and mobile plant;
- Provided with safe and suitable means of access;
- Fitted with adequate signalling devices to make movement safe including reversing;
- Excavations and other openings must be provided with sufficient barriers to prevent construction vehicles and mobile plant from falling into same;
- Provided with roll-over protection;
- Inspected daily before start-up by the driver, operator and/or user and the findings recorded in a register/log book and any defects addressed as matter of urgency;
- Fitted with two head and two tail lights that is in good working condition whilst operating under poor visibility conditions; and
- Used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported.

No loose tools, material etc. is allowed in the driver and/or operators compartment/cabin nor in the compartment in which any other persons are transported.

No person may ride on construction vehicles and mobile plant except for in a safe place designed and provided for this purpose.

Construction vehicles and mobile plant left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights, reflectors or adequate barricades to prevent moving traffic from a sudden emergency, or to come into contact with the parked construction vehicles and mobile plant.

In addition, construction vehicles and mobile plant left unattended after hours must be parked with all buckets, booms etc. full lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely.

All construction vehicles and mobile plant daily inspection records must be kept in the health and safety file.

7.12 Electrical Installations

Any electrical work undertaken as part of the project, including the installation of temporary electricity for construction use shall be in accordance with Construction Regulation 24 and the Electrical Installation Regulations.

The Principal Contractor must ensure that:

- Existing services are to be located and clearly marked before construction commences and during the progress thereof;
- Where the abovementioned is not possible, employees with jackhammers etc. will be protected against electric shock by the use of suitable protective equipment e.g. rubber mats, insulated handles etc;
- Electrical installations and -machinery are sufficiently robust to withstand normal working conditions on site;
- Temporary electrical installations must be inspected at least once per week by a competent person and a record of the inspections kept on the occupational health and safety file;
- Electrical machinery used on a construction site must be inspected daily before start-up by the competent driver/operator or any other competent person and a record of the inspections kept on the occupational health and safety file; and
- A competent person appointed in writing must control all temporary electrical installations.

7.13 Electrical and mechanical lockout

An electrical and mechanical lockout procedure must be developed by the Principal Contractor and submitted to CIDB for approval before construction commences. All contractors on site must be informed of and adhere to this lockout procedure.

7.14 Use and Storage of Flammables

The principal contractor must ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present unless adequate precautions is taken;
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container, cage or room that is kept locked with consistent access control measures in place and sufficient firefighting equipment installed and fire prevention methods practiced for example proper housekeeping;
- Only one day's quantity of flammable is to be kept in the workplace;
- Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas; and
- Welding and other flammable gases to be stored segregated as to the type of gas and empty and full cylinders.

7.15 Fire Prevention and Protection

The Principal Contractor must ensure that:

- The risk of fire is avoided;
- Sufficient and suitable storage of flammables is provided;
- All employees are instructed in the use of the firefighting equipment and know how to attempt to extinguish a fire;

- A sufficient number of employees are appointed and trained to act as an emergency team to deal with fires and other emergencies;
- Employees are informed regarding emergency evacuation procedures and escape routes;
- Emergency escape routes are kept clear at all times and clearly marked;
- Evacuation assembly points are demarcated and made known to employees;
- Evacuation is regularly practiced to ensure that all persons are evacuated timeously and;
- Roll call is held after evacuation to account for all employees and to ensure that no-one including visitors and disabled persons have been left behind; and
- A clearly audible, to all persons on site, siren or alarm is fitted and regularly tested.

7.16 Housekeeping

The Principal Contractor must ensure that:

- Housekeeping is continuously implemented and maintained;
- Materials and equipment is properly stored;
- Scrap, waste and debris is removed off site regularly;
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to the free-flow of pedestrians and vehicular traffic;
- Where practicable, construction sites are fenced off to prevent entry of unauthorised persons;
- An unimpeded work space is maintained for every employee;
- Every workplace is kept clean, orderly and free of tools and the likes that are not required for the work being done;
- As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skid-free and free of obstruction, waste and materials; and
- The walls and roof of every indoor workplace be sound and leak-free.

7.17 Stacking and Storage

The Principal Contractor must ensure that:

- A competent person is appointed in writing to supervise all stacking and storage on a construction site;
- Adequate storage areas are provided and demarcated;
- The storage areas are kept neat and under control;
- The base of any stack is level and capable of sustaining the weight exerted on it by the stack;
- The items in the lower layers can support the weight exerted by the top layers;
- Cartons and other containers that may become unstable due to wet conditions are kept dry;
- Pallets and containers are in good condition and no material is allowed to spill out;

- The height of any stack does not exceed 3 times the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector of the Department of Labour has been obtained to build the stacks higher with the aid of a machine. (The operator of the machine must be protected against items falling from overhead or off the stack and no items may overhang);
- The articles that make up a single tier are consistently of the same size, shape and mass;
- Structures for supporting stacks are structurally sound and able to support the mass of the stack;
- No articles are removed from the bottom of the stack first but from the top tier first;
- Anybody climbing onto a stack can and does do it safely and that the stack is sufficiently stable to support him or her;
- Stacks that are in danger of collapsing are broken down and restacked;
- Stability of stacks are not threatened by vehicles or other moving plant and machinery;
- Stacks are built in a header and stretcher fashion and that corners are securely bonded; and
- Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations.

7.18 Employee Welfare Facilities

7.18.1 Toilets

The provision of toilets for each sex is required in terms of the National Building Regulations and Construction Regulation 30.

Chemical toilets are allowed instead of the water borne sewerage type. Toilets have to be provided at a ratio of at least 1 toilet per 30 employees.

7.18.2 Showers

At least cold-water showers of some sort for each sex have to be provided at a ratio of at least 1 shower per 15 employees.

7.18.3 Change rooms

Some form of screened off changing facility must be provided separately for each sex.

7.18.4 Eating facility

Some form of eating facility sheltered from the sun, wind and rain must be provided.

7.19 Personal and other protective equipment

The Principal Contractor is required to proactively identify the hazards in the workplace and deal with them on an ongoing basis. He/she must either remove them or, where impracticable take steps to protect employees and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal protective equipment should, however, be the last resort and there should always first be an attempt to apply re-engineering and other solutions to mitigating hazardous situations before the issuing of personal protective equipment is considered.

Where it is not possible to create an absolutely safe and healthy workplace the Principal Contractor is required to inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the Principal Contractor maintain the said equipment, that he/she instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s in a consistent and correct manner.

Employees do not have the right to refuse to use and/or wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other valid reason, the employee cannot be allowed to continue working under the hazardous condition(s) for which the equipment was prescribed but an alternative solution has to be found that may include relocating the employee.

The Principal Contractor may not charge any fee for protective equipment prescribed by him or her but may charge for equipment under the following conditions:

- Where the employee requests additional issue in excess of what is prescribed;
- Where the employee has blatantly abused or neglected the equipment leading to early failure; and where the employee has lost the equipment.

7.20 Portable Electrical Tools and Equipment

Portable electrical tools and equipment includes every unit that takes electrical power from a 15 ampere plug point and is moved around for use in the workplace i.e. drills, saws, grindstones, portable lights, etc. In addition, electrical appliances such as fridges, hotplates, heaters, etc must be inspected regularly but at least on a weekly basis and maintained to the same standards as portable electrical tools and appliances.

The use, inspection and maintenance of portable electrical tools and equipment must be governed by the following:

- Regular inspections by a competent person appointed in writing;
- Inspection results must be recorded in a register;
- Only competent authorised persons are allowed to use portable electrical tools and equipment; and
- The correct protective equipment is worn/used whilst operating portable electrical tools and equipment.

This equipment:

- Must be maintained in good condition at all times to prevent an electrical shock to the user;

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- The main source should incorporate an earth leakage protection device or receive power through a double wound transformer or be double insulated and clearly marked as such; and
- All equipment must be fitted with a switch to allow for safe and easy starting and stopping.

7.21 Portable lights

The following requirements apply to portable lights:

- Must be fitted with a robust non-hygroscopic non-conducting handle;
- Live metal parts which may become live must be protected against contact;
- The lamp must be protected by a strong guard;
- The cable lead-in must withstand rough handling;
- A register be kept for each piece of equipment with findings of regular inspections undertaken to evaluate the condition of these lights;
- Inspections must be undertaken that concentrate on at least the plug, cord, switch, guard and any obvious faults; and
- When used in wet/damp/metal container conditions, it must be protected.

7.22 Public Health and Safety

The Principal Contractor is responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimise those dangers. This includes among others:

- Non- employees entering the site for whatever reason;
- The surrounding community; and
- Passers-by the site.

Appropriate signage must be posted to this effect and all employees on site must be instructed to ensure that non-employees are protected at all times.

All non-employees entering the site must receive site applicable induction into the hazards and risks and the control measures for these.

7.23 Working in Confined Spaces

7.23.1 Ventilation

- The confined space must be opened and allowed to ventilate for at least 15 minutes before entering the confined space. All confined spaces must be barricaded and manned at all times.
- A gas monitor must be lowered to the bottom of the confined space with a rope to test the presence of any toxic/flammable gas. If any gas is detected, the space must be force ventilated by means of a blower for at

least 15 minutes where after the air must be tested again. Under no circumstances may any space be entered while there is a toxic/flammable gas present.

- After the undertaking of the necessary work, the person in charge of the activities must confirm that all the employees are accounted for.

7.23.2 Entering a confined space

- When entering a confined space, the person entering the space must wear a safety harness and fully operational gas detector. A lifeline must be attached to the safety harness and a person on the surface must be in continuous contact with the person in the confined space. At least one person on the surface must be trained in basic first-aid (level 1) with proof of such training as well as a fully equipped first aid box available on site.
- No person shall remain within a confined space for a period of more than one hour at a time. A minimum of 5-minute rest periods on the surface must be taken after this period before re-entering.
- Should the alarm sound on the gas monitor, all employees must exit the confined space and the immediate area must also be evacuated immediately. The area must be properly ventilated and re-tested before re-entering the confined space. Professional support should be called for if necessary.
- Employees must be provided with flameproof lighting when entering a confined space with the possibility of flammable gases. No naked lights, smoking or unprotected electrical apparatus which may cause sparks, shall be permitted in any confined space or in its vicinity.

7.23.3 General

All employees working in confined spaces must be issued with fully functioning gas monitoring equipment and safety harnesses. All these employees must be trained (including refresher training on a regular and continuous basis) in the use thereof.

7.23.4 Safety equipment

All teams must be issued with fully functional gas monitoring equipment and safety harnesses where applicable. All employees must be trained (including refresher training on a regular and continuous basis) in the use thereof.

7.23.5 General records

The following records shall be implemented and maintained by the principal contractor:

- Confined space entry permits
- Confined space entry registers
- Safety harness and gas monitoring equipment registers
- Risk assessments
- Incident registers

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7.23.6 Training

All employees that have to enter a confined space must be formally trained and confirmed competent before being required to enter such areas (new employees to complete this training and be declared competent before allowed to work in a confined space).

Refresher courses must be attended by employees at least once every 2 years or immediately if new methodologies or equipment are adopted or acquired.

Continuous onsite training and support by supervisory staff should be undertaken and enforced where required.

7.24 Vessels under Pressure (VUP) and Gas Bottles

The Principal Contractor and all relevant Contractors shall comply with the Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing
- Inspect equipment regularly and keep records of inspections
- Providing appropriate firefighting equipment (Fire Extinguishers) on hand

7.25 Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor and relevant Contractors must ensure all appropriate measures are taken to avoid the risk of fire shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required. The fire equipment contemplated in previous paragraph is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof and a sufficient number of workers are trained in the use of fire-extinguishing equipment;

7.26 Hired Plant and Machinery

The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use. The necessary requirements as stipulated by the Occupational Health and Safety Act 85/1993 and Construction Regulations 2014 shall apply. The Principal Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the health and safety file. All relevant Contractors must ensure the same.

7.27 Lifting Machines and Tackle

The Principal Contractor and all Contractors shall ensure that lifting machinery and tackle is inspected before use and thereafter in accordance with the Driven Machinery Regulations and the Construction Regulations. A competent lifting

machinery and tackle inspector need to be appointed in writing and must inspect the equipment daily or before use, taking into account that:

- All lifting machinery and tackle have a safe working load clearly indicated;
- Regular inspection and servicing are carried out;
- Records are kept of inspections and of service certificates;
- There is a proper supervision in terms of guiding the loads that includes a trained banks man to direct lifting operations and check lifting tackle;
- The operators are competent as well as physically and psychologically fit to work and in possession of a medical certificate of fitness to be available on site.

7.28 General Machinery

The Principal Contractor and relevant Contractors shall ensure compliance with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing, and training those who use machinery.

7.29 High Voltage Electrical Equipment, Underground, Overhead power lines

Care shall be taken when working close to, over or under high voltage reticulation power lines or cables. Underground services to be identified beforehand and the layout of such to be include in the Contractors health and safety plan. A safe work procedure be drawn up and included into Contractors health and safety plan.

7.30 Transport of Workers

The Principal Contractor and other Contractors shall not:

- Transport persons together with goods or tools unless there is an appropriate area of section to store them and all loose tool and plant are tied down and secured;
- Transport persons in a non-enclosed vehicle, e.g. truck; there must be a proper canopy (properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle.
- Transport workers in bakkies unless they are closed/ covered and have the correct number of seats for the passengers.

8. ANNEXURES:

8.1 Annexure A: Bill of Quantities for Health and Safety

Nr	Description	Cost Per	Quantity / Units	Total Cost
SUPPLY OF PERSONAL PROTECTIVE CLOTHING & EQUIPMENT				
1.	Safety boots – Steel toe cap			
2.	Protective clothing / overalls			
3.	Gloves			
4.	Hardhats – colour coded			
5.	Ear protection			
6.	Eye protection – appropriate for task performed			
7.	High visibility safety vests			
8.	Full body harness			
9.	Dust masks			
BARRICADING and SIGNAGE				
10.	Supply, installation and removal of safety nets			
11.	Rigid type barricading			
12.	Compulsory safety signage			
OH&S TRAINING				
13.	First Aid Training			
14.	OH&S Representative training			
15.	Emergency Rescue training			
16.	Hazard identification and risk assessment training			
17.	Induction training			
18.	Work at height training			
19.	Fire fighting training			
20.	HIV/AIDS awareness training			
RESPONSIBILITY STRUCTURE				
21.	Construction Safety Officer			
GENERAL SAFETY OBLIGATIONS				
22.	Development and implementation of OHS Plan and File			
23.	Medical surveillance programme			
24.	Fire extinguishers			
25.	First aid box			
26.	Induction tags / cards			
27.	Provision of OH&S required facilities, (toilets, eating areas, change rooms			
TOTAL OH&S COST PROVISION:				
All quantities are estimated and will be re-measured on completion.				

ENTITY NAME	REPRESENTATIVE	DATE	SIGNATURE

8.2 Annexure B: Contractors Health and Safety Performance Evaluation

HEALTH AND SAFETY MANAGEMENT SYSTEM			
QUESTION		REFERENCE	SCORE (1-10)
1.	Is company registered with Compensation Commissioner? Provide CC Fund number and Letter of Good Standing. If yes, attach proof	General	
2.	Does company have an Organisational Organogram (detailing all statutory appointments – List all possible appointments)? If yes, attach proof	General	
3.	Has a Person charged with the responsibilities of the Act been appointed? (Provide appointment letters 16 (1) & 16(2)).	OHS Act, Section 16	
4.	Does the company have a written SHE (Safety, Health and Environmental) Policy in place? If yes, attach proof.	OHSA 85/1993 Section 7	
5.	Does the company provide training for employees and appointees (Training Matrix)? If yes state training in relation to appointee / employee using the format below. Attach proof of Competency	General	
6.	Does the company have a SHE Plan? If yes, attach.	CR5(4)	
7.	Provide details of Hazard Identification and Risk Assessment methodology/procedure with risk matrix. Attach examples of baseline risk assessment and issue-based risk assessment.	CR7	
8.	How does the company ensure legislative, contractor and client requirement compliance of sub-contractors (Sub-contractor management)? Provide details.	CR5	
9.	Provide incident statistics for current year and previous two years		
10.	Has the company made provision for the cost of Health, Safety and Environment? Provide details.	CR4(h)	

CONTRACTOR NAME:			
NAME & SURNAME	DESIGNATION	DATE	SIGNATURE
EVALUATOR DETAILS (FOR OFFICE USE ONLY)			
EVALUATOR NAME:		SIGNATURE:	
DESIGNATION:		DATE:	
SCORES OBTAINED (PERCENTAGE (%))			
1-10 POINT ALLOCATION (TOTAL SCORE OBTAINED / 100)			
<i>Gatekeeper scoring of a minimum of 80% is required</i>			

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EVALUATION OUTCOME			
CONTRACTOR DECLINED – DOES NOT MEET		CONTRACTOR APPROVED – MEETS MINIMUM	
EVALUATOR COMMENTS:			

8.3 Annexure C: Mandatory Agreements (37.2)

WRITTEN AGREEMENT ON OCCUPATIONAL HEALTH AND SAFETY MATTERS

(In accordance with Section 37(2) of the Occupational Health and Safety Act 85 of 1993)

AS ENTERED INTO BY AND BETWEEN

Construction Industry Development Board

(Herein after referred to as the “Employer”)

And

(Herein after referred to as the "Mandatory")

Compensation Fund Number:

I, _____ representing _____, do hereby acknowledge that _____ is an employer in his/her own right, with duties as prescribed in the Occupational Health and Safety Act No. 85 of 1993 ("the Act"), as amended, and agree to ensure that all work will be performed and/or machinery or plant used in accordance with the provisions of the Act.

I undertake that _____ shall strictly adhere to, and ensure that his/her employees adhere to, the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993). I have been provided with SHE specifications for **SUPPLY AND INSTALL A 1250 KVA TRANSFORMER, REMOVAL OF EXISTING TRANSFORMER, DB REWIRING, LIGHTING AND SMALL POWER RECTIFICATION, EARTHING & LIGHTNING PROTECTION UPGRADES WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION** and will comply with the requirements set out in these. I accept and agree that the SHE specifications constitute arrangements and procedures between _____ and **CIDB** which will ensure compliance by _____ with the provisions of the Act, as contemplated in section 37(2) of the Act.

This agreement constitutes the sole agreement between the parties, and no variation, modification, or waiver of any of the provisions of this agreement or consent to any departure from these shall, in any manner, be of any force or effect, unless confirmed in writing and signed by both parties, and such variation, modification, waiver, or consent shall be effective only in the specific instance and for the specific purpose and to the extent for which it was made or given.

This agreement is signed on behalf of the parties, each signatory to this warranting that he/she has the requisite authority to do so.

Signed this _____ day of _____ 20____ at _____

Name _____ Signature _____

on behalf of _____

Witnesses

1. _____

2. _____

Signed this _____ day of _____ 20____ at _____

Name _____ Signature _____

on behalf of **CIDB**

Witnesses

1. _____

2. _____

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8.4 Annexure D: Principal Contractors Appointment Letter

APPOINTMENT OF PRINCIPAL CONTRACTOR

Construction Regulation 5(1)(k)

I _____ hereby appoint _____ as Principal Contractor in terms of Construction Regulation 5(1)(k) to perform **SUPPLY AND INSTALL A 1250 KVA TRANSFORMER, REMOVAL OF EXISTING TRANSFORMER, DB REWIRING, LIGHTING AND SMALL POWER RECTIFICATION, EARTHING & LIGHTNING PROTECTION UPGRADES WITH THREE-YEAR MAINTENANCE SERVICES AT THE CIDB HEAD OFFICE IN CENTURION.**

You shall ensure that all requirements of the Construction Regulations including all other applicable SHE legislation, City Power SHE Specification and Baseline Risk Assessment are complied with at all times. Upon identification of any new hazards from scope changes or other factors, which were not considered in the contractor Risk Assessment or SHE Plan, such documents shall be resubmitted for approval in writing to the department.

The contractor and their employees including subcontractors shall fully comply with the requirements of The Occupational Health and Safety Act and Regulations (85 of 1993), Environmental Legislations and Municipality bi-laws applicable to this project. The contractor shall also ensure that they have signed the Client OHS Act 37.2 Agreement as well as appoint their contractors in terms of OHS Act 37.2 Agreement and/or the Construction Regulations 7(i)(c)(v).

In executing this project, you and your potential contractor shall ensure **(a)** that you comply with all legislations governing this project **(b)** that competent employees and sub-contractors with sufficient skill and knowledge are employed, **(c)** that sufficient provision for Health and Safety measures during the construction process is made

This letter is valid until completion of the project.

Signature of Client (16.2)

Date

I _____ Designation _____

Full name and surname of contractor representative

On behalf of _____, understand the implications of the appointment as detailed above and confirm my acceptance thereof.

Signature

Date

8.5 Annexure E: Acknowledgement of Specifications and Annexures Form

I, the undersigned, hereby acknowledge that I have obtained copies of the following listed documentation and confirm that I fully understand the contents thereof and the consequences of non-compliance. The Principal Contractor furthermore reiterates its commitment to compliance of the requirements contained within the following provided documentation:

- Annexure A: OHS Bill of Quantities
- Annexure B: Contractors SHE Competency Evaluation Form;
- Annexure C: Section 37(2) Mandatory Agreements Form;
- Annexure D: Principal Contractors Appointment Letter Form
- Annexure E: Acknowledgement of Specifications and Annexure Form

Signed at _____ on this _____ Day of _____ 20_____

CONTRACTS MANAGER			
NAME	DESIGNATION	DATE	SIGNATURE

CONTRACTS SUPERVISOR			
NAME	DESIGNATION	DATE	SIGNATURE

WITNESS 1			
NAME	DESIGNATION	DATE	SIGNATURE

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WITNESS 2			
NAME	DESIGNATION	DATE	SIGNATURE

PART C4 SITE INFORMATION

SITE INFORMATION

The site is located at:

1267 Gordon Hood Rd, Centurion Central, Centurion, 0157



PART D1: PROCUREMENT REQUIREMENTS

PART D 1.1 EVALUATION PROCESS

The CIDB will adopt a four (4) phase approach in assessing, analysing and evaluating proposals, which will be:

Phase 1: Mandatory requirements

The Mandatory Requirements are listed below, and it is mandatory that bidders submit all the documentation requested or will be disqualified and not be evaluated further.

No	Document that must be submitted	Yes/No	Description and Minimum requirements
1.	Proof of CIDB grading		Must be registered with the CIDB in terms of the applicable Grade designation. Service Providers must submit proof of grading Level/Grade two (2) or higher
2.	COIDA		Must submit Valid Letter of Good Standing with COIDA
3.	DoEL Registration		Must be registered and in good standing with the Department of Employment and Labour (DoEL) in terms of the Electrical Installation, Transformer Works, and Generator Services

Phase Two: Administration requirements

No	Document that must be submitted	Yes/No	Non-submission <u>MAY</u> result in disqualification?
1.	SDB 1 - Tender notice and invitation to bid. Provide MAAA number.	Yes	Complete and sign the <u>supplied pro forma document</u>
2.	SBD2 – Tax compliant with SARS	Yes	SARS (to be verified through CSD or SARS). Attach a copy of Tax Compliance status Pin.
3.	SBD3.1 – Pricing data	Yes	Submit full details of the pricing proposal
4.	SBD4 – Bidders Declaration	Yes	Complete and sign the <u>supplied pro forma document</u>
5.	SBD 6.1 – Preference Points Claim form.	No	A certified copy of B-BBEE status level verification certificate or an original sworn affidavit signed by the EME representatives AND attested by Commissioner of Oath Non-submission will lead to a zero (0) score on BBEE (if applicable) <u>Attach in the Annexure provided.</u>

6.	Certificate of Authority for signatory /Delegation of authority	Yes	Complete and sign the <u>supplied pro forma document</u>
7.	Record of Addenda issued (if any)	Yes	Complete and sign the <u>supplied pro forma document</u>
8.	Proof of registration with the National Treasury Central Supplier Database	Yes	The bidder must be registered as a service provider on the Central Supplier Database (CSD). If you are not registered proceed to complete the registration of your company prior to submitting your proposal. Visit https://secure.csd.gov.za/ to obtain your vendor number. Submit proof of registration in the Annexure provided.
9.	Active Registration with Company Intellectual Property Commission Certified copies of South African Identity Documents or Valid Passports of Members. Directors / owner (In a case of a sole proprietor or Partnership)	No	(to be verified through CSD and CIPC). Attach a copy of CIPC/CIPRO certificate. Attach certified copies in the Annexure provided
10.	A Joint Venture Agreement (in case of a Joint Venture)	No	Attach Joint Venture agreement in the Annexure provided

Phase Three: Functionality / Technical Evaluation

The purpose of the Technical Evaluation or Functional Criteria is to determine the functionality of each proposal by assessing the quality and the robustness thereof.

Quality criteria	Sub criteria	Maximum number of points	
PROOF OF EXPERIENCE	(i) Bidders must demonstrate experience by providing proof of similar projects with a similar scope specified in the description of services.		100
	(ii) The bidders must submit proof of experience in the form of appointment letter(s) not older than 5 years, with the project value(s) and Completion Certificate(s) of each project(s) completed. The letter(s) and certificate(s) must be signed, dated and stamped by the client to be considered. (iii) It is at the discretion of the CIDB to reject the project as not relevant, therefore proper project descriptions must be given. The list of projects must be in the format of the table in Annexure A . Failure to complete table below or submission of supporting requested information, will score zero points on experience.		
	Points will be allocated as follows:		

		35															
	<table><tr><th>Scoring criteria</th><th>Max Points</th></tr><tr><td>the bidder did not submit proof of experience</td><td>0</td></tr><tr><td>the bidder submitted proof of experience (1 project)</td><td>7</td></tr><tr><td>the bidder submitted proof of experience (2 projects)</td><td>14</td></tr><tr><td>the bidder submitted proof of experience (3 projects)</td><td>21</td></tr><tr><td>the bidder submitted proof of experience (4 projects)</td><td>28</td></tr><tr><td>the bidder submitted proof of experience (5 projects or more)</td><td>35</td></tr></table>	Scoring criteria	Max Points	the bidder did not submit proof of experience	0	the bidder submitted proof of experience (1 project)	7	the bidder submitted proof of experience (2 projects)	14	the bidder submitted proof of experience (3 projects)	21	the bidder submitted proof of experience (4 projects)	28	the bidder submitted proof of experience (5 projects or more)	35		
Scoring criteria	Max Points																
the bidder did not submit proof of experience	0																
the bidder submitted proof of experience (1 project)	7																
the bidder submitted proof of experience (2 projects)	14																
the bidder submitted proof of experience (3 projects)	21																
the bidder submitted proof of experience (4 projects)	28																
the bidder submitted proof of experience (5 projects or more)	35																
TEAM COMPETENCY	(i) Bidders must demonstrate the skills, experience and qualifications of the resources pertaining to a similar scope specified in the description of services. (ii) Attach detailed CVs of the key personnel and populate the table in Annexure C for the CIDB to assess relevant experience. Evidence of qualifications and certifications to the relevant bodies of the key personnel to be included. All documentation contained in the CV to be certified (not older than 3 months) (iii) Points allocation to be allocated per resource qualifying for the minimum requirements. (iv) Failure to submit all relevant supporting information, especially that that is mentioned in the minimum requirements will result in the bidder not obtaining the allocated points. <table><tr><th>Scoring criteria</th><th>Max Points</th><th>Points claimed</th></tr><tr><td>The resource not meeting minimum requirements</td><td>0</td><td></td></tr><tr><td>Registered Electrical Engineer with the following minimum qualifications, certifications and experience: - BEng / BTech / National Diploma in Electrical Engineering (Heavy Current), registered with ECSA at least a Professional Engineer (Pr.Eng) OR Professional Technologist (Pr.Tech.Eng), OR Professional Technician (Pr.Techni.Eng). - Minimum 5 years in design, installation, testing, and commissioning of MV/LV substations and transformers up to 11 kV. - Experience in Engineering design approval- Verification of cable sizing, earthing, and protection settings- Approval of testing and commissioning results- Issuing of professional sign-off reports. </td><td>22</td><td></td></tr></table>	Scoring criteria	Max Points	Points claimed	The resource not meeting minimum requirements	0		Registered Electrical Engineer with the following minimum qualifications, certifications and experience: - BEng / BTech / National Diploma in Electrical Engineering (Heavy Current), registered with ECSA at least a Professional Engineer (Pr.Eng) OR Professional Technologist (Pr.Tech.Eng), OR Professional Technician (Pr.Techni.Eng). - Minimum 5 years in design, installation, testing, and commissioning of MV/LV substations and transformers up to 11 kV. - Experience in Engineering design approval- Verification of cable sizing, earthing, and protection settings- Approval of testing and commissioning results- Issuing of professional sign-off reports.	22								
Scoring criteria	Max Points	Points claimed															
The resource not meeting minimum requirements	0																
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	• Must demonstrate working knowledge of SANS 10142-1, SANS 10280, SANS 10281, and NRS 097-2.			65	
	Licensed Installation Electrician with the following minimum qualifications, certifications and experience: • N6 / Trade Test Certificate (Electrical) plus Installation Electrician Trade Test (Section 13/26D). • Wireman’s license and be Registered Installation Electrician (IE) or Master Installation Electrician (MIE) with the Department of Labour and must be able to issue Certificate of Compliance (CoC) per SANS 10142-1. • Minimum 5 years post-registration experience in commercial MV/LV installations.	21			
	MV (11KV) Authorized person or switching operator with the following minimum qualifications, certifications and experience: • NQF Level 5/6 in either Electrical Engineering with MV Switching Authorization Certificate issued by an accredited training provider or utility (Eskom/City Power). • Minimum 5 years MV switching experience in substations and ring main units and must have extensive knowledge in MV isolation, earthing, and permit-to-work issue and clearance during transformer removal or energization.	22			
TOTAL					100
Threshold					80
NB: Only bidders who will obtain a 80% minimum functionality threshold will qualify to be considered for phase 4					
People With Disability					
People with disability are encouraged to bid.					

Phase Four: Pricing and BBBEE

In the event of a contract being awarded and work has been allocated, successful service providers in the panel will be evaluated on price and preference in accordance with the PPPFA and the Preferential Procurement Regulations of 2017.

The Preferential Procurement Policy Framework Act will be applied and the **80/20** BBBEE points system will be applicable.

	POINTS	
PRICE	80	

SPECIFIC GOALS	20	
Total points for Price and SPECIFIC GOALS	100	100

ANNEXURE A: EXPERIENCE OF THE BIDDING ENTITY

Table A - Bidders must demonstrate experience by providing proof of similar projects with a similar scope specified in the description of services:

No.	Client name	Description of services provided	Contract duration	Contract value	Contactable client details
1.					Name..... Tel..... Email.....
2.					Name..... Tel..... Email.....
3.					Name..... Tel..... Email.....
4.					Name..... Tel..... Email.....
5.					Name..... Tel..... Email.....

NB: Bidders must provide details of 5 (five) recent projects managed by the bidder as it relates to the scope of work the bidder is bidding for. The information must be submitted in the above format.

ANNEXURE C : TEAM COMPETENCY

No.	Role	Name of Member	Qualifications	Years of relevant Experience	Demonstrate working knowledge with regards to SANS standards : SANS 10142-1, SANS 10280, SANS 10281, and NRS 097-2.
1					
2					

3. MARKED UP MASTER AGREEMENT.

A summary of the mark-ups and comments should be inserted in the table below and a copy of the marked-up Master Agreement to be submitted in hard copy and electronic format

	Clause Number	Proposed amendment	Rationale for proposed amendment
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			