



KENYA REINSURANCE CORPORATION LTD

P.O.BOX 30271-00100

NAIROBI

Email: kenyare@kenyare.co.ke

TENDER DOCUMENT

FOR

PROPOSED ELECTRICAL INFRASTRUCTURE

REFURBISHMENTS

AT ANNIVERSARY TOWERS - NAIROBI

KRC/1865/2022/193

INVITATION TO TENDER

PROCURING ENTITY: Kenya Reinsurance Corporation Limited

CONTRACT NAME AND DESCRIPTION: Proposed Electrical Infrastructure Refurbishments at Anniversary Towers Nairobi.

1. The **Kenya Reinsurance Corporation Ltd** invites sealed tenders for the *Proposed Renovation to the Electrical Infrastructure at Anniversary Towers Nairobi*.
2. Tendering will be conducted under National open competitive method using a standardized tender document. Tendering is open to all qualified and interested Tenderers.
3. Qualified and interested tenderers may obtain further information and inspect the Tender Documents during office hours **Monday through to Friday between 8:00am and 5:00 pm** at the address given below.
4. Tender documents may be obtained electronically from the Website(s) www.kenyare.co.ke. Tender documents obtained electronically will be free of charge.
5. Tender documents may be viewed and downloaded for free from the website www.kenyare.co.ke. Tenderers who download the tender document must forward their particulars immediately to **procurement@kenyare.co.ke**
6. Tenders shall be quoted in Kenya Shillings and shall include all taxes. Tenders shall remain valid for **180 days** from the date of opening of tenders.
7. All Tenders must be accompanied by a **tender security of Kenya Shillings Nine Hundred and Fifty Thousand (950,000.00)** from a bank licensed by the Central Bank of Kenya.
8. The Tenderers shall chronologically serialize all pages of the tender documents submitted.
9. Completed tenders must be delivered to the address below on or before **10:00 a.m. Tuesday, 13th September 2022**. Electronic Tenders **will not** be permitted.
10. Tenders will be opened immediately after the deadline date and time specified above or any deadline date and time specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.
11. Late tenders will be rejected.
10. The addresses referred to above are:

A. Address for obtaining further information regarding the tender documents

Kenya Reinsurance Corporation Ltd,
Nairobi City, Taifa Road, Reinsurance Plaza, 14th Floor,
Supply Chain Office,
P.O Box 30271-00100, Nairobi,
Email: Procurement@kenyare.co.ke
Tel: 0703 083 200.

B. Address for Submission of Tenders.

Kenya Reinsurance Corporation Ltd,
P.O Box 30271-00100, Nairobi,
Attn: Head of Supply Chain,
Nairobi City, Taifa Road, Reinsurance Plaza, 14th Floor, Supply Chain Office.

C. Address for Opening of Tenders.

Kenya Reinsurance Corporation Ltd
Nairobi City, Taifa Road, Reinsurance Plaza, 17th Floor

D. Invitation for Tenders.

Kenya Reinsurance Corporation Ltd,
P.O Box 30271-00100, Nairobi,
Managing Director
Authorized Representative: Head of Supply Chain,
Nairobi City, Taifa Road, Reinsurance Plaza, 14th Floor, Supply Chain Office.

PART 1 - TENDERING PROCEDURES

SECTION I: INSTRUCTIONS TO TENDERERS

A General Provisions

1. Scope of Tender

- 1.1 The Procuring Entity as defined in the Appendix to Conditions of Contract invites tenders for Works Contract as described in the tender documents. The name, identification, and number of lots (contracts) of this Tender Document are **specified in the TDS**.

2. Fraud and Corruption

- 2.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 "Declaration not to engage in corruption". The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.
- 2.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.
- 2.3 Unfair Competitive Advantage - Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, the Procuring Entity shall indicate in the **Data Sheet** and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.
- 2.4 Unfair Competitive Advantage - Fairness and transparency in the tender process require that the Firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender being tendered for. The Procuring Entity shall indicate in the **TDS** firms (if any) that provided consulting services for the contract being tendered for. The Procuring Entity shall check whether the owners or controllers of the Tenderer are same as those that provided consulting services. The Procuring Entity shall, upon request, make available to any tenderer information that would give such firm unfair competitive advantage over competing firms.

3. Eligible Tenderers

- 3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 3.7 or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. Public employees and their close relatives (*spouses, children, brothers, sisters and uncles and aunts*) are not eligible to participate in the tender. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution. The maximum number of JV members shall be specified in the **TDS**.
- 3.2 Public Officers of the Procuring Entity, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers are also not allowed to participate in any procurement proceedings.
- 3.3 A Tenderer shall not have a conflict of interest. Any tenderer found to have a conflict of interest shall be disqualified. A tenderer may be considered to have a conflict of interest for the purpose of this tendering process, if the tenderer:
 - a) Directly or indirectly controls, is controlled by or is under common control with another tenderer; or
 - b) Receives or has received any direct or indirect subsidy from another tenderer; or

- c) Has the same legal representative as another tenderer; or
- d) Has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering process; or
- e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender; or
- f) any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as Engineer for the Contract implementation; or
- g) Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the contract specified in this Tender Document or
- h) Has a close business or family relationship with a professional staff of the Procuring Entity who:
 - i) are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract; or
 - ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.

3.4 A tenderer shall not be involved in corrupt, coercive, obstructive, collusive, or fraudulent practice. A tenderer that is proven to have been involved in any of these practices shall be automatically disqualified.

3.5 A Tenderer (either individually or as a JV member) shall not participate in more than one Tender, except for permitted alternative tenders. This includes participation as a subcontractor in other Tenders. Such participation shall result in the disqualification of all Tenders in which the firm is involved. A firm that is not a tenderer, or a JV member may participate as a subcontractor in more than one tender. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender.

3.6 A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT 4.8. A Tenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated, or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub-consultants for any part of the Contract including related Services.

3.7 Tenderer that has been debarred from participating in public procurement shall be ineligible to tender or be awarded a contract. The list of debarred firms and individuals is available from the website of PPRA www.ppra.go.ke.

3.8 Tenderers that are state-owned enterprises or institutions may be eligible to compete and be awarded a Contract(s) only if they are accredited by PPRA to be (i) a legal public entity of the state Government and/or public administration, (ii) financially autonomous and not receiving any significant subsidies or budget support from any public entity or Government, and (iii) operating under commercial law and vested with legal rights and liabilities similar to any commercial enterprise to enable it compete with firms in the private sector on an equal basis.

3.9 A Firm and individuals may be ineligible if their countries of origin (a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country, or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country. A tenderer shall provide such documentary evidence of eligibility satisfactory to the Procuring Entity, as the Procuring Entity shall reasonably request.

- 3.10 Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, subcontracts, and labor) from national suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable the Procuring Entity to determine if this condition is met shall be provided in for this purpose is be provided in "SECTION III - EVALUATION AND QUALIFICATION CRITERIA, Item 9".
- 3.11 Pursuant to the eligibility requirements of ITT 4.10, a tender is considered a foreign tenderer if the tenderer is not registered in Kenya or if the tenderer is registered in Kenya and has less than 51 percent ownership by Kenyan Citizens. JVs are considered as foreign tenderers if the individual member firms are not registered in Kenya or if are registered in Kenya and have less than 51 percent ownership by Kenyan citizens. The JV shall not subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.
- 3.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website www.nca.go.ke.
- 3.13 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort, or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from the website www.cak.go.ke
- 3.14 A Kenyan tenderer shall provide evidence of having fulfilled his/her tax obligations by producing a valid tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

4. Eligible Goods, Equipment, and Services

- 4.1 Goods, equipment, and services to be supplied under the Contract may have their origin in any country that is not eligible under ITT 3.9. At the Procuring Entity's request, Tenderers may be required to provide evidence of the origin of Goods, equipment, and services.
- 4.2 Any goods, works and production processes with characteristics that have been declared by the relevant national environmental protection agency or by other competent authority as harmful to human beings and to the environment shall not be eligible for procurement.

5. Tenderer's Responsibilities

- 5.1 The tenderer shall bear all costs associated with the preparation and submission of his/her tender, and the Procuring Entity will in no case be responsible or liable for those costs.
- 5.2 The tenderer, at the tenderer's own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings and obtain all information that may be necessary for preparing the tender and entering a contract for construction of the Works. The costs of visiting the Site shall be at the tenderer's own expense.
- 5.3 The Tenderer and any of its personnel or agents will be granted permission by the Procuring Entity to enter upon its premises and lands for the purpose of such visit. The Tenderer shall indemnify the Procuring Entity against all liability arising from death or personal injury, loss of or damage to property, and any other losses and expenses incurred because of the inspection.
- 5.4 The tenderer shall provide in the Form of Tender and Qualification Information, a preliminary description of the proposed work method and schedule, including charts, as necessary or required.

B. Contents of Tender Documents

6. Sections of Tender Document

6.1 The tender document consists of Parts 1, 2, and 3, which includes all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITT 8.

PART 1 Tendering Procedures

- i) Section I - Instructions to Tenderers (ITT)
- ii) Section II - Tender Data Sheet (TDS)
- iii) Section III - Evaluation and Qualification Criteria
- iv) Section IV - Tendering Forms

PART 2 Works Requirements

- i) Section V - Drawings
- ii) Section VI - Specifications
- iii) Section VII - Bills of Quantities

PART 3 Conditions of Contract and Contract Forms

- i) Section VIII - General Conditions of Contract (GCC)
- ii) Section IX - Special Conditions of Contract (SC)
- iii) Section X - Contract Forms

6.2 The Invitation to Tender Document (ITT) issued by the Procuring Entity is not part of the Contract documents.

Unless obtained directly from the Procuring Entity, the Procuring Entity is not responsible for the completeness of the Tender document, responses to requests for clarification, the minutes of the pre-Tender meeting (if any), or Addenda to the Tender document in accordance with ITT 8. In case of any contradiction, documents obtained directly from the Procuring Entity shall prevail. The Tenderer is expected to examine all instructions, forms, terms, and specifications in the Tender Document and to furnish with its Tender all information and documentation as is required by the Tender document.

7. Site Visit

7.1 The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine and inspect the Site of the Required Services and its surroundings and obtain all information that may be necessary for preparing the Tender and entering a contract for the Services. The costs of visiting the Site shall be at the Tenderer's own expense.

8. Pre-Tender Meeting

8.1 The Procuring Entity shall specify in the **TDS** if a pre-tender meeting will be held, when and where. The Procuring Entity shall also specify in the **TDS** if a pre-arranged pretender site visit will be held and when. The Tenderer's designated representative is invited to attend a pre-arranged pretender visit of the site of the works. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

8.2 The Tenderer is requested to submit any questions in writing, to reach the Procuring Entity not later than the period specified in the **TDS** before the meeting.

8.3 Minutes of the pre-Tender meeting and the pre-arranged pretender site visit of the site of the works, if applicable, including the text of the questions asked by Tenderers and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Tenderers who have acquired the Tender Documents in accordance with ITT 6.3. Minutes shall not identify the source of the questions asked.

8.4 The Procuring Entity shall also promptly publish anonym zed (*no names*) Minutes of the pre-Tender meeting and the pre-arranged pretender visit of the site of the works at the web page identified in the **TDS**. Any modification to the Tender Documents that may become necessary because of the pre-tender meeting and the pre-arranged pretender site visit, shall be made by the Procuring Entity exclusively through the issue of an Addendum pursuant to ITT 8 and not through the minutes of the pre-Tender meeting. Nonattendance at the pre-Tender meeting will not be a cause for disqualification of a Tenderer.

9. Clarification and amendments of Tender Documents

9.1 A Tenderer requiring any clarification of the Tender Document shall contact the Procuring Entity in writing at the Procuring Entity's address specified in the **TDS** or raise its enquiries during the pre-Tender meeting and the pre-arranged pretender visit of the site of the works if provided for in accordance with ITT 8.4. The Procuring Entity will respond in writing to any request for clarification, provided that such request is received no later than the period specified in the **TDS** prior to the deadline for submission of tenders. The Procuring Entity shall forward copies of its response to all tenderers who have acquired the Tender Documents in accordance with ITT 6.3, including a description of the inquiry but without identifying its source. If specified in the **TDS**, the Procuring Entity shall also promptly publish its response at the web page identified in the **TDS**. Should the clarification result in changes to the essential elements of the Tender Documents, the Procuring Entity shall amend the Tender Documents appropriately following the procedure under ITT 8.4.

10. Amendment of Tendering Document

10.1 At any time prior to the deadline for submission of Tenders, the Procuring Entity may amend the Tendering document by issuing addenda.

10.2 Any addendum issued shall be part of the tendering document and shall be communicated in writing to all who have obtained the tendering document from the Procuring Entity in accordance with ITT 6.3. The Procuring Entity shall also promptly publish the addendum on the Procuring Entity's web page in accordance with ITT 8.4.

10.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Procuring Entity shall extend, as necessary, the deadline for submission of Tenders, in accordance with ITT 25.2 below.

C. Preparation of Tenders

11. Cost of Tendering

11.1 The Tenderer shall bear all costs associated with the preparation and submission of its Tender, and the Procuring Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

12. Language of Tender

12.1 The Tender, as well as all correspondence and documents relating to the tender exchanged by the tenderer and the Procuring Entity, shall be written in the English Language. Supporting documents and printed literature that are part of the Tender may be in another language provided they are accompanied by an accurate and notarized translation of the relevant passages into the English Language, in which case, for purposes of interpretation of the Tender, such translation shall govern.

13. Documents Comprising the Tender

13.1 The Tender shall comprise the following:

- a) Form of Tender prepared in accordance with ITT 14;
- b) Schedules including priced Bill of Quantities, completed in accordance with ITT 14 and ITT 16;
- c) Tender Security or Tender-Securing Declaration, in accordance with ITT 21.1;
- d) Alternative Tender, if permissible, in accordance with ITT 15;
- e) Authorization: written confirmation authorizing the signatory of the Tender to commit the Tenderer,

in accordance with ITT 22.3;

- f) Qualifications: documentary evidence in accordance with ITT 19 establishing the Tenderer's qualifications to perform the Contract if its Tender is accepted.
- g) Conformity: a technical proposal in accordance with ITT 18;
- h) Any other document required in the **TDS**.

13.2 In addition to the requirements under ITT 11.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Tender shall be signed by all members and submitted with the Tender, together with a copy of the proposed Agreement. **The Tenderer shall chronologically serialize pages of all tender documents submitted.**

13.3 The Tenderer shall furnish in the Form of Tender information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Tender.

14. Form of Tender and Schedules

14.1 The Form of Tender and Schedules, including the Bill of Quantities, shall be prepared using the relevant forms furnished in Section IV, Tendering Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITT 20.3. All blank spaces shall be filled in with the information requested.

15. Alternative Tenders

15.1 Unless otherwise specified in the **TDS**, alternative Tenders shall not be considered.

15.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the **TDS**, and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.

15.3 Except as provided under ITT 13.4 below, Tenderers wishing to offer technical alternatives to the requirements of the Tender Documents must first price the Procuring Entity's design as described in the Tender Documents and shall further provide all information necessary for a complete evaluation of the alternative by the Procuring Entity, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Tenderer with the winning Tender conforming to the basic technical requirements shall be considered by the Procuring Entity. When specified in the **TDS**, Tenderers are permitted to submit alternative technical solutions for specified parts of the Works, and such parts will be identified in the **TDS**, as will the method for their evaluating, and described in Section VII, Works' Requirements.

16. Tender Prices and Discounts

16.1 The prices and discounts (including any price reduction) quoted by the Tenderer in the Form of Tender and in the Bill of Quantities shall conform to the requirements specified below.

16.2 The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Tenderer shall be deemed covered by the rates for other items in the Bill of Quantities and will not be paid for separately by the Procuring Entity. An item not listed in the priced Bill of Quantities shall be assumed to be not included in the Tender, and provided that the Tender is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive Tenderers will be added to the Tender price and the equivalent total cost of the Tender so determined will be used for price comparison.

16.3 The price to be quoted in the Form of Tender, in accordance with ITT 14.1, shall be the total price of the Tender, including any discounts offered.

- 16.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 14.1.
- 16.5 It will be specified in the **TDS** if the rates and prices quoted by the Tenderer are or are not subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, except in cases where the contract is subject to fluctuations and adjustments, not fixed price. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Procuring Entity may require the Tenderer to justify its proposed indices and weightings.
- 16.6 Where tenders are being invited for individual lots (contracts) or for any combination of lots (packages), tenderers wishing to offer discounts for the award of more than one Contract shall specify in their Tender the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITT 16.4, provided the Tenders for all lots (contracts) are opened at the same time.
- 16.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of Tenders, shall be included in the rates and prices and the total Tender Price submitted by the Tenderer.

17. Currencies of Tender and Payment

- 17.1 Tenderers shall quote entirely in Kenya Shillings. The unit rates and the prices shall be quoted by the Tenderer in the Bill of Quantities, entirely in Kenya shillings. A Tenderer expecting to incur expenditures in other currencies for inputs to the Works supplied from outside Kenya shall devise own ways of getting foreign currency to meet those expenditures.

18. Documents Comprising the Technical Proposal

- 18.1 The Tenderer shall furnish a technical proposal including a statement of work methods, equipment, personnel, schedule, and any other information as stipulated in Section IV, Tender Forms, in sufficient detail to demonstrate the adequacy of the Tenderer's proposal to meet the work's requirements and the completion time.

19. Documents Establishing the Eligibility and Qualifications of the Tenderer

- 19.1 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.
- 19.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section IV, Tender Forms.
- 19.3 A margin of preference will not be allowed. Preference and reservations will be allowed, individually or in joint ventures. Applying for eligibility for Preference and reservations shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.
- 19.4 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a contractor or group of contractors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.

- 19.5 The purpose of the information described in ITT 19.4 above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be accepted by the Procuring Entity as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.
- 19.6 The Tenderer shall provide further documentary proof, information, or authorizations that the Procuring Entity may request in relation to ownership and control which information on any changes to the information which was provided by the tenderer under ITT 6.3. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.
- 19.7 All information provided by the tendered pursuant to these requirements must be complete, current and accurate as at the date of provision to the Procuring Entity. In submitting the information required pursuant to these requirements, the Tenderer shall warrant that the information submitted is complete, current and accurate as at the date of submission to the Procuring Entity.
- 19.8 If a tenderer fails to submit the information required by these requirements, its tender will be rejected. Similarly, if the Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tendered pursuant to these requirements, then the tender will be rejected.
- 19.9 If information submitted by a tendered pursuant to these requirements, or obtained by the Procuring Entity (whether through its own enquiries, through notification by the public or otherwise), shows any conflict of interest which could materially and improperly benefit the tenderer in relation to the procurement or contract management process, then:
- i) if the procurement process is still ongoing, the tenderer will be disqualified from the procurement process,
 - ii) if the contract has been awarded to that tenderer, the contract award will be set aside,
 - iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other persons have committed any criminal offence.
- 19.10 If a tenderer submits information pursuant to these requirements that is incomplete, inaccurate or out-of-date, or attempts to obstruct the verification process, then the consequences ITT 6.7 will ensue unless the tenderer can show to the reasonable satisfaction of the Procuring Entity that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tenderer.

20. Period of Validity of Tenders

- 20.1 Tenders shall remain valid for the Tender Validity period specified in the **TDS**. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by the Procuring Entity in accordance with ITT 24). A Tender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.
- 20.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 21.1, it shall also be extended for thirty (30) days beyond the deadline of the extended validity period. A Tenderer may refuse the request without forfeiting its Tender security. A Tenderer granting the request shall not be required or permitted to modify its Tender, except as provided in ITT 20.3.

- 20.3 If the award is delayed by a period exceeding the number of days to be specified in the **TDS** days beyond the expiry of the initial tender validity period, the Contract price shall be determined as follows:
- a) in the case of **fixed price** contracts, the Contract price shall be the tender price adjusted by the factor specified in the **TDS**;
 - b) in the case of **adjustable price** contracts, no adjustment shall be made; or in any case, tender evaluation shall be based on the tender price without taking into consideration the applicable correction from those indicated above.

21. Tender Security

- 21.1 The Tenderer shall furnish as part of its Tender, either a Tender-Securing Declaration or a Tender Security as specified in the **TDS**, in original form and, in the case of a Tender Security, in the amount and currency specified in the **TDS**. A Tender-Securing Declaration shall use the form included in Section IV, Tender Forms.
- 21.2 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security shall be a demand guarantee in any of the following forms at the Tenderer's option:
- a) an unconditional Bank Guarantee issued by a reputable commercial bank; or
 - b) an irrevocable letter of credit;
 - c) a Banker's cheque issued by a reputable commercial bank; or
 - d) another security specified in the **TDS**,
- 21.3 If an unconditional bank guarantee is issued by a bank located outside Kenya, the issuing bank shall have a correspondent bank located in Kenya to make it enforceable. The Tender Security shall be valid for thirty (30) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 20.2.
- 21.4 If a Tender Security or Tender-Securing Declaration is specified pursuant to ITT 19.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by the Procuring Entity as non-responsive.
- 21.5 If a Tender Security is specified pursuant to ITT 21.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's signing the Contract and furnishing the Performance Security and any other documents required in the **TDS**. The Procuring Entity shall also promptly return the tender security to the tenderers where the procurement proceedings are terminated, all tenders were determined nonresponsive, or a bidder declines to extend tender validity period.
- 21.6 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract and furnished the required Performance Security, and any other documents required in the **TDS**.
- 21.7 The Tender Security may be forfeited, or the Tender-Securing Declaration executed:
- e) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension thereto provided by the Tenderer; or
 - f) if the successful Tenderer fails to:
 - i) sign the Contract in accordance with ITT 50; or
 - ii) furnish a Performance Security and if required in the **TDS**, and any other documents required in the **TDS**.
- 21.8 Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA that PPRA debar the Tenderer from participating in public procurement as provided in the law.
- 21.9 The Tender Security or the Tender-Securing Declaration of a JV shall be in the name of the JV that submits the Tender. If the JV has not been legally constituted into a legally enforceable JV at the time of tendering, the Tender Security or the Tender-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITT 4.1 and ITT 11.2.

21.10A tenderer shall not issue a tender security to guarantee itself.

22. Format and Signing of Tender

22.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 13 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 15, shall be clearly marked "ALTERNATIVE." In addition, the Tenderer shall submit copies of the Tender, in the number specified in the **TDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

22.2 Tenderers shall mark as "CONFIDENTIAL" all information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.

22.3 The original and all copies of the Tender shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Tenderer. This authorization shall consist of a written confirmation as specified in the **TDS** and shall be attached to the Tender. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Tender where entries or amendments have been made shall be signed or initialed by the person signing the Tender.

22.4 In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

22.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Tender.

D. Submission and Opening of Tenders

23. Sealing and Marking of Tenders

23.1 Depending on the sizes or quantities or weight of the tender documents, a tenderer may use an envelope, package, or container. The Tenderer shall deliver the Tender in a single sealed envelope, or in a single sealed package, or in a single sealed container bearing the name and Reference number of the Tender, addressed to the Procuring Entity and a warning not to open before the time and date for Tender opening date. Within the single envelope, package or container, the Tenderer shall place the following separate, sealed envelopes:

- a) in an envelope or package or container marked "ORIGINAL", all documents comprising the Tender, as described in ITT 11; and
- b) in an envelope or package or container marked "COPIES", all required copies of the Tender; and
- c) if alternative Tenders are permitted in accordance with ITT 15, and if relevant:
 - i) in an envelope or package or container marked "ORIGINAL –ALTERNATIVE TENDER", the alternative Tender; and
 - ii) in the envelope or package or container marked "COPIES- ALTERNATIVE TENDER", all required copies of the alternative Tender.

The inner envelopes or packages or containers shall:

- a) bear the name and address of the Procuring Entity.
- b) bear the name and address of the Tenderer; and
- c) bear the name and Reference number of the Tender.

23.2 If an envelope or package or container is not sealed and marked as required, the *Procuring Entity* will assume no responsibility for the misplacement or premature opening of the Tender. Tenders that are misplaced or opened prematurely will not be accepted.

24. Deadline for Submission of Tenders

24.1 Tenders must be received by the Procuring Entity at the address specified in the **TDS** and no later than the date and time also specified in the **TDS**. When so specified in the **TDS**, Tenderers shall have the option of submitting their Tenders electronically. Tenderers submitting Tenders electronically shall follow the electronic Tender submission procedures specified in the **TDS**.

24.2 The Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders by amending the Tender Documents in accordance with ITT 8, in which case all rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

25. Late Tenders

25.1 The Procuring Entity shall not consider any Tender that arrives after the deadline for submission of tenders, in accordance with ITT 24. Any Tender received by the Procuring Entity after the deadline for submission of Tenders shall be declared late, rejected, and returned unopened to the Tenderer.

26. Withdrawal, Substitution, and Modification of Tenders

26.1 A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITT 22.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:

- a) prepared and submitted in accordance with ITT 22 and ITT 23 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
- b) received by the Procuring Entity prior to the deadline prescribed for submission of Tenders, in accordance with ITT 24.

26.2 Tenders requested to be withdrawn in accordance with ITT 26.1 shall be returned unopened to the Tenderers.

26.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender or any extension thereof.

27. Tender Opening

27.1 Except in the cases specified in ITT 23 and ITT 26.2, the Procuring Entity shall publicly open and read out all Tenders received by the deadline, at the date, time and place specified in the **TDS**, in the presence of Tenderers' designated representatives who chooses to attend. Any specific electronic Tender opening procedures required if electronic Tendering is permitted in accordance with ITT 24.1, shall be as specified in the **TDS**.

27.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelopes with the corresponding Tender shall not be opened but returned to the Tenderer. No Tender withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Tender opening.

27.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Tender being substituted, and the substituted Tender shall not be opened, but returned to the Tenderer. No Tender substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Tender opening.

27.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender. No Tender modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Tender opening.

- 27.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Price, per lot (contract) if applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security or Tender-Securing Declaration, if required; and any other details as the Procuring Entity may consider appropriate.
- 27.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further for evaluation. The Form of Tender and pages of the Bills of Quantities are to be initialed by the members of the tender opening committee attending the opening. The number of representatives of the Procuring Entity to sign shall be specified in the **TDS**.
- 27.7 At the Tender Opening, the Procuring Entity shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 25.1).
- 27.8 The Procuring **Entity shall prepare minutes of the Tender Opening that shall include, as a minimum:**
- a) the name of the Tenderer and whether there is a withdrawal, substitution, or modification;
 - b) the Tender Price, per lot (contract) if applicable, including any discounts;
 - c) any alternative Tenders;
 - d) the presence or absence of a Tender Security if one was required.
 - e) number of pages of each tender document submitted.
- 27.9 The Tenderers' representatives who are present shall be requested to sign the minutes. The omission of a Tenderer's signature on the minutes shall not invalidate the contents and effect of the minutes. A copy of the tender opening registers shall be distributed to all Tenderers upon request.

E. Evaluation and Comparison of Tenders

28. Confidentiality

- 28.1 Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderers or any other persons not officially concerned with the Tender process until information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 46.
- 28.2 Any effort by a Tenderer to influence the Procuring Entity in the evaluation of the Tenders or Contract award decisions may result in the rejection of its tender.
- 28.3 Notwithstanding ITT 28.2, from the time of tender opening to the time of contract award, if a tenderer wishes to contact the Procuring Entity on any **matter related to the tendering process, it shall do so in writing.**

29. Clarification of Tenders

- 29.1 To assist in the examination, evaluation, and comparison of the tenders, and qualification of the tenderers, the Procuring Entity may, at its discretion, ask any tenderer for a clarification of its tender, given a reasonable time for a response. Any clarification submitted by a tenderer that is not in response to a request by the Procuring Entity shall not be considered. The Procuring Entity's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the tender shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring Entity in the evaluation of the tenders, in accordance with ITT 33.
- 29.2 If a tenderer does not provide clarifications of its tender by the date and time set in the Procuring Entity's request for clarification, its Tender may be rejected.

30. Deviations, Reservations, and Omissions

30.1 During the evaluation of tenders, the following definitions apply:

- a) "Deviation" is a departure from the requirements specified in the tender document;
- b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the tender document; and
- c) "Omission" is the failure to submit part or all of the information or documentation required in the Tender document.

31. Determination of Responsiveness

31.1 The Procuring Entity's determination of a Tender's responsiveness is to be based on the contents of the tender itself, as defined in ITT 13.

31.2 A substantially responsive Tender is one that meets the requirements of the Tender document without material deviation, **reservation, or omission. A material deviation, reservation, or omission is one that, if accepted, would:**

- a) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
- b) limit in any substantial way, inconsistent with the tender document, the Procuring Entity's rights or the tenderer's obligations under the proposed contract; or
- c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders.

31.3 The Procuring Entity shall examine the technical aspects of the tender submitted in accordance with ITT 18, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation, or omission.

31.4 If a tender is not substantially responsive to the requirements of the tender document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

32. Non-material non-conformities

32.1 Provided that a tender is substantially responsive, the Procuring Entity may waive any non-conformities in the tender.

32.2 Provided that a Tender is substantially responsive, the Procuring Entity may request that the tenderer submit the necessary information or documentation, within a reasonable period, to rectify non-material non-conformities in the tender related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the price of the tender. Failure of the tenderer to comply with the request may result in the rejection of its tender.

32.3 Provided that a tender is substantially responsive, the Procuring Entity shall rectify quantifiable non-material non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified in the **TDS**.

33. Arithmetical Errors

33.1 The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment, or amendment in any way by any person or entity.

33.2 Provided that the Tender is substantially responsive, the Procuring Entity shall handle errors on the following basis:

- a) Any error detected if considered a major deviation that affects the substance of the tender, shall lead to disqualification of the tender as non-responsive.

- b) Any errors in the submitted tender arising from a miscalculation of unit price, quantity, and subtotal and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive. and
- c) if there is a discrepancy between words and figures, the amount in words shall prevail

33.3 Tenderers shall be notified of any error detected in their bid during the notification of a award.

34. Currency provisions

34.1 Tenders will be priced in Kenya Shillings only. Tenderers quoting in currencies other than in Kenya shillings will be determined non-responsive and rejected.

35. Margin of Preference and Reservations

35.1 No margin of preference shall be allowed on contracts for small works.

35.2 Where it is intended to reserve the contract to specific groups under Small and Medium Enterprises, or enterprise of women, youth and/or persons living with disability, who are appropriately registered as such by the authority to be specified in the **TDS**, a procuring entity shall ensure that the invitation to tender specifically indicates that only businesses/firms belonging to those specified groups are the only ones eligible to tender. Otherwise, if no so stated, the invitation will be open to all tenderers.

36. Nominated Subcontractors

36.1 Unless otherwise stated in the **TDS**, the Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected in advance by the Procuring Entity.

36.2 Tenderers may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the **TDS**. Subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.

36.3 The subcontractor's qualifications shall not be used by the Tenderer to qualify for the Works unless their specialized parts of the Works were previously designated by the Procuring Entity in the **TDS** as can be met by subcontractors referred to hereafter as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Subcontractors proposed by the Tenderer may be added to the qualifications of the Tenderer.

37. Evaluation of Tenders

37.1 The Procuring Entity shall use the criteria and methodologies listed in this ITT and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Procuring Entity shall determine the Best Evaluated Tender in accordance with ITT 40.

37.2 To evaluate a Tender, the Procuring Entity shall consider the following:

- a) price adjustment due to discounts offered in accordance with ITT 16;
- b) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT 39;
- c) price adjustment due to quantifiable non-material non-conformities in accordance with ITT 30.3; and
- d) any additional evaluation factors specified **in the TDS** and Section III, Evaluation and Qualification Criteria.

37.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be considered in Tender evaluation.

37.4 In the case of multiple contracts or lots, Tenderers shall be allowed to tender for one or more lots and the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the **Form of Tender, is specified in Section III, Evaluation and Qualification Criteria.**

38. Comparison of Tenders

38.1 The Procuring Entity shall compare the evaluated costs of all substantially responsive Tenders established in accordance with ITT 38.2 to determine the Tender that has the lowest evaluated cost.

39. Abnormally Low Tenders

39.1 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regard to the Tenderer's ability to perform the Contract for the offered Tender Price or that genuine competition between Tenderers is compromised.

39.2 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.

39.3 After evaluation of the price analyses, in the event that the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

40. Abnormally High Tenders

40.1 An abnormally high price is one where the tender price, in combination with other constituent elements of the Tender, appears unreasonably too high to the extent that the Procuring Entity is concerned that it (the Procuring Entity) may not be getting value for money, or it may be paying too high a price for the contract compared with market prices or that genuine competition between Tenderers is compromised.

40.2 In case of an abnormally high tender price, the Procuring Entity shall make a survey of the market prices, check if the estimated cost of the contract is correct and review the Tender Documents to check if the specifications, scope of work and conditions of contract are contributory to the abnormally high tenders. The Procuring Entity may also seek written clarification from the tenderer on the reason for the high tender price. The Procuring Entity shall proceed as follows:

- i) If the tender price is abnormally high based on wrong estimated cost of the contract, the Procuring Entity may accept or not accept the tender depending on the Procuring Entity's budget considerations.
- ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.

40.3 If the Procuring Entity determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised (often due to collusion, corruption, or other manipulations), the Procuring Entity shall reject all Tenders and shall institute or cause competent Government Agencies to institute an investigation on the cause of the compromise before retendering.

41. Unbalanced and/or Front-Loaded Tenders

41.1 If in the Procuring Entity's opinion, the Tender that is evaluated as the lowest evaluated price is seriously unbalanced and/or front loaded, the Procuring Entity may require the Tenderer to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the tender prices with the scope of works, proposed methodology, schedule, and any other requirements of the Tender document.

41.2 After the evaluation of the information and detailed price analyses presented by the Tenderer, the Procuring Entity may as appropriate:

- a) accept the Tender; or
- b) require that the total amount of the Performance Security be increased at the expense of the Tenderer to a level not exceeding a 30% of the Contract Price; or

- c) agree on a payment mode that eliminates the inherent risk of the Procuring Entity paying too much for undelivered works;or
- d) rejecttheTender,

42. QualificationsoftheTenderer

- 42.1 The Procuring Entity shall determine to its satisfaction whether the eligible Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender, meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 42.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 19. The determination shall not take into consideration the qualifications of other firms such as the Tenderer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the Tender document), or any other firm(s) different from the Tenderer.
- 42.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in disqualification of the Tender, in which event the Procuring Entity shall proceed to the Tenderer who offers a substantially responsive Tender with the next lowest evaluated price to make a similar determination of that Tenderer's qualifications to perform satisfactorily.
- 42.4 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regard to the Tenderer's ability to perform the Contract for the offered Tender Price.
- 42.5 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.
- 42.6 After evaluation of the price analyses, if the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

43. BestEvaluatedTender

- 43.1 Having compared the evaluated prices of Tenders, the Procuring Entity shall determine the Best Evaluated Tender. The Best Evaluated Tender is the Tender of the Tenderer that meets the Qualification Criteria and whose Tenderhasbeendeterminedto be:
- a) Most responsive to the Tender document;and
 - b) the lowest evaluated price.

44. ProcuringEntity'sRighttoAcceptAnyTender,andtoRejectAnyor AllTenders.

- 44.1 The Procuring Entity reserves the right to accept or reject any Tender and to annul the Tender process and reject all Tenders at any time prior to Contract Award, without thereby incurring any liability to Tenderers. In case of annulment, all Tenderers shall be notified with reasons and all Tenders submitted and specifically, Tender securities,shall be promptly returned to the Tenderers.

F. Award of Contract

45. AwardCriteria

- 45.1 The Procuring Entity shall award the Contract to the successful tenderer whose tender has been determined to be the Lowest Evaluated Tender.

46. Notice of Intention to enter into a Contract

46.1 Upon award of the contract and prior to the expiry of the Tender Validity Period the Procuring Entity shall issue a Notification of Intention to Enter into a Contract / Notification of award to all tenderers which shall contain, at a minimum, the following information:

- a) the name and address of the Tenderer submitting the successful tender.
- b) the Contract price of the successful tender.
- c) a statement of the reason(s) the tender of the unsuccessful tenderer to whom the letter is addressed was unsuccessful unless the price information in (c) above already reveals the reason.
- d) the expiry date of the Standstill Period; and
- e) instructions on how to request a debriefing and/or submit a complaint during the standstill period.

47. Standstill Period

47.1 The Contract shall not be signed earlier than the expiry of a Standstill Period of 14 days to allow any dissatisfied tender to launch a complaint. Where only one Tender is submitted, the Standstill Period shall not apply.

47.2 Where a Standstill Period applies, it shall commence when the Procuring Entity has transmitted to each Tenderer the Notification of Intention to Enter **into a Contract with the successful Tenderer.**

48. Debriefing by the Procuring Entity

48.1 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 46, an unsuccessful tenderer may make a written request to the Procuring Entity for a debriefing on specific issues or concerns regarding their tender. The Procuring Entity shall provide the debriefing within five days of receipt of the request.

48.2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending **such a debriefing meeting.**

49. Letter of Award

49.1 Prior to the expiry of the Tender Validity Period and upon expiry of the Standstill Period specified in ITT 42.1, upon addressing a complaint that has been filed within the Standstill Period, the Procuring Entity shall transmit the Letter of Award to the successful Tenderer. The letter of award shall request the successful tenderer to furnish the Performance Security within 21 days of the date of the letter.

50. Signing of Contract

50.1 Upon the expiry of the fourteen days of the Notification of Intention to enter into contract and upon the parties meeting their respective statutory requirements, the Procuring Entity shall send the successful Tenderer the Contract Agreement.

50.2 Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to the Procuring Entity.

50.3 The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period

51. Appointment of Adjudicator

51.1 The Procuring Entity proposes the person named in the **TDS** to be appointed as Adjudicator under the Contract, at the hourly fee specified in the **TDS**, plus reimbursable expenses. If the Tenderer disagrees with this proposal, the Tenderer should so state in his Tender. If, in the Letter of Acceptance, the Procuring Entity does not agree on the appointment of the Adjudicator, the Procuring Entity will request the Appointing Authority designated in the Special Conditions of Contract (SCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

52. Performance Security

- 52.1 Within twenty-one (21) days of the receipt of the Letter of Acceptance from the Procuring Entity, the successful Tenderer shall furnish the Performance Security and, any other documents required in the **TDS**, in accordance with the General Conditions of Contract, subject to ITT 40.2 (b), using the Performance Security and other Forms included in Section X, Contract Forms, or another form acceptable to the Procuring Entity. A foreign institution providing a bank guarantee shall have a correspondent financial institution located in Kenya, unless the Procuring Entity has agreed in writing that a correspondent bank is not required.
- 52.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security and other documents required in the **TDS**, or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the Tenderer offering the next Best Evaluated Tender.
- 52.3 Performance security shall not be required for contracts estimated to cost less than Kenya shillings five million shillings.

53. Publication of Procurement Contract

- 53.1 Within fourteen days after signing the contract, the Procuring Entity shall publish the awarded contract at its notice boards and websites; and on the Website of the Authority. At the minimum, the notice shall contain the following information:
- a) name and address of the Procuring Entity;
 - b) name and reference number of the contract being awarded, a summary of its scope and the selection method used;
 - c) the name of the successful Tenderer, the final total contract price, the contract duration.
 - d) dates of signature, commencement and completion of contract;
 - e) names of all Tenderers that submitted Tenders, and their Tender prices as read out at Tender opening.

54. Procurement Related Complaints and Administrative Review

- 54.1 The procedures for making Procurement-related Complaints are as specified in the **TDS**.
- 54.2 A request for administrative review shall be made in the form provided under contract forms.

Section II - Tender Data Sheet (TDS)

The following specific data shall complement, supplement, or amend the provisions in the Instructions to Tenderers (ITT). Whenever there is a conflict, the provisions herein shall prevail over those in ITT.

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
	A. General
ITT 1.1	The name of the contract is <i>Proposed Renovation of Electrical works at Anniversary Towers, University way-Nairobi</i> The reference number of the Contract is KRC/1865/2022/193
ITT 2.4	The firms that provided consulting services for the contract being tendered for are: <ul style="list-style-type: none"> • M/S Gedox Associates Ltd (Lead consultants & project managers) • M/S Heritage Associates Ltd • M/S Armitech Consulting Engineers
ITT 3.1	Maximum number of members in the Joint Venture (JV) shall be: 2 No
B. Contents of Tender Document	
8.1	(A) Pre-Tender conference <i>shall</i> take place at: Friday, 2nd September 2022 at 0900hours at Ground Floor adjacent the Gensets & KCB Bank entrance (B) A pre-arranged pretender visit of the site of the works <i>shall</i> take place at: Friday, 2nd September 2022 at 0900hours at Ground Floor adjacent the Gensets & KCB Bank entrance Bidder must have a technical permanent staff as site visit attendant
ITT 8.2	The Tenderer will submit any questions in writing, to reach the Procuring Entity not later than 8th September 2022 at 12 midnight.
ITT 8.4	The Procuring Entity's website where Minutes of the pre-Tender meeting and the pre-arranged pretender site visit will be published is www.kenyare.co.ke
ITT 9.1	For Clarification of Tender purposes, for obtaining further information and for purchasing tender documents, the Procuring Entity's address is: Kenya Reinsurance Corporation Ltd, Nairobi City, Taifa Road, Reinsurance Plaza, 14th Floor, Supply Chain Office, P.O Box 30271-00100, Nairobi, Email: Procurement@kenyare.co.ke, Tel: 0703 083 200. <i>Clarification may be requested no later than Seven (7) days to the submission deadline.</i>
C. Preparation of Tenders	
ITP 13.1 (h)	The Tenderer shall submit the following additional documents in its Tender: <i>[list any additional document not already listed in ITT 11.1 that must be submitted with the Tender. The list of additional documents should include the following:]</i>

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
ITT 15.1	Alternative Tenders shall not be considered.
ITT 15.2	Alternative times for completion shall not be permitted.
ITT 15.4	Alternative technical solutions will not be permitted .
ITT 16.5	The prices quoted by the Tenderer shall be fixed
ITT 20.1	The Tender validity period shall be 180 days.
ITT 20.3 (a)	<p>(a) The delayed to exceeding 360 number of days.</p> <p>(b) The Tender price shall be adjusted by the following percentages of the tender price:</p> <p>(i) By <u>3</u>% of the local currency portion of the Contract price adjusted to reflect local inflation during the period of extension, and</p> <p>(ii) By <u>3</u>% the foreign currency portion of the Contract price adjusted to reflect the international inflation during the period of extension.</p>
ITT 21.1	<p>A Tender Security shall be Kshs. 950,000.00 required.</p> <p>A Tender-Securing Declaration shall not be required.</p>
ITT 21.2 (d)	The other Tender Security shall be _____N/A_____
ITT 21.5	On the Performance Security, other documents required shall be <u>N/A</u>
ITT 22.1	In addition to the original of the Tender, the number of copies is: 1No Bidder to submit one original and One copy of the tender
ITT 22.3	<p>The written confirmation of authorization to sign on behalf of the Tenderer shall consist of:</p> <p>Power of Attorney</p>
D. Submission and Opening of Tenders	
ITT 24.1	<p>(A) For Tender submission purposes only, the Procuring Entity's address is:</p> <p>Kenya Reinsurance Corporation Ltd P.O Box 30271-00100, Nairobi, Email: Procurement@kenyare.co.ke, Tel: 0703 083 200. Nairobi City, Taifa Road, Reinsurance Plaza, 14th Floor, Supply Chain Office</p> <p>The deadline for tender submission is :</p> <p>Date : Tuesday, 13th September 2022 at 10:00 a.m.</p> <p>Tenders shall not submit tenders electronically.</p>

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
ITT 27.1	<p>The Tender opening shall take place at the time and the address for Opening of Tenders provided below:</p> <p>Kenya Reinsurance Corporation Ltd Nairobi City, Taifa Road, Reinsurance Plaza, 17th Floor,</p> <p>Tenders to be opened on 13th September 2022 at 1000 hours</p>
ITT 27.1	<p>If Tenderers are allowed to submit Tenders electronically, they shall follow the electronic tender submission procedures specified below: __ N/A __</p>
ITT 27.6	<p>The number of representatives of the Procuring Entity to sign is A minimum of 3No.</p>
E. Evaluation, and Comparison of Tenders	
ITT 32.3	<p>The adjustment shall be based on the highest price of the item or component as quoted in other substantially responsive Tenders. If the price of the item or component cannot be derived from the price of other substantially responsive Tenders, the Procuring Entity shall use its best estimate.</p>
ITT 35.2	<p>The invitation to tender is extended to the following groups that qualify for Reservations _____ N/A _____</p>
ITT 36.1	<p>At this time, the Procuring Entity does not intend to execute certain specific parts of the Works by subcontractors selected in advance.</p>
ITT 36.2	<p>Contractor's may propose subcontracting: Maximum percentage of subcontracting permitted is: __30__% of the total contract amount. Tenderers planning to subcontract more than 10% of total volume of work shall specify, in the Form of Tender, the activity (ies) or parts of the Works to be subcontracted along with complete details of the subcontractors and their qualification and experience.</p>
ITT 36.3	<p>The parts of the Works for which the Procuring Entity permits Tenderers to propose Specialized Subcontractors are designated as follows: Electrical works and Mechanical works _____ Civil/Building works _____</p> <p>For the above-designated parts of the Works that may require Specialized Subcontractors, the relevant qualifications of the proposed Specialized Subcontractors will be added to the qualifications of the Tenderer for the purpose of evaluation. N/A</p>
ITT 37.2 (d)	<p>Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria.</p>
ITT 51.1	<p>The person named to be appointed as Adjudicator is as per the Engineer's Board of Kenya, BORAQS, ICARB or any other professional body to be determined jointly by both parties.</p>
ITT 52.2	<p>Other documents required are:</p> <ol style="list-style-type: none"> 1. All Insurances necessary as per Conditions of Contract 2. NCA registration certificate and annual license renewal 3. EPRA registration certificate and annual license renewal

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
ITT 54.1	<p>The procedures for making a Procurement-related Complaints are detailed in the "Regulations" available from the PPRA Website www.ppra.go.ke or email complaints@ppra.go.ke. If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to:</p> <p>For the attention: The Supply Chain Manager Procuring Entity: Kenya Reinsurance Plaza Nairobi Email address: procurement@kenyare.co.ke</p> <p>A Procurement-related Complaint may challenge any of the following:</p> <ul style="list-style-type: none"> (i) the terms of the Tender Documents; and (ii) the Procuring Entity's decision to award the contract.

EVALUATION CRITERIA

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

1. General Provisions

Wherever a Tenderer is required to state a monetary amount, Tenderers should indicate the amounts in Kenyan Shillings:

This section contains the criteria that the Employer shall use to evaluate tender and qualify tenderers. No other factors, methods or criteria shall be used other than specified in this tender document. The Tenderer shall provide all the information requested in the forms included in Section IV, Tendering Forms. The Procuring Entity shall use **The Standard Tender Evaluation Document for Goods and Works** for evaluating Tenders.

Evaluation and contract award Criteria

The Procuring Entity shall use the criteria and methodologies listed in this Section to evaluate tenders and arrive at the Lowest Evaluated Tender.

The Lowest Evaluated Tender is the tender that: -

- (i) meets the qualification criteria,
- (ii) has been determined to be substantially responsive to the Tender Documents, and
- (iii) is determined to have the Lowest Evaluated Tender price

The Lowest Evaluated Tender shall be selected for award of contract.

2. Preliminary examination for Determination of Responsiveness

The Procuring Entity will start by examining all tenders to ensure they meet in all respects the eligibility criteria and other requirements in the ITT, and that the tender is complete in all aspects in meeting the requirements of "Part 2 – Procuring Entity's Works Requirements", including checking for tenders with unacceptable errors, abnormally low tenders, abnormally high tenders, and tenders that are front loaded. The Standard Tender Evaluation Report Document for Goods and Works for evaluating Tenders provides very clear guide on how to deal with review of these requirements. Tenders that do not pass the Preliminary Examination will be considered irresponsive and will not be considered further.

[The Procuring Entity will provide the preliminary evaluation criteria. To facilitate, a template may be attached or clearly described all information and list of documentation to be submitted by Tenderers to enable preliminary evaluation of the Tender]

3. Tender Evaluation (ITT 35) Price evaluation: in addition to the criteria listed in ITT 35.2 (a) – (c) the following

criteria shall apply:

- i) **Alternative Completion Times**, if permitted under ITT 13.2, will be evaluated as follows:
.....**N/A**.....
- ii) **Alternative Technical Solutions** for specified parts of the Works, if permitted under ITT 13.4, will be evaluated as follows:.....**N/A**.....
- iii) **Other Criteria**; if permitted under ITT 35.2(d):
.....**N/A**.....

4. Multiple Contracts ___ **N/A**

Multiple contracts will not be permitted in accordance with ITT 35.4. Tenderers are evaluated on basis of Lots and the lowest evaluated tenderer identified for each Lot. The Procuring Entity will select one Option of the two Options listed below for award of Contracts.

5. Alternative Tenders (ITT 13.1) ___ N/A

An alternative if permitted under ITT 13.1, will be evaluated as follows:

The Procuring Entity shall consider Tenders offered for alternatives as specified in Part 2- Works Requirements. Only the technical alternatives, if any, of the Tenderer with the Best Evaluated Tender conforming to the basic technical requirements shall be considered by the Procuring Entity.

6. Margin of Preference is not applicable

7. Post qualification and Contract award (ITT 39), more specifically,

a) In case the tender was subject to post-qualification, the contract shall be awarded to the lowest evaluated tenderer, subject to confirmation of pre-qualification data, if so required.

b) In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award, subject to meeting each of the following conditions.

i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cashflow of Kenya Shillings **30,000,000.00**.

ii) Average annual construction turnover of Kenya Shillings **150,000,000.00**, equivalent calculated as total certified payments received for contracts in progress and/or completed within the last **5 years**.

iii) At least 2 of contract(s) of a similar nature executed within Kenya, or the East African Community or abroad, that have been satisfactorily and substantially completed as a prime contractor, or joint venture member or sub-contractor each of minimum value Kenya shillings **30,000,000** equivalent.

iv) Contractor's Representative and Key Personnel, which are specified as hereunder contractors' key equipment listed on the table "Contractor's Equipment" below and more specifically listed as *[specify requirements for each lot as applicable]* ___ N/A Other conditions depending on their seriousness.

a) **History of non-performing contracts:**

Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that non-performance of a contract did not occur because of the default of the Tenderer, or the member of a JV in the last **5 years**. The required information shall be furnished in the appropriate form.

b) **Pending Litigation**

Financial position and prospective long-term profitability of the Single Tenderer, and in the case the Tenderer is a JV, of each member of the JV, shall remain sound according to criteria established with respect to Financial Capability under Paragraph (i) above if all pending litigation will be resolved against the Tenderer. Tenderer shall provide information on pending litigations in the appropriate form.

c) **Litigation History**

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the last **5 years**. All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the years specified. A consistent history of awards against the Tenderer or any member of a JV may result in rejection of the tender.

MANDATORY EVALUATION (NON-TECHNICAL)

NO.	MANDATORY REQUIREMENTS	YES	NO
1	Copy of Certificate of Incorporation		
2	Valid Business Trading License from County Government of Nairobi/ Nairobi Metropolitan Services		
3	Valid registration with National Construction Authority (NCA) Category 3 and above under Electrical Installations		
4	Valid registration of the company/firm with Energy Petroleum Regulatory Authority (EPRA) under Class A1		
5	Valid Tax Compliance Certificate from the Kenya Revenue Authority (KRA)		
6	Duly completed manufacturer's authorization for the proposed equipment below outlining the country of origin of: Low Voltage (LV) panels as: ABB, Siemens, Schneider, Larsen & Turbo, or equal and approved equivalent Automatic Voltage stabilizer (AVS): IREM, Ortea Sirrus, Orion Plus or equal and approved equivalent		
7	Provision of Bid Security of Kshs. 950,000.00 from a reputable Bank in the Republic of Kenya and licensed by the Central Bank of Kenya (CBK)		
8	Proof of Site Visit (<i>duly filled, signed, and stamped site visit form as per Standard Forms</i>). (This form must be signed and stamped by client representative on the specified date of site visit & the bidder's representative must be a permanent and technical employee of the firm who has worked at the firm for at least 4years (provide evidence of the same).		
9	Provide proof details of physical addresses of the Company/business, for the bidding firm attach a lease agreement or proof of ownership of the office. Attach copies of premises ownership /lease or utility bills over the last 6 months.		
10	Provide CR12 or CR13 issued within the last twelve months with copies of national identity cards /passports of directors.		
11	Duly filled, signed, and stamped Form of tender		
12	Duly filled, signed, and stamped Certificate of Independent tender determination		
13	Duly, filled, signed, and stamped Self-declaration form that the person tenderer is not debarred in the matter of the PPDA 2015		
14	Dully filled, signed, and stamped Confidential Business Questionnaire		
15	Dully filled, signed, and stamped Self Declaration form that the tenderer will not engage in any corrupt or Fraudulent Practice		
16	Duly filled, signed, and stamped Declaration and Commitment to the Code of Ethics		
17	Duly filled "Historical Contract Non-Performance, Pending Litigation and Litigation History" form (Form to be signed and stamped by a Commissioner of Oaths) If bidder has any works with Kenya Re – contract details must be included		
18	The tender should be bound appropriately with no loose pages, sequentially paginated with a proper table of contents. The tenderer must state the total number of pages on the cover page. All pages should be stamped and signed/initialized. The tender MUST be serialized on each page of the bid submitted. Submission of tenders will be as per Sec 77 of the Public Procurement and Asset Disposal Act, 2015.		

ANY BIDDER THAT DOES NOT MEET ANY OF THE REQUIREMENTS ABOVE SHALL BE DISQUALIFIED AND SHALL NOT BE TECHNICALLY EVALUATED

TECHNICAL EVALUATION CRITERIA PART A					
NO	DESCRIPTION	MINIMUM REQUIREMENTS		POINTS SCORED	MAX POINTS
		YES	NO		
1	Key Personnel - Director of the firm(Attach Evidence) Holder of college certificate and above				2 marks
2	Key Personnel (Attach Evidence) - At least 1No. Project Manager BSc/ Diploma Electrical/Electronic Engineering field and registration with EPRA. With over 3 years' relevant experience				3 marks
3	2No. Installers with Electrician license with EPRA Class C2 and above				5 marks
4	3No. contracts successfully completed in the last five (5) years of at least electrical works value of Kshs. 30,000,000.00 Bidder must provide completion certificates or reference letter from clients (on client's letter head) issued within the last 2 years				6 marks
5	Project Completion period (The marks will be distributed on pro-rata to the lowest completion time submitted) The least submitted time ----- 4 marks for least submitted time Calculated as follows: (Least time) ÷ (Bidder's time) x 4 = _____ marks NB: Should a successful bidder give an unrealistic unreasonably short time frame, which after contract award they cannot meet, unless in occurrence of a force majeure event, a sum of Kshs. 500,000.00 shall be penalized excluded from the stipulated liquidated and ascertained damages provided for.				4 marks
6	Financial Reports - Certified Audited financial statements 2021, 2020 & 2019 - Turn over greater than Kshs. 150million				3 marks
7	Evidence of Financial Resources (cash in hand/ lines of credit/ overdraft facility/ bank statements etc.) Provide certified copies of the originals - Has financial resources greater than Kshs. 50million				2 marks
PASS MARK 15MARKS / 25 MARKS TO PROCEED TO PART B					

TECHNICAL EVALUATION CRITERIA PART B - TECHNICAL ANALYSIS
ATTACH CLEARLY MARKED COLOURED CATALOGS AND HIGHLIGHT BELOW POINTS

NO	DESCRIPTION	MINIMUM REQUIREMENTS		POINTS SCORED	MAX POINTS
		YES	NO		
1	<p align="center"><u>AUTOMATIC VOLTAGE STABILIZER (PAGES 50 – 52)</u></p> <p>Bidder shall either attain full points for conformance or zero</p> <ul style="list-style-type: none"> a. Input Voltage – 3ph + N b. Output Voltage - 3PH+N 400Y230 VAC 3PH 4 wires c. Output voltage accuracy - ± 0.5 % RMS stabilized d. Waveform distortion - < 0, 2 % - nil and none added e. Permissible overload - 200% x2 minutes, 150% x5 mins, 110% x10 mins f. Full load efficiency - > 98% at 100% linear load g. Operation type - Electro Servo mechanical, motor drive controlled. h. Operation control system - unit sensed by solid state electronics, conformal coated to prevent short circuiting due to humidity. i. Full load efficiency - > 98% at 100% linear load j. Company certification - according to ISO 9001, 14001, BS OHSAS 18001 k. Protection degree - metallic cabinet IP21 RAL 7035 finish paint l. Terminal board - Input & Output bus bars terminals with provision of suitable connection holes. Cables fed the AVR from the bottom side 				14 marks
2	<p align="center"><u>THE MAIN LOW VOLTAGE BOARD:- (PAGES 23-49)</u></p> <p>Bidder shall either attain full points for conformance or zero</p> <ul style="list-style-type: none"> a. Low Voltage sub-board of form 2B & IP 54 b. Electric charge for spring motor for the main incomer. c. The ACB to be 4 poles with neutral protection. d. Height of the board shall not exceed 2300mm e. The Low voltage board shall be type tested assembly code IEC 61439-1/2 f. Copper bus bars as per ISO 1190-1 g. The Digital power meter shall have accuracy not less than 0.5/ class 0.5 h. Internal arc withstand 85kVA at 0.4 sec i. Surge arrestor type 1 & 2 combined. 				14 marks
3	<p align="center"><u>POWER FACTOR CORRECTION UNIT; (PAGES 23-49)</u></p> <p>Bidder shall either attain full points for conformance or zero</p> <ul style="list-style-type: none"> a. Operating temperature of up to 55° C. b. Over current handling including harmonics up to 1.8I_n c. Power factor (PF) controller with advance intelligence and control d. Controller with Rs 485. e. Inbuilt temperature sensor on controller. f. Automatic step detection and faulty step alarm g. Protection of capacitor by breaker. 				10 marks
4	<p align="center"><u>FIRE DETECTION & ALARM SYSTEM: (PAGES 52)</u></p> <p>Bidder shall either attain full points for conformance or zero</p> <ul style="list-style-type: none"> a. Addressable fire alarm system b. Large Graphic display c. Dual line digital communicator & modem d. Central station reporting 				5 marks

5	TRANSFORMER/RMU				11 marks
	<p>Bidder shall either attain full points for conformance or zero</p> <p>a. Rated power 1600kVA b. Primary tension – 11000V / 11kV c. Tapping on primary - ±2 x2.5% d. Secondary tension at No load 433V (415V on load) e. Primary connection – Delta f. Secondary connection – star + N g. Cooling – ONAN h. Installation – Indoor i. Altitude – 2000m ASL j. Ambient temperature - ≤ 40°C k. No load losses – 2600W l. Windings Materials – Copper/Copper</p>				
6	BUSBARS				11 marks
	<p>Bidder shall either attain full points for conformance or zero</p> <p>a. Bus duct construction – sandwich type b. Applicable standard – IEC 61439 part 1 & 6 c. Rated operational voltage – 415V/690V and maximum up to 1000V d. Rated insulation voltage – 1100V e. Rated impulse voltage – 8kV; 12kV (1.2/50µs) f. Rated dielectric voltage – 2.5kV for 5sec g. Rated frequency – 50Hz h. Insulation class - Class F (155°C) i. Enclosure material – Multilayer polyethylene terephthalate (UL listed). j. Enclosure thickness – 2.5mm AL thickness k. Paint shade – RAL 7032 Epoxy powder coating l. Fire resistance in building penetration – 240 minutes</p>				
PASS MARK 60MARKS / 65 MARKS TO PROCEED TO PART C					

PRESENTATION CRITERIA

Each bidder will be requested to propose 1NO. Site which has been completed and handed over in the **past three years** with at least 1600A switchboard and 1000KVA stabilizer.

TECHNICAL EVALUATION CRITERIA PART C – PRESENTATION EVALUATION				
No.	DESCRIPTION	POINTS AWARDED	MAX POINTS	COMMENTS & OBSERVATIONS
a	Company History and overview of current status.		1 mark	
b	Organization structure, staff, and personnel resources for the project.		1 mark	
c	<p>Post occupancy works:</p> <p>1. Client support (0.5 marks) 2. Maintenance (0.5 marks) 3. Client training (0.5 marks) 4. Handover documentation (0.5 marks) 5. Labelling of the cables (0.5 marks) 6. Labelling of breakers (0.5 marks)</p>		3 marks	
d	Proposed power room layout, arrangement and usability.		1 mark	
e	Experience with Green building certification (LEED/Green star) rated building		1 mark	

f	Installations in site visited with similar specifications of proposed specified installations as part B hereabove: a) Transformer – 1mark b) Busbar – 1mark c) Digital AVS – 1mark		3 marks	
PASS MARK 6MARKS / 10 MARKS TO PROCEED TO FINANCIAL EVALUATION			10 MARKS	

SUMMARY OF TECHNICAL COMPUTATIONS				
		ACTUAL SCORE	PASS MARK	MAX MARKS
1	Part A Technical Evaluation		15	25
2	Part B Technical Evaluation - Technical Analysis		60	65
3	Part C Technical Evaluation – Presentation		6	10
TOTAL			81	100

FINANCIAL EVALUATION CRITERIA

Financial evaluations of bids will be carried out only for tenderers that have passed the mandatory and technical evaluation AS PER THE PASS MARKS IN THE TABLE ABOVE.

Financial evaluation shall be in accordance to ITT 33, ITT 39, ITT 40 and ITT 41 and as tabulated below.

NO	FINANCIAL EVALUATION CRITERIA	RESPONSIVE	NON-RESPONSIVE
1	Deviation from official cost estimates - \leq or \geq 15% in accordance with ITT39 and ITT40		
2	Significance of error in accordance with ITT 33		
3	Tender Balance (no frontloading or inconsistencies) in accordance with ITT 41 Note Should a tenderer's bid found to be unbalanced and or front loaded, the Procuring entity shall require that the total amount of the Performance Securities be increased at the expense of the tenderer to 30% of the contract price in accordance with ITT 41.2(c). The Procuring entity will write to prospective bidders seeking commitment of the same.		

THE MOST RESPONSIVE BIDDER SHALL BE THE LOWEST FINANCIAL PROPOSAL AFTER PASSING THE STAGES LISTED ABOVE.

STAGE 5- DUE DILIGENCE

The Kenya Reinsurance Corporation shall prior to award of this tender determine to its satisfaction whether the selected bidder will qualify to perform the contract satisfactorily by carrying out a due diligence visit to the bidder's stated workstation and to previously completed projects completed by the bidder as required.

Successful international bidders who provide locations of completed projects that are outside of Kenya will be required to facilitate the cost incurred by Kenya Reinsurance Corporation Staff in visiting such sites for purposes of due diligence.

8. QUALIFICATION FORMSUMMARY

1 Item No.	2 Qualification Subject	3 Qualification Requirement	4 Document To be Completed by Tenderer	5 For Procuring Entity's Use (Qualification met or Not Met)
1	Nationality	Nationality in accordance with ITT 3.6	Forms ELI – 1.1 and 1.2, with attachments	
2	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by the the Kenya Revenue Authority in accordance with ITT 3.14.	Form of Tender	
3	Conflict of Interest	No conflicts of interest in accordance with ITT 3.3	Form of Tender	
4	PPRA Eligibility	Not having been declared ineligible by the PPRA as described in ITT 3.8	Form of Tender	
5	State- owned Enterprise	Meets conditions of ITT 3.7	Forms ELI – 1.1 and 1.2, with attachments	
6	Goods, equipment, and services to be supplied under the contract	To have their origin in any country that is not determined ineligible under ITT 4.1	Forms ELI – 1.1 and 1.2, with attachments	
7	History of Non-Performing Contracts	Non-performance of a contract did not occur as a result of contractor default since 1 st January [.....].	Form CON-2	
8	Suspension Based on Execution of Tender/Proposal Securing Declaration by the Procuring Entity	Not under suspension based on-execution of a Tender/Proposal Securing Declaration pursuant to ITT 19.9	Form of Tender	
9	Pending Litigation	Tender's financial position and prospective long-term profitability still sound according to criteria established in 3.1 and assuming that all pending litigation will NOT be resolved against the Tenderer.	Form CON – 2	
10	Litigation History	No consistent history of court/arbitral award decisions against the Tenderer since 1 st January <i>[insert year]</i>	Form CON – 2	
11	Financial Capabilities	(i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as Kenya Shillings <i>[insert amount]</i> equivalent for the subject contract(s) net of the Tenderer's other commitments.	Form FIN – 3.1, with attachments	

1 Item No.	2 Qualification Subject	3 Qualification Requirement	4 Document To be Completed by Tenderer	5 For Procuring Entity's Use (Qualification met or Not Met)
		<p>(ii) The Tenderers shall also demonstrate, to the satisfaction of the Procuring Entity, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.</p> <p>(iii) The audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the Procuring Entity, for the last <i>[insert number of years]</i> years shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability.</p>		
12	Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings <i>[insert amount]</i> , equivalent calculated as total certified payments received for contracts in progress and/or completed within the last <i>[insert of year]</i> years, divided by <i>[insert number of years]</i> years	Form FIN – 3.2	
13	General Construction Experience	Experience under construction contracts in the role of prime contractor, JV member, sub-contractor, or management contractor for at least the last <i>[insert number of years]</i> years, starting 1 st January <i>[insert year]</i> .	4. Form EXP – 4.1 Experience	
	Specific Construction & Contract Management Experience	A minimum number of <i>[state the number]</i> similar contracts specified below that have been satisfactorily and substantially completed as a prime contractor, joint venture member, management contractor or sub-contractor between 1st January <i>[insert year]</i> and tender submission deadline i.e. (number) contracts, each of minimum value Kenya shillings..... equivalent. <i>[In case the Works are to be tender as individual contracts under multiple contract procedure, the minimum number of contracts required for purposes of evaluating qualification shall be selected from the options mentioned in ITT 35.4]</i>	Form EXP 4.2(a)	

1 Item No.	2 Qualification Subject	3 Qualification Requirement	4 <i>Document To be Completed by Tenderer</i>	5 <i>For Procuring Entity's Use (Qualification met or Not Met)</i>
		The similarity of the contracts shall be based on the following: <i>[Based on Section VII, Scope of Works, specify the minimum key requirements in terms of physical size, complexity, construction method, technology and/or other characteristics including part of the requirements that may be met by specialized subcontractors, if permitted in accordance with ITT 34.3]</i>		

QUALIFICATION FORMS

1. FORMEQU:EQUIPMENT

The Tenderer shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Tenderer.

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured	

Omit the following information for equipment owned by the Tenderer.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture agreements specific to the project	

2. FORMPER-1

Contractor's Representative and Key Personnel Schedule

Tenderers should provide the names and details of the suitably qualified Contractor's Representative and Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

Contractor' Representative and Key Personnel

1.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach Gantt chart)]</i>
2.	Title of position: _____	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach Gantt chart)]</i>
3.	Title of position: _____	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach Gantt chart)]</i>
4.	Title of position: _____	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach Gantt chart)]</i>

5.	Title of position: <i>[insert title]</i>	
	Name of candidate	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach Gantt chart)]</i>

3. FORM PER-2:

Resume and Declaration - Contractor's Representative and Key Personnel.

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Name of Tenderer

Position [# 1]: <i>[title of position from Form PER-1]</i>	
Personnel information	Name: _____ Date of birth: _____
	Address: _____ E-mail: _____
	Professional qualifications: _____
	Academic qualifications: _____
	Language proficiency: <i>[language and levels of speaking, reading, and writing skills]</i>
Details	Address of Procuring Entity: _____
	Telephone: _____ Contact (manager / personnel officer): _____
	Fax: _____
	Job title: _____ Years with present Procuring Entity: _____

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Project	Role	Duration of involvement	Relevant experience
<i>[main project details]</i>	<i>[role and responsibilities on the project]</i>	<i>[time in role]</i>	<i>[describe the experience relevant to this position]</i>

Declaration

I, the undersigned _____ *[insert either "Contractor's Representative" or "Key Personnel" as applicable]*, certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Tender:

Commitment	Details
Commitment to duration of contract:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>
Time commitment:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>

I understand that any misrepresentation or omission in this Form may:

- a) be taken into consideration during Tender evaluation.
- b) result in my disqualification from participating in the Tender.
- c) result in my dismissal from the contract.

Name of Contractor's Representative or Key Personnel: _____ *[insert name]*

Signature:

Date (day month year):

Countersignature of authorized representative of the Tenderer:

Signature:

Date (day month year):

4. TENDERER'S QUALIFICATION WITHOUT PRE-QUALIFICATION

To establish its qualifications to perform the contract in accordance with Section III, Evaluation and Qualification Criteria the Tenderer shall provide the information requested in the corresponding Information Sheets included hereunder.

4.1 FORM ELI -1.1

Tenderer Information Form

Date: _____

ITT No. and title: _____

Tenderer's name:
In case of Joint Venture (JV), name of each member: 1. 2.
Tenderer's actual or intended country of registration: <i>[indicate country of Constitution]</i>
Tenderer's actual or intended year of incorporation:
Tenderer's legal address [in country of registration]:
Tenderer's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITT 3.6 <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.5 <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents establishing: <ul style="list-style-type: none">• Legal and financial autonomy• Operation under commercial law• Establishing that the Tenderer is not under the supervision of the Procuring Entity
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

4.2 FORM ELI -1.2

Tenderer's JV Information Form(to be completed for each member of Tenderer's JV)

Date: _____

ITT No. and title: _____

Tenderer's JV name:
JV member's name:
JV member's country of registration:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITT 3.6. <input type="checkbox"/> In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Procuring Entity, in accordance with ITT 3.8.
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

4.3 FORM CON – 2

Historical Contract Non-Performance, Pending Litigation and Litigation History

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
<input type="checkbox"/> Contract non-performance did not occur since 1 st January <i>[insert year]</i> specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.1.			
<input type="checkbox"/> Contract(s) not performed since 1 st January <i>[insert year]</i> specified in Section III, Evaluation and Qualification Criteria, requirement 2.1			
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and Kenya Shilling equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Procuring Entity: <i>[insert full name]</i> Address of Procuring Entity: <i>[insert street/city/country]</i> Reason(s) for nonperformance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
<input type="checkbox"/> No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3.			
<input type="checkbox"/> Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below.			

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
		Contract Identification: _____ Name of Procuring Entity: _____ Address of Procuring Entity: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
		Contract Identification: _____ Name of Procuring Entity: _____ Address of Procuring Entity: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
Litigation History in accordance with Section III, Evaluation and Qualification Criteria			
<input type="checkbox"/> No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4.			
<input type="checkbox"/> Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as indicated below.			

Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
[insert year]	[insert percentage]	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Procuring Entity: [insert full name] Address of Procuring Entity: [insert street/city/country] Matter in dispute: [indicate main issues in dispute] Party who initiated the dispute: [indicate "Procuring Entity" or "Contractor"] Reason(s) for Litigation and award decision [indicate main reason(s)]	[insert amount]

4.4 FORM FIN – 3.1:

Financial Situation and Performance

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

4.4.1. Financial Data

Type of Financial information in _____ (currency)	Historic information for previous _____ years, _____ (amount in currency, currency, exchange rate*, USD equivalent)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					

Type of Financial information in _____ (currency)	Historic information for previous _____ years, _____ (amount in currency, currency, exchange rate*, USD equivalent)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

*Refer to ITT 15 for the exchange rate

4.4.2 Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (Kenya Shilling equivalent)
1		
2		
3		

4.4.3 Financial documents

The Tenderer and its parties shall provide copies of financial statements for _____ years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:

- (a) reflect the financial situation of the Tenderer or in case of JV member, and not an affiliated entity (such as parent company or group member).
 - (b) be independently audited or certified in accordance with local legislation.
 - (c) be complete, including all notes to the financial statements.
 - (d) correspond to accounting periods already completed and audited.
- Attached are copies of financial statements¹ for the _____ years required above; and complying with the requirements

¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of Tender, the reason for this should be justified.

4.5 FORM FIN – 3.2:

Average Annual Construction Turnover

Tenderer’s Name: _____

Date: _____

JV Member’s Name _____

ITT No. and title: _____

Annual turnover data (construction only)				
Year	Amount Currency	Exchange rate	Kenya equivalent	Shilling
<i>[indicate year]</i>	<i>[insert amount and indicate currency]</i>			
Average Annual Construction Turnover *				

* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

4.6 FORM FIN – 3.3:

Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section III, Evaluation and Qualification Criteria

Financial Resources			
No.	Source of financing	Amount (Kenya equivalent)	Shilling
1			
2			
3			

4.7 FORM FIN – 3.4:

Current Contract Commitments / Works in Progress

Tenderers and each member to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Current Contract Commitments						
	Name of Contract	Procuring Entity's Contact Address, Tel,	Value of Outstanding Work [Current Kenya Shilling /month Equivalent]	Estimated Completion Date	Average Invoicing Over Last Six Months [Kenya /month]	Monthly Invoicing Over Last Six Months Shilling
1						
2						
3						
4						
5						

4.8 FORM EXP - 4.1

General Construction Experience

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

Page _____ of _____ pages

Starting Year	Ending Year	Contract Identification	Role of Tenderer
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	

4.9 FORM EXP- 4.2(a)

Specific Construction and Contract Management Experience

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

Similar Contract No.	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor <input type="checkbox"/>	Member in JV <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
Total Contract Amount	Kenya Shilling			
If member in a JV or sub-contractor, specify participation in total Contract amount				
Procuring Entity's Name:				
Address:				
Telephone/fax number				
E-mail:				

Similar Contract No.	Information
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
1. Amount	
2. Physical size of required works items	
3. Complexity	
4. Methods/Technology	
5. Construction rate for key activities	
6. Other Characteristics	

4.10 FORM EXP - 4.2(b)

Construction Experience in Key Activities

Tenderer's Name: _____

Date: _____

Tenderer's JV Member Name: _____

Sub-contractor's Name² (as per ITT 34): _____

ITT No. and title: _____

All Sub-contractors for key activities must complete the information in this form as per ITT 34 and Section III, Evaluation and Qualification Criteria, Sub-Factor 4.2.

1. Key Activity No One: _____

Information				
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor <input type="checkbox"/>	Member in JV <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
Total Contract Amount	Kenya Shilling			
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity in the contract (i)	Percentage participation (ii)		Actual Quantity Performed (i) x (ii)
Year 1				
Year 2				
Year 3				
Year 4				
Procuring Entity's Name:				
Address: Telephone/fax number E-mail:				

² If applicable

	Information
Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III:	

- 2. Activity No. Two
- 3.

OTHER FORMS

5. FORM OF TENDER

INSTRUCTIONS TO TENDERERS

- i) *The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address.*
- ii) *All italicized text is to help Tenderer in preparing this form.*
- iii) *Tenderer must complete and sign CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF DECLARATION OF THE TENDERER attached to this Form of Tender.*
- iv) *The Form of Tenders shall include the following Forms duly completed and signed by the Tenderer.*
 - *Tenderer's Eligibility- Confidential Business Questionnaire*
 - *Certificate of Independent Tender Determination*
 - *Self-Declaration of the Tenderer*

Date of this Tender submission: *[insert date (as day, month, and year) of Tender submission]*

Request for Tender No.: *[insert identification]*

Name and description of Tender *[Insert as per ITT]*

Alternative No.: *[insert identification No if this is a Tender for an alternative]*

To: *[insert complete name of Procuring Entity]*

Dear Sirs,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above-named Works, we, the undersigned offer to construct and complete the Works and remedy any defects therein for the sum of Kenya Shillings *[[Amount in figures]*_____ Kenya Shillings *[amount in words]*_____.

The above amount includes foreign currency amount (s) of *[state figure or a percentage and currency]* *[figures]*_____ *[words]*_____.

The percentage or amount quoted above does not include provisional sums, and only allows not more than two foreign currencies.

2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Project Manager's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Special Conditions of Contract.
3. We agree to adhere by this tender until _____ *[Insert date]*, and it shall remain binding upon us and may be accepted at any time before that date.
4. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us. We further understand that you are not bound to accept the lowest or any tender you may receive.
5. We, the undersigned, further declare that:
 - i) No reservations: We have examined and have no reservations to the tender document, including Addenda issued in accordance with ITT 28;
 - ii) Eligibility: We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3 and 4;
 - iii) Tender-Securing Declaration: We have not been suspended nor declared ineligible by the Procuring Entity based on execution of a Tender-Securing or Proposal-Securing Declaration in the Procuring Entity's Country in accordance with ITT 19.8;

- iv) Conformity: We offer to execute in conformity with the tendering documents and in accordance with the implementation and completion specified in the construction schedule, the following Works: *[insert a brief description of the Works]*;
- v) Tender Price: The total price of our Tender, excluding any discounts offered in item 1 above is: *[Insert one of the options below as appropriate]*

vi) Option 1, in case of one lot: Total price is: *[insert the total price of the Tender in words and figures, indicating the various amounts and the respective currencies]*; Or

Option 2, in case of multiple lots:

- a) Total price of each lot *[insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]*; and
- b) Total price of all lots (sum of all lots) *[insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies]*;
- vii) Discounts: The discounts offered and the methodology for their application are:
- viii) The discounts offered are: *[Specify in detail each discount offered.]*
- ix) The exact method of calculations to determine the net price after application of discounts is shown below: *[Specify in detail the method that shall be used to apply the discounts]*;
- x) Tender Validity Period: Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- xi) Performance Security: If our Tender is accepted, we commit to obtain a Performance Security in accordance with the Tendering document;
- xii) One Tender Per Tender: We are not submitting any other Tender(s) as an individual Tender, and we are not participating in any other Tender(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITT 3.4, other than alternative Tenders submitted in accordance with ITT 13.3;
- xiii) Suspension and Debarment: We, along with any of our subcontractors, suppliers, Project Manager, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Public Procurement Regulatory Authority or any other entity of the Government of Kenya, or any international organization.
- xiv) State-owned enterprise or institution: *[select the appropriate option and delete the other]* *[We are not a state-owned enterprise or institution]* / *[We are a state-owned enterprise or institution but meet the requirements of ITT 3.8]*;
- xv) Commissions, gratuities, fees: We have paid, or will pay the following commissions, gratuities, or fees with respect to the tender process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*.

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

- xvi) Binding Contract: We understand that this Tender, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- xvii) Not Bound to Accept: We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other Tender that you may receive.

- xviii) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption.
- xix) **Collusive practices:** We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.
- xx) We undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copy available from _____ (*specify website*) during the procurement process and the execution of any resulting contract.
- xxi) We, the Tenderer, have completed fully and signed the following Forms as part of our Tender:
- a) Tenderer's Eligibility: Confidential Business Questionnaire – to establish we are not in any conflict to interest.
 - b) Certificate of Independent Tender Determination – to declare that we completed the tender without colluding with other tenderers.
 - c) Self-Declaration of the Tenderer – to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
 - d) Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal

Further, we confirm that we have read and understood the full content and scope of fraud and corruption as informed in "**Appendix 1- Fraud and Corruption**" attached to the Form of Tender.

Name of the Tenderer: **[insert complete name of person signing the Tender]*

Name of the person duly authorized to sign the Tender on behalf of the Tenderer: ***[insert complete name of person duly authorized to sign the Tender]*

Title of the person signing the Tender: *[insert complete title of the person signing the Tender]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]* **Date signed** *[insert date of signing]* day of *[insert month]*, *[insert year]*

Date signed _____ day of _____,

Notes

- * In the case of the Tender submitted by joint venture specify the name of the Joint Venture as Tenderer*
- ** Person signing the Tender shall have the power of attorney given by the Tenderer to be attached with the Tender.*

A. TENDERER'S ELIGIBILITY-CONFIDENTIAL BUSINESS QUESTIONNAIRE

Instruction to Tenderer

Tender is instructed to complete the particulars required in this Form, *one form for each entity if Tender is a JV*. Tenderer is further reminded that it is an offence to give false information on this Form.

(a) **Tenderer's details**

ITEM	DESCRIPTION
1	Name of the Procuring Entity
2	Reference Number of the Tender
3	Date and Time of Tender Opening
4	Name of the Tenderer
5	Full Address and Contact Details of the Tenderer. <ol style="list-style-type: none"> 1. Country 2. City 3. Location 4. Building 5. Floor 6. Postal Address 7. Name and email of contact person.
6	Current Trade License Registration Number and Expiring date
7	Name, country, and full address (<i>postal and physical addresses, email, and telephone number</i>) of Registering Body/Agency
8	Description of Nature of Business
9	Maximum value of business which the Tenderer handles.
10	State if Tenders Company is listed in stock exchange, give name and full address (<i>postal and physical addresses, email, and telephone number</i>) of state which stock exchange

General and Specific Details

b) Sole Proprietor, provide the following details.

Name in full _____ Age _____ Nationality _____
 _____ Country of Origin _____ Citizenship _____

c) Partnership, provide the following details.

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

d) Registered Company, provide the following details.

i) Private or public Company

ii) State the nominal and issued capital of the Company _____
 Nominal Kenya Shillings (Equivalent).....

iii) Issued Kenya Shillings (Equivalent).....

iv) Give details of Directors as follows.

	Names of Director	Nationality	Citizenship	% Shares owned
1				
2				
3				

(e) DISCLOSURE OF INTEREST-Interest of the Firm in the Procuring Entity.

i) Are there any person/persons in (Name of Procuring Entity) who has/have an interest or relationship in this firm? Yes/No.....

If yes, provide details as follows.

	Names of Person	Designation in the Procuring Entity	Interest or Relationship with Tenderer
1			
2			
3			

ii) Conflict of interest disclosure

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
1	Tenderer is directly or indirectly controls, is controlled by or is under common control with another tenderer.		
2	Tenderer receives or has received any direct or indirect subsidy from another tenderer.		
3	Tenderer has the same legal representative as another tenderer		
4	Tender has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer or influence the decisions of the Procuring Entity regarding this tendering process.		
5	Any of the Tenderer's affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender.		
6	Tenderer would be providing goods, works, non-consulting services or consulting services during implementation of the contract specified in this Tender Document.		
7	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract.		
8	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who would be involved in the implementation or supervision of such Contract.		
9	Has the conflict stemming from such relationship stated in item 7 and 8 above been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.		

f) Certification

On behalf of the Tenderer, I certify that the information given above is complete, current, and accurate as at the date of submission.

FullName

TitleorDesignation

(Signature)

(Date)

B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying Letter of Tender to the _____ [Name of Procuring Entity] for: _____ [Name and number of tenders] in response to the request for tenders made by: _____ [Name of Tenderer] do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of _____ [Name of Tenderer] that:

1. I have read and I understand the contents of this Certificate.
2. I understand that the Tender will be disqualified if this Certificate is found not to be true and complete in every respect.
3. I am the authorized representative of the Tenderer with authority to sign this Certificate, and to submit the Tender on behalf of the Tenderer.
4. For the purposes of this Certificate and the Tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
 - a) has been requested to submit a Tender in response to this request for tenders.
 - b) could potentially submit a tender in response to this request for tenders, based on their qualifications, abilities or experience.
5. The Tenderer discloses that [check one of the following, as applicable]:
 - a) The Tenderer has arrived at the Tender independently from, and without consultation, communication, agreement, or arrangement with, any competitor.
 - b) the Tenderer has entered into consultations, communications, agreements, or arrangements with one or more competitors regarding this request for tenders, and the Tenderer discloses, in the attached document(s), complete details thereof, including the names of the competitors and the nature of, and reasons for, such consultations, communications, agreements or arrangements.
6. In particular, without limiting the generality of paragraphs (5)(a) or (5)(b) above, there has been no consultation, communication, agreement, or arrangement with any competitor regarding:
 - a) prices.
 - b) methods, factors or formulas used to calculate prices.
 - c) the intention or decision to submit, or not to submit, a tender; or
 - d) the submission of a tender which does not meet the specifications of the request for Tenders; except as specifically disclosed pursuant to paragraph (5)(b) above.
7. In addition, there has been no consultation, communication, agreement, or arrangement with any competitor regarding the quality, quantity, specifications or delivery particulars of the works or services to which this request for tenders relates, except as specifically authorized by the procuring authority or as specifically disclosed pursuant to paragraph (5)(b) above.
8. the terms of the Tender have not been, and will not be, knowingly disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening, or of the awarding of the Contract, whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph (5)(b) above.

Name _____ Title ___ Date

[Name, title and signature of authorized agent of Tenderer and Date].

C. SELF - DECLARATION FORMS

FORM SD1

SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENT AND ASSET DISPOSAL ACT 2015.

I,, of Post Office Box being a resident of in the Republic of do hereby make a statement as follows: -

- 1. THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of (*Insert name of the Company*) who is a Bidder in respect of Tender No. for (*Insert tender title/description*) for (*Insert name of the Procuring entity*) and duly authorized and competent to make this statement.
- 2. THAT the aforesaid Bidder, its directors, and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.
- 3. THAT what is deponed to herein above is true to the best of my knowledge, information, and belief.

..... (Title)

(Signature)

(Date)

Bidder Official Stamp

DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I (person) on behalf of (*Name of the Business/ Company/Firm*)
..... declare that I have read and fully understood the contents of
the Public Procurement & Asset Disposal Act, 2015, Regulations and the Code of Ethics for persons participating
in Public Procurement and Asset Disposal and my responsibilities under the Code.

I do hereby commit to abide by the provisions of the Code of Ethics for persons participating in Public Procurement
and Asset Disposal.

Name of Authorized signatory..... Sign.....

Position.....

Office address..... Telephone..... E-
mail.....

Name of the Firm/Company.....

Date..... (Company Seal/ Rubber Stamp
where applicable)

Witness

Name Sign.....

Date.....

D. APPENDIX 1-FRAUD AND CORRUPTION

1. Purpose

2. The Government of Kenya's Anti-Corruption and Economic Crime laws and their sanction's policies and procedures, Public Procurement and Asset Disposal Act (*no. 33 of 2015*) and its Regulation, and any other Kenya's Acts or Regulations related to Fraud and Corruption, and similar offences, shall apply with respect to Public Procurement Processes and Contracts that are governed by the laws of Kenya.

3. Requirements

The Government of Kenya requires that all parties including Procuring Entities, Tenderers, (applicants/proposers), Consultants, Contractors and Suppliers; any Sub-contractors, Sub-consultants, Service providers or Suppliers; any Agents (whether declared or not); and any of their Personnel, involved and engaged in procurement under Kenya's Laws and Regulation, observe the highest standard of ethics during the procurement process, selection and contract execution of all contracts, and refrain from Fraud and Corruption and fully comply with Kenya's laws and Regulations as per paragraphs 1.1 above.

Kenya's public procurement and asset disposal act (*no. 33 of 2015*) under Section 66 describes rules to be followed and actions to be taken in dealing with Corrupt, Coercive, Obstructive, Collusive or Fraudulent practices, and Conflicts of Interest in procurement including consequences for offences committed. A few of the provisions noted below highlight Kenya's policy of no tolerance for such practices and behavior: -

- 1) a person to whom this Act applies shall not be involved in any corrupt, coercive, obstructive, collusive, or fraudulent practice; or conflicts of interest in any procurement or asset disposal proceeding.
- 2) A person referred to under subsection (1) who contravenes the provisions of that sub-section commits an offence.
- 3) Without limiting the generality of the subsection (1) and (2), the person shall be: -
 - a) disqualified from entering into a contract for a procurement or asset disposal proceeding; or
 - b) if a contract has already been entered into with the person, the contract shall be voidable.
- 4) The voiding of a contract by the procuring entity under subsection (7) does not limit any legal remedy the procuring entity may have.
- 5) An employee or agent of the procuring entity or a member of the Board or committee of the procuring entity who has a conflict of interest with respect to a procurement: -
 - a) shall not take part in the procurement proceedings.
 - b) shall not, after a procurement contract has been entered into, take part in any decision relating to the procurement or contract; and
 - c) shall not be a subcontractor for the bidder to whom was awarded contract, or a member of the group of bidders to whom the contract was awarded, but the subcontractor appointed shall meet all the requirements of this Act.
- 6) An employee, agent or member described in subsection (1) who refrains from doing anything prohibited under that subsection, but for that subsection, would have been within his or her duties shall disclose the conflict of interest to the procuring entity.
- 7) If a person contravenes subsection (1) with respect to a conflict of interest described in subsection (5)(a) and the contract is awarded to the person or his relative or to another person in whom one of them had a direct or indirect pecuniary interest, the contract shall be terminated, and all costs incurred by the public entity shall be made good by the awarding officer. Etc.

In compliance with Kenya's laws, regulations and policies mentioned above, the Procuring Entity:

- a) Defines broadly, for the purposes of the above provisions, the terms set forth below as follows:
 - i) "Corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party.
 - ii) "Fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation.
 - iii) "Collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party.
 - iv) "Coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v) "Obstructive practice" is:
 - deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation by Public Procurement Regulatory Authority (PPRA) or any other appropriate authority appointed by Government of Kenya into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3 e. below.
- b) Defines more specifically, in accordance with the above procurement Act provisions set forth for fraudulent and collusive practices as follows:

"fraudulent practice" includes a misrepresentation of fact in order to influence a procurement or disposal process or the exercise of a contract to the detriment of the procuring entity or the tenderer or the contractor, and includes collusive practices amongst tenderers prior to or after tender submission designed to establish tender prices at artificial non-competitive levels and to deprive the procuring entity of the benefits of free and open competition.
- c) Rejects a proposal for award¹ of a contract if PPRA determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question.
- d) Pursuant to the Kenya's above stated Acts and Regulations, may sanction or recommend to appropriate authority (ies) for sanctioning and debarment of a firm or individual, as applicable under the Acts and Regulations.
- e) Requires that a clause be included in Tender documents and Request for Proposal documents requiring (i) Tenderers (applicants/proposers), Consultants, Contractors, and Suppliers, and their Sub-contractors, Sub-consultants, Service providers, Suppliers, Agents personnel, permit the PPRA or any other appropriate authority appointed by Government of Kenya to inspect² all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the PPRA or any other appropriate authority appointed by Government of Kenya; and
- f) Pursuant to Section 62 of the above Act, requires Applicants/Tenderers to submit along with their Applications/Tenders/Proposals a "Self-Declaration Form" as included in the procurement document declaring that they and all parties involved in the procurement process and contract execution have not engaged/will not engage in any corrupt or fraudulent practices.

¹For the avoidance of doubt, a party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and tendering, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Investigating Authority or persons appointed by the Procuring Entity to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

FORM OF TENDER SECURITY-[Option 1–Demand Bank Guarantee]

Beneficiary: _____

Request for Tenders No: _____

Date: _____

TENDER GUARANTEE No.:

Guarantor:

1. We have been informed that _____ (herein after called "the Applicant") has submitted or will submit to the Beneficiary its Tender (herein after called " the Tender") for the execution of _____ under Request for Tenders No. _____ ("the ITT").
2. Furthermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender guarantee.
3. At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:
 - (a) has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Applicant; or
 - b) having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance.
4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) thirty days after the end of the Tender Validity Period.
5. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

[signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

FORMAT OF TENDER SECURITY [Option 2–Insurance Guarantee]

TENDER GUARANTEE No.:

1. Whereas [*Name of the tenderer*] (hereinafter called "the tenderer") has submitted its tender dated [*Date of submission of tender*] for the [*Name and/or description of the tender*] (hereinafter called "the Tender") for the execution of__under Request for Tenders No._____("the ITT").
2. KNOW ALL PEOPLE by these presents that WE of [**Name of Insurance Company**] having our registered office at (hereinafter called "the Guarantor"), are bound unto [*Name of Procuring Entity*] (hereinafter called "the Procuring Entity") in the sum of (Currency and guarantee amount) for which payment well and truly to be made to the said Procuring Entity, the Guarantor binds itself, its successors and assigns, jointly and severally, firmly by these presents.

Sealed with the Common Seal of the said Guarantor this ___day of _____ 20__.

3. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Applicant:
 - a) has withdrawn its Tender during the period of Tender validity set forth in the Principal's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Principal; or
 - b) having been notified of the acceptance of its Tender by the Procuring Entity during the Tender Validity Period or any extension thereto provided by the Principal; (i) failed to execute the Contract agreement; or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to tenderers ("ITT") of the Procuring Entity's Tendering document.

then the guarantee undertakes to immediately pay to the Procuring Entity up to the above amount upon receipt of the Procuring Entity's first written demand, without the Procuring Entity having to substantiate its demand, provided that in its demand the Procuring Entity shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii)twenty-eight days after the end of the Tender Validity Period.
5. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

[Date]

[Signature of the Guarantor]

[Witness]

[Seal]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

TENDER-SECURING DECLARATION FORM

[The Bidder shall complete this Form in accordance with the instructions indicated]

Date:.....*[insert date (as day, month and year) of Tender Submission]*

Tender No.:.....*[insert number of tendering process]*

To:.....*[insert complete name of Purchaser]* I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Tender-Securing Declaration.
2. I/We accept that I/we will automatically be suspended from being eligible for tendering in any contract with the Purchaser for the period of time of *[insert number of months or years]* starting on *[insert date]*, if we are in breach of our obligation(s) under the bid conditions, because we – (a) have withdrawn our tender during the period of tender validity specified by us in the Tendering Data Sheet; or (b) having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the instructions to tenders.
3. I/We understand that this Tender Securing Declaration shall expire if we are not the successful Tenderer(s), upon the earlier of:
 - a) our receipt of a copy of your notification of the name of the successful Tenderer; or
 - b) thirty days after the expiration of our Tender.
4. I/We understand that if I am/we are/in a Joint Venture, the Tender Securing Declaration must be in the name of the Joint Venture that submits the bid, and the Joint Venture has not been legally constituted at the time of bidding, the Tender Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed:..... Capacity / title (director

or partner or sole proprietor, etc.) Name:

..... Duly authorized to sign the bid

for and on behalf of: *[insert complete name of Tenderer]*

Dated on day of *[Insert date of signing]* Seal or stamp

Appendix to Tender

Schedule of Currency requirements

Summary of currencies of the Tender for _____ *[insert name of Section of the Works]*

Name of currency	Amounts payable
Local currency:	
Foreign currency #1:	
Foreign currency #2:	
Foreign currency #3:	
Provisional sums expressed in local currency _____	[To be entered by the Procuring Entity]

PART II - WORK REQUIREMENTS

SECTION V - DRAWINGS

A list of drawings should be inserted here. The proposed drawings including site layouts and plans should be annexed in a separate booklet.

SECTION VI – SPECIFICATIONS - Notes for preparing Specifications

1. Specifications must be drafted to present a clear and precise statement of the required standards of materials, and workmanship for tenderers to respond realistically and competitively to the requirements of the Procuring Entity and ensure responsiveness of tenders. The Specifications should require that all materials, plant, and other supplies to be permanently incorporated in the Works be new, unused, of the most recent or current models, and incorporating all recent improvements in design and materials unless provided otherwise in the Contract. Where the Contractor is responsible for the design of any part of the permanent Works, the extent of his obligations must be stated.
2. Specifications from previous similar projects are useful and may not be necessary to re-write specifications for every Works Contract.
3. There are considerable advantages in standardizing **General Specifications** for repetitive Works in recognized public sectors, such as highways, urban housing, irrigation, and water supply. The General Specifications should cover all classes of workmanship, materials and equipment commonly involved in constructions, although not necessarily to be used in a particular works contract. Deletions or addenda should then adapt the General Specifications to the particular Works.
4. Care must be taken in drafting Specifications to ensure they are not restrictive. In the Specifications of standards for materials, plant and workmanship, existing Kenya Standards should be used as much as possible, otherwise recognized international standards may also be used.
5. The Procuring Entity should decide whether technical solutions to specified parts of the Works are to be permitted. Alternatives are appropriate in cases where obvious (and potentially less costly) alternatives are possible to the technical solutions indicated in tender documents for certain elements of the Works, taking into consideration the comparative specialized advantage of potential tenderers.
6. The Procuring Entity should provide a description of the selected parts of the Works with appropriate reference to Drawings, Specifications, Bills of Quantities, and Design or Performance criteria, stating that the alternative solutions shall be at least structurally and functionally equivalent to the basic design parameters and Specifications.
7. Such alternative solutions shall be accompanied by all information necessary for a complete evaluation by the Procuring Entity, including drawings, design calculations, technical specifications, breakdown of prices, proposed construction methodology, and other relevant details. Technical alternatives permitted in this manner shall be considered by the Procuring Entity each on its own merits and independently of whether the tenderer has priced the item as described in the Procuring Entity's design included with the tender documents.

PART B

GENERAL SPECIFICATION FOR ELECTRICAL WORKS

A. GENERAL CLAUSES

2.01 Regulations

This specification covers the requirements of lighting and power installation in Kenya. All apparatus and material supplied, and all work carried out shall comply with the Kenya Government Electrical Specifications, GES.1 and GES.2 and local Statutory Regulations. Installations should also be generally in accordance with the requirements of the 16th Edition of the "Regulations of the Electrical Equipment for Buildings" issued by the institution of Electrical Engineers, which should be used as a "Code of practice" except where they conflict with Kenya Government Legislation regarding electrical installations.

2.02 **Standards**

Except where otherwise indicated in this Specification the Contract Works and all manufactured items shall comply with the relevant Specification of the British Standards Installation. Such Specifications are hereinafter referred to as "BS". In each case, the latest edition of such Specification shall apply.

Should it be desired to offer equipment covered by other National or International Standards, the approval of the Engineer must be obtained, in Writing, before completion of the tender.

2.03 **Records Drawings**

The contractor shall mark accurately on one set of drawings the conduit laid during the progress of the work. This information must be made available on site for inspection by the Engineer.

At the completion of the Contract, the Contractor shall supply the engineer with one set of transparent originals, and two complete sets of prints showing the complete installation.

The drawing shall include the location of all apparatus conduits and cable routes and a schematic diagram of the main distribution indicating the phasing of the system.

2.04 **Contract Drawings**

These drawings form part of this specification and are to be read in conjunction with this specification to enable the contractor to prepare a tender. Where there are any omissions in the bills of quantities, contract drawings supersede the bills of quantities.

These drawings are not intended to be used as working drawings unless they are released for that purpose.

2.05 **Working Drawings**

The contractor shall prepare the working drawings as may be necessary. These shall be submitted to the Engineer for approval before the execution of the works.

Working drawings, to be prepared by the contractor, shall be detailed as below but not restricted only to these:-

1. General arrangement of drawings showing plants, M.V. Switchgear, distribution boards, consumer units, fittings, switches, switched sockets outlets etc.

2. Layout drawings of concealed and surface conduits, ducts, trucking etc.

3. Any other drawings that are not called for in the Specification.

Two copies of all working drawings shall be submitted to the Engineer for approval. Thereafter, the contractor shall submit copies of approved working drawings for distribution to the parties concerned. The contractor shall not be relieved of any of these obligations under the contract or from correction any errors on site or elsewhere found subsequently in the approved working drawings by the Engineer.

2.06 **Labels**

All switchgear, switch fuses, distribution boards, etc., shall be clearly labeled with black on white background engraved labels to indicate the name, purpose and position of the gear. All circuits in distribution boards shall be clearly identified in respect of the number and location of the M.C.B. The charts shall be securely fixed inside the covers of the distribution boards.

2.07 **Galvanizing**

Galvanizing shall be applied by the hot process and shall consist of a smooth clean zinc coating free from defects and be uniform in thickness.

The thickness shall be not less than 610gms of zinc per square meter of surface and tested in accordance with the requirements of B.S 729 where applicable. Sherardizing or other alternative processes shall not be used without approval in writing of the Engineer.

The preparation for galvanizing itself shall not adversely affect the mechanical properties of the coated material. Surfaces which are normally in contact with oil shall not be galvanized or cadmium plated.

All out-door structures, access ladders, platforms, equipment cubicles shall be galvanized.

2.08 **Cleaning and painting**

Having due regard to the destination and climate conditions under which the plant is to operate, extreme care shall be exercised in the manufacture of the equipment to prevent the formation of any corrosion. All equipment shall be cleaned of all dust, oil, grease, dirt, scale, and rust by power tool operated metal brush or preferably by shot or grit blasting and then ground smooth where necessary. Unless otherwise approved, they shall then immediately have applied to them two coats of approved primer paint. After inspection any rough surface shall be filled in and smoothed over and further painting in the factory shall be as follows:-

(a) All interior of cubicles, kiosks, boxes etc., containing wiring or other apparatus and internal components of the plant which are dispatched to site in an assembled condition, shall be finish painted with at least two coats of white enamel. The final coat shall be of white anti-condensation finish, where so specified.

(b) The external surface of the panels shall be finished in gray stove enamel to B.S. shade 631 or other shade as may be approved by the Engineer.

(c) All interior surface of tanks and other oil filled chambers and external surface of piping therein shall be painted finally with an oil resisting coating to the approved by the Engineer.

(d) All wall and floor mounted junction boxes, loose starters, etc., throughout the works shall be finished in grey stove enamel or painted finally with to B.S. 381C shade 631 or other shade as may be approved by the Engineer.

After all erection has been made completed at site, the contractor shall make good all defects in painting and galvanizing which have arisen during transport, storage and erection on site and shall apply undercoat and one finished coat of gloss paint to B.S. 311C shade as may be approved by the Engineer to the external surface of all equipment.

Where galvanized metal work has been damaged it shall either be repaired by cold galvanizing at site or alternatively at the discretion of the Engineer, be returned to the manufacturer for re-galvanizing by the hot process.

2.09 **Lighting and Distribution Boards**

General lighting and power distribution boards shall comply with the B.S. 3817, 5861 and B.S. 214 and shall be of the metal clad pattern, flush mounted, except where otherwise specified on the drawings.

2.10 **Construction**

Enclosures shall be substantially constructed from 16S.W.G. Minimum thickness sheet steel having hinged front cover and shall be vermin and insect proof. Each unit shall house M.C.B.'s and shall be supplied complete with busbars, earthing terminal, neutral bar, circuit chart, and blanking plate for any spare ways. The incoming isolator switch shall be integral with the distribution board in consumer Units only.

2.11. **Miniature Circuit Breakers**

All distribution boards shall be supplied with M.C.B.'s manufactured to B.S. 3871 and of a rating as specified on the drawings. The circuit breakers shall incorporate both thermal overload and magnet short circuit tripping, with a trip-free mechanism.

Three phase circuits shall be controlled by integrally manufactured three pole circuit breakers, with one common operating lever. An inter tripping mechanism shall ensure isolation of all three poles in the event of an overload or short circuit on any one phase.

2.12 **Earth leakage Circuit Breakers**

If specified or indicated on the Contract drawings the use of E.L.C.B. for isolation of incoming supply in the distribution board shall be of an approved type for flush mounting. The general requirements of the E.L.C.B. are as follows:-

(a) It shall have high sensitivity i.e. it shall operate in 30 milliseconds for a leakage current of 30 milliampere.

(b) Its operation shall not rely on the mains supply for tripping under fault conditions. For example, in the event of a leakage from the live to earth conductor occurring at the same time as break in the neutral supply wire, the breaker shall trip.

2.13. **Labeling**

A circuit chart in each board shall show the name, location and current loading of each circuit connected. Each board shall be fitted with an engraved identification label in black on white, such as "Distribution Board D.I.", etc, and all three phase distribution boards shall be labeled in white on red, "DANGER 415 VOLTS".

B. NON-METALLIC CONDUIT 2.14. **Standards and Installation**

All non-metallic conduits shall be class 'A' heavy gauge, high impact, PVC complying with BS 4606part 2 type All. The minimum size to be used on the Contract is 20mm external diameter. The required sizes are shown on the Contract drawings. All conduit installation shall be concealed in the walls and floors or in structural slabs.

2.15. **Joints**

Conduit will be joined and terminated utilizing the appropriate rigid PVC compounds as detailed below, or standard conduit entry electrical equipment. Jointing will conform to one of the following techniques:-

No. 1 - Permanent Adhesives - The solvent cement supplied by the conduit manufacturers will be used to produce a rigid sealed connection.

No. 2 - Flexible Adhesive - A non-hardening adhesive supplied by the conduit manufacturers will be used to produce a flexible sealed joint where allowance is necessary for longitudinal movement (e.g. expansion couplers).

2.16. **Bends**

Bends and sets in the conduit will be made in accordance with the manufacturer's instructions. The radius of the bend shall not be less than 2.5 times the outside diameter of the conduit or such greater radius which will facilitate easy drawing in of cables.

2.17. **Expansion**

Adequate allowance shall be made for longitudinal expansion and contraction of the conduit under normal working temperature variations as follows:-

(a) Expansion couplers should be used in straight runs exceeding 6 meters with a loose or flexible type joint

(N0.2 above) at the long spout end of the coupler.

(b) Saddles as supplied by the manufacturers shall include a sliding support tolerance for longitudinal expansion.

Special consideration may need to be given to the fixing of accessories where this may prevent natural conduit movements. Over size or slotted fixing holes may be necessary or the introduction of expansion couplers.

2.18. **Support**

Conduits should be supported by saddles, at not more than 900mm intervals. Where working temperatures tend to be high this should be reduced to 600mm.

2.19. **Conduit Boxes and Fittings**

- (a) All conduit boxes shall be circular or square pattern of Rigid PVC suitable for plain connections conforming to sheet 62 B.S. 4607 part 2. Boxes for supporting a fitting or accessory shall be fitted with a PVC lid held in position by means of two 2BA round headed screws Boxes shall have metallic screwed inserts.
- (b) Circular or square boxes shall be provided at all outlet points, unless otherwise specified and lighting fitting, ceiling switches and other accessories will be screwed to the internal lugs of the boxes. Care must be taken when considering the use of totally enclosed fitting with PVC circular boxes where the temperature within the box is likely to rise above 60 C [140 F]. Special steel insert clips should be used in conjunction with circular boxes where heavy pendants are used.
- (c) Looping in boxes of circular P.V.C. pattern to sheet 63B.S. 4607 part 2 may be used in such work as dictated by the structure of the buildings. Conduit entry shall be made by means of P.V.C. bushes.
- (d) Adaptable boxes shall be of molded or fabricated PVC of square or oblong shape complete with P.V.C. Lids secured by 2 BA or steel plates' round-headed screws. All adaptable boxes and lids of the same size shall be interchangeable. No adaptable box smaller than 75mm x 50mm or larger than 300mm x 300mm shall be employed. Boxes shall be of adequate depth in relation to the size of conduit entering them.
- (e) Conduits shall be terminated at adaptable boxes, fuse-board switches, sockets outlets or other equipment not possessing push-in or threaded spouts, by means of appropriate size female adapter and PVC hexagonal headed Bare Bush. All cemented joints to be made to a depth of not less than the diameter of the conduit being used.

2.20. **Earth Continuity**

Earth continuity shall be provided by a separate insulated conductor drawn into the plastic conduit and rated in accordance with circuit loadings and appropriate regulations, or as mentioned, on the drawings.

Where required under the Regulations, an earth continuity conductor shall be provided for lighting fittings in which case the control switches shall be equipped with an appropriate earth terminal.

2.21. **Arrangement of Conduit Layout**

The conduit system shall be carefully planned and erected to avoid unnecessary bends or changes in direction. Conduits shall be laid in straight horizontal or vertical lines with easy sets. Where several conduits follow similar routes, they shall be laid out from a common center. Where draw-in boxes for right angled change of direction are required in multiple runs, adaptable boxes shall be used for such size as to allow conduits to enter the box without sets. Where conduits are concealed or laid on constructional floors, they shall be secured by fixing as approved by the Engineer. Where it is essential that conduits cross one another in floors, the chases shall be deepened, and the conduits set to create the minimum desirable diversion.

Care shall be taken to ensure that there are no obstructions to cables within the conduits caused by the ingress of plaster, concrete, or other matter. Conduit ends must be square and cleaned of burrs.

2.22. **Conduit Draw-in Points**

Conduits for each circuit shall be completely erected before any cable is drawn in. Adequate draw-in points shall be provided. Straight runs shall have draw-in facilities at distance not exceeding 12 meters. Runs incorporating sets of bends shall have draw-in facilities at a distance not exceeding 9 meters. These distances may need to be reduced in difficult situations or with particular cable complexes.

Not more than four easy sets, or two right angle bends or sets may be installed between draw-in points. Solid elbows or tees shall not be accepted.

C. **FINAL CIRCUIT WIRING**

2.23. **Type**

All power and lighting wiring cables shall be 600/1000-volt grade, single core, P.V.C. insulated, with stranded copper conductors, manufactured in accordance with B.S. 6006. The minimum size of lighting circuits shall be 1.5 sq.mm sizes, 4.0sq.mm on power spur circuits and 2.5sq.mm on ring main circuits.

2.24. **Installation**

Cables forming circuits connected to different distribution boards shall not be drawn into the same conduit or draw-in box. The cables shall be colored in accordance with Table B4 of the IEE Regulations. Cables used on extra low voltage circuits shall be of distinctive colors other than these colors.

No reduction of the strands forming the conductors shall be allowed at switch or other terminals, but all strands shall be effectively secured by screws, nuts and washers or other approved means. Cables shall be joined together at the terminals of ceiling boxes and other accessories. Under no circumstances will joints be permitted in the run of the cable.

D. **P.V.C. INSULATED ARMOURED CABLES**

2.25. **Type**

These shall be 600/1000 voltage grade to BS.6346 or B.S 6004 having copper wire insulated, P.V.C. sheathed, single wire armored and P.V.C. sheathed overall. The cores of four core cables shall be distinctively colored red, yellow, blue and black. The Contractor shall provide suitable glands and accessories for all armored cable termination, and where cables are suspended shall provide the necessary rack, cleat or hanger supports and fixing.

Cable supports and racks shall be made by a recognized manufacturer and shall be to the approval of the Consulting Engineer.

All supports and racks shall be arranged as far as is practicable for the easy removal of any single cable in a multi-cable run, without threading cables through supports and racks. The number of types of supports and racks shall be kept to a minimum commensurate with meeting the requirements of the Contract Works.

2.26. **Laying of Cables**

The work of excavating and back-filling of all trenches for cables, is included in this contract and the responsibility for positioning, width, and depth of trenches, and for laying and bedding of all cables and protective covers is included with the Electrical Works covered by this Specification. Cables shall be laid in trenches at the following minimum depths.

For M.V. cables in open ground	0.55m
For M.V. cables under roads and pavements	0.85m

Where more than one cable is laid in a trench, cables shall be spaced as follows:

Between M.V. cables	0.1m
Between M.V. and telephone cables	0.4m
Between M.V. and L.V. cables	0.4m
Between L.V. and telephone cables	0.4m
Between L.V. cables	0.1m

In straight run trenches cable crossings shall not be permitted except where cables branch from the main run. At every draw-in point or junction box the cable should be snaked.

Before cables are laid the bottom of the trench shall be evenly graded and cleared of all loose stones and shall then be covered with an 80mm layer of sand or sifted soil and lightly compacted, and a further 80mm layer shall be placed on top of the cables. The approved cable protection, see Clause 2.27, shall then be laid and the excavated materials in 0.2m layers, each layer being well compacted by hand or mechanical punners before the next layer is filled.

The width of the trench shall be such that a clearance of 80mm shall be provided between outermost cable and the side of the trench. Where cables are disposed in more than one layer, the vertical spacing shall be 0.4. between centers of cables or cable groups, the depth of the trench being made suitable accordingly.

2.27 **Protective Covers**

The protective covers, of approved local manufacture to BS.2484 shall be provided over cables laid in the ground each complete with an interlocking device to prevent lateral displacement. These protective covers shall extend at least 50mm laterally beyond the outside of the outer cable in each group of cables so protected.

2.28. **Cable Position Markers**

These should be placed adjacent to all points where cables change direction, and at all intervals of not more than 30m and at other positions designated by the Architect or the Consulting Engineer.

2.29. **Sealing of Cable Entries**

Where cables enter a building in pipes, or ducts, the mouths of the pipes or ducts shall be effectively sealed by means of close fitting solid impregnated wooden plugs and mixture of compound and transformer oil, or other approved manner.

All cables passing through interior walls or floors shall be effectively sealed to the approval of the Engineer By means of asbestos cement after the cables have been pulled through, in order to prevent the accumulation of moisture and the ingress of debris, sand or vermin. The cost of sealing the cables shall be included in the rates for erection and laying.

2.30. **Protection against Mechanical Damage**

All cables located in such positions where they are vulnerable to damage by mechanical or other means shall be protected by suitable lengths of steel pipe bushed to prevent damage to the cable.

2.31. **Rating Plates**

Each cable when completely erected shall have permanently attached to it at each end, and in such intermediate positions as may be considered necessary by the Engineer, metal plates upon which is engraved, or stamped, the identification number of cable together with its supplies. This information shall be recorded by the contractor so that it may appear on drawings of the completed installation.

2.32. **Cable Jointing**

The Contractor shall be wholly responsible for sealing and jointing of all cables supplies and erected under the contract. The cable boxes, loop-boxes, and glands for power and L.V. cables on all items of equipment shall be provided under the contract.

Sealing and jointing shall be in accordance with the best current practices and of first-class workmanship. Where cable armoring is used as earth continuity conductors the glands shall have the necessary contact surfaces or straps to provide a low resistance path under fault conditions.

The Tender shall include for all cable jointing where appropriate and also all labor, jointing material, and compound, together with the use of all jointer's tools and making of the tails to the apparatus terminals. Generally, cable terminations on switchgear, transformers, joint boxes, outgoing, and incoming circuits on the switch-boards shall be glanded in an approved manner.

E. SOCKET OUTLETS

2.33 **General**

In all areas, general power outlets shall be of the 13 Amp.3 pin fused plug type complying with BS. 1363. They shall be flush pattern with white or ivory plates unless otherwise specified on the drawings. Where the circuits are supplied from a common feed, two outlets shall form a twin unit in a common box. The earthing terminal of every socket outlet shall be connected to the earth continuity conductor of the final circuit by an appropriately sized insulated copper conductor. Unless otherwise stated they shall be mounted at 300mm above finished floor level.

2.34. **Plugs**

One fused plug top shall be supplied for each socket outlet installed. Fuses shall be 13 Amp unless otherwise specified.

E. FUSED CONNECTION UNITS

2.35. **General**

All fused connection units shall be 13 Amp. with fuse and neon indicator lamp. Boxes shall be flush type with white or ivory copper plates and shall be switched type unless otherwise specified on the drawings.

2.36. **Fuses**

All fused connection units shall be fitted with 13 Amp. fuses, unless otherwise specified.

2.37. **Labeling**

The front plate of each fused connection unit shall, unless otherwise specified, be engraved with the name of the appliance connected to it.

G. LIGHTING SWITCHES

2.38. **Type**

Lighting switches shall be of all insulated rocker operating plate switch type to BS. 3676 of ample rating. Switch inserts shall be white set in white or ivory cover plates.

Switches controlling points in bathrooms shall be placed outside the bathroom or consist of a ceiling switch operated by a non-conducting cord, as specified. Switches mounted outdoors shall be of a weather tight pattern.

Switches shall be one way, two ways or intermediate as specified and where a number of switches are mounted together, they shall be tilted in a common box.

Ceiling switches shall be white or ivory semi recessed pattern and shall only be used where specified. Pull cords shall be fitted with shock absorbing springs.

H. LIGHTING FITTINGS

2.39. General

The Contractor shall supply and fit all lighting fittings of the type indicated on the drawings and in the schedules. All fittings shall be suitable for operation on a 240V, 50Hz supply. Lighting fittings rated other than 240 volts will not be accepted. All lighting fittings shall be supplied with lamps.

2.40. Fluorescent Fittings.

Fluorescent fittings shall generally be of the batten type, with control gear contained within the supporting channel. All fittings shall be supported from conduit boxes and shall be suspended by two 20mm diameter conduits to give a clearance of 25mm between the top of the fitting and the ceiling. Where fittings are suspended by chains from the ceiling the contractor shall use white flexible cord between the box and the fittings.

The installation of the suspension chain and cord shall be approved on site by the Engineer. In the ceiling, conduit boxes, to BS. 31, shall be fitted with dome covers, to which the suspension conduits shall be joined, so that the lighting fitting hangs vertically below the conduit boxes.

Fitting shall comply with BS. 3820 or class1, indoor normal atmospheres.

All fluorescent fittings shall be fitted with radio interference suppression capacitors and power factor correction capacitors and shall be earthen.

2.41 Reflectors and Diffusers

All reflectors for fluorescent fittings shall be made of sheet metal suitably shaped and stiffened and shall be of white enamel finish. The diffusers shall be of white enamel finish. The diffusers shall be of white opal type in extruded plastic with external reeding.

2.42. Lamps

All lighting fittings shall be supplied complete with lamps of the type and rating specified. Fluorescent tubes shall be of the "white" type, except where otherwise stated. Pearly type tungsten lamps will be fitted in open fittings.

I. FLEXIBLE CORDS

2.43. General

These shall be of 250-volt grade PVC insulated and shall comply with BS.7. Flexible cords shall not be less than 24/.20(23/.0076).

Flexible cords for pendant fittings shall be circular type, heat resistant and white in color.

J. EARTHING

2.44 Earthing Electrodes

Earth electrodes shall be minimum 1.4 meters long by 12mm diameter hard drawn copper rod and shall be located not less than 3 meters apart at a convenient position 6 meters away from the building. The terminal head of each electrode shall be in a concrete inspection pit, with cover. If the resistance to earth is not satisfactory with one electrode, then additional electrodes or an earth mat shall be provided as directed by the Engineer.

2.45 Distribution System Earthing

All distribution boards shall be earthed in accordance with the I.E.E. Regulations. All metal work associated with the regulations currently in force.

2.46 **Testing of Earthing System**

The resistance of the earth continuity system when measured between earthing point and other point in the installation, including all conduit and metal work which may provide a path to earth, shall not exceed 0.5 ohm where steel conduit forms part or the whole part of the system, or 1.0 ohm, if the earth continuity system is composed entirely of copper, copper alloy or aluminum. When the installation is complete the Contractor shall carry out tests for earth loop impedance, polarity insulation resistance, ring circuit continuity and earth electrode resistance, in the presence of, and to the satisfaction of the Engineer and the K.P.&L. The Contractor shall rectify all work not giving test results within the limits prescribed.

2.47. **P.M.E. system**

Provision shall be made for P.M.E. System at supply intake (where applicable) and on the isolators of the adjacent building. "P.M.E." means that system whereby the neutral conductor of the supply network is earthed at a prescribed number of points along its route, together with the installation earth continuity conductor, at each consumer's installation, so providing a metallic path for the flow of earth fault currents. The connections between the neutral conductors of the installation shall be made by the supply Authority at the point of intake only. The connection at the isolators will be made by the Contractor in the presence of the Engineer after completion of all tests.

2.48. **COMMISSIONING**

All installations shall be tested to the statutory requirements of the Electricity Authority and commissioned in the presence of and to the satisfaction of the Engineer.

Four copies of tests reports shall be provided within seven days of carrying out the tests; and reports shall include full details of how each test was carried out, and a copy of all readings taken.

ACB DESIGN & SPECIFICATION.

General

The present specification applies to air circuit breakers (ACB) from 630A to 6300A for AC (50/60Hz) low voltage electrical installation from 220V to 690V.

- ACB shall be equipped with a trip unit that offers the appropriate level of protection performance to fit to the application. All trip units could be proposed with versions that provide measurement, and communication functions.

- ACB shall be available in fixed or withdrawable versions as well as in 3-pole and 4-pole versions. For withdrawable versions, a safety trip shall provide advanced opening to prevent connection and disconnection of a closed-circuit breaker

- It shall be possible to supply power either from the top or bottom side without reduction in performance.

- For an ACB rating frame given, dimensions shall be the same whatever the ultimate breaking capacity.

- ACB shall have a rated operational voltage (U_e) of 690 V, a rated insulation voltage (U_i) of 1000 V (AC 50/60 Hz) and a rated impulse voltage (U_{imp}) of 12kV, ACB shall be suitable for isolation according to IEC 60 947-1 and -2 for the rated insulation voltage of 1000 V and for the overvoltage category IV.

- No safety clearance shall be required around draw out circuit breakers. For fixed circuit breakers, 150 mm of free space shall be provided above the arc chutes to allow removal of the latter.

- The operating mechanism shall be of the Open/Closed/Open stored-energy spring type. The closing time shall be less than or equal to 70 milliseconds for rating <4000A.

Compliance with Standards

Reference	Title	Scope
EN /IEC 60947-1 & 2	Low-voltage Switchgear and control gear Part 2 : Circuit Breaker	Characteristics of circuit-breakers; - operation and behaviour in normal service; - operation and behaviour in case of overload and operation and behaviour in case of short-circuit, including co-ordination in service (discrimination and back-up protection); - Dielectric properties;
IEC 60947-2, annex B	Circuit Breaker incorporating residual current protection	
IEC 60947-2, annex F	Additional tests for circuit-breakers with electronic over-current protection	Electronic trip unit (rms current measurement, EMC)
IEC 60664-1	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements, and tests	Category IV for a rated insulation voltage up to 690 V, class II insulation between the front and internal power circuits
IEC 61000-4-1	Electromagnetic compatibility (EMC) Testing and measurement techniques	EMC Immunity
IEC 61557-12	Combined performance measuring and monitoring devices for electrical parameters	Accuracy class
IEC 60068-2	Environmental testing	Climatic withstand

Versions complying with UL / ANSI / JIS shall also be available.

Circuit breaker design

Safety

For maximum safety,

- Air circuit breakers main contact shall be encased in a reinforced polyester casing and offer double insulation from the operators on the breaker front face.
- Air circuit breakers shall be equipped with metal filters to reduce effects perceptible from the outside during current interruption
- The circuit breaker shall be equipped with a safety interlock which keeps the circuit breaker open if the trip unit is not installed.
- Mechanical indicators on the front panel of Air circuit breakers shall indicate the following status conditions:

1. "ON" (main contacts closed)	Spring charged
2. "ON" (main contacts closed)	Spring discharged
3. "OFF" (main contacts open)	Spring charged – circuit breaker ready to close
4. "OFF" (main contacts open)	Spring charged – circuit breaker not ready to close
5. "OFF" (main contacts open)	Spring discharged

- ACB shall be equipped with anti-pumping function: If opening and closing orders occur simultaneously, the circuit breaker shall remain in the open position. After fault tripping or intentional opening using the manual or electrical controls, the closing order must first be discontinued, then reactivated to close the circuit breaker.

- The draw out operation shall be possible through a closed door.
 - o Three positions of the moving part shall be possible:
 1. connected position - all auxiliary and main circuits engaged
 2. test position - all auxiliary circuits engaged all main circuits disconnected
 3. isolated position - all circuits disconnected
 - o The positions shall be clearly indicated, and no intermediate position shall be possible
 - o Each position shall be acknowledged before moving to a new position
 - o The racking handle shall be stowed on the air circuit breaker in such a manner as to be accessible without defeating the door interlocking.
 - o The draw out mechanism shall be part of the fixed frame to reduce the weight of withdrawable part.
- A door interlock shall be provided so that it shall not be possible to open the door until the air circuit breaker moving part is in the disconnected position.
- Insulated safety shutters shall be provided over the incoming and outgoing main circuits and over the auxiliary circuits. An interlocking shall be provided to prevent insertion of a circuit breaker having a rating higher than the current rating of the fixed part, into that fixed part.
- In electronic trip units, protection functions shall be electronically managed independently of measurement and communication function by a dedicated ASIC.

Breaking capacity, durability, discrimination,

- The ACB breaking capacity performance certificates shall be available for category B according to IEC 60947-2 standards. The test shall be carried out with a breaking performance during operation (Ics) and admissible short time withstand (Icw) equal to the ultimate breaking capacity (Icu.) up to 85kA
- The rated ultimate breaking capacity (Icu) of each ACB shall be equal to at least the value of the short-circuit current (Isc) at the point of installation on the electric circuit.
- The ACB range will offer several level of Icu capacity up to 150kA @440V to fit to the application.
- ACB's manufacturer shall provide selectivity and coordination tables with other devices such as other ACB, ACBs, switches etc.
- Mechanical durability shall be at least 12500/ 10000 / 5000 operation for ratings <1600 / <3200 / >4000

Auxiliaries and accessories

Generals

- All electrical auxiliaries including the motor spring charging mechanism shall be field adaptable without adjustment or the necessity for any tool (except a screwdriver). They shall be fitted into a compartment which under normally loaded conditions has no metalwork energized from the main poles exposed with it.
- Any adaptation carried out shall not increase the breaker overall dimensions.
- It shall be possible to connect all auxiliary wiring from the front face of the air circuit breaker, this wiring shall be taken through a set of disconnecting contacts, so that all auxiliary wiring is automatically disconnected in the isolated position.
- Screws that held removable parts shall be self-contained

Remote operation

- Coils:
 - o The breaker could be equipped with one closing release, one shunt opening release, one additional shunt or under voltage opening release
 - o Coils shall be designed for continuous duty.
 - o Voltage release auxiliary power supply
 - AC: 24 48 100/130 200/250 277 380/480 VAC
 - DC 12 24/30 48/60 100/130 200/250 VDC
 - o Opening time with shunt opening release 50ms +/- 10ms
 - o Closing time closing release 70ms +/- 10ms $I_n \leq 4000A$
 - o Closing time closing release 80ms +/- 10ms $I_n > 4000A$
- Electric motor for spring charge
 - o Motor auxiliary power supply:
 - AC: 24 48 100/130 200/250 277 380/415 400/440VAC
 - DC 12 24/30 48/60 100/130 200/250 VDC
 - o Charging time: ≤ 4 sec
 - o Operating frequency ≤ 3 cycle / min.

Protections requirements

General

- The ACB shall be available in 3-pole or 4-pole (neutral protection) versions. On 4-pole circuit breakers, a 3-position switch shall be provided to set neutral protection to any of the following levels: unprotected neutral (4P3D), half-protected neutral (4P3D+N/2) or fully protected neutral (4P4D).
- The trip units shall not increase overall circuit breaker dimension
- All electronic components shall withstand temperatures up to 105 °C.
- Trip units shall be adjustable, and it shall be possible to fit lead seals to prevent unauthorised access to the settings
- Protection settings shall apply to all circuit breaker poles
- It shall be possible to adjust protections with a knob without any power supply or when the main is off
- Electronic trip unit shall be fitted with thermal memory
- It shall be possible to equip ACBs with an auxiliary contact signaling an electrical fault operated by the trip unit
- The following monitoring functions shall be integral parts of electronic trip units:
 - o 1 LED for load indication lighted above 105 % of I_r
 - o a test connector shall be installed for checks on electronic and tripping mechanism operation using an external device

Trip unit protection functions

ACB shall be equipped with a trip unit that offers the appropriate level of performance to fit to the application:

Basic protection (LI) with or without energy measurement

These trip units shall offer

- Long-time protection
 - Adjustable I_r threshold settings from 40% to 100 % of the trip unit rating
 - Adjustable t_r time delay
- Instantaneous protection
 - Adjustable I_{sd} threshold settings from 1.5x I_r to 10x I_r

Selective protection (LSI) with or without energy measurement

These trip units shall offer

- **Long-time protection**
 - Adjustable I_r threshold settings from 40% to 100 % of the trip unit rating
 - Adjustable t_r time delay
- **Short time protection**
 - Adjustable I_{sd} threshold settings from $1.5I_r$ to $10I_r$
 - Adjustable t_{sd} time delay
- **Instantaneous protection**
 - Adjustable I_i threshold settings from $2I_n$ to $15I_n$ with an OFF position.
 - Selective protection & Ground fault or Earth leakage protection (LSIG) with or without energy measurement

These trip units shall offer

- **Long-time protection**
 - Adjustable I_r threshold settings from 40% to 100 % of the trip unit rating
 - Adjustable t_r time delay
- **Short time protection**
 - Adjustable I_{sd} threshold settings from $1.5I_r$ to $10I_r$
 - Adjustable t_{sd} time delay
- **Instantaneous protection**
 - Adjustable I_i threshold settings from $2I_n$ to $15I_n$ with an OFF position
- **Ground fault protection (GF)Or Earth leakage protection (Vigi)**
 - Adjustable I_g threshold settings Adjustable $I_{\Delta n}$ threshold settings
 - Adjustable t_g time delay Adjustable $t_{\Delta n}$ time delay

Trip unit measurement function

If required by the application, the trip unit shall offer measurement (including energy) without additional module whatever the protection type (LI, LSI, LSIG).

Minimum measurements shall be:

- Currents & Energy
- Demand Current, Maxim Demand Current
- Voltage, active power, reactive power, power factor,
- Demand Power, Maxim Demand Power
- Accuracies of the entire measurement system, including the sensors: shall be
 - Current: 1,5%
 - Voltage: 0.5 %
 - Power and energy: 2%
- Rogowski current transformers shall be used to ensure accurate measurements from low current up to high currents
- For safety reason, protection functions shall be electronically managed independently of measurement function by a dedicated ASIC.
- The measurements shall be displayed on the breaker itself and on a remote system via Modbus communication. In addition to these solutions, it shall be possible to connect a remote display

Advanced protection trip unit

In addition to the previous protection functions trip units with Under/Over Voltage, Under/Over Frequency and Reverse Power protection could be proposed.

Operating & Maintenance

Maintenance

The arc chutes shall be removable on site.

The main contacts shall be equipped with a visual wear indicator that may be accessed by removing the arc chutes, for immediate assessment of contact wear without requiring measurements or specific tools

Operating assistance function

- Electronic trip units with measurement and communication capability shall offer operating assistance function:
 - o trips history (Fault type, date, and time)
 - o Pre-alarm
 - o Trip and pre-alarm could activate relay output(s)
- These functions and indicators shall be available on the display, by communication or setting PC tool.

Maintenance indicators

Electronic trip units with measurement and communication capability shall offer maintenance indicators:

- Operation and trip counters,
- Operating hours counter,
- Load profile

- These functions and indicators shall be available by communication or PC tool. Commissioning and operating tool

- A test connector shall be installed for checks on electronic and tripping mechanism operation using an external dedicated tool

- A software tool available for all electronic trip unit shall be provided:
 - To visualize and configure trip unit parameters
 - To create and save setting files
 - To display tripping curve
 - To set time and date
 - To display tripping and alarms histories

Alarms (Advanced protection trip units)

- User shall be able to activate alarms based on measurement (I, U, F, Q, Idemand, Pdemand,)
- Alarms shall be time stamped
- Alarms could activate up to 6 relay output(s)
- These functions and indicators shall be available by display and/or communication and/or setting PC tool.

Communication

ACB shall be equipped easily with MODBUS communication.

- Whatever the trip unit is: the following information shall be accessible:
- Open / Close position / fault-trip indication (SDE) / Ready to close/ Position in the Chassis (Withdrawable version).the following commands shall be possible
- Open / close.
- When trip units with measurement functions are used the following information shall be accessible:
- Instantaneous and demand values, maximeters/minimeters, Energy, Current demand and power demand.
- Timestamp trip and alarm histories and event table.
- Maintenance indicators.

Environment

- Production site organisation shall be non-polluting and certified to comply with ISO 9002 and ISO 14001 standards.
- Air circuit breakers shall be supplied in recyclable packing complying with environmental directives RoHS and WEEE.
- The manufacturer shall implement non-polluting production processes that do not make use of chlorofluorocarbons, chlorinated hydrocarbons, ink for cardboard markings, etc.
- The manufacturer shall provide product environmental profile of the ACB
- The manufacturer shall provide instructions on the removal, dismantling and processing of circuit-breaker materials at the end of service life.

MCCB DESIGN CHARACTERISTICS AND PARAMETERS.

1. General

The present specification applies to moulded case circuit breakers (MCCB) from 630A to 1600A for AC (50/60Hz) low voltage electrical installation from 220V to 690V.

- MCCB shall be equipped with a trip unit that offers the appropriate level of protection performance to fit to the application. All trip units could be proposed with versions that provide measurement, and communication functions.

- MCCB shall be available in fixed or withdrawable versions as well as in 3-pole and 4-pole versions. For withdrawable versions, a safety trip shall provide advanced opening to prevent connection and disconnection of a closed-circuit breaker

- Fixed and manual MCCBs shall be designed for both vertical, horizontal, and flat mounting, without any adverse effect on electrical performance.

- For a MCCB rating frame given, MCCBs dimensions shall be the same whatever the ultimate breaking capacity.

- MCCB shall have a rated operational voltage (Ue) of 690 V, a rated insulation voltage (Ui) of 800V (AC 50/60 Hz) and a rated impulse voltage (Uimp) of 8kV.

2. Compliance with Standards

REFERENCE	TITLE	SCOPE
EN /IEC 60947-1 & 2	Low-voltage Switchgear and control gear Part 2 : Circuit Breaker	Characteristics of circuit-breakers; - operation and behaviour in normal service; - operation and behaviour in case of overload and operation and behaviour in case of short-circuit, including co-ordination in service (discrimination and back-up protection); - Dielectric properties;
IEC 60947-2, annex B	Circuit Breaker incorporating residual current protection	
IEC 60947-2, annex F	Additional tests for circuit-breakers with electronic over-current protection	Electronic trip unit (rms current measurement, EMC)
IEC 60664-1	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements, and tests	Category IV for a rated insulation voltage up to 690 V, class II insulation between the front and internal power circuits
IEC 61000-4-1	Electromagnetic compatibility (EMC) Testing and measurement techniques	EMC Immunity
IEC 61557-12	Combined performance measuring and monitoring devices for electrical parameters	Accuracy class
IEC 60068-2	Environmental testing	Climatic withstand

Versions complying with UL 489 shall also be available.

3. Circuit breaker design

a. Safety

For maximum safety,

- The power contacts shall be insulated in an enclosure made of a thermosetting material from other functions such as the operating mechanism, the case, the trip unit and auxiliaries
- The molded case circuit breakers shall provide double insulation of the front face to allow on-site installation of auxiliaries without de-energising the installation. All electrical auxiliaries and accessories such as voltage releases, (shunt or under voltage type) and auxiliary contacts shall be designed for easy on-site installation.
- The operating mechanism of the moulded case circuit breakers shall be of the fast make and fast break type. Tripping on a fault shall be mechanically independent of the operating handle. The operating mechanism shall be designed to operate all poles of the circuit breaker simultaneously for making, breaking, and tripping.
- If required, the circuit breaker shall be equipped with a rotary handle.
- The operating mechanism shall be designed in such a way that the position of the operating handle of the circuit breaker indicates the real position of the main contacts, even if the circuit breaker is equipped with a rotary handle.
- In order to ensure suitability for isolation complying with IEC 60947-2 § 7-27: The operating mechanism shall be designed such that the handle can only be in OFF position (O) if the power contacts are all actually separated, in OFF position, the handle shall indicate the isolation position.
- MCCBs shall be able to receive a device for locking in the "isolated" position, with up to 3 padlocks, Ø8 maximum or keylock (for rotary handle).
- MCCBs shall be designed to prevent access to live parts when the cover is removed
- MCCBs shall be equipped with a "push to trip" button in front to test operation and the opening of the poles.
- MCCB rating, "push to trip" button, performances and contact position indication must be clearly visible and accessible from the front, through the front panel or the door of the switchboard.
- In electronic trip units, protection functions shall be electronically managed independently of measurement and communication function by a dedicated ASIC.

b. Breaking capacity, Current limitation, discrimination, durability

- The molded case circuit breakers (except for current-limiting circuit breakers) shall belong to category B as defined in IEC60947-1. Certificates attesting to compliance with these rules shall be established considering the following performance levels for the test sequences: service breaking capacity (Ics) equal to at least 50% of the rated ultimate breaking capacity (Icu) and a rated short-time withstand current (Icw) of 25 kA / 0.5 s (except for current-limiting circuit breakers)
- If required current limiting circuit breakers shall be available.
- The rated ultimate breaking capacity (Icu) of each molded case circuit breaker shall be equal to at least the value of the short-circuit current (Isc) at the point of installation on the electric circuit, unless the upstream circuit breaker makes it possible to ensure coordination (as defined in Appendix A of IEC 60947-2); in this case, the coordination between the two circuit breakers shall be confirmed by manufacturer.
- **MCCB's manufacturer shall provide selectivity and coordination tables with other devices such as other MCCBs, ACB, switches and contactors.**

c. Auxiliaries and accessories

- The operating mechanism shall be of the stored-energy type only
- The addition of a motor mechanism or a rotary handle shall in no way affect circuit breaker characteristics:
 - o Only three stable tripping mechanism positions (ON, OFF and TRIPPED) shall be possible with the motor mechanism.
 - o Suitability for isolation shall be provided by positive contact indication (ON and OFF) in front of the motor mechanism module
- MCCBs shall be designed to enable safe on-site installation of auxiliaries such as voltage releases (shunt and under voltage releases) and indication switches as follows:
 - o same field installable auxiliary contacts for signalling different functions, as: open/ closed position, fault signal, electrical fault (including electrical leakage) signal, all auxiliaries shall be common for the entire range,
 - o they shall be separated from power circuits,
 - o all electrical auxiliaries shall be of the snap-in type and fitted with terminal blocks,
 - o Auxiliary function and terminals shall be permanently engraved on the case of the circuit breaker and the auxiliary itself,
- The trip units shall not increase overall circuit breaker dimensions

i. Remote operation

- Coils:
 - o Manually operated circuit breaker could be equipped with one shunt opening release or one under voltage opening release.
 - o Electrically operated circuit breaker could be equipped with one shunt opening release or one under voltage opening release in addition to opening and closing order.
 - o Coils shall be designed for continuous duty.
 - o Voltage release auxiliary power supply:
 - AC: 24 48 100/130 200/250 277 380/480 VAC
 - DC 12 24/30 48/60 100/130 200/250 VDC
 - o Opening time with shunt opening release 50ms +/- 10ms
 - o Electrical closing time 60ms +/- 10ms
- Electric motor for spring charge
 - o Motor auxiliary power supply:
 - AC: 24 48 100/130 200/250 277 380/415 VAC
 - DC 12 24/30 48/60 100/130 200/250 VDC
 - o Charging time: <=4sec
 - o Operating frequency <=3 cycle / min.
- Electrically operated MCCB shall be equipped with anti-pumping function: If opening and closing orders occur simultaneously, the circuit breaker shall remain in the open position.

4. Protections requirements

a. General

- The high-current moulded case circuit breakers shall be available in 3-pole or 4-pole (neutral protection) versions. On 4-pole circuit breakers, a 3-position switch shall be provided to set neutral protection to any of the following levels: unprotected neutral (4P3D), half-protected neutral (4P3D+N/2) or fully protected neutral (4P4D).
- The trip units shall not augment overall circuit breaker dimensions
- Trip unit shall be easily interchangeable and easily secured to the MCCB without removing the breaker from the panel
- All electronic components shall withstand temperatures up to 105 °C.

- Electronic and thermal-magnetic trip units shall be adjustable, and it shall be possible to fit lead seals to prevent unauthorised access to the settings
- Protection settings shall apply to all circuit breaker poles
- It shall be possible to adjust protections with a knob without any power supply or when the main is off
- Electronic trip unit shall be fitted with thermal memory
- It shall be possible to equip MCCBs with an auxiliary contact signaling an electrical fault operated by the trip unit.
- The following monitoring functions shall be integral parts of electronic trip units:
 - o 1 LED for load indication lighted above 105 % of Ir
 - o A test connector shall be installed for checks on electronic and tripping mechanism operation using an external device.

b. Trip unit protection functions

i. Basic protection (LI) with or without energy measurement

These trip units shall offer

- **Long-time protection**
 - Adjustable Ir threshold settings from 40% to 100 % of the trip unit rating
 - Adjustable tr time delay
- **Instantaneous protection**
 - Adjustable Isd threshold settings from 1.5xIr to 10xIr

ii. Selective protection (LSI) with or without energy measurement

These trip units shall offer

- **Long-time protection**
 - Adjustable Ir threshold settings from 40% to 100 % of the trip unit rating
 - Adjustable tr time delay
- **Short time protection**
 - Adjustable Isd threshold settings from 1.5xIr to 10xIr
 - Adjustable tsd time delay
- **Instantaneous protection**
 - Adjustable Ii threshold settings from 2xIn to 15xIn with an OFF position

iii. Selective protection & Ground fault or Earth leakage protection (LSIG) with or without energy measurement

These trip units shall offer

- **Long-time protection**
 - Adjustable Ir threshold settings from 40% to 100 % of the trip unit rating
 - Adjustable tr time delay
- **Short time protection**
 - Adjustable Isd threshold settings from 1.5xIr to 10xIr
 - Adjustable tsd time delay
- **Instantaneous protection**
 - Adjustable Ii threshold settings from 2xIn to 15xIn with an OFF position
- **Ground fault protection (GF) Or Earth leakage protection (Vigi)**
 - Adjustable Ig threshold settings Adjustable IΔn threshold settings
 - Adjustable tg time delay Adjustable tΔn time delay

iv. Advanced protection trip unit

In addition to the previous protection functions trip units with Under/Over Voltage, Under/Over Frequency and Reverse Power protection could be proposed.

c. Trip unit measurement function

If required by the application, the trip unit shall offer measurement (including energy) without additional module whatever the protection type (LI, LSI, LSIg). Available measurements shall be:

- Currents
- Demand Current, Maxim Demand Current
- Voltage, active power, reactive power, power factor,
- Demand Power, Maxim Demand Power
- Energy
- Accuracies of the entire measurement system, including the sensors: shall be
 - Current: 1,5%
 - Voltage: 0.5 %
 - Power and energy: 2%
- Rogowski current transformers shall be used to ensure accurate measurements from low current up to high currents
- For safety reason, protection functions shall be electronically managed independently of measurement function by a dedicated ASIC.
- The measurements shall be displayed on the breaker itself and on a remote system via Modbus communication. In addition to these solutions, it shall be possible to connect a remote display.

5. Operating & Maintenance

a. Operating assistance function

- Electronic trip units with measurement and communication capability shall offer operating assistance function:
 - o trips history (Fault type, date, and time)
 - o Pre-alarm
 - o Trip and pre-alarm could activate relay output(s)
- These functions and indicators shall be available on the display, by communication or setting PC tool.

b. Maintenance indicators

Electronic trip units with measurement and communication capability shall offer maintenance indicators:

- Operation and trip counters,
- Operating hours counter,
- Load profile

c. These functions and indicators shall be available by communication or setting PC tool.

Commissioning and operating tool

- A test connector shall be installed for checks on electronic and tripping mechanism operation using an external dedicated tool
- A software tool available for all electronic trip unit shall be provided:
 - To visualize and configure trip unit parameters
 - To create and save setting files
 - To display tripping curve
 - To set time and date
 - To display tripping and alarms histories

d. Alarms (Advanced protection trip units)

- User shall be able to activate alarms based on measurement (I, U, F, Q, Idemand, Pdemand,)
- Alarms shall be time stamped
- Alarms could activate up to 6 relay output(s)
- These functions and indicators shall be available by display and/or communication and/or setting PC tool.

6. Communication

ACB shall be equipped easily with MODBUS communication.

- Whatever the trip unit is:

The following information shall be accessible:

- Open / Close position / fault-trip indication (SDE) / Ready to close/ Position in the Chassis (Withdrawable version).

The following commands shall be possible

- Open / close.

- When trip units with measurement functions are used the following information shall be accessible:
 - Instantaneous and demand values, maximeters/minimeters, energy, Current demand and power demand.
 - Timestamp trip and alarm histories and event table.
 - Maintenance indicators.

7. Environment

- Production site organisation shall be non-polluting and certified to comply with ISO 9002 and ISO 14001 standards.
- MCCBs shall be designed according to Eco-design complying with ISO 14062 Especially MCCB's materials shall be of halogen free type
- MCCB shall be designed for easy disassembly and recycling at end of life and complies with environmental directives RoHS and WEEE.
- The manufacturer shall provide product environmental profile of the MCCB
- The manufacturer shall provide instructions on the removal, dismantling and processing of circuit-breaker materials at the end of service life.

MAIN ELECTRICAL CONTROL PANEL

1. General

This specification defines requirements that shall apply to prefabricated low voltage switchgear assemblies. It defines the basic features of the equipment and the requirement that manufacturers shall fulfil to provide equipment manufactured and tested in accordance with International Electro technical Standards (IEC)

The manufacturer who designed the equipment and who confirmed the performances through certified design & type tests has also the authority to licence the assembly of this equipment to other panel builders.

2. References

The following standards shall apply to the LV electrical equipment.

- IEC 61439-1/2 *Low voltage switchgear & control gear assemblies – Part 2 Power switchgear and control gear assemblies*
- IEC61641-v2 *Enclosed low voltage switchgear and control gear assemblies Guide for testing under conditions of arcing due to internal fault*
- IEC60044-1 *Current transformers*
- IEC60186 *Voltage transformers*
- IEC60529 *Degrees of protection provided by enclosures*
- IEC60947-2 *Low voltage switchgear & control gear – part 2 Circuit breakers*
- IEC60947-3 *Appareillage à base tension – Partie 3 Interrupteurs, sectionneurs, interrupteurs-sectionneurs et combinés-fusibles*
- IEC60068 *Environmental testing*
- IEC61140 *Protection against electric shock – Common aspects for installation and equipment – Basic safety publication*
- IEC60 947-4-1 *Contactors and motor starters*

3. Service conditions

The switchgear shall be suitable for installation in an indoor electrical room and shall be suitable for continuous operation under the following service conditions without both damage and performance de-rating:

Altitude: < 2000m

Temperature:

- Average temperature during 24hours: 35°C
- Max temp. +40°C
- Min temp. 5°C

Humidity:

- Max 50% at 40°C

4. Construction

The low voltage switchgear shall be made of identified free standing vertical structures, suitable for installation side by side and designed to be connected with bus ducts as well as cables. The system shall make it possible to implement fixed or withdrawable distribution sections, which together form an assembly referred to as a low voltage electrical switchboard.

The frame, external panels (doors, side & rear panels, tops) metal sheet components shall be made of 2mm thick metal sheet and protected by an epoxy-paint coating.

Each vertical structure (or section) shall contain the following:

- A main horizontal bus bar on the top or at the bottom,
- A vertical distribution bus bar to feed the different functional units
- The functional units (fix or withdrawable) containing ACB, MCCB, MCB
- A compartment for auxiliary components (instruments, measurement, control...)

The section construction shall be so designed that sheet steel barriers shall be provided between each vertical sections, breaker compartments, and control and power compartments. Each compartment sheet walls shall provide a protection against direct contacts with live parts and guarantee a degree of protection IP2X.

Gland plate for current greater than 600A flow shall be made of aluminium. (To avoid eddy currents)

The low voltage switchgear shall be completely factory assembled, wired and tested.

The structure **height shall not exceed 2300mm.**

5. Mechanical characteristics

The here under information shall be chosen according to the client needs:

Each section construction shall offer a form 2b

The ingress protection shall be: 54

The low voltage switchgear shall enable a cable entry is from top and shall give an access to operators either from front or rear side.

6. Electrical characteristics

- Rated insulation voltage: 1000 Vac
- Rated operational voltage: up to 690 Vac
- Rated current of main busbar: up to 7000A
- Short current withstand strength:
 - Main bus bar
 - 50kA / 1s (105kA peak)
 - 85kA / 1s (187kA peak)
 - 100kA/1s (220kA peak)
 - Distribution bus bar
 - 50kA / 1s (105kA peak)
 - 85kA / 1s (**187kA peak**)
- **Internal arc withstand: 85 kA 0,4s**

As per IEC61439, the value of peak current shall be obtained by multiplying the r.m.s. value of the short-circuit current by the factor n. The n factor between 20 to <50kA shall be 2,1 for r.m.s short circuit values equal and higher than 50kA, the n factor shall be 2,2.

7. People safety

The switchboard shall be designed to minimize the risks of occurrence of an internal arc, and whenever such an arc occurs it should prevent its effect on operators and material/equipment surrounding the switchboard.

The manufacturer who designed the equipment shall provide certificates showing evidence that the switchboard can withstand an internal arc of **85kA 0,4s**. Tests shall be performed on horizontal and vertical bus bar as well as functional units and full fill the **7 criteria of IEC 61641-v2** standard concerning personal protection& assembly protection.

In case an internal arc occurs, **the assembly's ingress protection shall be retained** to avoid any foreign element penetration inside the electrical assembly.

8. Bus bars

Bus bars shall be made of electrolytic copper (type Cu ETP as defined by standard ISO1190-1) to ensure correct thermal and electrical conductivity.

To facilitate the connection and cable access, main bus bar shall be **located on the top** and shall enable an easy connection to the bus bar in the adjacent vertical section.

The main busbar should be made of copper bars spliced at each column level in order to achieve simplicity and flexibility in transportation, installation and maintenance. Sliding fishplates should be used to make the connection of the copper bars between columns.

Main bus bar design shall allow for front or back cables connection, via the top plates and all these interfacing possibilities should remain available even with no busbar position change. In order to make easy the installation, **bars shall not exceed the section width.**

Within a section offering a withdrawable solution, the vertical bus bar shall be located so that the withdrawable breakers or **drawers can be connected directly on it without need of adapters.** When the withdrawable unit is completely removed from its place, **the power connection shall be covered with shutters.**

To avoid fretting corrosion, tin plated on both bus bar and plugs is not accepted.

The bus bars shall be designed for mounting on insulated supports that are sufficient in number to accept the electrodynamic forces resulting from the flow of the peak asymmetric short-circuit current.

This performance shall be proven with a type test certificate.

9. Functional units

The switchboard shall provide diverse functional units according to the different application requirements. Fixed unit (FFF- according to IEC 61439) or full withdrawable functional units (WWW-according to IEC 61439) must be available for electrical distribution to achieve easy operation and maintenance.

On withdrawable version, when drawers are proposed, facility shall be offered to change the drawer status in the shortest time possible (Connected / test/ disconnected). **No dedicated tool shall be required to move the mobile part from a position to another one. Operating handle/tool on drawers will be rejected.**

There should be clear drawer position, which indicate the connected, test and disconnected positions. The drawer shall provide an effective mechanical latch to prevent incorrect operation to avoid unexpected position changing from one position to another. The drawers **shall provide the facility to be locked** by 3 padlocks to prevent unauthorized insertion/withdrawal and OPEN / CLOSE operation of circuit breaker.

In the fixed version the circuit breaker shall be padlocked in open/closed position.

In test position, drawers shall be in a situation that both upstream and downstream power connections are fully isolated from bus bar in order to ensure a maximum of safety to operators. Test position with power connection still in contact with bus bar will be rejected for safety reason.

Functional unit equipped with either air or moulded case **circuit breakers (ACB, MCCB) shall provide a trip indication on drawers front face.** The facility shall be offered either through the ACB mechanical indication or through the operating handle that shall move to the trip position in case an electrical protection occurs.

In case, two drawers are of the same dimensions, there shall be, as an option, a mechanical mean to prevent unwanted inter-changeability of these drawers. Software-only means will not be accepted for safety reason.

The size of functional units should be optimised to achieve high stacking density of switchboard and shall be proposed in full or half size. **Any drawer whatever its size shall be made of sheet metal material for robustness reason.**

In order to allow thermal imaging analysis or device setting (in test position) **the front face of all drawers should offer to authorized people the facility to be opened with a tool.**

On motor starters' functional units, devices association shall ensure a coordination type 2.

10. Angle section (when required)

The low voltage switchboard shall offer a dedicated section to allow the installation in an electrical room corner. Bus bar shall be sized so that the main bus bar forms a constant rating from on side to opposite one. The manufacturer shall make evidence that this solution is part of its standard offer.

11. De-rating

To ensure that all components work in appropriate conditions, the influence of the ambient temperature and switchboard IP must be considered in the design of the switchboard. To ensure the reliability, the switchboard manufacturer must be able to provide, when requested, the de-rating table formally originated from the original manufacturer showing the current value allowed for the dedicated components under a certain combination of ambient temperature, IP degree and voltage.

12. Grounding system

The low-voltage electrical switchboards shall be compatible with all system Earthing arrangements defined in standard IEC 60984 (IT, TT or TN).

The low-voltage electrical switchboards shall have an Earthing circuit of a solid copper bar able to withstand the rated short circuit level.

13. Corrosive atmosphere features

The low-voltage electrical switchboard should have the ability to withstand corrosion due to Sulphur Dioxide (SO₂) and Hydrogen Sulphide (H₂S) with necessary adaptations. Inside the equipment, the appropriate coating should be done on conductors (busbars, connections) and metal elements (mechanisms, frames, casing). Also, the electrical and electronic equipment should show a compliance class relevant to the above pollutants. The manufacturer shall consider the power circuits' conductivity depending on the types of coatings used on these circuits.

The level of protection on the switchboard will be in conformance with IEC 60 721-3-3.

14. Seismic resistance

The low-voltage electrical switchboard should have the capability to withstand seismic conditions. When the switchboard is to be used in a seismic area, the manufacturer should determine the switchboard configuration according to seismic information provided by customer, which is appropriate to the stresses involved. The seismic test should be done in compliance with the UBC (Uniform Building Code) and CBC (California Building Code) regulations. The manufacturer shall be able to provide information on seismic zone (1 to 4) and installation level which the equipment is conforming to. Test report shall be made available.

15. Type tests

The low-voltage electrical switchboard must be a Type Tested Assembly, compliant with IEC 61439-1/2. The switchboard type-test certificates shall be originated by a worldwide known third-party certification organization such as ASEFA, or KEMA. The supplier should be able to provide several certificates (not only one) upon request during the project. These certificates should either reflect the switchboard characteristics or allow understanding on how these characteristics are reached. In this second case, the manufacturer shall be able to show design tables (such as de-rating or co-ordination tables) formally originated from the PCC original designer.

The selected switchgear and control gear brands shall be equal to the ones mentioned in the type tests reports of the equipment.

16. Installation

The installation area shall provide enough space in order to allow the following:

- Future extension of the switchgear on both sides,
- Opening of front and rear doors if any,

Depending on cable connection way, the following shall be foreseen:

- Connection from top shall provide at least 600mm to allow cable connection,
- Connection from bottom shall provide at least 600mm on either a trench or a false floor.

Extensions to the low-voltage electrical switchboard shall be possible on either side (right or left) of the switchboard.

DIGITAL VOLTAGE STABILISER SPECIFICATION

General

The present specification applies three-phase digital voltage stabilisers belonging to the intermediate power range from 105kVA and 1000kVA for AC (50/60Hz)

The enclosure should be modular cabinets, which are suitable for any industrial environment and are able to tolerate all the mechanical stresses that may occur during transport and those generated by plants all over the world.

Three-phase digital voltage stabilisers must allow for the choice of several input voltage variation percentages within a broad range (from +30% up to -45%).

For $\pm 10\%$; $\pm 15\%$; $\pm 20\%$ and $\pm 25\%$; $\pm 30\%$ range, the change of stabilisation is obtained through different internal connections.

Three-phase digital voltage stabilisers should be supplied with independent regulation on each phase and are regulated by toroidal voltage regulators.

Three-phase digital voltage stabilisers should handle when main is unbalanced and when unbalanced three-phase loads and/or single-phase loads need to be supplied. In this situation the presence of the neutral wire is required. The admissible load unbalance is up to 100% of rated current.

The three-phase digital voltage stabilisers should be air cooled (natural convection with cabinet internal temperature lower than 45°C).

The measuring instrumentation should be incorporated in a control panel on the cabinet door and consists of two multi-task digital network analysers with minimum information of status of the lines upstream and downstream the voltage stabiliser such as phase and linked voltages, current, power factor, active power, apparent power, reactive power.

The logic control, performed on the true rms voltage, is based on the 2-way DSP microprocessor. By means of fine settings and specific configurations, this control system can be set by using a personal computer: this characteristic allows to solve any problem of voltage stability in any industrial plant.

Should include SPD surge arrestors Cl. II.

Voltage regulator with rollers (without brushes, which are subject to heavy wear & tear).

The operating status of the three-phase digital voltage stabilisers can be easily monitored by means of a LED interface placed on the front panel, which displays all the information regarding the operating of the three phases and the possible alarms. LED lights signal 'power on', reaching of voltage regulation limits and direction of voltage regulation (increase/decrease).

Alarms for minimum and maximum voltages, maximum current, and over-temperature and ventilation failure are also indicated with an acoustic alarm located on the control panel mounted on the cabinet door.

Automatic circuit breakers are provided on the regulation circuit to protect against overload and short circuit on the voltage regulator.

The auxiliary circuit is protected by fuses.

Voltage stabilizer Design

Three phase Digital Voltage Stabilizer with three separate control circuits, individually regulate each phase and are therefore suitable for unbalanced lines & load unbalance between phases to 100%

*Rated power	: 1000 kVA continuous duty - INDOOR INSTALLATION
*Input voltage	: 3PH+N 400Y230 3PH 4 wires
*Input voltage range	: 400Y230 VAC $\pm 15\%$ (340V up to 460V for L-L / 196V up to 265V for L-N)
*Output voltage	: 3PH+N 400Y230 VAC 3PH 4 wires
*Output voltage accuracy	: $\pm 0.5\%$ RMS stabilized
*Frequency	: 50/60 Hz $\pm 5\%$
*Admitted load variation	: 0 to 100%
*Admitted load unbalance	: up to 100%
*Load type	: designed to run lighting, battery chargers, air conditioners, compressor, and industrial machines in an unheated and/or unventilated building
*Maximum Input Current	: 1698 A
*Rated Output Current	: 1443A @ 400 VAC
*Operation type	: Electro Servo mechanical, motor drive controlled
*Operation control system	: unit sensed by solid state electronics, conformal coated to prevent short circuiting due to humidity
*Correction speed	: 24 ms/V
*Power factor of the load	: any
*Waveform distortion	: $< 0,2\%$ - nil and none added
*Full load efficiency	: $> 98\%$ at 100% linear load
*Cooling	: natural air (aided by fans over 45°C)
*Permissible overload	: 200% x2 minutes, 150% x5 mins, 110% x10 mins
*Operating temperature	: -15°C up to +45°C
*Storage Temperature	: -20°C up to +60°C
*Relative humidity	: $< 90\%$ (non-condensing)
*Ambient environment site	: dusty with small pollution
*Acoustic noise	: ≤ 58 dB (A)
*Company certification	: according to ISO 9001, 14001, BS OHSAS 18001
* Fittings	: Input & Output multi-task digital network analyzers able to provide monitoring of electrical values with digital display: Measurement front panel with the following parameters (Voltage, Current, Frequency, Power factor, Power, KVA)
	: Lightning protection arrestors of spikes/surges 60kA TVSS class II
	: Soft start and Soft Stop protections given by super-capacitor system for safe load supply at start-up
	: Logic control based on a microprocessor control system
	: Buzzer alarm provisions over-temperature, under/over voltage
	: Alarms for minimum and maximum voltage
	: Alarms for maximum current
	: Alarms for ventilation failure and over-temperature
	: Auxiliary circuits are protected by fuses
*Terminal board	: Input & Output bus bars terminals with prevision of suitable connection holes. Cables fed the AVR from the bottom side
Protection degree	: metallic cabinet IP21 RAL 7035 finish paint ()
*DVS dimensions	: 2400 x 1000 x 2000 mm (L x W x H)
*DVS NET weight	: 2400 kg approx.

FIRE ALARM SYSTEM:

Standard Features:-

- a. The panel to be a 2-loop panel.
- b. The panel to be FM approved and UL listed.
- c. One full SLC circuit expandable to two.
- d. 3 programmable relays.
- e. 5.25A power supply.
- f. Large graphic display.
- g. Real time clock
- h. Compatible with graphics annunciator.
- i. Powerful, network wide cause effect (500 total)
- j. Fully user programmable by point or Zone.
- k. Can be networked with additional panels.
- l. Compatible with Omega R annunciator.
- m. Programmable through a PC connection to the panel.
- n. Stores 1000 last events in history log.
- o. Model ranges include with or without a dual line internal DACT.
- p. Compact, stylish enclosure.
- q. Available in Red or Grey.
- r. 2 programmable NAC circuits with internal synchronization support.
- s. Dual line digital communicator.
- t. Central station reporting; SIA and Contact ID.
- u. On board loop start terminal connections for both primary and secondary telco lines.

PART C

PARTICULAR SPECIFICATION

1. General

The Specification contained hereinafter relates to specific electrical installation in the **PROPOSED REFURBISHMENT OF ELECTRICAL INFRASTRUCTURE AT ANNIVERSARY TOWERS NAIROBI**

The Contract works shall be carried out in accordance with the current Code of Practice applicable to outside and inside electrical installation in public buildings and shall comply in all aspects with current regulations enumerated in Part B of this Specification. In carrying out the installation, the Contractor shall ensure that terminations and outlets for various appliances and machinery are correctly wired and rated.

2. Extent and Description of Project

The work to be carried out under this contract includes the supply, delivery, installation, connection, testing, energizing, and leaving in service condition to the satisfaction of the Engineer of the complete installation as herein described in the specification and related specification and/or on the attached drawings. The installation includes the following items:-

- (a) Supply and installation of Low voltage board, distribution board and armored cables.
- (b) Supply and installation of super high impact gauge PVC conduit concealed in the buildings' roof space for drawing in of cables for lighting fittings.
- (c) Supply and installation of electric cabling to all electrical points
- (c) Supply and installation of all electrical fittings and accessories
- (d) Supply and installation of the Digital voltage stabilizers.
- (e) Supply and installation of extract fan/ sump pump.
- (f) Tiding up of the whole working area.
- (g) Supply and installation of Fire detection and alarm system.
- (h) Supply and installation of portable automatic fire extinguishers.
- (i) Power reticulation.

3. Commencement of Works

The Contractor in submitting his tender shall be deemed to have included for commencing any necessary work on site at such time as to comply with the overall contractor's works program. Safety is paramount and all necessary precautions should be considered to avoid accidents.

4. **Incoming Electricity supply**

The Electricity supply for the project will be derived from existing meter board nearby. The tenderer shall test and commission the whole installation.

5. **Attendance**

The contractor shall liaise fully with all other contractors in ensuring satisfactory completion of all their works. The works shall not be deemed completed until it is fully energized.

6. **Distribution Board.**

The distribution board shall be 4/6-way triple pole and neutral as specified in the contract schematic diagram. It shall be of the miniature circuit break type. The boards shall comply with B.S. 3817, B.S. 5861 AND B.S. 214. The MCBs shall comply with B.S. 3871.

7. **Method of Wiring**

7.1. **General**

Armored cables from the LV switchboard to distribution board shall be properly clipped onto the walls and roof space.

7.2 **Lighting Circuit**

The lighting installation shall be carried out in single core PVC insulated cables drawn into plastic conduit concealed in floor slab, columns and walls, i.e. wiring system A.

8. **Lighting Switches**

The lighting switches shall be single pole 10A ratings, rocker operated microgrid switches. The lighting switches shall be mounted at 1400mm above floor level.

9. **Lighting Fittings**

Fluorescent Bulkhead Fittings

Fluorescent bulkhead lighting fittings shall comply with B.S. 4533, where applicable, and be complete with bi-pin lamp holders, auxiliary apparatus, internal wiring and lamps or tubes,

Fluorescent fittings shall be complete with correctly rated "Switchless start" control gear incorporated in the body of the fitting. Dangerous internal gas pressures shall not develop in capacitors. Discharge lamp circuits shall be effectively suppressed and have an operating power factor of not less than 0.85 lag.

All tungsten lighting fittings and accessories shall comply with B.S. 816.

All lighting fittings shall be protected against the ingress of hydrogen sulphide and the insulation shall not be subjected to excessive heat. Lamp holders not included in fittings shall be of heavy gauge brass screwed to conduit. Unless otherwise approved tungsten lighting fittings up to 200 watts capacity shall have Edison Screw lamp sockets, and lighting fittings over 200 watts capacity shall have Giant Edison Screw lamp sockets shall be suitably shrouded.

Fittings shall be rigidly fixed on the surface of ceilings except in the Printing Area where they shall be rigidly suspended from steel trusses by suitable steel rods, conduit or other non-flexible means.

Lighting fittings shall be complete with white fluorescent tubes.

10. **Telephone/Computer cables**

The work to be carried out under this Contract is for the supply and installation of trunking for drawing in telephone and computer system cables.

The Contractor shall supply, and lay 160mmx50mm 2 compartment powder coated metallic trunking as indicated in the contract drawings

11. **Bonding and earthing of cable sheaths and Terminations**

At a point near the switchgear termination ends of each power cable not laid in trefoil, bonding the earthing of three and four-core cables shall be by means of a branch earth tape connection from each cable armour clamp to the switchgear earth bar. The surfaces of the armour wire and gland are to be thoroughly cleaned to ensure a first-class connection.

Except where otherwise approved, single-core lead covered cables carrying alternating currents shall be run in close trefoil formation so as to keep to a minimum losses and voltage rise in the sheaths. With this arrangement,

the cable sheath shall be insulated from the switchgear or other apparatus at both ends and bonded and earthed at one end only at the point of breaking trefoil. The cables having a route length exceeding 30mm, shall in addition, have the lead sheaths bonded together (not earthed) at intervals of approximately 30m. After the single cables leave the final trefoil points, the clamps must be carefully insulated.

Unless otherwise approved, the method of bonding the metal sheaths of single-core cables in close trefoil formation shall consist of sheath lead 5mm thickness and approximately 100mm wide, wrapped round the trefoil cable assembly in such manner as to make close contact therewith. The edges of the lead strip shall be made at each side. Free ends of lead shall be left so that connection can be made thereto.

Where required, by means of strip between the lead ends and two other backing strips. Three galvanized steel bolts of not less than 10mm diameter shall be used for the connection of the earth strip to the lead bond. When buried direct in a creosote wooded box which shall be completely filled with bituminous compound.

12. **Testing of complete Installation**

The installation when complete shall pass the following tests:-

1. Insulation resistance between lines and line/neutral
2. Insulation resistance between line and earth and neutral and earth.
3. Earth continuity resistance including all fittings.
4. Test on earth electrode when carried out with earth (null balance) at any point within the network must not exceed 3 ohms

The result of the test shall be issued to the Engineer who will ascertain whether they conform to the standard

13. **Certificate of completion**

The contractor shall complete commencement, completion and installation test certificate and submit them to KPLC with a copy to the Engineer on completion of the works.

PART D

SCHEDULES

- (i) The Tenderer shall complete all the schedules. The schedules shall be read in conjunction with the specifications and the drawings.
- (ii) The total prices in the main summary of price schedules shall be deemed to include all obligations under the Contract including and not limited to supply of materials equipment, apparatus, fittings, spares, tools, insurance, delivery to site, storage, installation, testing and commissioning in accordance with this specification.
- (iii) Any prices omitted from any section or part of price schedule shall be deemed to have been included in another item, section or part.
- (iv) All prices shall be duty paid and shall also be inclusive of all taxes current at the time of tendering.

NOTES.

The bill of quantities listed hereunder as provisional are approximate and as such are subject to re-measurement on completion.

The quantities listed hereunder are not to be used for ordering purposes. The contractor is to make his own assessment from the documentation provided and from site measurement for the purpose of ordering materials.

BILLS OF QUANTITIES

1. The Bills of Quantities form part of the contract documents and are to be read in conjunction with the contract drawings and general specifications of materials and works.

2. The prices quoted shall be deemed to include for all obligations under the sub-contract including but not limited to supply of materials, labour, delivery to site, and storage on site, installation, testing, commissioning, and all taxes (including **16% VAT**).

In accordance with Government policy, withholding of 6% VAT **shall be deducted** from all payments made to the tenderer, and the same shall be forwarded to the **Kenya Revenue Authority (KRA)**.

3. All prices omitted from any item, section or part of the Bills of Quantities shall be deemed to have been included to another item, section or part.

4. The brief description of the items given in the Bills of Quantities are for the purpose of establishing a standard to which the sub-contractor shall adhere to. Otherwise alternative brands of **equal** and **approved** quality will be accepted.

Should the sub-contractor install any material not specified here-in before receiving **approval** from the Project Engineer, the sub-contractor shall remove the material in question and, **at his own cost**, install the proper material.

5. The grand total of prices in the price summary page must be carried forward to the **Form of Tender**.

SECTION VII- BILLS OF QUANTITIES

1. Objectives

The objectives of the Bill of Quantities are:

- a) to provide sufficient information on the quantities of Works to be performed to enable tenders to be prepared efficiently and accurately; and
- b) when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Work executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and contents of the Bill of Quantities should be as simple and brief as possible.

2. Day work Schedule

A Day work Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Procuring Entity of the realism of rates quoted by the Tenderers, the Day work Schedule should normally comprise the following:

- a) A list of the various classes of labor, materials, and Constructional Plant for which basic day work rates or prices are to be inserted by the Tenderer, together with a statement of the conditions under which the Contractor shall be paid for work executed on a day work basis.
- b) Nominal quantities for each item of day work, to be priced by each Tenderer at day work rates as Tender. The rate to be entered by the Tenderer against each basic day work item should include the Contractor's profit, overheads, supervision, and other charges.

3. Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary priced Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the Special Conditions of Contract should state the manner in which they shall be used, and under whose authority (usually the Project Manager's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Procuring Entity to select such specialized contractors. To provide an element of competition among the Tenderers in respect of any facilities, amenities, attendance, etc., to be provided by the successful Tenderer as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Tenderer to quote a sum for such amenities, facilities, attendance, etc.

These Notes for Preparing a Bill of Quantities are intended only as information for the Procuring Entity or the person drafting the tendering document. They should not be included in the final tendering document.

4. The Bills of Quantities

The Bills of Quantities should be divided generally into the following sections:

- a) Preambles
- b) Preliminary items
- c) Work Items
- c) Daywork Schedule; and
- d) Provisional items
- e) Summary.

5. The Summary to the Bills of Quantities will take this form or some other form but including these items.

SUMMARY ITEMS	<i>Page</i>	<i>Amount</i>
Bill No. 1: Preliminary Items		
Bill No. 2: Work Items		
Bill No 3: Daywork Summary		
Bill No 4: Provisional Sums		
Subtotal of Bills No 1-4		
Allow for any Discounts ⁱ		
TOTAL TENDER PRICE Carried forward to Form of Tender		

**PROPOSED RENOVATION OF ELECTRICAL
INFRASTRUCTURE**

FOR

KENYA RE INSURANCE CORPORATION

NAIROBI

ANNIVERSARY TOWERS BUILDING

BILLS OF QUANTITIES

LEAD CONSULTANT

Gedox Associates Limited

MEP Engineers

P.O. Box 64441 - 00620.

NAIROBI

ITEM	DESCRIPTION	KSHS
	<p><u>PARTICULAR PRELIMINARIES</u></p> <p>A PRICING ITEMS OF PRELIMINARIES:</p> <p>Prices SHALL BE INSERTED against items of “preliminaries” in the tenderer's priced Bills of Quantities.</p> <p>Please note that failure to price any item of general or particular preliminaries will be construed to mean that the tenderer wishes to provide for that item free of charge.</p> <p>B VALUE ADDED TAX:</p> <p>The tenderer shall include VAT in their prices as no Lumpsum addition on account of this will be accepted.</p> <p>C SCOPE OF CONTRACT:</p> <p>The works to be carried out under this contract comprises of refurbishment of windows, refurbishment of boundary wall and completion of generator set housing.</p> <p>D DESCRIPTION OF THE WORKS</p> <p>The works to be carried out under this contract comprises of demolitions of existing timber louvered windows and fixing new aluminium windows for main towers, refurbishment of boundary wall and completion of generator set housing.</p> <p>E MEASUREMENTS</p> <p>In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the Project Manager in accordance with the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with the said Conditions.</p> <p>F LOCATION OF THE SITES</p> <p>The site is located within Nairobi county, along University way.</p> <p>NOTE</p> <p>The tenderer shall be deemed to have visited the above sites and familiarised himself with all site conditions prior to submission of tender.</p> <p>No claims arising from the tenderer's failure to do so will be entertained.</p>	
	<p>Total Carried to Collection</p>	<p>KShs</p> <p>-</p>

ITEM	DESCRIPTION	KSHS
A	<p>EXISTING BUILDING SERVICES</p> <p>Special precaution shall be required throughout the contract period to avoid damage to the existing building elements, cables, drains and other services. The Tenderer shall take special note that these are live sites with on going government and business organizations and any disruption of services will be devastating and costly.</p> <p>The contractor shall allow for expeditiously making good any damage arising from his actions during execution of this contract at his own expense.</p>	
B	<p>GENERAL SPECIFICATIONS</p> <p>The contractor is referred to the General Specification for Building Works 1976 Edition Pages B1 - B2 inclusive and must allow for all costs in complying with these clauses.</p>	
C	<p>CONTRACT COMPLETION PERIOD</p> <p>The contract completion period must be strictly adhered to by the Contractor.</p> <p>The Project Manager shall strictly monitor the contractor's progress in relation to the progress chart and should it be found necessary, the Project Manager shall inform the contractor in writing that his actual performance on any of the sites is not satisfactory.</p> <p>In all such cases, the contractor shall accelerate his rate of performance, production and progress by all means such as additional labour, plant, etc and working overtime all at his</p>	
D	<p>WORKING CONDITIONS</p> <p>The contractor shall allow in his rates for any interference that he may encounter in the course of execution of the works for the Client may in some cases ask the contractor not to proceed with the works until some activities within the sites are completed.</p> <p>The contractor shall also allow in his rates for any movement of furniture and filing records that he may encounter on the site.</p>	
E	<p>SIGNBOARD</p> <p>Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the Project</p>	
F	<p>LABOUR CAMPS</p> <p>The contractor shall not be allowed to house labour on any of the sites. Allow for transporting workers to and from the sites during the tenure of the contract.</p>	
G	<p>PRICING RATES</p> <p>The tenderer shall include for all costs in executing the whole of the works, including transport, replacing damaged items, fixing, all to comply with the said Conditions of Contract.</p>	
	<p>Total Carried to Collection</p>	<p>KShs</p> <p>-</p>

ITEM	DESCRIPTION	KSHS
<p>A</p>	<p>SECURITY</p> <p>The contractor shall allow for providing adequate security for the works and the workers in the course of execution of this contract. No claim will be entertained from the Contractor for not maintaining adequate security for both the works and workers.</p>	
<p>B</p>	<p>URGENCY OF THE WORKS</p> <p>The contractor is notified that these “ works are urgent” and should be completed within the period stated in these Particular Preliminaries.</p> <p>The contractor shall allow in his rates for any costs he deems that he may incur by having to complete these works within the stipulated contract period.</p>	
<p>C</p>	<p>PAYMENT FOR MATERIALS ON SITE</p> <p>All materials for incorporation in the works must be stored on each site before payment is effected, unless specifically exempted by the Project Manager. This is to include materials of the contractor, nominated sub - contractors and nominated suppliers.</p>	
<p>D</p>	<p>EXISTING SERVICES</p> <p>Prior to the commencement of any work, the contractor is to ascertain from the relevant Authority(ies) the exact position, depth and level of all existing services in the area and he shall make whatever provisions may be required by the authorities concerned for the support, maintenance and protection of such services.</p>	-
<p>E</p>	<p>TENDER DOCUMENTS</p> <p>Tender documents are as listed in the Contents Page. The Tenderer should check and confirm that all the documents are included otherwise to notify the Project Manager of any discrepancy before submission of the tender.</p>	
<p>F</p>	<p>DELIVERY OF TENDER</p> <p>Tenders and all documents in connection therewith, as specified above must be delivered in the addressed envelope which should be properly sealed and deposited at the offices as specified in the letter accompanying these documents or as indicated in the advertisement. Tenders will be opened at the time specified in the letter accompanying these Tender Documents or as indicated in the advertisement. Tenders delivered/received later than the above time will not be opened.</p>	
	<p>Total Carried to Collection</p>	<p>KShs</p> <p>-</p>

ITEM	DESCRIPTION	KSHSS
	<u>COLLECTION</u>	
	Brought Forward From Page 1	-
	Brought Forward From Page 2	-
	Brought Forward From Page 3	-
	Brought Forward From Page 4	-
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO PAGE 18	-

ITEM	DESCRIPTION	KSHS
	<p><u>GENERAL PRELIMINARIES</u></p> <p>A PRICING ITEMS OF PRELIMINARIES AND PREAMBLES</p> <p>Prices will be inserted against items of Preliminaries in the contractor's priced Bills of Quantities and Specification.</p> <p>The contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.</p> <p>B ABBREVIATIONS</p> <p>Throughout these Bills, units of measurement and terms are abbreviated and shall be all the requirements for the proper execution of the whole of the works in the Contract.</p> <p><i>C.M. or CM</i> Shall mean cubic metre</p> <p><i>S.M. or SM</i> Shall mean square metre</p> <p><i>L.M. or LM</i> Shall mean linear metre</p> <p><i>MM or mm</i> Shall mean Millimetre</p> <p><i>Kg. or KG</i> Shall mean Kilogramme</p> <p><i>No. or No.</i> Shall mean Number</p> <p><i>Prs. or PRS</i> Shall mean Pairs</p> <p><i>B.S.</i> Shall mean the British Standard Specification Published by the <i>British Standards Institution, 2 Park Street, London W.1., England.</i></p> <p><i>Ditto</i> Shall mean the whole of the preceding description except as qualified in the description in which it occurs.</p> <p><i>m.s.</i> Shall mean measured separately.</p> <p><i>a.b.d</i> Shall mean as before described.</p>	
	<p>Total Total Carried to Collection</p>	<p>KSHS</p> <p style="text-align: center;">-</p>

ITEM	DESCRIPTION	KSHS
A	<p>EXCEPTIONS TO THE STANDARD METHOD OF MEASUREMENT</p> <p>Attendance on nominated Sub-contractors shall be given as an item in each case shall be deemed to include: allowing use of standing scaffolding, mess rooms, sanitary accommodation and welfare facilities; provision of special scaffolding where necessary; providing space for office accommodation and for storage of plant and materials; providing light and water for their work: clearing away rubbish; unloading, checking and hoisting: providing electric power and removing and replacing duct covers, pipe casings and the like necessary for the execution and testing of Sub- contractors' work and being responsible for the accuracy of the same.</p> <p><i>Fix Only:-</i></p> <p>"Fix Only" shall mean take delivery, load and transport to Sites where necessary, unload, store, unpack, assemble as necessary, distribute to position, hoist and fix only.</p> <p>EMPLOYER</p> <p>The "Employer" is Kenya Reinsurance Corporation Ltd P.O. Box 30271-00100 NAIROBI</p> <p>The term "Employer" and "Client" wherever used in the contract document shall be synonymous</p> <p>CONSULTANTS</p> <p>Architects and/or Lead Consultant: Heritage Associate Ltd P.O Box 56293 – 00200, NAIROBI</p> <p>Quantity Surveyor: Costek Alma Quantity Surveyors & Project Architects, P.O. Box 20852 - 00202, NAIROBI</p> <p>Electrical/Mechanical Engineer: Gedox Associates Limited, P.O Box 64441 - 00620 , NAIROBI</p> <p>Structural Engineers Armitech Consulting Engineers P.O. Box 48453-, NAIROBI</p>	
	<p style="text-align: right;">Total Total Carried to Collection</p>	<p style="text-align: right;">KSHS</p> <p style="text-align: right;">-</p>

ITEM	DESCRIPTION	KSHS
------	-------------	------

<p>A</p>	<p>FORM OF CONTRACT</p> <p>The Form of Contract shall be as stipulated in the Public Procurement Regulatory Authority Standard Tender Document for Procurement of Building Works (2020 Edition) included herein. The Conditions of Contract are also included herein</p>	
<p>B</p>	<p>CONDITIONS OF CONTRACT</p> <p>Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of Quantities</p>	
<p>C</p>	<p>PERFORMANCE BOND.</p> <p>The Tenderer shall find and submit on the Form of Tender an approved bank who will be willing to be bound to Kenya Reinsurance Corporation in an amount equal to one per cent (1%) of the Contract amount for the due performance of the Contract up to the date of completion as certified by the Project Architect and who will, when and if called upon, sign a Bond to that effect on the relevant standard form included herein (without the addition of any limitations) on the same day as the Contract Agreement is signed, by the Client, the contractor shall furnish within seven days another Surety to the</p>	
<p>D</p>	<p>PLANT, TOOLS AND VEHICLES</p> <p>Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub contractors as described herein. No timber used for scaffolding, formwork or temporary works of any kind shall be used afterwards in the permanent work.</p>	
<p>E</p>	<p>TRANSPORT.</p> <p>Allow for transporting of workmen, materials, etc., to and from the Sites at such hours and by such routes as may be permitted by the competent authorities.</p>	
<p>F</p>	<p>MATERIALS AND WORKMANSHIP.</p> <p>All materials and workmanship used in the execution of the work shall be of the best quality and description unless otherwise stated. The contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also ensure they are on each site when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.</p>	
	<p>Total Total Carried to Collection</p>	<p>KSHS</p>

ITEM	DESCRIPTION	KSHS
<p>A</p>	<p>SIGN FOR MATERIALS SUPPLIED BY THE CLIENT.</p> <p>The contractor will be required to sign a receipt for all articles and materials supplied by the Client at the time of taking delivery thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and for replacements of any such loss or damage with articles and/or materials which will be supplied by the Client at the current market prices including Customs Duty and V.A.T., all at the contractor's own cost and expense, to the satisfaction of the Project Manager</p>	
<p>B</p>	<p>STORAGE OF MATERIALS</p> <p>The contractor shall provide at his own risk and cost where directed on each site weather proof lock-up sheds and make good damaged or disturbed surfaces upon completion to the satisfaction of the Project Manager. Nominated Sub-contractors are to be made liable for the cost of any storage accommodation provided especially for</p>	
<p>C</p>	<p>SAMPLES</p> <p>The contractor shall furnish at his own cost any samples of materials or workmanship including concrete test cubes required for the works that may be called for by the Project Manager for his approval until such samples are approved by the Project Manager and the Client, may reject any materials or workmanship not in his opinion to be up to approved samples. The Project Manager shall arrange for the testing of such materials as he may at his discretion deem desirable, but the testing shall be made at the expense of the contractor and not at the expense of the Client. The contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of Transport, Infrastructure, Housing, Urban Development and Public</p> <p>The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the Project Manager. The contractor shall allow in his tender for such samples and tests except those in connection with nominated sub-contractors' work.</p>	-
<p>D</p>	<p>GOVERNMENT ACTS REGARDING WORK PEOPLE, ETC.</p> <p>Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular the contractor's attention is drawn to the provisions of the Occupational Safety and Health Act (OSHA), 2007 and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or to the safety, health and welfare of the work people.</p>	-
	<p>Total Total Carried to Collection</p>	<p>KSHS</p> <p>-</p>

ITEM	DESCRIPTION	KSHS

The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps , passes for transport, etc. It is most important that the contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.

In particular the contractor shall allow for complying with the Conditions that may be imposed by the National Environmental Management Authority (NEMA).

A SECURITY OF WORKS ETC.

The contractor shall be entirely responsible for the security of all the works, stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public.

B PUBLIC AND PRIVATE ROADS.

Maintain as required throughout the execution of the works and make good any damage to public or private roads arising from or consequent upon the execution of the works to the satisfaction of the local and other competent authority and the Project

C EXISTING PROPERTY.

The contractor shall take every precaution to avoid damage to all existing property including Building elements, Finishes, Fittings, roads, cables, drains and other services and he will be held responsible for and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the

D VISITING OF SITES .

The contractor is recommended to visit each site which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which, may affect his tender. No claim arising from his failure to comply with this recommendation will be considered.

	Total Total Carried to Collection	KSHS
--	--	-------------

ITEM	DESCRIPTION	KSHS
A	<p>ACCESS TO SITES AND TEMPORARY ROADS.</p> <p>Means of access to each site shall be agreed with the Client prior to commencement of the work and contractor must allow for building any necessary temporary access roads for the transport of the materials, plant and workmen as may be required for the complete execution of the works including the provision of temporary culverts, crossings, bridges, or any other means of gaining access to the Sites. Upon completion of the works, the contractor shall remove such temporary access roads; temporary culverts, bridges, etc., and make good and reinstate all works and surfaces disturbed to the satisfaction of the Project Manager.</p>	
B	<p>AREA TO BE OCCUPIED BY THE CONTRACTOR</p>	
	<p>The area in each site which may be occupied by the contractor for use of storage and for the purpose of erecting workshops, etc., shall be defined on site by the Client. The Contractor shall be responsible for any demarcation that may be required to cut off this area for his use.</p>	
C	<p>OFFICE ETC. FOR THE CONSULTANTS</p>	
	<p>The contractor shall provide for Repair and cleaning of any parts that will be assigned and used as the office for the Consultants and or their assistants during the whole period of execution of the works.</p>	
	<p>The contractor shall abide by the Client's instructions regarding the use of washrooms that will be allocated him for the use by his workers. He shall provide a cleaner and detergents for cleaning the same so as to ensure its cleanliness to the satisfaction of the Client and the Project Manager, Failure to do so may lead to denial of use of the washrooms.</p>	
D	<p>WATER AND ELECTRICITY FOR THE WORKS</p>	
	<p>The contractor shall provide at his own risk and cost all necessary water, electric light and power required for use in the works. The contractor must make his own arrangements for connection to the nearest suitable water main and/or for metering the water used. He must also provide temporary tanks and meters as required at his own cost and clear away when no longer required and make good on completion to the entire satisfaction of the Project Manager . The contractor shall pay all charges in connection herewith. No guarantee is given or implied that sufficient water will be available from mains and the contractor must make his own arrangements for augmenting this supply at his own cost. Nominated Sub contractors are to be made liable for the cost of any water or electric current used and for any installation provided</p>	
	<p>Notwithstanding the foregoing the Contractor may agree with the Client to use the power and water on site and reimburse the Client for the same by use of check meters.</p>	
	<p>Total Carried to Collection</p>	<p>KSHSs</p>
		<p>-</p>

ITEM	DESCRIPTION	KSHS
A	<p>SANITATION OF THE WORKS</p> <p>The Sanitation of the works shall be arranged and maintained by the contractor to the satisfaction of the Government and/or Local Authorities, Labour Department and the Project Manager</p>	
B	<p>SUPERVISION AND WORKING HOURS</p> <p>The works shall be executed under the direction and to the entire satisfaction in all respects of the Project Manager who shall at all times during normal working hours have access to the works and to the yards and work shops of the contractor and sub-contractors or other places where work is being prepared for the contract.</p> <p>The working hours for this project will be as stipulated in the Instructions to the Tenderers i.e. between 8.00AM and 6.00PM. The Contractor shall allow for this working arrangement against this item as no claim regarding this limitation will be entertained or allowed.</p>	
C	<p>PROVISIONAL SUMS.</p> <p>The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7(i) of the Standard Method of Measurement. Such sums are net and no addition shall be made to them for profit.</p>	
D	<p>PRIME COST (OR P.C.) SUMS.</p> <p>The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement. Persons or firms nominated by the Client to execute work or to provide and fix materials or goods described herein as Nominated Sub- contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated</p>	
E	<p>PROGRESS CHART.</p> <p>The contractor shall provide within two weeks of Possession of the sites and in agreement with the Project Manager a Progress Chart for the whole of the works including the works of Nominated Sub-contractors; one copy to be handed to the Project Manager and a further copy to be retained on each site. Progress to be recorded and chart to be amended as necessary as the work proceeds.</p>	-
	<p>Total Carried to Collection KSHSs</p>	-

ITEM	DESCRIPTION	KSHS
------	-------------	------

A	<p>ADJUSTMENT OF P.C. SUMS.</p> <p>In the final account all P.C. Sums shall be deducted and the amount properly expended upon the Project Manager's order in respect of each of them added to the Contract sum. The contractor shall produce to the Project Manager such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance" following P.C. sums shall be adjusted pro-rata to the physical extent of the work executed (not prorata to the amount paid) and this shall apply though the contractor's Bills show a percentage in the rate column in respect of them.</p> <p>Should the contractor be permitted to tender and his tender be accepted for any work for which a P.C. Sum is included in these Bill of Quantities profit and attendance will be allowed at the same rate as it would be if the work were executed by a Nominated Sub-contractor.</p>	
B	<p>ADJUSTMENT OF PROVISIONAL SUMS.</p> <p>In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the Project Manager's order added to the Contract Sum. Such work shall be valued as described for Variations in Conditions No. 22 of the Conditions of Contract, but should any part of the work be executed by a Nominated Sub- contractor, the value of such work or articles for the work to be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.</p>	
D	<p>NOMINATED SUB-CONTRACTORS</p> <p>When any work is ordered by the Project Manager to be executed by nominated sub contractors, the contractor shall enter into sub-contracts as described in Condition No. 7 of the PPOA Conditions of Contract and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described the contractor is to provide for sub contractors any or all of the facilities described in these Preliminaries. The contractor should price for these with the nominated Sub-contractor's work concerned in the P.C. Sums under the description "add for Attendance".</p>	
E	<p>DIRECT CONTRACTS</p> <p>Notwithstanding the foregoing conditions, the Client reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In any such instances, profit relative to the P.C. Sum in the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.</p>	
	<p>Total Carried to Collection KSHSs</p>	-

ITEM	DESCRIPTION	KSHS
------	-------------	------

<p>A</p>	<p>ATTENDANCE UPON OTHER TRADESMEN, ETC.</p> <p>The contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The contractor, however, shall not be required to erect any special scaffolding for them. The contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the Project Manager and the work will be measured and paid for to the extent executed at rates</p>	
<p>B</p>	<p>INSURANCE</p> <p>The contractor shall insure as required in Clause 13 of the Conditions of Contract. No payment on account of the work executed will be made to the contractor until he has satisfied the Project Manager either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in all respects. Thereafter the Project Manager shall from time to time ascertain that premiums are duly paid up by the sub - contractor who shall if called upon to do so, produce the receipted premium renewals for the Project Manager's</p>	<p>-</p>
<p>C</p>	<p>PROVISIONAL WORK</p> <p>All work described as "Provisional" in these Bills of Quantities is subject to remeasurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other work liable to adjustment under this Contract shall be left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the Project Manager. Immediately the work is ready for measuring, the contractor shall give notice to the Project Manager. If the contractor makes default in these respects he shall if the Project Manager so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own</p>	
<p>D</p>	<p>ALTERATIONS TO BILLS, PRICING, ETC.</p> <p>Any unauthorised alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities. All items of measured work shall be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.</p>	
<p>Total Carried to Collection</p>	<p>KSHSs</p>	<p>-</p>

ITEM	DESCRIPTION	KSHS
<p>A</p>	<p>MATERIALS ARISING FROM DEMOLITIONS</p> <p>Materials of any kind obtained from the demolitions shall be the property of the Client. Unless the Client directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the contractor would otherwise have had to supply with the written permission of the Client, should such permission be given, the contractor shall make due allowance for the value of the materials so used at a price to be agreed.</p>	
<p>B</p>	<p>PROTECTION OF THE WORKS.</p>	
<p></p>	<p>Provide protection of the whole of the works contained in the Bills of Quantities, including casing , casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the Client and remove such protection when no longer required and make good any damage which may nevertheless have been done at completion free of cost to the client.</p>	
<p>C</p>	<p>CLEANING</p>	
<p></p>	<p>Collect all rubbish and debris from the Buildings and Sites as it accumulates and at the completion of the works and deposit them where directed by the Project Manager.All waste, plant, scaffolding and unused materials at completion should be removed from the Sites.</p>	-
<p>D</p>	<p>WORKS TO BE DELIVERED UP CLEAN</p>	
<p></p>	<p>Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole of the buildings watertight, clean, perfect and fit for occupation to the approval of the Project</p>	
<p>E</p>	<p>FIRM PRICE CONTRACT</p>	
<p></p>	<p>Unless specifically stated otherwise in the Particular Preliminaries this is a firm price contract and fluctuations clause shall not apply.</p>	
<p>F</p>	<p>GENERAL SPECIFICATION.</p>	
<p></p>	<p>For the full description of materials and workmanship, method of execution of the work and notes for pricing, the contractor is referred to the Ministry of Roads, Public Works and Housing General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities. For security work, the full specifications are attached as part of the contract (and in the tender documents).</p>	
<p></p>	<p>Total Carried to Collection</p>	<p>KSHSs</p>
		-

ITEM	DESCRIPTION	KSHS
A	<p>TRAINING LEVY</p> <p>The contractor's attention is drawn to legal notice No. 237 of October, 1971, which requires payment by the contractor of a Training Levy at the rate of 1/4 % of the Contract sum on all contracts of more than KSHS. 50,000.00 in value and his tender must include for all cost arising therefrom.</p>	-
B	<p>MATERIALS ON SITES</p> <p>All materials for incorporation in the works must be stored on or adjacent to each site before payment is effected unless specifically exempted by the Project Manager. This includes the materials of the Main contractor, Nominated Sub- contractors and Nominated Suppliers.</p>	
C	<p>HOARDING</p> <p>The contractor shall enclose the Site, as shown on the Site plan with a hoarding 3.5 metres high, with openings and gates as required constructed of substantial timbers to approval and covered with new galvanised corrugated iron sheeting painted to approval</p> <p>The contractor shall enclose the site with a hoarding 2400mm high consisting of iron sheets gauge 30 on 100 x 50 mm 2nd grade treated sawn cypress timber posts firmly secured at 1800 mm centres with two 75 x 50 mm second grade treated sawn cypress timber rails. The Contractor is in addition required to take all precautions necessary for the safe custody of the works, materials, plant, public and Employer's property on the site.Allow for the following Provisional lengths; -</p> <p>Reinsurance Plaza-Kisumu a length of 36 metres @ KSHS.....</p> <p>(Tenderer must insert rate and extend)</p>	
D	<p>CONTRACTOR'S SUPERINTENDENCE/SITE AGENT</p> <p>The contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall give his whole experience in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the contractor all directions and instructions from the Quantity Surveyor and such directions shall be deemed to have been given to the contractor in accordance with the Conditions of Contract.</p>	-
E	<p>COPYRIGHT</p> <p>The copyright of these documents is vested in Project Quantity Surveyor. No part of this document may be reproduced in any form or by any means without prior</p>	
	Total Carried to Collection	KSHSs
		-

ITEM	DESCRIPTION	KSHS
	<u>COLLECTION</u>	
	Brought Forward From Page 6	-
	Brought Forward From Page 7	-
	Brought Forward From Page 8	-
	Brought Forward From Page 9	-
	Brought Forward From Page 10	-
	Brought Forward From Page 11	-
	Brought Forward From Page 12	-
	Brought Forward From Page 13	-
	Brought Forward From Page 14	-
	Brought Forward From Page 15	-
	Brought Forward From Page 16	-
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO PAGE 18	-

PROPOSED ELECTRICAL INFRASTRUCTURE WORKS AT ANNIVERSARY TOWERS ALONG UNIVERSITY WAY

BILL OF QUANTITIES FOR ELECTRICAL INSTALLATION WORKS

RATES TO INCLUDE VAT

ALL BIDDERS MUST ATTACH PROPOSED PRODUCT CATALOGUES

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	<u>PRELIMINARIES AND GENERAL CONDITIONS</u>				
A	Carried forward from General Preliminaries CF from page 5	Sum			
B	Carried forward from particular Preliminaries CF from page 17	Sum			
C	Preparation of working drawings "As installed" record drawings and presentation of operation manuals among other hand over documents	Sum			
D	Printing of paper copies of item C above.	Sum			
E	Allow for builders works such as cutting wall (500mm x 500mm) for the extract fan. Supply and install a wall 1.5kW wall fan with a 1400rpm	SM			
F	Skim, Prepare and apply atleast three coats silk vinyl emulsion paint to wall and ceiling in electrical room to engineer satisfaction.	SM	100		
	TOTAL CARRIED FORWARD TO SUMMARY PAGE				

TRANSFORMER AND SWITCH GEAR

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	Supply, install and commission the following:-				
A	1600kVA 11kv/433V 50Hz 3ph, ground mounted Dyn-11 transformer, ONAN, Cu winding as specified in volume specifications for transformer' and 'specifications for electrical works'. Transformer as Schneider or ABB or equivalent and approved. Form needs to be filled as provided in Technical Spec. Transformer to have cable termination box/ unit for 12x630mm ² single core cables, and wheels for ground movement. Allow for auxilliary terminals for signal cabling to RMU. (Attach catalogues)	NO.	1		
B	Free standing 11KV Ring main unit (RMU) for 1600KVA 11kv/433V 50Hz 3ph, Dyn-11 transformer complete with breakers, switches and complete switch gear as specified in volume 'specifications for transformer' and specifications for electrical works'. RMU to have master/ lock-out relay on TX feeder, 12 window annunciator with RS485 modbus output for BMS monitoring. RMU as Schneider or ABB. Attach catalogue indicating compliance to Technical Spec.	NO.	1		
C	3C, 120mm ² copper cable of voltage rating 33kv/11kv, XLPE, PVC/SWA/PVC insulated copper cable from Ring main unit to transformer as East Africa cables	LM	50		
D	Supply and installation of 33/11 KV Heat Termination Kit for the 3C, 120mm ² XLPE, PVC/SWA/PVC insulated copper cable	Nos.	1		
	<u>Transformer grounding</u>				
E	25x3mm copper tape complete with clips	Lm	50		
F	Allow for testing of resistivity of the soil	Item	1		
G	Earthing comprising of copper earth mat in lattice configuration 1000mmx1000mm. Conductor size of lattice 25x3mm with tail to tie copper tape.	Item	1		
H	Excavation for copper earth mat not less than 1.5m, laying of mat enhancement of ground with dust coal & red soil and backfilling	Item	1		
I	300mm ² single core XLPE PVC/SWA/PVC insulated copper cable from transformer to the earth bar within the transformer room.	LM	30		
TOTAL CARRIED TO SWITCH GEAR COLLECTION PAGE					

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
A	Allow for 80x10mm 1200 mm long copper busbar for bonding; complete with 100mm long insulators for supports	No	1		
<u>Transformer tests and inspections</u>					
B	Allow for standard IEC 60076 dielectric tests, short circuit withstand test, temperature rise test and all other tests specified in the volume 'specifications for transformer'	item	item		
C	Allow for factory inspection as specified in the volume specifications for transformer' standard acceptance tests for the transformer, IEC 60076 standard tests. This is mandatory and has to be priced for	item	item		
D	Allow for Hot run test for the Transformer, including all the site tests but not limited to Ratio test, Insulation test etc	No.	1		
<u>LV cablingTransformer and switchboard</u>					
E	Supply, Install, test and commission 2500A sandwiched copper bus bar to link between the transformer and the stabiliser complete with 2no. Right angle bends and flanges. The busbar to be as C & S or Equivalent and approved.	LM	25		
TOTAL CARRIED TO SWITCH GEAR COLLECTION PAGE					

TRANSFORMER & SWITCH GEAR COLLECTION PAGE

ITEM NO.	DESCRIPTION	AMOUNT KSHS.
1	TOTAL BROUGHT FORWARD FROM:	
2	PAGE 19	
3	PAGE 20	
3	PC SUM FOR POWER APPLICATION & UPGRADE FROM KPLC	
TOTAL CARRIED TO MAIN SUMMARY PAGE		

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
A	<p>DIGITAL VOLTAGE STABILIZER</p> <p>Supply, install, test & commission a 1600kVA +_15% Digital three phase voltage Stabilizer (AVS) with the following specifications:-</p> <p><i>Attach product colored product catalogues</i></p> <p>i) Frequency 50Hz ii) Admitted Load Variation from 0 up to 100% iii) Admitted Load imbalance up to 100% iv) Mains Waveform Distortion Increment <0.2% v) Cooling Natural Air (aided over 35°C) vi) Ambient Temperature -25/+45°C vii) Storage Temperature -25/+60°C viii) Input Voltage 415+_15% ix) Output voltage 415+_0.5% ix) Admitted Overload 200% 2min x) Colour RAL 7035 xi) Protection IP 21 xii) Harmonic Distortion - None introduced. xiii) Over-voltage protection- Class II output surge arrestor - Optimal voltage return through super capacitors incase of blackout xiv) Instrumentation - Input and Output Digital multimeter xv) Voltage stabilisation - Independent phase control xvi) LCD/Digital two multi- task digital network analyzers xvii) Regulator overload protection - digital standby control xvii) Communication system - Ethernet/GPRS/USB Xviii) In built Bypass Unit</p>	NO	1		
B	Schneider Manual Bypass switch and 2NO. 2500A ACB's	NO	2		
C	Supply, Install, test and commission 2500A sandwiched copper bus bar to link between the stabiliser & Main Board complete with 2no. Right angle bends and flanges. The busbar to be as C & S or Equivalent and approved.	LM	15		
D	1C, 630mm ² PVC/SWA/PVC cable for AVR terminations complete with cable lugs, glands and shrouds	LM	12		
E	Earthing comprising of copper earth mat lattice 1m x 1m and an earth electrode of size 1500mm long x15mm diameter enclosed by a concrete manhole of size 450x450x450mm with removable concrete cover and a 38mm diameter PVC heavy gauge conduit lead-in duct and bonded to the AVR	NO	1		
G	Any other item required for proper operation of the AVR; Specify	Item			
TOTAL CARRIED FORWARD TO SUMMARY PAGE					

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	Supply, install and set to work the following:- <u>MAIN LV SUB BOARD</u>				
A	Power LV sub board to be type tested free standing as manufactured by strictly Schneider Electric formerly Power technics or ABB or Equivalent and approved of form 2B PRISMA/BLOKSET with the following: - a) 2No. 2500A 4P Masterpact withdrawable Air Circuit breaker type NW25H1 with micrologic unit having adjustable over current settings and a short circuit breaking capacity of 65kA at 415V ac, 50Hz. b) 2NO. TP 1250A ACB complete with shunt trip c) 3NO. TP 630A MCCB for fire pump & Sprinkler; & Lifts d) 4NO. TP 250A MCCB for basement Ventilation fans. e) 5NO. TP 160A MCCB f) 3NO. TP 125A MCCB g) 4NO. TP 100A MCCB h) 5NO. TP 63A MCCB i) 1No. Set of 4P 2500A BURSBAR j) 1No. 800A ACB for the PFCU k) 2500A AMF with both electrical & mechanical Interlock k) 1No. Digital power meter as PM 5310 with 2500/5A CT class 0.5 indication of voltage, current, KW, KWh, KVA, Power Factor, frequency, etc. j) Three- phase surge arrester Type 1 & Type 2 completes with protection. j) 2500/5A Current transformer wired to terminals for P.F. sensing. k) Set of phase presence indicators lights l) Appropriate knockouts for incoming/ out going cables m) 485kVAR PFCU as shown in drg. n) Space for 1No. Three phase KPLC meter. o) Sealable CT chamber	item	1		
B	Earthing comprising of copper earth mat in lattice configuration 1000mmx1000mm. Conductor size of lattice 25x3mm with tail to tie copper tape.	No	2		
C	630 mm ² PVC/SWA/PVC single core copper cable for distribution of power from the Transformer to the switch board in A above;	LM	40		
D	Cable glands, lugs and shrouds for terminating SC, 630 mm ² PVC/SWA/PVC copper cable	NO	16		
E	Allow for a 100mm x 3mm and 1000mm long Copper earth bar for earthing equipment in electrical room.	NO	4		
F	Dual Tarrif check meters as Schneider Electric PM 5560 complete with enclosure and CT's or equivalent and approved	No.	28		
TOTAL CARRIED FORWARD TO SUMMARY PAGE					

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	Supply, install and set to work the following:-				
	<u>SHOPS METER SUB BOARD</u>				
A	Power LV sub board to be mounted free standing as manufactured by strictly Schneider Electric formerly Power technics or ABB with the following: - a) 1No. 630A 4P Molded case Circuit Breaker 4P4T MICROLOGIC 2.3 630A NSX630F b) 44NO. TP 63A MCCB c) 8NO. TP 32A MCCB d) 1No. Set of 4P 630A BURSBAR e) 1No. Digital power meter as PM2220 with 630/5A CT class 0.5 indication of voltage, current, KW, KWh, KVA, Power Factor, frequency, etc. f) Three- phase surge arrester type 1/2 completes with protection. g) 630/5A Current transformer wired to terminals for P.F. sensing. h) Set of phase presence indicators lights i) Appropriate knockouts for incoming/ out going cables j) Space for 26No. Three phase post-paid KPLC meters. k) Sealable CT chamber The maximum length of the board to be 3metres.	item	1		
B	Earthing comprising of copper earth mat in lattice configuration 1000mmx1000mm. Conductor size of lattice 25x3mm with tail to tie copper tape.	No	1		
C	4C 300 mm ² PVC/SWA/PVC copper cable for distribution of power from the Transformer to the switch board in A above;	LM	30		
D	Cable glands, lugs and shrouds for terminating 4C, 300 mm ² PVC/SWA/PVC copper cable	NO	16		
E	Allow for a 100mm x 3mm and 1000mm long Copper earth bar for earthing equipment in electrical room.	NO.	2		
TOTAL CARRIED FORWARD TO SUMMARY PAGE					

1250A COPPER BUSBAR

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	Supply, install test and commission a horizontal busbar systems manufactured by either L & T, C & S, ABB or Schneider or equvalet and approved. The busbar to be of 415V/690V Sandwich construction Busbar trunking system with Multilayer Class-F insulation and; a) Conductors : Copper b) Rating : 1250A c) Configuration : 3P4W d) IP Rating : IP54 e) Enclosure : AL 2.5 mm thickness f) Impulse Withstand Voltage : 12kV g) Paint Shade : RAL7032 Epoxy Powder Coating				
A	Straight Run feeder	LM	128		4,741,377.16
B	Right angled bend feeder	LM	2		
C	Cable feed box with flange End	No.	1		
D	End closure	No.	1		
E	Plug in box + Plug in hole complete with 250A TPN MCCB with ROM	No.	4		
F	Plug in box + Plug in hole complete with 200A TPN MCCB with ROM	No.	4		
G	Plug in box + Plug in hole complete with 160A TPN MCCB with ROM	No.	4		
H	Plug in box + Plug in hole complete with 100A TPN MCCB with ROM	No.	30		
I	Horizontal spring hanger/ Fix hanger Equally spaced	No.	30		
J	Fire Barrier	No.	30		
K	Wall flange	No.	10		
L	Dual Tarrif CT meter for all Out goers as Schneider PM 5560 complete with enclosure	No.	44		
SUB-TOTAL FOR 1NO. BUSBAR					
MULTIPLY BY 2 FOR 2NO. BUSBARS					X2
TOTAL CARRIED TO MAIN SUMMARY PAGE					

ADDRESSABLE FIRE ALARM INSTALLATION

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	Supply install and set to work the following;				
	All detectors to be as MENVIER/SHIELD model numbers indicated or equal and approved. All detectors to be complete with mounting base (Attach catalogues)				
A	Fire alarm points, wired in 2 loops using 2C, 1.5mm2 fire resistant screened cable FP200 drawn in 25mm diameter PVC heavy gauge conduits concealed in roof space and wall from control panel through the detectors.	No.	10		
B	Fire sounder points, wired in 2 spur using 2C, 1.5mm2 fire resistant screened cable FP200 drawn in 25mm space and wall from control panel through the sounders	No.	2		
C	Analogue addressable photoelectric smoke detectors complete base plate MAP720S	No.	4		
D	Addressable break glass units MBG613	No.	2		
E	Fire alarm electronic sounders MWS424	No.	2		
F	2 loop networkable analogue addressable control panel complete 12 sounder circuits, 4 zones, LCD and power supply unit 72 hr. Panel to be capable of day/night function	No.	1		
G	Short circuit isolators MSI750	No.	1		
H	Serial communication interface unit MFASC	No.	1		
I	Analogue communications driver unit MFACI	No.	1		
J	Allow for training of personnel on the usage and operation of fire alarm system	Item			
K	9KGS Portable fire extinguishers as BS standard	No.	6		
L	Fire balls as BS standard	NO	4		
TOTAL CARRIED TO MAIN SUMMARY FOR FIRE ALARM					

LIGHTING AND POWER

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	<u>LIGHTING AND POWER</u>				
	Final sub-circuits complete with accessories and fittings as detailed below wired in 25mm diameter conduits clipped onto the ceiling using spacer saddles on one part and in partitioning board on the other part.				
A	Lighting points, wired using 3C x 1.5mm ² flexible PVC insulated Copper cables drawn in 25mm diameter heavy gauge conduit concealed above ceiling for one/two way switching but excluding the fittings and switches.	NO.	52		
B	Round cover, ceiling rose and 3x1.5mm short flex to link between light points and the light fittings	NO.	30		
C	13A twin power points, wired in 3x 2.5mm sq single core cables in ring circuit enclosed and concealed in PVC conduits	NO.	10		
D	Fire alarm outlet point with draw wire left in 25mm dia. PVC heavy gauge conduits concealed in the floor and walls from control panel located in the service duct	NO.	10		
E	4C, 6mm ² PVC/SWA/PVC cable from DBs to Sumps.	LM	80		
	<u>LIGHT FITTINGS AND ACCESSORIES</u>				
	Lighting control accessories complete with wiring terminations and fixing materials				
F	10A three gang two way as Crabtree 4173	NO.	4		
G	Light motion/Occupation sensors complete with wiring	NO.	10		
	<i>Lighting fittings as shown in the drawings complete with control gears and lamps:-</i>				
H	Vulcan LED Corrosion proof Single and Double 1.5m 100 lumens per circuit watt 5000K cool white light output 50,000 hour average lamp life. Complete with the following features emergency, dimmable, stainless steel clips - as V-TAC/ROBUS	NO.	50		
I	Maintained emergency lights as Vtac or Equivalent with 30 minutes autonomy	NO.	10		
J	13Amps twin switched weather proof socket outlet plate and as Crabtree or MK or Approved equivalent. Sockets to be mounted flush on the wall	NO.	10		
K	20A DP switch for for the extract fan with neon indicator as Crabtree Cat. No. 4013/3	NO.	2		
L	32A TP Isolator with metal clad for the sump pumps	NO.	2		
TOTAL CARRIED FORWARD TO SUMMARY PAGE					

CABLE ALTERATION, ADDITION AND CABLE SCHEDULES

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	Supply, install, test and commission the following cables complete with lugs, shrouds and glands to the satisfaction of the engineer.				
A	4C 6 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
B	2C 10 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
C	4C 10 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	60		
D	4C 16 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
E	4C 25 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
F	4C 35 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
G	4C 50 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	30		
H	4C 70 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	30		
I	4C 95 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	30		
J	4C 120 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
K	4C 150 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
L	4C 185 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
M	4C 240 mm ² PVC/SWA/PVC copper cable for distribution of power out going from the LV switchboard.	LM	40		
TOTAL CARRIED FORWARD TO SUMMARY PAGE					

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSHS.	TOTAL KSHS.
	POWER DISTRIBUTION Supply, install and commission the following: -				
A	38mm diameter sub mains PVC HG conduit from DBs to DB'B complete with bends, coupler saddles for cable management etc.	LM	120		
B	50mm diameter HG PVC conduits for complete with bends, coupler. saddles for cable management etc	LM	100		
C	100mm diameter HG PVC conduits for complete with bends, coupler. saddles for cable management etc	LM	100		
D	300x50mm metallic perforated & powder coated cable tray with atleast 1.5mm thick complete complete with tees, crossover, bends end cap, jacking, mounting brackets etc and bonded to earth. The cable tray ti be complete with cover.	LM	220		
E	600x50mm metallic perforated & powder coated cable traywith atleast 1.5mm thick complete complete with tees, crossover, bends end cap, jacking, mounting brackets etc and bonded to earth. The cable tray be complete with cover.	LM	220		
F	12 way TPN Distribution Board incorporation 100A integral isolator, lockable cover and labelling but without MCB's and as as Schneider Acti 9 series screwless and lockable	NO.	12		
G	12 way SPN consumer unit incorporation 100A integral isolator, lockable cover and labelling but without MCB's and as as Schneider Acti 9 series screwless and lockable	NO.	10		
H	Single phase MCB's rating as in schematics	NO	36		
I	Three phase MCB's rating as in schematics	NO	20		
J	Blanking plates	NO	12		
K	4C, 25mm ² PVC/SWA/PVC copper cable for distribution of power from meter board to DB'A' in 50mm diameter conduit	LM	120		
L	4C, 10mm ² PVC/SWA/PVC copper cable for distribution of power from DB'A' to DB 'B' and to AC outdoor unit in 32mm diameter conduit above	LM	120		
M	125A TPN isolator as MEM or equal and approved	NO.	14		
N	Proper managemnet of cables in the DB's and LV switchboard, labelling and replacement of faulty MCB's	Item	Item		
O	Allow for labelling all the armored cables with engraced metallic labels.	Item	Item		
P	Allow proper load balancing on all phases throught the building	Item	Item		
TOTAL CARRIED TO NEXT PAGE					

INFRASTRUCTURE AUDIT AT ANNIVERSARY TOWERS

ELECTRICAL INSTALLATION WORKS - EXECUTIVE SUMMARY PAGE

ITEM NO.	DESCRIPTION	AMOUNT KSHS.
	TOTAL BROUGHT FORWARD FROM:	
1	PRELIMINARIES & GENERAL CONDITIONS - BF PAGE 18	
2	1600KVA TX INSTALLATION WORKS - BF PAGE 21	
3	DIGITAL VOLTAGE STABILIZER - BF PAGE 22	
4	MAIN LOW VOLTAGE BOARD - BF PAGE 23	
5	SHOPS METERBOARD - BF PAGE 24	
6	BUSBAR INSTALLATION WORKS - BF PAGE 25	
7	FIRE ALARM DETECTION, ALARM - BF PAGE 26	
8	LIGHTING AND POWER - BF PAGE 27	
9	CABLING ADDITIONS/ALTERATIONS - BF PAGE 28	
10	POWER DISTRIBUTION & RETICULATION - BF PAGE 29	
11	CONTIGENCY SUM	
	TOTAL TO BE CARRIED TO FORM OF TENDER	
	LESS: TRADE IN FOR EXISTING EXISTING AVR	850,000.00
	LESS: TRADE IN FOR THE EXISTING BOARDS & BUSBARS	1,000,000.00
	TOTAL TO BE CARRIED TO FORM OF TENDER	

Total in words:

Name of Contractor:

Address:

Telephone:.....

Pin. No. Vat Reg. No.

Signature:

Official Stamp/Date:

**PART III - CONDITIONS OF CONTRACT AND
CONTRACT FORMS**

SECTION VIII - GENERAL CONDITIONS OF CONTRACT

These General Conditions of Contract (GCC), read in conjunction with the Special Conditions of Contract (SCC) and other documents listed therein, should be a complete document expressing fairly the rights and obligations of both parties.

These General Conditions of Contract have been developed on the basis of considerable international experience in the drafting and management of contracts, bearing in mind a trend in the construction industry towards simpler, more straightforward language.

The GCC can be used for both smaller admeasurement contracts and lump sum contracts.

General Conditions of Contract

A. General

1. Definitions

1.1 Bold face type is used to identify defined terms.

- a) **The Accepted Contract Amount** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- b) **The Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
- c) **The Adjudicator** is the person appointed jointly by the Procuring Entity and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
- d) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.
- e) **Compensation Events** are those defined in GCC Clause 42 hereunder.
- f) **The Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 53.1.
- g) **The Contract** is the Contract between the Procuring Entity and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
- h) **The Contractor** is the party whose Bid to carry out the Works has been accepted by the Procuring Entity.
- i) **The Contractor's Bid** is the completed bidding document submitted by the Contractor to the Procuring Entity.
- j) **The Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
- k) **Days** are calendar days; months are calendar months.
- l) **Day works** are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
- m) **A Defect** is any part of the Works not completed in accordance with the Contract.
- n) **The Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor.
- o) **The Defects Liability Period** is the period **named in the SCC** pursuant to Sub-Clause 34.1 and calculated from the Completion Date.
- p) **Drawings** means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Procuring Entity in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- q) **The Procuring Entity** is the party who employs the Contractor to carry out the Works, **as specified in the SCC**, who is also the Procuring Entity.

- r) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- s) **"In writing" or "written"** means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- t) The Initial Contract Price is the Contract Price listed in the Procuring Entity's Letter of Acceptance.
- u) **The Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the SCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- v) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- w) **Plant** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- x) **The Project Manager** is the person **named in the SCC** (or any other competent person appointed by the Procuring Entity and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.
- y) **SCC** means Special Conditions of Contract.
- z) **The Site** is the area of the works as **defined as such in the SCC**.
- aa) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- bb) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- cc) **The Start Date** is **given in the SCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- dd) **A Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- ee) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- ff) **A Variation** is an instruction given by the Project Manager which varies the Works.
- gg) **The Works** are what the Contract requires the Contractor to construct, install, and turn over to the Procuring Entity, **as defined in the SCC**.

2. Interpretation

- 21 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
- 22 If sectional completion is specified in the SCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 23 The documents forming the Contract shall be interpreted in the following order of priority:
- a) Agreement,
 - b) Letter of Acceptance,
 - c) Contractor's Bid,
 - d) Special Conditions of Contract,
 - e) General Conditions of Contract, including Appendices,
 - f) Specifications,
 - g) Drawings,
 - h) Bill of Quantities⁶, and

- i) any other document **listed in the SCC** as forming part of the Contract.

⁶*In lump sum contracts, delete "Bill of Quantities" and replace with "Activity Schedule."*

3. Language and Law

- 3.1 The language of the Contract is English Language and the law governing the Contract are the Laws of Kenya.
- 3.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Procuring Entity's Country when
- a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country; or
 - b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

4. Project Manager's Decisions

- 4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Procuring Entity and the Contractor in the role representing the Procuring Entity.

5. Delegation

- 5.1 Otherwise **specified in the SCC**, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.

6. Communications

- 6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.

7. Subcontracting

- 7.1 The Contractor may subcontract with the approval of the Project Manager but may not assign the Contract without the approval of the Procuring Entity in writing. Subcontracting shall not alter the Contractor's obligations.

8. Other Contractors

- 8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Procuring Entity between the dates given in the Schedule of Other Contractors, as **referred to in the SCC**. The Contractor shall also provide facilities and services for them as described in the Schedule. The Procuring Entity may modify the Schedule of Other Contractors and shall notify the Contractor of any such modification.

9. Personnel and Equipment

- 9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

93 If the Procuring Entity, Project Manager or Contractor determines, that any employee of the Contractor be determined to have engaged in Fraud and Corruption during the execution of the Works, then that employee shall be removed in accordance with Clause 9.2 above.

10. Procuring Entity's and Contractor's Risks

10.1 The Procuring Entity carries the risks which this Contract states are Procuring Entity's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Procuring Entity's Risks

11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Procuring Entity's risks:

- a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to:
 - i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
 - ii) negligence, breach of statutory duty, or interference with any legal right by the Procuring Entity or by any person employed by or contracted to him except the Contractor.
- b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Procuring Entity or in the Procuring Entity's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.

11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is a Procuring Entity's risk except loss or damage due to

- aa) a Defect which existed on the Completion Date,
- bb) an event occurring before the Completion Date, which was not itself a Procuring Entity's risk, or
- cc) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

12.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Procuring Entity's risks are Contractor's risks.

13. Insurance

13.1 The Contractor shall provide, in the joint names of the Procuring Entity and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the SCC** for the following events which are due to the Contractor's risks:

- a) loss of or damage to the Works, Plant, and Materials;
- b) loss of or damage to Equipment;
- c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
- d) personal injury or death.

13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

13.3 If the Contractor does not provide any of the policies and certificates required, the Procuring Entity may effect the insurance which the Contractor should have provided and recover the premiums the Procuring Entity has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

134 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.

135 Both parties shall comply with any conditions of the insurance policies.

14. Site Data

14.1 The Contractor shall be deemed to have examined any Site Data **referred to in the SCC**, supplemented by any information available to the Contractor.

15. Contractor to Construct the Works

15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.

16. The Works to Be Completed by the Intended Completion Date

16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

17. Approval by the Project Manager

17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.

17.2 The Contractor shall be responsible for design of Temporary Works.

17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.

18. Safety

18.1 The Contractor shall be responsible for the safety of all activities on the Site.

19. Discoveries

19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Procuring Entity. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

20. Possession of the Site

20.1 The Procuring Entity shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date **stated in the SCC**, the Procuring Entity shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.

21. Access to the Site

21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

22. Instructions, Inspections and Audits

- 22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 22.2 The Contractor shall keep and shall make all reasonable efforts to cause its Subcontractors and sub-consultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.
- 22.3 The Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, the Procuring Entity and/or persons appointed by the Public Procurement Regulatory Authority to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Public Procurement Regulatory Authority. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Public Procurement Regulatory Authority's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Public Procurement Regulatory Authority's prevailing sanctions procedures).

23. Appointment of the Adjudicator

- 23.1 The Adjudicator shall be appointed jointly by the Procuring Entity and the Contractor, at the time of the Procuring Entity's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Procuring Entity does not agree on the appointment of the Adjudicator, the Procuring Entity will request the Appointing Authority designated in the SCC, to appoint the Adjudicator within 14 days of receipt of such request.
- 23.2 Should the Adjudicator resign or die or should the Procuring Entity and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Procuring Entity and the Contractor. In case of disagreement between the Procuring Entity and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the SCC at the request of either party, within 14 days of receipt of such request.

24. Settlement of Claims and Disputes

24.1 Contractor's Claims

- 24.1.1 If the Contractor considers itself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give Notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 30 days after the Contractor became aware, or should have become aware, of the event or circumstance.
- 24.1.2 If the Contractor fails to give notice of a claim within such period of 30 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Procuring Entity shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.
- 24.1.3 The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.
- 24.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Procuring Entity's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.

- 24.1.5 Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:
- a) this fully detailed claim shall be considered as interim.
 - b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
 - c) the Contractor shall send a final claim within 30 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.
- 24.1.6 Within 42 days after receiving a Notice of a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars but shall nevertheless give his response on the principles of the claim within the above defined time period.
- 24.1.7 Within the above defined period of 42 days, the Project Manager shall proceed in accordance with Sub-Clause
- 24.1.8 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.
- 24.1.9 Each Payment Certificate shall include such additional payment for any claim as has been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.
- 24.1.10 If the Project Manager does not respond within the timeframe defined in this Clause, either Party may consider that the claim is rejected by the Project Manager and any of the Parties may refer to Arbitration in accordance with Sub-Clause 24.4 [Arbitration].
- 24.1.11 The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause 24.3.

24.2 Amicable Settlement

- 24.2.1 Where a notice of a claim has been given, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, the Party giving a notice of a claim in accordance with Sub-Clause 24.1 above should move to commence arbitration after the fifty-sixth day from the day on which a notice of a claim was given, even if no attempt at an amicable settlement has been made.

24.3 Matters that may be referred to arbitration

24.3.1 Notwithstanding anything stated herein the following matters may be referred to arbitration before the practical completion of the Works or abandonment of the Works or termination of the Contract by either party:

- a) The appointment of a replacement Project Manager upon the said person ceasing to act.
- b) Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
- c) Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
- e) Any dispute arising in respect of war risks or war damage.
- f) All other matters shall only be referred to arbitration after the completion or alleged completion of the Works or termination or alleged termination of the Contract unless the Procuring Entity and the Contractor agree otherwise in writing.

24.4 Arbitration

- 24.4.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 24.3 shall be finally settled by arbitration.
- 24.4.2 No arbitration proceedings shall be commenced on any claim or dispute where notice of a claim or dispute has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.
- 24.4.3 Notwithstanding the issue of a notice as stated above, the arbitration of such a claim or dispute shall not commence unless an attempt has in the first instance been made by the parties to settle such claim or dispute amicably with or without the assistance of third parties. Proof of such attempt shall be required.
- 24.4.4 The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject of or included in any certificate.
- 24.4.5 The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision requirement or notice had been given.
- 24.4.6 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Project Manager from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.
- 24.4.7 Neither Party shall be limited in the proceedings before the arbitrators to the evidence, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction.
- 24.4.8 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Project Manager shall not be altered by reason of any arbitration being conducted during the progress of the Works.
- 24.4.9 The terms of the remuneration of each or all the members of Arbitration shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

24.5 Arbitration with National Contractors

24.5.1 If the Contract is with national contractors, arbitration proceedings will be conducted in accordance with the Arbitration Laws of Kenya. In case of any claim or dispute, such claim or dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within thirty days of the notice. The dispute shall be referred to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed, on the request of the applying party, by the Chairman or Vice Chairman of any of the following professional institutions.

- i) Architectural Association of Kenya
- ii) Institute of Quantity Surveyors of Kenya
- iii) Association of Consulting Engineers of Kenya
- iv) Chartered Institute of Arbitrators (Kenya Branch)
- v) Institution of Engineers of Kenya

24.5.2 The institution written to first by the aggrieved party shall take precedence over all other institutions.

24.6 Alternative Arbitration Proceedings

24.6.1 Alternatively, the Parties may refer the matter to the Nairobi Centre for International Arbitration (NCIA) which offers a neutral venue for the conduct of national and international arbitration with commitment to providing institutional support to the arbitral process.

24.7 Failure to Comply with Arbitrator's Decision

24.7.1 The award of such Arbitrator shall be final and binding upon the parties.

24.7.2 In the event that a Party fails to comply with a final and binding Arbitrator's decision, then the other Party may, without prejudice to any other rights it may have, refer the matter to a competent court of law.

24.8 Contract operations to continue

24.8.1 Notwithstanding any reference to arbitration herein,

- a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- b) the Procuring Entity shall pay the Contractor any monies due the Contractor.

25. Fraud and Corruption

25.1 The Government requires compliance with the country's Anti-Corruption laws and its prevailing sanctions policies and procedures as set forth in the Constitution of Kenya and its Statutes.

25.2 The Procuring Entity requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity, or fee.

B. Time Control

26. Program

26.1 Within the time stated in the SCC, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.

26.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.

26.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.

26.4 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.

27. Extension of the Intended Completion Date

27.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.

27.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

28. Acceleration

28.1 When the Procuring Entity wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Procuring Entity accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Procuring Entity and the Contractor.

28.2 If the Contractor's priced proposals for an acceleration are accepted by the Procuring Entity, they are incorporated in the Contract Price and treated as a Variation.

29. Delays Ordered by the Project Manager

29.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

30. Management Meetings

30.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

30.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Procuring Entity. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

31. Early Warning

31.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.

31.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

32. Identifying Defects

32.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.

33. Tests

33.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

34. Correction of Defects

34.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the SCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

34.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

35. Uncorrected Defects

35.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. Cost Control

36. Contract Price⁷

36.1 The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.

37. Changes in the Contract Price⁸

37.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Procuring Entity.

37.2 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

38. Variations

38.1 All Variations shall be included in updated Programs⁹ produced by the Contractor.

38.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.

38.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.

38.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

⁷In lump sum contracts, replace GCC Sub-Clauses 36.1 as follows:

36.1 The Contractor shall provide updated Activity Schedules within 14 days of being instructed to by the Project Manager. The Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for materials on site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

⁸In lump sum contracts, replace entire GCC Clause 37 with new GCC Sub-Clause 37.1, as follows:

The Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

⁹In lump sum contracts, add "and Activity Schedules" after "Programs." ¹⁰In lump sum contracts, delete this paragraph.

385 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning

386 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 39.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.

387 Value Engineering: The Contractor may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following.

- a) the proposed change(s), and a description of the difference to the existing contract requirements.
- b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs) the Procuring Entity may incur in implementing the value engineering proposal; and
- c) a description of any effect(s) of the change on performance/functionality.

388 The Procuring Entity may accept the value engineering proposal if the proposal demonstrates benefits that:

- a) accelerate the contract completion period; or
- b) reduce the Contract Price or the life cycle costs to the Procuring Entity; or
- c) improve the quality, efficiency, safety or sustainability of the Facilities; or
- d) yield any other benefits to the Procuring Entity, without compromising the functionality of the Works.

389 If the value engineering proposal is approved by the Procuring Entity and results in:

- a) a reduction of the Contract Price; the amount to be paid to the Contractor shall be the **percentage specified in the SCC** of the reduction in the Contract Price; or
- b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in
(a) to (d) above, the amount to be paid to the Contractor shall be the full increase in the Contract Price.

39. Cash Flow Forecasts

39.1 When the Program¹¹, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

40. Payment Certificates

- 40.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 40.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 40.3 The value of work executed shall be determined by the Project Manager.
- 40.4 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed¹².
- 40.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 40.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- 40.7 Where the contract price is different from the corrected tender price, in order to ensure the contractor is not paid less or more relative to the contract price (which would be the tender price), payment valuation certificates and variation orders on omissions and additions valued based on rates in the Bill of Quantities or schedule of rates in the Tender, will be adjusted by a plus or minus percentage. The percentage already worked out during tender evaluation is worked out as follows: $(\text{corrected tender price} - \text{tender price}) / \text{tender price} \times 100$.

41. Payments

- 41.1 Payments shall be adjusted for deductions for advance payments and retention. The Procuring Entity shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If the Procuring Entity makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
- 41.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 41.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 41.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Procuring Entity and shall be deemed covered by other rates and prices in the Contract.

42. Compensation Events

- 42.1 The following shall be Compensation Events:
- d) The Procuring Entity does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
 - e) The Procuring Entity modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
 - f) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Work on time.
 - g) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
 - h) The Project Manager unreasonably does not approve a subcontract to be let.
 - i) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.

- j) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Procuring Entity, or additional work required for safety or other reasons.
- k) Other contractors, public authorities, utilities, or the Procuring Entity does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- l) The advance payment is delayed.
- m) The effects on the Contractor of any of the Procuring Entity's Risks.
- n) The Project Manager unreasonably delays issuing a Certificate of Completion.

422 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

423 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

¹¹In lump sum contracts, add "or Activity Schedule" after "Program."

¹²In lump sum contracts, replace this paragraph with the following: "The value of work executed shall comprise the value of completed activities in the Activity Schedule."

424 The Contractor shall not be entitled to compensation to the extent that the Procuring Entity's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

43. Tax

431 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 30 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.

44. Currency of Payment

441 All payments under the contract shall be made in Kenya Shillings

45. Price Adjustment

451 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the SCC**. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies:

$$P = A + B I_m / I_o$$

where: P is the adjustment factor for the portion of the Contract Price payable.

A and B are coefficients¹³ **specified in the SCC**, representing the non-adjustable and adjustable portions, respectively, of the Contract Price payable and I_m is the index prevailing at the end of the month being invoiced and I_o is the index prevailing 30 days before Bid opening for inputs payable.

452 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected, and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

46. Retention

46.1 The Procuring Entity shall retain from each payment due to the Contractor the proportion stated in the **SCC** until Completion of the whole of the Works.

46.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 53.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an "on demand" Bank guarantee.

47. Liquidated Damages

47.1 The Contractor shall pay liquidated damages to the Procuring Entity at the rate per day stated in the **SCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the SCC. The Procuring Entity may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

47.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 41.1.

48. Bonus

48.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the SCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

49. Advance Payment

49.1 The Procuring Entity shall make advance payment to the Contractor of the amounts stated in the **SCC** by the date stated in the **SCC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Procuring Entity in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.

49.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.

49.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

50. Securities

50.1 The Performance Security shall be provided to the Procuring Entity no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the SCC**, by a bank or surety acceptable to the Procuring Entity and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Completion Certificate in the case of a Performance Bond.

51. Dayworks

51.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.

51.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.

51.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

52. Cost of Repairs

52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

53. Completion

53.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.

54. Taking Over

54.1 The Procuring Entity shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.

55. Final Account

55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

¹³The sum of the two coefficients A and B should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the non-adjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other non-adjustable components. The sum of the adjustments for each currency are added to the Contract Price.

56. Operating and Maintenance Manuals

56.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.

56.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the SCC pursuant to GCC Sub-Clause 56.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the SCC** from payments due to the Contractor.

57. Termination

57.1 The Procuring Entity or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

572 Fundamental breaches of Contract shall include, but shall not be limited to, the following:

- a) the Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager.
- b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days.
- c) the Procuring Entity or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation.
- d) a payment certified by the Project Manager is not paid by the Procuring Entity to the Contractor within 84 days of the date of the Project Manager's certificate.
- e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager.
- f) the Contractor does not maintain a Security, which is required.
- g) the Contractor has delayed the completion of the Works by the number of days for which the maximum number of liquidated damages can be paid, as **defined in the SCC**; or
- h) if the Contractor, in the judgment of the Procuring Entity has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Procuring Entity may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.

573 Notwithstanding the above, the Procuring Entity may terminate the Contract for convenience.

574 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

575 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.

58. Payment upon Termination

58.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as specified in the SCC. Additional Liquidated Damages shall not apply. If the total amount due to the Procuring Entity exceeds any payment due to the Contractor, the difference shall be a debt payable to the Procuring Entity.

58.2 If the Contract is terminated for the Procuring Entity's convenience or because of a fundamental breach of Contract by the Procuring Entity, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

59. Property

59.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Procuring Entity if the Contract is terminated because of the Contractor's default.

60. Release from Performance

60.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Procuring Entity or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

SECTION IX - SPECIAL CONDITIONS OF CONTRACT

Except where otherwise specified, all Special Conditions of Contract should be filled in by the Procuring Entity prior to issuance of the bidding document. Schedules and reports to be provided by the Procuring Entity should be annexed.

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
A. General	
GCC 1.1 (q)	The Procuring Entity is Kenya Reinsurance Corporation Limited
GCC 1.1 (u)	The Intended Completion Date for the whole of the Works shall be quoted by the bidder
GCC 1.1 (x)	The Project Manager is Corporation's appointed Projects Implementation Committee & M/s Gedo Associates Limited
GCC 1.1 (z)	The Site is located at Anniversary Towers Nairobi, CBD and is defined in as plot No. LR Number 207/9744
GCC 1.1 (cc)	The Start Date shall be date of official site handover after award & contracting
GCC 1.1 (gg)	The Works consist of upgrading of electrical infrastructure in line with the electrical infrastructure audit recommendations at Anniversary Towers Nairobi
GCC 2.2	Sectional Completions are: N/A
GCC 5.1	The Project manager may not delegate any of his duties and responsibilities.
GCC 8.1	Schedule of other contractors: <i>[insert Schedule of Other Contractors, if appropriate]</i>
GCC 9.1	<p>Key Personnel GCC 9.1 is replaced with the following:</p> <p>9.1 Key Personnel are the Contractor's personnel named in this GCC 9.1 of the Special Conditions of Contract. The Contractor shall employ the Key Personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.</p> <p><i>[insert the name/s of each Key Personnel agreed by the Procuring Entity prior to Contract signature.]</i></p>
GCC 13.1	<p>The minimum insurance amounts and deductibles shall be:</p> <p>(a) for loss or damage to the Works, Plant and Materials: 50,000,000.00</p> <p>(b) For loss or damage to Equipment: 50,000,000.00</p> <p>(c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract 10,000,000.00</p> <p>(d) for personal injury or death:</p> <p>(i) of the Contractor's employees: 10,000,000.00</p> <p>(ii) of other people: 10,000,000.00</p>
GCC 14.1	Site Data are: <i>[list Site Data]</i>

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
GCC 20.1	The Site Possession Date(s) shall be: <i>To be determined after contracting</i>
GCC 23.1 & GCC 23.2	Appointing Authority for the Adjudicator: <i>Chartered Institute of Arbitrators in Kenya</i> Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: <i>To be determined at point of Arbitration</i>
B. Time Control	
GCC 26.1	The Contractor shall submit for approval a Program for the Works within 21 days from the date of the Letter of Acceptance.
GCC 26.3	The period between Program updates is 30 days . The amount to be withheld for late submission of an updated Program is Kshs. 50,000.00 .
C. Quality Control	
GCC 34.1	The Defects Liability Period is: 366 days . <i>[The Defects Liability Period is usually limited to 12 months, but could be less in very simple cases]</i>
D. Cost Control	
GCC 38.9	If the value engineering proposal is approved by the Procuring Entity the amount to be paid to the Contractor shall be 0% (<i>insert appropriate percentage. The percentage is normally up to 50%</i>) of the reduction in the Contract Price.
GCC 44.1	The currency of the Procuring Entity's Country is: Kenyan Shillings
GCC 45.1	The Contract is not subject to price adjustment in accordance with GCC Clause 45, and the following information regarding coefficients does not apply.
GCC 46.1	The proportion of payments retained is: 10%
GCC 47.1	The liquidated damages for the whole of the Works are Kshs. 140,000.00 per week or part thereof per day . The maximum amount of liquidated damages for the whole of the Works is 10% of the final Contract Price.
GCC 48.1	The Bonus for the whole of the Works is 0% . The maximum amount of Bonus for the whole of the Works is 0% of the final Contract Price.
GCC 49.1	The Advance Payments shall be: A maximum of 20% secured by an equivalent bank guarantee and shall be paid to the Contractor no later than 30 working days from date of application, issuance of an invoice and valid and verified bank guarantee.
GCC 50.1	The Performance Security amount is 10% of the contract price denominated in the types and proportions of the currencies in which the Contract Price is payable. (a) Performance Security – Bank Guarantee: in the amount(s) of 10% of the accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount. (b) Performance Security – Performance Bond: in the amount(s) of 10% percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount.

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
E. Finishing the Contract	
GCC 56.1	<p>The date by which operating, and maintenance manuals are required is 30 calendar days after date of practical completion.</p> <p>The date by which “as built” drawings are required is 30 calendar days after date of practical completion.</p>
GCC 56.2	The amount to be withheld for failing to produce “as built” drawings and/or operating and maintenance manuals by the date required in GCC 58.1 is Kshs. 500,000.00.
GCC 57.2 (g)	The maximum number of days is: 60 calendar days.
GCC 58.1	The percentage to apply to the value of the work not completed, representing the Procuring Entity’s additional cost for completing the Works, is 25%.

FORM No 1: NOTIFICATION OF INTENTION TO AWARD

This Notification of Intention to Award shall be sent to each Tenderer that submitted a Tender. Send this Notification to the Tenderer's Authorized Representative named in the Tender Information Form on the format below.

FORMAT

1. For the attention of Tenderer's Authorized Representative

- i) Name: *[insert Authorized Representative's name]*
- ii) Address: *[insert Authorized Representative's Address]*
- iii) Telephone: *[insert Authorized Representative's telephone/fax numbers]*
- iv) Email Address: *[insert Authorized Representative's email address]*

[IMPORTANT: insert the date that this Notification is transmitted to Tenderers. The Notification must be sent to all Tenderers simultaneously. This means on the same date and as close to the same time as possible.]

2. Date of transmission: [email] on [date] (local time)

This Notification is sent by *(Name and designation)*

3. Notification of Intention to Award

- i) Procuring Entity: *[insert the name of the Procuring Entity]*
- ii) Project: *[insert name of project]*
- iii) Contract title: *[insert the name of the contract]*
- iv) Country: *[insert country where ITT is issued]*
- v) ITT No: *[insert ITT reference number from Procurement Plan]*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period, you may:

4. Request a debriefing in relation to the evaluation of your tender

Submit a Procurement-related Complaint in relation to the decision to award the contract.

a) The successful tenderer

- i) Name of successful Tender
- ii) Address of the successful Tender
- iii) Contract price of the successful Tender Kenya Shillings _____
(in words _____)

b) Other Tenderers

Names of all Tenderers that submitted a Tender. If the Tender's price was evaluated include the evaluated price as well as the Tender price as read out. For Tenders not evaluated, give one main reason the Tender was unsuccessful.

SNo	Name of Tender	Tender Price as read out	Tender's evaluated price (Note a)	One Reason Why not Evaluated
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

(Note a) State NE if not evaluated

5. How to request a debriefing

- a) DEADLINE: The deadline to request a debriefing expires at midnight on **14 days after notification of tender results.**
- b) You may request a debriefing in relation to the results of the evaluation of your Tender. If you decide to request a debriefing your written request must be made within three (5) Business Days of receipt of this Notification of Intention to Award.
- c) Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:
 - i) Attention: *[insert full name of person, if applicable]*
 - ii) Title/position: *[insert title/position]*
 - ii) Agency: *[insert name of Procuring Entity]*
 - iii) Email address: *[insert email address]*
- d) If your request for a debriefing is received within the 3 Days deadline, we will provide the debriefing within five (3) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (3) Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.
- e) The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.
- f) If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Days from the date of publication of the Contract Award Notice.

6. How to make a complaint

- a) Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, *[insert date]* (local time).
- b) Provide the contract name, reference number, name of the Tenderer, contact details; and address the Procurement-related Complaint as follows:
 - i) Attention: *[insert full name of person, if applicable]*
 - ii) Title/position: *[insert title/position]*
 - iii) Agency: *[insert name of Procuring Entity]*
 - iv) Email address: *[insert email address]*
- c) At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.
- d) Further information: For more information refer to the Public Procurement and Disposals Act 2015 and its Regulations available from the Website info@ppra.go.ke or complaints@ppra.go.ke.
You should read these documents before preparing and submitting your complaint.
- e) There are four essential requirements:
 - i) You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this tendering process and is the recipient of a Notification of Intention to Award.
 - ii) The complaint can only challenge the decision to award the contract.
 - iii) You must submit the complaint within the period stated above.
 - iv) You must include, in your complaint, all of the information required to support your complaint.

7. Standstill Period

- i) DEADLINE: The Standstill Period is due to end at midnight on *[insert date]* (local time).
- ii) The Standstill Period lasts ten (14) Days after the date of transmission of this Notification of Intention to Award.
- iii) The Standstill Period may be extended as stated in paragraph Section 5 (d) above.

If you have any questions regarding this Notification please do not hesitate to contact us. On behalf of the Procuring Entity:

Signature: _____ **Name:** _____

Title/position: _____ **Telephone:** _____

Email:

FORM NO. 2 - REQUEST FOR REVIEW

FORM FOR REVIEW(r.203(1))

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NO.....OF.....20.....

BETWEEN

.....**APPLICANT**

AND

.....**RESPONDENT (Procuring Entity)**

Request for review of the decision of the..... (Name of the Procuring Entity ofdated the...day of20.....in the matter of Tender No.....of20..... for(Tender description).

REQUEST FOR REVIEW

I/We.....,the above-named Applicant(s), of address: Physical address.....P. O. Box No..... Tel. No.....Email, hereby request the Public Procurement Administrative Review Board to review the whole/part of the above-mentioned decision on the following grounds , namely:

- 1.
- 2.

By this memorandum, the Applicant requests the Board for an order/order that:

- 1.
- 2.

SIGNED(Applicant) Dated on.....day of/...20.....

FOR OFFICIAL USE ONLY Lodged with the Secretary Public Procurement Administrative Review Board on.....day of20.....

SIGNED

Board Secretary

FORM NO 3: LETTER OF AWARD

[letterhead paper of the Procuring Entity] [date]

To: *[name and address of the Contractor]*

This is to notify you that your Tender dated *[date]* for execution of the *[name of the Contract and identification number, as given in the Contract Data]* for the Accepted Contract Amount *[amount in numbers and words] [name of currency]*, as corrected and modified in accordance with the Instructions to Tenderers, is hereby accepted by *(name of Procuring Entity)*.

You are requested to furnish the Performance Security within 30 days in accordance with the Conditions of Contract, using, for that purpose, one of the Performance Security Forms included in Section VIII, Contract Forms, of the Tender Document.

Authorized Signature:.....

Name and Title of Signatory:.....

Name of Procuring Entity.....

Attachment: *Contract Agreement*.....

FORM NO 4: CONTRACT AGREEMENT

THIS AGREEMENT made the _____ day of _____, 20____, between _____ of _____ (hereinafter "the Procuring Entity"), of the one part, and _____ of _____ (hereinafter "the Contractor"), of the other part:

WHEREAS the Procuring Entity desires that the Works known as _____ should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Procuring Entity and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - a) the Letter of Acceptance
 - b) the Letter of Tender
 - c) the addenda Nos _____ (if any)
 - d) the Special Conditions of Contract
 - e) the General Conditions of Contract;
 - f) the Specifications
 - g) the Drawings; and
 - h) the completed Schedules and any other documents forming part of the contract.
3. In consideration of the payments to be made by the Procuring Entity to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Procuring Entity to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Procuring Entity hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the Laws of Kenya on the day, month and year specified above.

Signed and sealed by _____ (for the Procuring Entity)

Signed and sealed by _____ (for the Contractor).

FORM NO. 5 - PERFORMANCE SECURITY

[Option 1 - Unconditional Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____ *[insert name and Address of Procuring Entity]* **Date:** _____
_____ *[Insert date of issue]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that _____ (hereinafter called "the Contractor") has entered into Contract No. _____ dated _____ with (name of Procuring Entity) _____ (the Procuring Entity as the Beneficiary), for the execution of (hereinafter called "the Contract").
2. Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.
3. At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (in words),¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.
4. This guarantee shall expire, no later than the Day of, 2.....², and any demand for payment under it must be received by us at the office indicated above on or before that date.
5. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months]* *[one year]*, in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

[Name of Authorized Official, signature(s) and seals/stamps].

Note: *All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.*

¹The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency of the Contract or a freely convertible currency acceptable to the Beneficiary.

²Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

FORM No. 6 - PERFORMANCE SECURITY

[Option 2- Performance Bond]

[Note: Procuring Entities are advised to use Performance Security – Unconditional Demand Bank Guarantee instead of Performance Bond due to difficulties involved in calling Bond holder to action]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: _____ *[insert name and Address of Procuring Entity]* **Date:**
_____ *[Insert date of issue].*

PERFORMANCE BOND No.:

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. By this Bond _____ as Principal (hereinafter called "the Contractor") and _____] as Surety (hereinafter called "the Surety"), are held and firmly bound unto _____] as Obligee (hereinafter called "the Procuring Entity") in the amount of _____ for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.
2. WHEREAS the Contractor has entered into a written Agreement with the Procuring Entity dated the day of _____, 20, for _____ in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.
3. NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Procuring Entity to be, in default under the Contract, the Procuring Entity having performed the Procuring Entity's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:
 - 1) complete the Contract in accordance with its terms and conditions; or
 - 2) obtain a tender or tenders from qualified tenderers for submission to the Procuring Entity for completing the Contract in accordance with its terms and conditions, and upon determination by the Procuring Entity and the Surety of the lowest responsive Tenderers, arrange for a Contract between such Tenderer, and Procuring Entity and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Procuring Entity to Contractor under the Contract, less the amount properly paid by Procuring Entity to Contractor; or
 - 3) pay the Procuring Entity the amount required by Procuring Entity to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.
4. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.
5. Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate. No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Procuring Entity named herein or the heirs, executors, administrators, successors, and assigns of the Procuring Entity.

6. In testimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this day__of_____20_____.

SIGNEDON_____on behalfof By__in the capacity of In the presenceof

SIGNEDON_____on behalf of By__in the capacity of In the presenceof

FORM NO. 7 - ADVANCE PAYMENT SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____ [Insert name and Address of Procuring Entity]

Date: _____ [Insert date of issue]

ADVANCE PAYMENT GUARANTEE No.: _____ [Insert guarantee reference number] **Guarantor:**
_____ [Insert name and address of place of issue, unless indicated in the letterhead]

1. We have been informed that _____ (hereinafter called "the Contractor") has entered into Contract No. _____ dated _____ with the Beneficiary, for the execution of _____
2. Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum (*in words*) is to be made against an advance payment guarantee.
3. At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (*in words* _____)¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:
 - a) has used the advance payment for purposes other than the costs of mobilization in respect of the Works;
or
 - b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.
4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Contractor on its account number at _____.
5. The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the _____ day of 2,² whichever is earlier. Consequently, demand for payment under this guarantee must be received by us at this office on or before that date.
6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [*six months*][*one year*], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

[Name of Authorized Official, signature(s) and seals/stamps]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

¹The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency of the advance payment as specified in the Contract.

²Insert the expected expiration date of the Time for Completion. The Procuring Entity should note that in the event of an extension of the time for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

FORM NO. 8 - RETENTION MONEY SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____ [Insert name and Address of Procuring Entity]

Date: _____ [Insert date of issue]

Advance payment guarantee no. [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

1. We have been informed that _____ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Contractor") has entered into Contract No. _____ [insert reference number of the contract] dated _____ with the Beneficiary, for the execution of _____ [insert name of contract and brief description of Works] (hereinafter called "the Contract").
2. Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, and payment of [insert the second half of the Retention Money] is to be made against a Retention Money guarantee.
3. At the request of the Contractor, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in figures] ([insert amount in words _____])¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.
4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the second half of the Retention Money as referred to above has been credited to the Contractor on its account number _____ at _____ [insert name and address of Applicant's bank].
5. This guarantee shall expire no later than the Day of, 2.....², and any demand for payment under it must be received by us at the office indicated above on or before that date.
6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

[Name of Authorized Official, signature(s) and seals/stamps]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

¹The Guarantor shall insert an amount representing the amount of the second half of the Retention Money.

²Insert a date that is twenty-eight days after the expiry of retention period after the actual completion date of the contract. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM

INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful tenderer. In case of joint venture, the tenderer must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Tenderer is any natural person who ultimately owns or controls the Tenderer by meeting one or more of the following conditions:

- Directly or indirectly holding 25% or more of the shares.*
- Directly or in directly holding 25% or more of the voting rights.*
- Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer.*

Tender Reference No.: _____ [insert identification

no] Name of the Assignment: _____ [insert name of the assignment]

to: _____ [insert complete name of Procuring Entity]

In response to your notification of award dated _____ [insert date of notification of award] to furnish additional information on beneficial ownership: _____ [select one option as applicable and delete the options that are not applicable]

I) We here by provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 25% or more of the shares (Yes / No)	Directly or indirectly holding 25 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer (Yes / No)
<i>[include full name (last, middle, first), nationality, country of residence]</i>			

OR

ii) *We declare that there is no Beneficial Owner meeting one or more of the following conditions: directly or indirectly holding 25% or more of the shares. Directly or indirectly holding 25% or more of the voting rights. Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer.*

OR

We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Tenderer shall provide explanation on why it is unable to identify any Beneficial Owner]

Directly or indirectly holding 25% or more of the shares. Directly or indirectly holding 25% or more of the voting rights.

Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer]"

Name of the Tenderer:[insert complete name of the Tenderer]*

*Name of the person duly authorized to sign the Tender on behalf of the Tenderer: ** [insert complete name of person duly authorized to sign the Tender]*

Title of the person signing the Tender: [insert complete title of the person signing the Tender]

Signature of the person named above: [insert signature of person whose name and capacity are shown above]

Date signed [insert date of signing] day of..... [Insert month], [insert year]



SITE VISIT CLEARANCE CERTIFICATE
KENYA REINSURANCE CORPORATION LIMITED
PROPOSED ELECTRICAL INFRASTRUCTURE REFURBISHMENTS AT ANNIVERSARY TOWERS NAIROBI
TENDER NO. KRC/1865/2022/193

This is to certify that

M/s. _____

(name of firm) have visited, inspected, and verified the scope of works at Anniversary Towers Nairobi

KENYA RE REPRESENTATIVE

NO.	STATION	NAME OF KENYA RE REPRESENTATIVE	SIGN	DATE OF VISIT
1.	Anniversary Towers, Monrovia Street/ University Way Nairobi – CBD - Kenya			

TENDERERS REPRESENTATIVE

NO.	STATION	NAME OF TENDERER'S REPRESENTATIVE	SIGN	DATE OF VISIT
1.	Anniversary Towers, Monrovia Street/ University Way Nairobi – CBD - Kenya			