

# **MURANG'A UNIVERSITY OF TECHNOLOGY**

P.O BOX 75-10200, MURANG'A TEL; 0771-463 515/0706-249 039

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## TENDER NO. MUT/T 05/HB PHI W2/2023-2024

# TENDER DOCUMENT FOR THE PROPOSED COMPLETION OF HOSTEL BLOCK FOR MURANG'A UNIVERSITY OF TECHNOLOGY PHASE 1-WING 2

CLOSING DATE: 7<sup>TH</sup> SEPTEMBER, 2023 AT 10.00 AM

**AUGUST, 2023** 



# TENDER DOCUMENTS FOR THE PROPOSED COMPLETION OF THE HOSTEL BLOCK PHASE I WING 2 FOR MURANG'A UNIVERSITY OF TECHNOLOGY, MURANG'A COUNTY

1) NAME AND CONTACT ADDRESSES OF PROCURING ENTITY

Name: MURANG'A UNIVERSITY OF TECHNOLOGY Address: P.O BOX 75 - 10200, MURANG'A, KENYA

Email address: info@mut.ac.ke, Tel: +254-771-370-824

- 2) Invitation to Tender (ITT) No; MUT / T 05/HB PHI W2/ 2023/2024
- 3) Tender Name: Proposed Completion of the Hostel Block Phase I Wing 2 for the Murang'a University of Technology.

## INVITATION TO TENDER

PROCURING ENTITY: MURANG'A UNIVERSITY OF TECHNOLOGY.

CONTRACT NAME AND DESCRIPTION: THE PROPOSED COMPLETION OF THE HOSTEL BLOCK

PHASE 1 WING 2 FOR THE MURANG'A UNIVERSITY OF TECHNOLOGY, MURANG'A COUNTY.

- 1. The Murang'a University of Technology (hereinafter referred to as MUT) invites sealed tenders for the Proposed Completion of the Hostel Block Phase I Wing 2.
- 2. Tendering will be conducted under open competitive method (**National**) using a standardized tender document. Tendering is open to all qualified and interested Tenderers.
  - The tendering is open to those registered with the National Construction Authority, Class No. 4 and above.
- 3. Qualified and interested tenderers may obtain further information and inspect the Tender Documents during office hours [0900 to 1500 hours] at the address given below.
- 4. A complete set of tender documents may be purchased or obtained by interested tenders upon payment of non-refundable fees of KShs. 1,000.00 (KShs. One Thousand only) in cash or Banker's Cheque and payable to the address given below. Tender documents may be obtained electronically from the Public Procurement Iformation Portal (PPIP) <a href="www.tenders.go.ke">www.tenders.go.ke</a> and the University Website(s) <a href="https://www.mut.ac.ke/tender/">https://www.mut.ac.ke/tender/</a>. Tender documents obtained electronically will be <a href="free of charge">free of charge</a>.
- 5. Tender documents may be viewed and downloaded for free from the PPIP website <a href="www.tender.go.ke">www.tender.go.ke</a> and the University website <a href="https://www.mut.ac.ke/tender/">https://www.mut.ac.ke/tender/</a>. Tenderers who download the tender document must forward their particulars immediately to <a href="mailto:tenders@mut.ac.ke">tenders@mut.ac.ke</a> with a copy to <a href="mailto:procurement@mut.ac.ke">procurement@mut.ac.ke</a> to facilitate any further clarification or addendum.
- 6. Tenders shall be quoted be in Kenya Shillings and shall include all taxes. Tenders shall remain **valid for 150 days** from the date of opening of tenders.
- 7. All Tenders must be accompanied by a "Tender Security" of KShs. 700,000.00 (KShs. Seven Hundred Thousand only) valid for 150 days from the date of opening of tenders.
- 8. The Tenderer shall chronologically serialize all pages of the tender documents submitted.
- 9. Bidders are required to attend a Mandatory Site Visit at Murng'a University of Technology on the Tuesday 29<sup>th</sup> August, 2023 strictly at 10.00 AM. (Bidders will be issued with a Site Visit Certificate).
- 10. Completed tenders must be delivered to the **tender box** situated at the address below **on or before** 7<sup>th</sup> **September, 2023 at 10.00 A.M.** Electronic Tenders will **not** be permitted.
- 11. Tenders will be opened immediately after the deadline date and time specified above or any dead line date and times pecified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.
- 12. Late tenders will be rejected.
- 13. The addresses referred to above are:

#### A. Address for obtaining further information and for purchasing tender documents.

Murang'a University of Technology Main Campus, Procurement Department opposite the Old University Administration Block during normal working hours [0900 to 1500 hours]

P.O Box 75-10200, Murang'a, Kenya

Procurement Department: Phone: 0706-249 039, Email: tenders@mut.ac.ke or procurement@mut.ac.ke

#### B. Address for Submission of Tenders.

Tender Box, situated at the Ground Floor of the Old Universty Administrtaion Block

The Murang'a University of Technology Main Campus,

P.O Box 75-10200, Murang'a, Kenya

# C. Address for Opening of Tenders.

Murang'a University of Technology Post Graduate Seminar Room 6, next to the Old University Administration Block.

Murang'a University of Technology Main Campus,

P.O Box 75-10200, Murang'a, Kenya

# VICE CHANCELLOR, MURANG'A UNIVERSITY OF TECHNOLOGY.



#### **SECTION I - INSTRUCTIONS TO TENDERERS**

#### A GENERAL PROVISIONS

#### 1.0 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.
- 12 Throughout this tendering document:
  - a) The term "inwriting" means communicated in written form (e.g. by mail, e-mail, fax, including if specified in the TDS, distributed or received through the electronic-procurement system used by the Procuring Entity) with proof of receipt;
  - b) if the context so requires, "singular" means "plural" and vice versa;
  - c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of the Procuring Entity. It excludes official public holidays.

## 2.0 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.
- The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding <u>collusive</u> <u>practices</u> 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.
- Tenderers shall permit and shall cause their agents (whether declared or not), subcontractors, sub-consultants, service providers, suppliers, and their personnel, to permit the Procuring Entity to inspect all accounts, records and other documents relating to any initial selection process, pre-qualification process, tender submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Procuring Entity.
- 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. 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 in formation that would in that respect give such firm any unfair competitive advantage over competing firms.

#### 3.0 Eligible tenderers

- 3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 3.8, or an individual or any combination of such entities in the form of a joint venture (JV) under an existing agree mentor with the intent to enter in to such an agreement supported by a letter of intent. 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. 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. 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.
- 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 an other tenderer;
- b) Receives or has received any director indirect subsidy from another tenderer;
- c) Has the same legal representative as an other tenderer;
- d) Has a relationship with an other tenderer, directly or through common third parties, that puts it in a position to influence the tender of an other tenderer, or influence the decisions of the Procuring Entity regarding this tendering process;
- e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods or works that are the subject of the tender;
- f) Any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as a consultant for Contract implementation;
- 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;
- h) Has a close business or personal relationship with senior management or professional staff of the Procuring Entity who has the ability to influence the bidding process and:
  - 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) May be involved in the implementation or supervision of such Contract unless the conflicts temming 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 or fraudulent practice. A tenderer that is proven to have been involved in any of these practices shall be automatically disqualified
- 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. Members of a joint venture may not also make an individual tender, be a sub-contractor in a separate tender or be part of another joint venture for the purposes of the same Tender. A firm that is not a tenderer or a JV member may participate as a subcontractor in more than one tender.
- 3.6 A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT3.9. ATenderer 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 sub-contractors or sub-consultants for any part of the Contract including related Services.
- 3.7 A 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.
- 38 A Tenderer that is a state-owned enterprise or a public institution in Kenya may be eligible to tender and be awarded Contract(s) only if it is determined by the Procuring Entity to meet the following conditions, i.e. if it is:
  - i) A legal public entity of 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.
- 39 Firms and individuals shall be ineligible if their countries of origin are:
  - (a) As a matter of law or official regulations, Kenya prohibits commercial relations with that country;
  - (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, local sub-contracts and labor) from citizen 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 determine if this condition is met shall be provided for this purpose in "SECTIONI II EVALUATION AND QUALIFICATION CRITERIA, Item 9".
- 3.11 Pursuant to the eligibility requirements of ITT 3.10, a tender is considered a foreign tenderer, If it is registered in Kenya and has less than 51 percent ownership by nationals of Kenya and if it does not subcontract to foreign firms or individuals more than 10 percent of the contract price, excluding provisional sums. JVs are considered as foreign tenderers if the individual member firms registered in Kenya have less 51 percent ownership by nationals of Kenya. 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 <a href="https://www.nca.go.ke">www.nca.go.ke</a>.
- 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 <a href="www.cak.go.ke">www.cak.go.ke</a>.
- 4.14 A kenyan tenderer shall be eligible to tender if it provides evidence of having fulfilled his/her tax obligations by producing valid tax compliance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

#### 4.0 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 ineligible 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.
- 42 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.

#### 5.0 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.
- The tenderer, at the tenderer's own responsibility and risk, is encouraged to visit and examine and inspect the Site of the Works and its surroundings and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall beat the tenderer's own expense.
- 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 again stall liability arising from death or personal injury, loss of or damage to property, and any other losses and expenses incurred as a result of the examination and inspection.

54 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. <u>CONTENTS OF TENDER DOCUMENTS</u>

#### 60 Sections of Tender Document

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 10.

#### **PART 1: Tendering Procedures**

Section I – Instructions to Tenderers Section II – Tender Data Sheet (TDS) Section III- Evaluation and Qualification Criteria Section IV – Tendering Forms

#### **PART 2: Works' Requirements**

Section V - Bills of Quantities Section VI - Specifications Section VII - Drawings

#### **PART 3: Conditions of Contract and Contract Forms**

**Section VIII - General Conditions (GCC)** 

Section IX - Special Conditions of Contract

Section X- Contract Forms

- The Invitation to Tender Notice 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 a pre-arranged site visit and those of the pre-Tender meeting (if any), or Addenda to the Tender document in accordance with ITT 10. Incase 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.

#### 7.0 Clarification of Tender Document, Site Visit, Pre-tender Meeting

- 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 if provided for in accordance with ITT 7.2. 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 7.4, including a description of the inquiry but without identifying its source. If so 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 following the procedure under ITT 8 and ITT 22.2.
- The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine and inspect the site(s) of the required contracts and obtain all information that may be necessary for preparing a tender. The costs of visiting the Site shall be at the Tenderer's own expense. The Procuring Entity shall specify in the **TDS** if a pre-arranged Site visit and or a pre-tender meeting will be held, when and where. The Tenderer's designated representative is invited to attend a pre-arranged site visit and a pre-tender meeting, as the case may be. The purpose of the site visit and the pre-tender meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 73 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.
- 7.4 Minutes of a pre-arranged site visit and those of the pre-tender meeting, 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. Minutes shall not identify the source of the questions asked.

The Procuring Entity shall also promptly publish anonymized (*no names*) Minutes of the pre-arranged site visit and those of the pre-tender meeting at the web page identified in the **TDS**. Any modification to the Tender Documents that may become necessary as a result of the pre-arranged site visit and those of the pre-tender meeting 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. Non-attendance at the pre-arranged site visit and the pre-tender meeting will not be a cause for disqualification of a Tenderer.

#### **80** Amendment of Tender Documents

- At any time prior to the deadline for submission of Tenders, the Procuring Entity may amend the Tender Documents by issuing addenda.
- Any addendum issued shall be part of the Tender Documents and shall be communicated in writing to all who have obtained the Tender Documents from the Procuring Entity. The Procuring Entity shall also promptly publish the addendum on the Procuring Entity's website in accordance with ITT 7.5.
- To give Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Procuring Entity should extend the dead line for the submission of Tenders, pursuant to ITT 22.2.

#### C. PREPARATION OF TENDERS

#### 9. Cost of Tendering

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.

#### 10.0 Language of Tender

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.

#### 11.0 Documents Comprising the Tender

- 11.1 The Tender shall comprise the following:
  - a) Form of Tender prepared in accordance with ITT 12;
  - b) Schedules including priced Bill of Quantities, completed in accordance with ITT 12 and ITT 14;
  - c) Tender Security or Tender-Securing Declaration, in accordance with ITT 19.1;
  - d) Alternative Tender, if permissible, in accordance with ITT 13;
  - e) *Authorization*: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordancewithITT20.3;
  - f) *Qualifications*: documentary evidence in accordance with ITT 17 establishing the Tenderer's qualifications to per form the Contract if its Tender is accepted;
  - g) Conformity: a technical proposal in accordance with ITT 16;
  - h) Any other document required in the **TDS**.
- In addition to the requirements under ITT 11.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into 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 JV Agreement. Change of membership and conditions of the JV prior to contract signature will render the tenderliable for disqualification.

#### 12.0 Form of Tender and Schedules

- 12.1 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 with out 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. The Tenderer shall chronologically serialize all pages of the tender documents submitted.
- 12.2 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.

#### 13. Alternative Tenders

- 13.1 Unless otherwise specified in the TDS, alternative Tenders shall not be considered.
- 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.
- 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.

#### 14.0 Tender Prices and Discounts

- 14.1 The prices and discounts (including any price reduction) quoted by the Tenderer in the Form of Tender and in the Billof Quantities shall conform to the requirements specified below.
- 142 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.
- The price to be quoted in the Form of Tender, in accordance with ITT 12.1, shall be the total price of the Tender, including any discounts offered.
- 14.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 12.1.
- 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 incases 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.
- 14.6 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 14.4, provided the Tenders for all lots (contracts) are opened at the sametime.

14.7 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.

#### 15.0 Currencies of Tender and Payment

- 15.1 The currency(ies) of the Tender and the currency(ies) of payments shall be the same.
- 152 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) A Tenderer expecting to incur expenditures in other currencies for inputs to the Works supplied from outside Kenya (referred to as "the foreign currency requirements") shall (if so allowed in the TDS) indicate in the Appendix to Tender the percentage(s) of the Tender Price (excluding Provisional Sums), needed by the Tenderer for the payment of such foreign currency requirements, limited to no more than two foreign currencies.
  - b) The rates of exchange to be used by the Tenderer in arriving at the local currency equivalent and the percentage(s) mentioned in (a) above shall be specified by the Tenderer in the Appendix to Tender and shall be based on the exchange rate provided by the Central Bank of Kenya on the date 30 days prior to the actual date of tender opening. Such exchange rate shall apply for all foreign payments under the Contract.
- 153 Tenderers may be required by the Procuring Entity to justify, to the Procuring Entity's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Schedule of Adjustment Data in the Appendix to Tender are reasonable, in which case a detailed break down of the foreign currency requirements shall be provided by Tenderers.

#### 16.0 Documents Comprising the Technical Proposal

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, insufficient detail to demonstrate the adequacy of the Tenderer's proposal to meet the work's requirements and the completion time.

#### 17.0 Documents Establishing the Eligibility and Qualifications of the Tenderer

- 17.1 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.
- 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.
- 173 If a marg in of preference applies as specified in accordance with ITT 33.1, nation al tenderers, individually or in joint ventures, applying for eligibility for national preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.
- 17.4 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 particular 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.
- The purpose of the information described in ITT 17.4 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.
- 17.6 The Tenderer shall provide further documentary proof, information or authorizations that the Procuring Entity may request in relation to owner ship and control which in formation on any changes to the information which was provided by the tenderer under ITT 6.4. 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.
- 17.7 All information provided by the tenderer 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.

- 178 If a tenderer fails to submit the information required by these requirements, its tender will be rejected. Similarly, ifthe Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tenderer pursuant to these requirements, then the tender will be rejected.
- 179 If information submitted by a tenderer 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 bed is qualified from the procurement process,
  - ii) if the contract has been awarded to that tenderer, the contract award will be set as idepending the outcome of (iii),
  - iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other person shave committed any criminal offence.
- 17.10 If a tenderer submits information pursuant to these requirements that is in complete, in accurate or out-of-date, or attempts to obstruct the verification process, then the consequences ITT 17.8 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 tender.

#### 18.0 Period of Validity of Tenders

- 18.1. 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 22). At ender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.
- 18.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may requestTendererstoextendtheperiodofvalidityoftheirTenders. Therequestandtheresponsesshallbemadein writing. If a Tender Security is requested in accordance with ITT 19, 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 Tendersecurity. A Tenderer granting the requests hall not be required or permitted to modify its Tender.

#### 19.0 Tender Security

- 19.1 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.
- 192 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:
  - I) cash;
  - ii) a bank guarantee;
  - iii) a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority;
  - (iv) a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya, from a reputable source, and an eligible country.
- 193 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 18.2.
- 19.4 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.
- 195 If a Tender Security is specified pursuant to ITT 19.1, 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 non-responsive or a bidder declines to extend tender validity period.
- 196 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.
- 19.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:
  - a) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension there to provided by the Tenderer; or
  - b) if the successful Tenderer fails to:
    - i) signthe Contract in accordance with ITT47; or
    - ii) furnish a Performance Security and if required in the TDS, and any other documents required in the TDS.
- Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA to debars the Tenderer from participating in public procurement as provided in the law.
- 199 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.
- 19.10 A tenderer shall not issue a tender security to guarantee itself.

#### 20.0 Format and Signing of Tender

- 20.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 11 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 13, 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 origin a landthe copies, the original shall prevail.
- 202 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.
- 203 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.
- Incase the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 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

#### 21.0 Sealing and Marking of Tenders

- 21.1 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 a nenvelope or package or container marked "COPIES", all required copies of the Tender; and
  - c) if alternative Tenders are permitted in accordance with ITT 13, 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.
- 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 misplaced or opened prematurely will not be accepted.

#### 22.0 Deadline for Submission of Tenders

- 22.1 Tenders must be received by the Procuring Entity at the address specified in the TDS and no later than the date and timeals ospecified 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.
- The Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders by amending the TenderDocumentsinaccordance with ITT 8, in which case all rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline shall there after be subject to the deadline as extended.

#### 23.0 Late Tenders

The Procuring Entity shall not consider any Tender that arrives after the deadline for submission of tenders, in accordance with ITT 22. 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.

#### 24.0 Withdrawal, Substitution, and Modification of Tenders

- 24.1 A Tenderer may withdraw, substitute, or modify its Tenderafterith as 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 20.3, (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 20 and ITT 21 (except that withdrawals 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 22.
- 24.2 Tenders requested to be withdrawn in accordance with ITT 24.1 shall be returned unopened to the Tenderers.
- 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.

#### 25. Tender Opening

- Except in the cases specified in ITT 23 and ITT 24.2, 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 22.1, shall be as specified in the TDS.
- 252 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.
- 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.
- 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 authorizationtorequest the modification and is readout at Tenderopening.
- 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.
- 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 Bill of Quantities (to be decided on by the tender opening committee) are to be initialed by the members of the tender opening committee attending the opening.
- 25.7 At the Tender Opening, the Procuring Entitys hall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 23.1).
- 258 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 new as required;
  - e) number of pages of each tender document submitted.
- 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 register shall be distributed to all Tenderers.

#### E. EVALUATION AND COMPARISON OF TENDERS

#### 26. Confidentiality

- 26.1 Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderersorany 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 43.
- 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.
- Not withstanding ITT 26.2, 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.

#### 27.0 Clarification of Tenders

- 27.1 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 aresponse. Any clarification submitted by a tenderer that is not in response to a request by the Procuring Entity shallnot 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 31.
- 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.

#### 28.0 Deviations, Reservations, and Omissions

- 28.1 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
- "Omission" is the failure to submit part or all of the information or documentation required in the Tender document.

#### 29.0 Determination of Responsiveness

- **29.1** 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 11.
- 29.2 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;
  - 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;
  - c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsivetenders.
- 293 The Procuring Entity shall examine the technical aspects of the tender submitted in accordance with ITT 16, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.
- 29.4 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.

#### 30.0 Non-material Non-conformities

- **30.1** Provided that a tender is substantially responsive, the Procuring Entity may waive any non-conformities in the tender.
- 30.2 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 of time, 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.
- 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.

#### 31.0 Arithmetical Errors

- 31.1 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.
- 31.2 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, subtotal and total bidpriceshallbe 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
- 313 Tenderers shall be notified of any error detected in their bid during the notification of award.

#### **32.0** Conversion to Single Currency

For evaluation and comparison purposes, the currency(ies) of the Tender shall be converted in to a single currency asspecified in the **TDS**.

#### 33.0 Margin of Preference and Reservations

- 33.1 A margin of preference may be allowed only when the contract is open to international competitive tendering where foreign contractors are expected to participate in the tendering process and where the contract exceeds the value/threshold specified in the Regulations.
- 332 A margin of preference shall not be allowed unless it is specified so in the TDS.
- 333 Contracts procured on basis of international competitive tendering shall not be subject to reservations exclusive to specific groups as provided in ITT 33.4.
- 33.4 Where it is intended to reserve a contract to as pecific group of businesses (these groups are Small and Medium Enterprises, Women Enterprises, Youth Enterprises and Enterprises of persons living with disability, as the case may be), and 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 or firms belonging to the specified group are eligible to tender. No tender shall be reserved to more than one group. If not so stated in the Invitation to Tender and in the Tender documents, the invitation to tender will be open to all interested tenderers.

#### 34.0 Nominated Subcontractors

- 34.1 Unless otherwise stated in the TDS, the Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected/nominated by the Procuring Entity. Incase the ProcuringEntity nominates a subcontractor, the subcontract agreement shall be signed by the Subcontractor and the Procuring Entity. The main contract shall specify the working arrangements between the main contractor and the nominated subcontractor.
- 34.2 Tenderers may propose sub-contracting up to the percentage of total value of contracts or the volume of works as specified in the TDS. The subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.
- 34.3 Domestic 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 so 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 Subcontractorsproposed by the Tenderer may be added to the qualifications of the Tenderer.

#### 35. Evaluation of Tenders

- 35.1 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 Lowest Evaluated Tender in accordance with ITT 40.
- 352 To evaluate a Tender, the Procuring Entity shall consider the following:
  - a) Price adjustment in accordance with ITT 31.1 (iii); excluding provisional sums and contingencies, if any, but including Daywork items, where priced competitively;
  - b) Price adjustment due to discounts offered in accordance with ITT 14.4;
  - c) Converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT 32;
  - d) Price adjustment due to quantifiable non material non-conformities in accordance with ITT 30.3; and
  - e) Any additional evaluation factors specified in the **TDS** and Section III, Evaluation and Qualification Criteria.
- 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.
- Where the tender involves multiple lots or contracts, the tenderer will be allowed to tender for one or more lots (contracts). Each lot or contract will be evaluated in accordance with ITT 35.2. The methodology to determine the lowest evaluated tenderer or tenderers base done lot (contract) or based on a combination of lots (contracts), will be specified in Section III, Evaluation and Qualification Criteria. In the case of multiple lots or contracts, tenderer will be required to prepare the Eligibility and Qualification Criteria Form for each Lot.

#### 36.0 Comparison of tenders

The Procuring Entity shall compare the evaluated costs of all substantially responsive Tenders established in accordance with ITT 35.2 to determine the Tender that has the lowest evaluated cost.

#### 37.0 Abnormally low tenders and abnormally high tenders

#### **Abnormally LowTenders**

- 37.1 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 regards to the Tenderer's ability to perform the Contract for the offered Tender Price or that genuine competition between Tenderersis compromised.
- 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.
- 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.

#### Abnormally high tenders

- 37.4 An abnormally high tender 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.
- Incase of a nab normally high 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 the wrong estimated cost of the contract, the Procuring Entity may accept or not a ccept 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.
- 37.6 If the Procuring Entity determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised, 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.

#### 38.0 Unbalanced and/ or front-loaded tenders

- 38.1 If in the Procuring Entity's opinion, the Tender that is evaluated as the lowest evaluated price is seriously unbalanced and/or frontloaded, 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.
- 382 After the evaluation of the information and detailed price analyses presented by the Tenderer, the Procuring Entity may as appropriate:
  - a) accept the Tender;
  - 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;
  - c) agree on a payment mode that eliminates the inherent risk of the Procuring Entity paying too much for undelivered works;
  - d) reject the Tender,

#### 39.0 Qualifications of the tenderer

- 39.1 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.
- 39.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 17. 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 Sub-contractors if permitted in the Tender document), or any other firm(s) different from the Tenderer.
- 39.3 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 ProcuringEntityshallproceedto 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.

#### 40.0 Lowest evaluated tender

Having compared the evaluated prices of Tenders, the Procuring Entity shall determine the Lowest Evaluated Tender. The Lowest Evaluated Tender is the Tender of the Tenderer that meets the Qualification Criteria and whose Tender has been determined to be:

- a) Mostresponsive to the Tender document; and
- b) the lowest evaluated price.

#### 41.0 Procuring entity's right to accept any tender, and to reject any or all tenders.

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 there by incurring any liability to Tenderers. Incase of annulment, all Tenders submitted and specifically, Tender securities, shall be promptly returned to the Tenderers.

#### F. AWARD OF CONTRACT

#### 42.0 Award criteria

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

#### 43.0 Notice of Intention to Enter into a Contract/Notification of Award

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) instruction son how to request a debriefing and/ or submit a complaint during the stand still period;

#### 44.0 Stand still Period

- **44.1** 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.
- Where a Stand still 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.

#### 45.0 Debriefing by The Procuring Entity

- 45.1 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 43, 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.
- Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending such a debriefing meeting.

#### 46.0 Letter of Award

Prior to the expiry of the Tender Validity Period and upon expiry of the Stand still Period specified in ITT 42.1, upon addressing a complaint that has been filed within the Stand still 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.

#### 47.0 Signing of Contract

- 47.1 Upon the expiry of the fourteen days of the Notification of Intention to enter in to contract and upon the parties meeting their respective statutory requirements, the Procuring Entity shall send the successful Tenderer the Contract Agreement.
- Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to the Procuring Entity.
- The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period.

#### **48.0** Performance Security

- 48.1 Within twenty-one (21) days of the receipt of the Letter of Award 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 38.2 (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.
- **48.2** Failure of the successful Tenderer to submit the above-mentioned Performance Security and otherdocuments 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.
- Performance security shall not be required for contracts estimated to cost less than the amount specified in the Regulations.

#### 49.0 Publication of Procurement Contract

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 readout at Tender opening.

#### 50.0 Procurement related Complaints and Administrative Review

- 50.1 The procedures for making Procurement-related Complaints are as specified in the TDS.
- 50.2 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.

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS		
A. General			
ITT 1.1	The name of the contract is: Proposed completion of hostel Block Phase I Wing 2 for Murang'a University of Technology.		
	The reference number of the Contract is: MUT/T 05/HB PHI W 2/2023/2024		
ITT 2.4	The Information made available on competing firms is as follows: Not Applicable		
ITT 2.4	The firms that provided consulting services for the contract being tendered for are: Public Works, Murang'a County		
ITT 3.1	Maximum number of members in the Joint Venture (JV) shall be: Not Aplicable		
B. Contents of	f Tender Document		
ITT 7.1	(i) The Tenderer will submit any request for clarifications in writing at the Address: Murang'a University of Technology, Kiharu; postal Address, P.O Box 75-10200, Murang'a		
	Emai: tenders@mut.ac.ke and copy to procurement@mut.ac.ke to reach the Procuring Entity not later than 5 (five) days to the Tender Closing date.		
	(ii) The Procuring Entity shall publish its response at the website <a href="www.mut.ac.ke">www.mut.ac.ke</a> or <a href="www.mut.ac.ke">www.mut.ac.ke</a> or <a href="www.mut.ac.ke">www.mut.ac.ke</a> or <a href="www.tenders.go.ke">www.tenders.go.ke</a>		
ITT 7.2	(A) A pre-arranged pretender site visit <i>shall</i> take place at the following date, time and place: On the 29 <sup>th</sup> August 2023, at 10.00 AM at the Murang'a University of Technology in the University Confrence Hall.		
	(B) Pre-Tender meeting shall take place at the following date, time and place: On the 29th August 2023, at 10.00 AM at the Murang'a University of Technology in the University Confrence Hall.		
ITT 9.1 For Clarification of Tender purposes, for obtaining further information and for purch documents, the Procuring Entity's address is:			
	Procurement Office,		
	Murang'a University of Technology Main Campus, procurement Department opposite the Old Administration Block during normal working hours [0900 to 1500 hours].		
	P.O Box 75-10200, Murang'a, Kenya Procurement Department: Mobile: 0706-249 039, Email: tenders@mut.ac.ke or procurement@mut.ac.ke		
	paration of Tenders		
ITT 13.1	Alternative Tenders <b>shall not</b> be considered.		
ITT 13.2	Alternative times for completion shall not be permitted.		
ITT 13.4	Alternative technical solutions shall be permitted for the following parts of the Works: Electrical Works Installation and Mechanical Engineering Installations.		
ITT 14.5	The prices quoted by the Tenderer shall be <b>Shall be fixed</b> .		

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS				
ITT 15.2 (a)	Foreign currency requirements are not allowed.				
ITT 18.1	The Tender validity period shall be <b>150 (One Fifty)</b> days.				
111 10.1	The Tender variates period shall be 130 (one Phry) days.				
ITT 18.3	(a) The Number of days beyond the expiry of the initial tender validity period will be <b>30 (Thirty)</b> days.				
	(b) The Tender price shall be adjusted by the following percentages of the tender price:				
	(i) By 7.90 % of the local currency portion of the Contract price adjusted to reflect local inflation during the period of extension, and				
	(ii) By 3.45% the foreign currency portion of the Contract price adjusted to reflect the international inflation during the period of extension.				
ITT 19.1	Tender shall provide a Tender Security The type of Tender security shall be in the amount of Kenya shillings Seven Hundred Thousand only (Kshs. 700,000.00)				
ITT 20.1	In addition to the original of the Tender, the number of copies is: one				
ITT 20.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of: <b>Power of Attorney</b>				
D. Submission	and Opening of Tenders				
ITT 22.1	(A) For <u>Tender submission purposes</u> only, the Procuring Entity's address is:				
	(1) Procurement Department,				
	Murang'a University of Technology Main Campus, procurement Department opposite the Old Administration Block during normal working hours [0900 to 1500 hours].				
	P.O Box 75-10200, Murang'a, Kenya Procurement Department: Phone: 0706-249 039, Email: tenders@mut.ac.ke or				
	(2) Date and time for submission of Tenders; on or before 7th September, 2023 at 10.00 A.M				
	(3) Tenderers <b>shall not submit</b> tenders electronically.				
ITT 25.1	The Tender opening shall take place at the time and the address for Opening of Tenders is provided below:				
	(1) Procurement Department,				
	Murang'a Universty of Technology Main Campus in the Post Graduate Seminar Room6, next to the Old Administration Block.				
	Murang'a University of Technology Main Campus,				
	P.O Box 75-10200, Murang'a, Kenya				
	(2) State date and time of tender opening on or before 7th September, 2023 at 10.00 A.M				
ITT 25.1	Tenderers are not allowed to submit Tenders electronically.				
E. Evaluation	, and Comparison of Tenders				
ITT 30.3	The adjustment shall be based on the <b>average</b> price of the item or component as quoted in other				

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS		
	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.		
TT 32.1	The currency that shall be used for Tender evaluation and comparison purposes only to convert at the selling exchange rate all Tender prices expressed in various currencies into a single currency is: <b>KSHs.</b>		
	The source of exchange rate shall be: The Central bank of Kenya (mean rate)		
	The date for the exchange rate shall be: the date for Submission of the Tenders.		
ITT 33.2	A margin of preference <b>shall</b> apply.		
ITT 33.4	The invitation to tender is extended to the following group that qualify for Reservations;  Not Applicable		
ITT 34.1	At this time, the Procuring Entity <b>does not intend</b> to execute certain specific parts of the Works by subcontractors selected in advance.		
ITT 34.2	Contractor's may propose subcontracting: Maximum percentage of subcontracting permitted is: 40% 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.		
ITT 34.3	The parts of the Works for which the Procuring Entity permits Tenderers to propose Specialized Subcontractors are designated as follows:  1) Electrical Engineering Installations 2) Mechanical Engineering Installations		
	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.		
ITT 35.2 (e)	Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria.		
ITT 48.1	Other documents required in addition to the Performance Security are a statement of work methods, equipment, personnel, Work Programme and evidence of Subcontractor's undertaking that they will execute the Subcontract agreement with the Main Contractor.		
ITT 50.1	The procedures for making a Procurement-related Complaint are detailed in the "Notice of Intention to Award the Contract" herein and are also available from the PPRA Website <a href="www.ppra.go.ke">www.ppra.go.ke</a> or email <a href="complaints@ppra.go.ke">complaints@ppra.go.ke</a> .		
	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:		
	For the attention: Prof. Dickson Nyariki, Ph.D.		
	Title/position: Vice Chancellor		
	Procuring Entity: Murang'a University of Technology		
	Email address: <u>info@mut.ac.ke</u> and copy to <u>vc@mut.ac.ke</u>		

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS		
	In summary, a Procurement-related Complaint may challenge any of the following (among others):		
(i) the terms of the Tender Documents; and			
	(ii) the Procuring Entity's decision to award the contract.		

#### SECTION III - EVALUATION AND QUALIFICATION CRITERIA

#### 10 GENERAL PROVISIONS

- 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.
- Wherever a Tenderer is required to state a monetary amount, Tenderers should indicate the Kenya Shilling equivalent using the rate of exchange determined as follows:
  - a) For construction turnover or financial data required for each year Exchange rate prevailing on the last day of the respective calendar year (in which the amount for that year is to be converted) was originally established.
  - b) Value of single contract Exchange rate prevailing on the date of the contract signature.
  - (c) Exchange rates shall be taken from the publicly available source identified in the ITT 14.3. Any error in determining the exchange rates in the Tender may be corrected by the Procuring Entity.

#### 13 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 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 shall be selected for award of contract.

#### 2.0 PRELIMINARY EXAMINATION FOR DETERMINATION OF

#### **RESPONSIVENESS 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 mandatory requirements in the ITT, and that the tender is complete in all aspects in meeting the requirements provided for in the preliminary evaluation criteria outlined below. 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 non-responsive and will not be considered further.

# Tenders shall be considered responsive in the Preliminary Evaluation by providing the following mandatory requirements:

MR1) Registration under the Companies Act Cap. 486 Certified Copy of Certificate of Incorporation / Registration. This should include change of Particulars Where applicable.

- MR2) Provide CR12 issued within the last **Six (6) months** before tender submission date and national identity cards of all directors.
- MR3) Valid Tax Compliance Certificate issued by Kenya Revenue Authority. (All domestic subcontractors shall be required to meet this requirement)
- MR4) (i) A copy of Valid National Construction Authority (NCA) Registration Certificate Building Works Category (NCA 4 and above)
  - (ii) A copy of Current National Construction Authority (NCA) Annual License for Building Works
- MR5) (i) A copy of Valid National Construction Authority (NCA) Registration Certificate Electrical Works Category (NCA 4 and above)
  - (ii) A copy of Current National Construction Authority (NCA) Annual License for Electrical Works
- MR6) (i) A copy of Valid National Construction Authority (NCA) Registration Certificate Mechanical Works Category (NCA 4 and above)
  - (ii) A copy of Current National Construction Authority (NCA) Annual License for Mechanical Works
- MR7) Valid copy of business permit /business license with relevant County Government.

  (All sub-contractors shall be required to meet this requirement)

  (All Certified by a commissioner of Oaths)
- MR8) Work place registration certificate.
- MR9) Tender security of tender sum amount as shown in the TDS, valid for 30 days after expiry of the tender validity period.
- MR10) Power of Attorney authorizing the legal representative to commit the tenderer. MR11) Duly filled, signed and stamped Form of Tender
- MR12) Duly filled, signed and stamped Confidential Business Questionnaire
- MR13) Duly filled, signed and stamped Self-Declaration Form SD1 (Public Procurement and Disposal Act Non-Debarment Form
- MR14) Duly filled, signed and stamped Self- Declaration Form SD2(Anti-corruption pledge)
- MR15) Duly filled, signed, and stamped Certificate of Independent Tender Determination
- MR16) Must attach details of the Litigation History of the company (both court and arbitration cases).
- MR17) Certified and signed audited accounts for the years 2020, 2021 and 2022. For purpose of the Evaluation the Accounts are considered to be certified if issued by a registered CPA

firm recognized by ICPAK and signed by the Companies Directors.

- MR18) Original bank statements for the last one year certified by the respective bank(s).
- MR19) Certified copy of NSSF compliance certificate (certified by the issuer).
- MR20) Certified copy of NHIF compliance certificate (certified by the issuer).
- MR21) Two copies of tender document (original and copy)
- MR22) Tenders submitted should be tape binded. The bid document "Original" and "Copies" must be sequentially paginated /serialized to ensure compliance with section 78(5) of Public procurement and Assets Disposal Act, 2015. (From the first page In format 1,2,3,4 to the last page). Spiral binding & use of box files will not be accepted.
- MR23) Attendance of a compulsory pre-bid meeting. (duly filled, signed, and stamped site visit form attached for reference).

# 2.1 TECHNICAL EVALUATION (100 Marks)

Technical evaluation shall be carried out only if the tender is determined to be responsive at the preliminary examination. Bidder must demonstrate conformance to all the technical specifications and requirements based on compliance with the technical specificationsset out in Template Attached.

#### **Detailed Technical Plan Attached.**

To be considered responsive and qualify for financial evaluation, tenders must score minimum of 70% on the following technical criteria:

Item	Description	Point	Max.	Point
		Scored		
1.	No of Years in Business			5
	a) 1-5 Years	3		
	b) 6-10 Years	4		
	c) Over 10 Years	5		
2.	Key Personnel (Attach evidence)			15
	Contract / Project Manager (Degree Holder):		7	
a)	At least 1 No. Degree holder in relevant technical field			
	With over 10 years relevant experience 7			
	○ With 5 – 9 years relevant experience 5			
	With under 5 years relevant experience 2			
	Site Agent / Foreman (Degree / Diploma Holder):		5	-
b)	At least 1 No. Degree / Diploma holder in relevant			
	technical field			
	With over 10 years relevant experience 5			
	○ With 5 – 9 years relevant experience 3			
	With under 5 years relevant experience 1			
c)	Site Artisans (Diploma / Certificate / Grade Test		3	
	Holders):			
	At least 3 No artisan (Diploma / Certificate / Grade Test			
	in relevant Engineering field)			
	o Three Artisans with relevant experience 3			
	Two Artisans with relevant experience 2			
	One Artisan with relevant experience 1			
3.	Contract Ongoing/completed in the last five (5) years			15
	(The most significant 3 No. Projects to be be evaluated)			
ļ	<u> </u>	<u> </u>		

	Projects of similar nature, complexity and magnitude		
	5 per Project		
	o Projects of value 2/3 of the value of the Project 2		
	per Project		
	o Projects of value 1/3 of the value of the Project 1		
	per Project		
	No completed project of similar nature 0		
4.	Schedule of contractors equipment relevant for the		15
	project (proof or evidence of ownership required)		
	Heavy commercial equipment (4 equipment to be		
	evaluated) 8		
	o Site vehicles: Trucks, tippers, pickups and the like (4		
	equipment to be evaluated) 4		
	Other site equipment: concrete mixers, vibrators,		
	pumps and the like (6 equipment to be evaluated) 3		
5.	Financial Capability		15
	Audited financial report (last three (3) years)		
	o Turn over greater or equal to 3 times the cost of the	5	
	project 5		
	o Turn over greater or equal to 1.5 times the cost of the		
	project 3		
	o Turn over greater or equal to the cost of the project - 2		
	o Turn over below the cost of the project1		
6.	Evidence of Financial Resources (cash in hand / bank,	10	7
	lines of credit, over draft facility etc )		
	Has financial resources equal or above the cost of the		
	project 10		
	Has financial resources equal to half the cost of the		
	project7		
	O Has financial resources less than half the cost of the		
	project2		
<u>7. Pr</u>	ogram of Works		5
			1

Provide a detailed schedule of activities		3.0
TOTAL	70	32
		33

The score will be calculated as a percentage i.e.  $a / 70 \times 100\%$ , (where "a" is the bidders score).

Only bidders who score 70 % and above shall be considered for further evaluation.

- Price evaluation: in addition to the criteria listed in ITT 35.2 (a) (d) the following criteria shall apply:
  - (i) Alternative Completion Times, if permitted under ITT13.2, will be evaluated as follows:

    The rate for the Liquidated and ascertained damages allowed herein shall be applied against the difference in Completion Times to determine the more responsive tender.
  - (ii) Alternative Technical Solutions for specified parts of the Works, if permitted under ITT 13.4, will be evaluated as follows: the Alternative Technical Solutions offer savings in the construction period and/or the construction costs.
  - (iii) Other Criteria; if permitted under ITT 35.2(j):

**Not Applicable** 

#### 4.0 MULTIPLE CONTRACTS

4.1 Multiple contracts will be permitted in accordance with ITT 35.4. Tenderers are evaluated on basis of Lots and a lowest evaluated tenderer identified for each Lot. The Multiple Contract does not apply.

#### 60 MARGIN OF PREFERENCE

- 61 If the TDS so specifies, the Procuring Entity will grant a margin of preference of fifteen percent (15%) to be loaded on evaluated prices of the foreign tenderers, where the percentage of share holding of Kenyan citizensis less than fifty- one percent (51%).
- 62 Contractors 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 particular contractor or group of contractors qualifies for a margin of preference.
- After Tenders have been received and reviewed by the Procuring Entity, responsive Tenders shall be assessed to ascertain their percentage of shareholding of Kenyan citizens. Responsive tenders shall be classified into the following groups:
  - i) Group A: tenders offered by Kenyan Contractors and other Tenderers where Kenyan citizens hold shares of over fifty one percent (51%).
  - ii) *Group B*: tenders offered by foreign Contractors and other Tenderers where Kenyan citizens hold shares of less than fifty one percent (51%).
- All evaluated tenders in each group shall, as a first evaluation step, be compared to determine the lowest tender, and the lowest evaluated tender in each group shall be further compared with each other. If, as a result of this comparison, a tender from Group A is the lowest, it shall be selected for the award of contract. If a tender from Group B is the lowest, an amount equal to the percentage indicated in Item 6.1 of the respective tender price, including unconditional discounts and excluding provisional sums and the cost of day works, if any, shall be added to the evaluated price offered in each tender from Group B. All tenders shall then be compared using new prices with added prices to Group B and the lowest evaluated tender from Group A. If the tender from Group A is still the lowest tender, it shall be selected foraward. If not, the lowest evaluated tender from Group B based on the first evaluation price shall be selected.

#### 7. Post qualification and Contract ward (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) Incase 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 cash flow sufficient for a Project of this magnitude.
- ii) Minimum average annual construction turnover of the projects equivalent calculated as total certified payments received for contracts in progress and/or completed within the last **five (5)** years.

**Not Applicable** 

iv) 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 five 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 Five years. All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or on going unde rits 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.

# **QUALIFICATION FORM\***

1	2	3	4	5
tem No.	Qualification Subject	Qualification Requirement	Document To be Completed by Tenderer	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 Kenya Revenue Authority in accordance with ITT 3.14.	Attachment	
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 3.7	Form of Tender	
5	State- owned Enterprise	Meets conditions of ITT 3.8	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 <sup>st</sup> January 2018.	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 1st January 2018.	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 equivalent for the subject contract(s) net of the Tenderer's other commitments.	Form $FIN - 3.1$ , with attachments	
		(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.		

	1	2	3	4	5
35	Item No.	Qualification Subject	Qualification Requirement	Document To be Completed by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
			(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 <b>three years</b> years shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability.		
	12	Average Annual Construction Turnover	Minimum average annual construction turnover calculated as total certified payments received for contracts in progress and/or completed within the last <b>five</b> years, divided by <b>three</b> 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 <b>five years</b> , starting <b>1</b> <sup>st</sup> January 2018.	Form EXP – 4.1	
	14	Specific Construction & Contract Management Experience	A minimum number of 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 2018 and tender submission deadline.	Form EXP 4.2(a)	

## **SECTION IV - TENDERING FORMS**

# QUALIFICATION FORMS

## 1. FOREIGN TENDERERS 40% RULE

Pursuant to ITT 3.9, a foreign tenderer must complete this form to demonstrate that the tender fulfils this condition.

ITEM	Description of Work Item	Describe location of Source	COST in K. shillings	Comments, if any
A	Local Labor			
1				
2				
3 4				
4				
5				
В	Sub contracts from Local source	es		
1				
2				
3				
4				
5				
С	Local materials			
1				
2				
3				
4				
5				
D	Use of Local Plant and Equipme	ent		
1				
2				
3				
4				
5				
Е	Add any other items			
1				
2				
3				
4				
5				
6				
	TOTAL COST LOCAL CONTI	ENT	XXXXX	
	PERCENTAGE OF CONTRAC			

# 2. 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 fo ralternative equipment proposed by the Tenderer.

Item of equipme	ent			
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			
	☐ Owned ☐ Rented ☐ Leased	☐ 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 agreem	ents specific to the project

# 3. <u>FORM PER -1</u>

## 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: Contractor's Representative			
	Name of candidate:			
	<b>Duration of</b>	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
ļ	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		
2.	Title of position: [	J		
	Name of candidate:			
	<b>Duration of</b>	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
ļ	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		
3.	Title of position: [	J		
	Name of candidate:			
	<b>Duration of</b>	[insert the whole period (start and end dates) for which this position will be		
ļ	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		
4.	Title of position: []			
ļ	Name of candidate:			
	<b>Duration of</b>	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		
5.	Title of position: [insert title]			
	Name of candidate			
	<b>Duration of</b>	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		

# 4. **FORM PER - 2:**

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

Name of Tenderer			

Position [#1]:	[title of position from Form PE	R-1]		
Personnel information	Name:	Date of birth:		
	Address:	E-mail:		
	Professional qualifications:			
	Academic qualifications:			
	Language proficiency: [language and levels of speaking, reading and writing skills]			
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
[main project details]	[role and responsibilities on the project]	[time in role]	[describe the experience relevant to this position]

#### **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:	[insert period (start and end dates) for which this
	Contractor's Representative or Key Personnel is available
	to work on this contract]
Time commitment:	[insert period (start and end dates) for which this
	Contractor's Representative or Key Personnel is available
	to work on this contract]

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):	

# 5. TENDERERS QUALIFICATION WITHOUT PREQUALIFICATION

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.

#### 51 FORM ELI -1.1

Tenderer InformationForm
Date:
ITT No. and title:
Tenderer's name
In case of Joint Venture (JV), name of each member:
Tenderer's actual or intended country of registration:
[indicate country of Constitution]
[indicate country of Constitution] 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
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
☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.5
□ In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents establishing:
Legal and financial autonomy
Operation under commercial law
1. Establishing that the Tenderer is not under the supervision of the Procuring Entity
2. Included are the organizational chart and a list of Board of Directors

#### 5.2 FORM ELI -1.2

# **Tenderer's JV Information Form** (to be completed for each member of Tenderer's JV) ITT No. andtitle: 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 ☐ 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. ☐ 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 3.5.

2. Included are the organizational chart and a list of Board of Directors.

## 53 <u>FORM CON -2</u>

□ 2.4. □

indicated below.

# Historical Contract Non-Performance, Pending Litigation and Litigation History

Tenderer	's Name:				
Date:					
JV Mem	ber's Nam	e	<del></del>		
ITT No. a	and title: _				
NI D	C 1.C		1	'4 C .' III F 1 .' 10 1'C .' .	a : . :
				rith Section III, Evaluation and Qualification Q	
	contract notion Criter			occur since 1st January 2018 specified in Section	on III, Evaluation and
	Contract(s	) not perfo	rmed since 1s	t January 2018 specified in Section III, Evalua	ation and Qualification Criteria
requirem	· .	) not perie	inica since i	January 2010 Specified in Section III, Evalua	ation and Quamireation Criteria,
	Contract(s	) withdray	n since 1 <sup>st</sup> Jar	nuary 2018 specified in Section III, Evaluation	and Oualification Criteria.
requirem		,		,	,
Year			Contract Id	entification	Total Contract Amount
	portion				(current value, currency,
	contrac	et			exchange rate and Kenya Shilling equivalent)
[insert	[insert o	amount	Contract Idea	ntification: [indicate complete contract name/	
year]	and per	centage]		any other identification]	,
	1	0,1		curing Entity: [insert full name]	
			Address of P	rocuring Entity: [insert street/city/country]	
			Reason(s) for	r nonperformance: [indicate main reason(s)]	
				on III, Evaluation and Qualification Criteria	
				e with Section III, Evaluation and Qualificati	
		igation in a	eccordance wit	th Section III, Evaluation and Qualification Cr.	iteria, Sub-Factor 2.3 as
indicated	l below.				
Year o	of.	Amount	in dispute	Contract Identification	Total Contract Amount
disput		(currenc		Contract Identification	(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:	
		<u> </u>	1 '4 6	Status of dispute: Section III. Evaluation and Qualification Crit	<u> </u>

No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor

Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
[insert   [year]	. 0,	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]

Include details relating to potential bid-rigging practices such as previous occasions where tenders were withdrawn, joint bids with competitors, subcontracting work to unsuccessful tenderers, etc.

# 5.4 **FORM FIN – 3.1:**

# Financial Situation and Performance

Tenderer's Name:	
Date:	
JV Member's Name	
ITT No. and title:	

## 5.4.1. Financial Data

Type of Financial information	Historic in	nformation for	r previous	years,			
in	(amount i	(					
(currency)	(amount in currency, currency, exchange rate*, USD equivalent)						
					L		
	Year 1	Year 2	Year 3	Year 4	Year 5		
Statement of Financial Position (Info	ormation from	m Balance She	eet)				
Total Assets (TA)							
Total Liabilities (TL)							
Total Equity/Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
Working Capital (WC)							
Information from Income Statement	t						
Total Revenue (TR)							
Profits Before Taxes (PBT)							
Cash Flow Information							
Cash Flow from Operating Activities	es						
*D C ( ITT 15 C (1 1							

<sup>\*</sup>Refer to ITT 15 for the exchange rate

#### **5.4.2** 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		

#### 5.4.3 Financial documents

The Tenderer and its parties shall provide copies of financial statements for **three** 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.
- $\square$  Attached are copies of financial statements<sup>1</sup> for the **three years** required above; and complying with the requirements.

<sup>&</sup>lt;sup>1</sup> 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.

# 5.5 **FORM FIN – 3.2:**

# **Average Annual Construction Turnover**

Tenderer's Name:	
Date:	_
JV Member's Name	
ITT No. and title:	

	Annual turnover da	ata (construction only)	
Year	Amount	Exchange rate	Kenya Shilling equivalent
	Currency		
[indicate year]	[insert amount and indicate		
	currency]		
Average			
Annual			
Construction			
Turnover *			

<sup>\*</sup> See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

## 5.6 **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

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

## 5.7 **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.

No.	Contract Commitmen  Name of  Contract	Procuring Entity's Contact Address, Tel,	Value of Outstanding Work [Current Kenya Shilling/month	Estimated Completion Date	Average Monthly Invoicing Over Last Six Months [Kenya Shilling /month)]
1			Equivalent]		/month)j
2					
3					
5					

# 5.8 **FORM EXP - 4.1**

# **General Construction Experience**

Date: JV Member	er's Name		
Page		_ofpages	
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:	

# 5.9 **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 □	Member in JV □	Management Contractor □	Sub- contractor □
Total Contract Amount If member in a JV or sub-contractor, specify participation in total Contract amount			Kenya Shilling	
Procuring Entity's Name:				
Address: Telephone/fax number E-mail:				
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 □	Member in JV □	Management Contractor □	Sub- contractor
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:				

# 5.9 **FORM EXP - 4.2 (a) (cont.)**

# **Specific Construction and Contract Management Experience (cont.)**

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	

# 5.10 **FORM EXP - 4.2(b)**

# **Construction Experience in Key Activities**

Tenderer's Name:				
Date:				
Tenderer's JV Member Name:				
Sub-contractor's Name <sup>2</sup> (as per ITT 34):				
ITT No. and title:				
All Sub-contractors for key activities mu Evaluation and Qualification Criteria, S		ne information	in this form as	per ITT 34 and
1. Key Activity No One: _				
	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor	Member in JV □	Management Contractor □	Sub-contractor
Total Contract Amount			Kenya Shillin	ıg
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity rthe contract (i)	in Percentag participat (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:				
	1			

<sup>&</sup>lt;sup>2</sup> 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**

#### 6. **FORM OF TENDER**

# (Amended and issued pursuant to PPRA CIRCULAR No. 02/2022)

#### **INSTRUCTIONS TO TENDERERS**

- All italicized text is to help the Tenderer in preparing this form. i)
- The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address. Tenderers are reminded that this is a mandatory requirement.
- F iii)

	lerer must complete and sign CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF CLARATION FORMS OF THE TENDERER as listed under (xxii) below.
Date	e of this Tender submission:[insert date (as day, month and year) of Tender submission] Tender
Nam	ne and Identification:[insert identification] Alternative
No.:.	[insert identification No if this is a Tender for an alternative]
To: .	[Insert complete name of Procuring Entity]
for	te of this Tender submission: [insert date (as day, month and year) of Tender submission] Request Tender No.: [insert identification] Name and description of Tender [Insert as per ITT) Alternative No.: sert identification No if this is a Tender for an alternative]
To	: [insert complete name of Procuring Entity]
Dea	ar 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 <sup>3</sup> of Kenya Shillings [[Amount in figures] Kenya Shillings [amount in words]
	The above amount includes foreign currency <sup>4</sup> amount (s) of [state figure or a percentage and currency] [figures]
2.	We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Architect 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 adhereby this tender until[Insert date], and it shall remain binding upon us and may be accepted at any time before that date.
4.	We understand that you are not bound to accept the lowest or any tender you may receive.
5.	We, the under signed, further declare that:
	i) No reservations: We have examined and have no reservations to the tender document, including Addenda issuedinaccordance with ITT 28;
	ii) Eligibility: We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3

 $<sup>^{3}</sup>$  This sum should be carried forward from the Summary of the Bills of Quantities.

<sup>&</sup>lt;sup>4</sup> The percentage quoted above should not include provisional sums, and not more than two foreign currencies are allowed.

- iii) <u>Tender Securing Declaration</u>: 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) <u>Conformity</u>: 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) <u>Tender Price:</u> 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, incase of one lot: Total priceis: [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) <u>Total price of all lots</u> (sum of all lots) [insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies];
- vii) <u>Discounts:</u> 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) <u>Tender Validity Period</u>: 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) <u>Performance Security:</u> If our Tender is accepted, we commit to obtain Performance Security in accordance with the Tendering document;
- xii) One Tender Per Tender: Weare 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 sub-contractor, and meet the requirements of ITT 3.4, other than alternative Tenders submitted in accordance with ITT 13.3;
- xiii) <u>Suspension and Debarment</u>: We, along with any of our subcontractors, suppliers, Engineer, 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) <u>State-owned enterprise or institution:</u> [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 ITT3.8];
- 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

- xvi) <u>Binding Contract:</u> We understand that this Tender, together with your written acceptance there of 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) <u>Fraud and Corruption:</u> We here by certify that we have taken steps to ensure that no personacting for us or on our behalf engages in any type of Fraud and Corruption; and
- xix) <u>Collusive practices:</u> 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.
- 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) **Beneficial Ownership Information:** We commit to provide to the procuring entity the Beneficial Ownership Information in conformity with the Beneficial Ownership Disclosure Form upon receipt of notification of intention to enter into a contract in the event we are the successful tenderer in this subject procurement proceeding.
- xxii) We, the Tenderer, have duly completed, signed and stamped the following Forms as part of our Tender:
  - a) Tenderer's Eligibility; Confidential Business Questionnaire to establish we are no tin any conflict to interest.
  - (b) Certificate of Independent Tender Determination to declare that we completed the tender without colluding with other tenderers.
  - (a) 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	of signing] day of [insert month], [insert year]	
Datesigned	dayof	

#### Notes

<sup>\*</sup> 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 in structed to complete the particulars required in this Form, *one form for each entity if Tender is a JV*. Tenderer isfurtherreminded that it is an offence to give false information on this Form.

#### (a) Tenderer'sdetails

	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> <li>Country</li> <li>City</li> <li>Location</li> <li>Building</li> <li>Floor</li> <li>Postal Address</li> <li>Name and email of contact person.</li> </ol>
6	Current Trade License Registration Number and Expiring date	•
7	Name, country and full address (postal and physical addresses, email, and telephone number) of Registering Body/Agency	
8	Description of Nature of Business  Maximum value of business which the	
	Tenderer handles.	
10	State if Tenders Company is listed in stock exchange, give name and full address (postal and physical addresses, email, and telephone number) of state which stock exchange	

#### **General and Specific Details**

**(b)** 

Name in full	Age	

Nationality Country of Origin Citizenship

(c) Partnership, provide the following details.

**Sole Proprietor,** provide the following details.

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

<b>(b)</b>	Registered Company, provide the following details.	

I)	Private or public Company	
----	---------------------------	--

	al Kenya Shillings (E Kenya Shillings (Equ		/				
	Give details of Direct	,				•••	
Names o	f Director	Nati	onality	Citizensh	ip	% Shares owned	
					•		
i) A	osure of inter re there any person/p lationship in this firm yes, provide details	persons in n? Yes/N	Murang'a Un	iversity of		Entity.  gy who has/have an in	terest
Names o	f Person		Designation i		Intere Tende	st or Relationship wi	th
					Tonac		
Conflic Type of C	t of interest disclose onflict	ure	Disclosure YES OR NO	If YES pr Tenderer		ils of the relationship w	ith
controls,	is directly or indirect is controlled by or is control with another	under					
Tenderer	receives or has receit or indirect subsidy						
Tenderer	has the same legal						
-	ative as another tend						
another to	as a relationship with enderer, directly or th third parties, that put	nrough					
position to	o influence the tende enderer, or influence	er of the					
	of the Procuring Ent this tendering proce						
	e Tenderer's affiliate						
participat	ed as a consultant in	the					
	on of the design or te						
	ions of the works the	at are					
	et of the tender. would be providing	goods					
	on-consulting service						
	g services during						
implemen	ntation of the contrac						
	in this Tender Docum						
	r has a close busines	s or					
	elationship with a onal staff of the Proc	uring					
	ho are directly or inc						
	in the preparation o						

State the nominal and issued capital of the Company\_\_\_\_\_

	Type of Conflict	Disclosure	If YES provide details of the relationship with
		YES OR NO	Tenderer
	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 the 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.		

~			, .	0				
	Δ	101	п	n	ca	tı	•	n
•	v.		ш		La.		₹,	

On behalf of the Tenderer, I certify that the information given above is complete, current and accurate as a submission.		
Full Name		
Titleor Designation		
(Signature)	(Date)	

# b) <u>CERTIFICATE OF INDEPENDENT TENDER DETERMINATION</u>

		ndersigned, in submitting the accompanying Letter of Tender to the Mu	[Name and number of tender] in
resp	onso	e to the request for tenders made by: ne following statements that I certify to be true and complete in every re-	[Name of Tenderer] do hereby espect:
Icer	tify,	, on behalf of	[NameofTenderer]that:
1.	I ha	ave read and I understand the contents of this Certificate;	
2.		nderstand that the Tender will be disqualified if this Certificate is found pect;	not to be true and complete in every
3.		m the authorized representative of the Tenderer with authority to sign the nder on behalf of the Tenderer;	his Certificate, and to submit the
4.		r the purposes of this Certificate and the Tender, I understand that the wlividual or organization, other than the Tenderer, whether or not affiliate	
		Has been requested to submit a Tender in response to this request for Could potentially submit a tender in response to this request for tender abilities or experience;	
5.	The	eTenderer discloses that [check one of the following, as applicable]:	
	a)	The Tenderer has arrived at the Tender independently from, and with agreement or arrangement with, any competitor;	out consultation, communication,
	b)	the Tenderer has entered into consultations, communications, agreemed competitors regarding this request for tenders, and the Tenderer discomplete details thereof, including the names of the competitors and consultations, communications, agreements or arrangements;	scloses, in the attached document(s),
6.		particular, without limiting the generality of paragraphs (5)(a) or(5)(b) a mmunication, agreement or arrangement with any competitor regarding	
			the request for Tenders; except as
7.	reg for	addition, there has been no consultation, communication, agreement garding the quality, quantity, specifications or delivery particulars of the tenders relates, except as specifically authorized by the procuring resuant toparagraph(5)(b) above;	works or services to which this request
8.	Thetermsofthe 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, whichevercomesfirst, unless otherwise required byl aw or as specifically disclosed pursuant to paragraph (5)(b) above.		g, or of the awarding of the Contract,
Nan	ne		
Titl	e		
Dat	e		

[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.

of	in the Republic of
1.	THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Direct or of
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 here in above is true to the best of my knowledge, information and belief.
	(Title) (Signature) (Date)
	Bidder Official Stamp

## FORM SD2

# SELF DECLARATION THAT THE PERSON/TENDERER WILL NOT ENGAGE IN ANY CORRUPT OR FRAUDULENT PRACTICE.

1.	THAT I am the Chief Executive/Managing Director/Principal Officer/Director of		
2.	THAT theafore said Bidder, its servants and/oragents/subcontractors will not engage in any corrupt or fraudule practice and has not been requested to pay any inducement to any member of the Board, Management, St and/or employees and/or agents of		
<i>3</i> .	THAT the aforesaid Bidder, its servants and/or agents /subcontractors have not offered any inducement to any member of the Board, Management, Staff and/or employees and/or agents of		
4.	THAT the aforesaid Bidder will not engage /has not engaged in any corrosive practice with other bidders participating in the subject tender		
5.	THAT what is deponed to here in above is true to the best of my knowledge information and belief.		
	(Title) (Signature) (Date)		
	Bidder's 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 Procurementand Asset Disposal and my responsibilities under the Code.
I do here by 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
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

1.1 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.

#### 2. Requirements

- 21 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.
- 22 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 as set 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 subcontract or for the tender to whom was awarded contract, or a member of the group of tenderers 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 sub section (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.
- 3. 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 setf orth 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;
  - "fraudulent practice" is any act or omission, including is representation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
  - "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; "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;
  - iv) "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 processorthe 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 award 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 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 inspect<sup>2</sup> 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.

For the avoidance of doubt, a party's in eligibility to be awarded a contract shall includee, 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.

<sup>&</sup>lt;sup>2</sup> 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, suc has 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 copyor electronic format) deemed relevant for th einvestigation/audit, and making copies there of 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]

	neficiary:quest forTenders No:
Dat	te:
TE	NDER GUARANTEE No.:
	arantor:
1.	We have been informed that(here inafter called "the Applicant") has submitted or will submit to the Beneficiary its Tender (here inafter called" the Tender") for the execution ofunder 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 onor 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]**

TEN	DER GUARANTEE No.:	
1.		tenderer] (hereinafter called "the tenderer") has submitted its tender dated ader] for the
2.	having our registered office at . University Technology (hereinaft and guarantee amount) for which	resents that WE
	Sealed with the Common Seal of	the said Guarantor thisday of 20
3.	NOW, THEREFORE, THE CO	NDITION OF THIS OBLIGATION is such that if the Applicant:
		during the period of Tender validity set forth in the Principal's Letter of dity Period"), or any extension thereto provided by the Principal; or
	Validity Period or any exagreement; or (ii) has failed	the acceptance of its Tender by the Procuring Entity during the Tender tension thereto provided by the Principal; (i) failed to execute the Contract ed to furnish the Performance Security, in accordance with the Instructions he Procuring Entity's Tendering document.
	receipt of the Procuring Entity's its demand, provided that in its	immediately pay to the Procuring Entity up to the above amount upon first written demand, without the Procuring Entity having to substantiate demand the Procuring Entity shall state that the demand arises from the events, specifying which event(s) has occurred.
4.	4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of cope the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant of the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notified to the Applicant of the results of the Tendering process; or (ii) twenty-eight days after the end Tender Validity Period.	
5.	Consequently, any demand for pa above on or before that date.	ayment under this guarantee must be received by us at the office indicated
	[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.

# FORM OF TENDER - SECURING DECLARATION

[Th	he Bidder shall complete this Form in accordance with the instructions indicated]
Da	te:
Teı	nder No.:[insert number of tendering process]
To	:
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.
Sig	gned:
sol	e proprietor, etc.)
Na	me:
bid	for and on behalf of: [insert complete name of Tenderer]
Da	ated on

# **Appendix to Tender**

# **Schedule of Currency requirements**

Summary of currencies of the Tender for	·	[insert name o	f 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 III - THE CONDITIONS OF CONTRACT AND CONTRACT

## SECTION VIII - GENERAL CONDITIONS OF CONTRACT (GCC)

# Murang'a University of Technology

Proposed Completion of Hostel Block Phase I Wing 2 for Murang'a University of Technology

#### **General Conditions of Contract**

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#### 1. GENERAL PROVISIONS

#### 1.1 Definitions

In this Contract, except where context otherwise requires, the following terms shall be interpreted as indicated below. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

- "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.
- "Base Date" means a date 30 day prior to the submission of tenders.
- "Bill of Quantities" means the priced and completed Bill of Quantities forming part of the tender.
- "Completion Date" meansthedateofcompletionoftheWorksascertifiedbytheEngineer.
- "Contract Price" means the price defined in the contract and there after as adjusted in accordance with the provisions of the Contract.
- "Contract" means the agreement entered into between the Procuring Entity and the Contractor as recorded in the Agreement Form and signed by the parties including all attachments and appendices thereto and all documents incorporated by reference therein to execute, complete, and maintain the Works.
- "Contractor's Documents" means the calculations, computer programs and other software, progress reports, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.
- "Contractor's Equipment" means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Procuring Entity's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- "Contractor's Personnel" means the Contractor's Representative and all personnel whom the Contractor utilizes on Site, who may include the staff, labor and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.
- "Contractor's Representative" means the person named by the Contractor in the Contractor appointed from time to timeby the Contractor who acts on behalf of the Contractor.
- "Contractor" means the person(s) named as contractor in the Form of Tender accepted by the Procuring Entity.
- "Cost" means expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.
- "Day" means a calendar day and "year" means 365 days.
- "Dayworks" means Work inputs subject to payment on a time basis for labour and the associated materials and plant.

- "Defect" means any part of the Works not completed in accordance with the Contract.
- "Defects Liability Certificate" means the certificate issued by Architect upon correction of defects by the Contractor.
- "Defects Liability Period" means the period named in the Special Conditions of Contract and calculated from the Completion Date, within which the contractor is liable for any defects that may develop in the handed over works.
- "Defects Notification Period" means the period for notifying defects in the Works oraSection(asthecasemaybe) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], whichextendsoverthedaysstated intheSpecialConditionsofContract.
- "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.
- **"Final Payment Certificate"** means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].
- "Final Statement" means the statement defined in Sub-Clause 14.11 [ApplicationforFinalPaymentCertificate].
- "Force Majeure" is defined in Clause19 [Force Majeure].
- "Foreign Currency" means a currency of another country (not Kenya) in which part (or all) of the Contract Price is payable, but not the Local Currency.
- "Goods" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- "Interim Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.
- "Laws" means all national legislation, statutes, ordinances, and regulations and by-laws of any legally constituted public authority.
- "Letter of Acceptance" means the letter of formal acceptance of a tender, signed by Procuring Entity, including any annexed memoranda comprising agreements between and signed by both Parties.
- "Local Currency" means the currency of Kenya.
- "Materials" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.
- "Notice of Dissatisfaction" means the notice given by either Party to the other under Sub-Clause 20.3 indicating its dissatisfaction and intention to commence arbitration.
- "Special Conditions of Contract" means the pages completed by the Procuring Entity entitled Special Conditions of Contract which constitute Part A of the Special Conditions.
- "Party" means the Procuring Entity or the Contractor, as the context requires.
- "Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment].
- "Performance Certificate" means the certificate issued under Sub-Clause 11.9 [Performance Certificate].
- "Performance Security" means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security].
- "Permanent Works" means the permanent works to be executed by the Contractor under the Contract.
- **"Plant"** means the apparatus, machinery and other equipment intended to form or forming part of the Permanent Works, including vehicles purchased for the Procuring Entity and relating to the construction or operation of the Works.
- "Procuring Entity's Equipment" means the apparatus, machinery and vehicles (if any) made available by the

Procuring Entity for the use of the Contract or in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Procuring Entity.

"Procuring Entity's Personnel" means the Engineer, the Engineer, the assistants and all other staff, labor and other employees of the Architect and of the Procuring Entity; and any other personnel notified to the Contractor, by the Procuring Entity or the Engineer, as Procuring Entity's Personnel.

"Procuring Entity" means the Entity named in the Special Conditions of Contract.

**"Engineer"** is the person named in the Appendix to Conditions of Contract (or any other competent person appointed by the Procuring Entity and notified to the Contractor, to act in replacement of the Engineer) who is responsible for supervising the execution of the Works and administering the Contract and shall be an "Architect" or a "Quantity Surveyor" registered under the Architects and Quantity Surveyors Act Cap 525 or an "Engineer" registered under Engineers Registration Act Cap 530.

"Engineer" means the person appointed by the Procuring Entity to act as the Architect for the purposes of the Contract and named in the Special Conditions of Contract, or other person appointed from time to time by the Procuring Entity and notified to the Contractor

"Provisional Sum" means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].

"Retention Money" means the accumulated retention moneys which the Procuring Entity retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].

"Schedules" means the document(s) entitled schedules, completed by the Contractor and submitted with the Form of Tender, as included in the Contract.

"Section" means a part of the Works specified in the Special Conditions of Contract as a Section (if any)

"Site Investigation Reports" are those reports that may be included in the tendering documents which a ref actual and interpretative about the surface and sub-surface condition sat the Site.

"Site" means the places where the Permanent Works are to be executed, including storage and working areas, and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.

"Specification" means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.

"Start Date" or "Commencement Date "is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with the Site possession date(s).

"Statement" means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

"Subcontractor" means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works.

"Taking-Over Certificate" means a certificate issued under Clause 10 [Procuring Entity's Taking Over].

"Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.

"Temporary works" means works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

"Tender" means the Form of Tender and all other documents which the Contractor submitted with the Form of Tender, as included in the Contract.

"Tests after Completion" means the tests (if any) which are specified in the Contract and which are carried out in

accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Procuring Entity.

- "Tests on Completion" means the tests which are specified in the Contractor agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Procuring Entity.
- "Time for Completion" means the time for completing the Works or a Section (as the case may be) as stated in the Special Conditions of Contract (with any extension calculated from the Commencement Date.
- "Unforeseeable" means not reasonably foreseeable by an experienced contractor by the Base Date.
- "Variation" means any change to the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].
- "Works" means the items the Procuring Entity requires the Contractor to undertake as defined in the Appendix to Conditions of Contract. "Works" may also mean the Permanent Works and the Temporary Works, or either of them as appropriate.

# 1.2 Interpretation

In the Contract, except where the context requires otherwise:

- a) Words indicating one gender include all genders;
- b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;
- d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

### 1.3 Communications

- 13.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:
  - a) In writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Special Conditions of Contract; and
  - b) delivered, sentor transmitted to the addressf or the recipient's communications as stated in the Special Conditions of Contract. However:
    - i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
    - ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the addressfromwhichtherequestwasissued.
- Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Architect or the other Party, as the case may be.

### 1.4 Law and Language

- **1.4.1** The Contract shall be governed by the laws of **Kenya**.
- 1.4.2 The ruling language of the Contract shall be English.

#### 1.5 Priority of Documents

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

- a) The Contract Agreement,
- b) The Letter of Acceptance,
- c) The Special Conditions Part A,
- d) the Special Conditions Part B
- e) the General Conditions of Contract
- f) the Form of Tender,
- g) the Specifications and Bills of Quantities
- h) the Drawings, and
- i) the Schedules and any other documents forming part of the Contract.

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

## 1.6 Contract Agreement

The Parties shall enter into a Contract Agreement within 14 days after the Contractor receives the Contract Agreement, unless the Special Conditions establish otherwise. The Contract Agreement shall be based upon the formannexed to the Special Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Procuring Entity.

## 1.7 Assignment

The Contractor shall not assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, the contractor:

- a) May as sign the whole or any part with the prior consent of the Procuring Entity, and
- b) may, as security in favor of a bank or financial institution, assign its right to moneys due, or to become due, under the Contract.

### 1.8 Care and Supply of Documents

- 18.1 The Specifications and Drawings shall be in the custody and care of the Procuring Entity. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawings and Bills of Quantities shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.
- 182 Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Procuring Entity. Unless otherwise stated in the Contract, the Contractor shall supply to the Architect two copies of each of the Contractor's Documents.
- 1.83 The Contractor shall keep on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Procuring Entity's Personnel shall have the right of access to all these documents at all reasonable times.
- 1.8.4 If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

## 1.9 Timely provision of Drawings or Instructions

19.1 The Contractor shall give notice to the Architect whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and the nature and amount of the delay or disruption likely to be suffered if it is late.

- If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Architect to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
    - b) payment of any other associated costs accrued, which shall be included in the Contract Price.
- After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- 194 However, if and to the extent that the Architect failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, or costs accrued.

## 1.10 Procuring Entity's Use of Contractor's Documents

- 1.10.1 Asagreed between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.
- 1.102 The Contractor shall be deemed (by signing the Contract) to give to the Procuring Entity a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:
  - a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works.
  - b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
  - c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.
- 1.103 The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Procuring Entityf or purposes other than those permitted under Sub-Clause 1.10.2.

### 1.11 Contractor's Use of Procuring Entity's Documents

As agreed between the Parties, the Procuring Entity shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Procuring Entity. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Procuring Entity's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

### 1.12 Confidential Details

- 1.12.1 The Contractor's and the Procuring Entity's Personnel shall ensure confidentiality at all times. The confidentiality shall survive termination or completion of the contract. They shall disclose all such confidential and other information as may be reasonably required in order to verify compliance with the Contract and allow its proper implementation.
- 1.122 The Contractor's and the Procuring Entity's Personnel shall also treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

## 1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Special Conditions of Contract:

- a) The Procuring Entity shall have obtained (or shall obtain) the planning, zoning, building permitor similar permission for the Permanent Works, and any other permissions described in the Specifications as having been (or to be) obtained by the Procuring Entity; and the Procuring Entity shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licenses and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Procuring Entity harmless against and from the consequences of any failure to do so, unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.

## 1.14 Joint and Several Liability

If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons:

- a) These persons shall be deemed to be jointly and severally liable to the Procuring Entity for the performance of the Contract;
- b) these persons shall notify the Procuring Entity of their leader who shall have authority to bind the Contractor and each of these persons; and
- the Contractor shall not alter its composition or legal status without the prior consent of the Procuring Entity.

## 1.15 Inspections and Audit by the Procuring Entity

Pursuant to paragraph 2.2(e). of Appendix B to the General Conditions, the Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, the Public Procurement Regulatory Authority, Procuring Entity and/or persons appointed or designated by the Government of Kenya 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 Procuring Entity if requested by the Procuring Entity. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 15.6 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise ofthe Procuring Entity's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of in eligibility pursuant to the Procuring Entity's prevailing sanctions procedures).

#### 2 THE PROCURING ENTITY

## 2.1 Right of Access to the Site

- 21.1 The Procuring Entity shall give the Contractor right of access to, and possession of, all parts of the Site within thetime (or times) stated in the **Special Conditions of Contract.** The right and possession may not be exclusive to the Contractor. If, under the Contract, the Procuring Entity is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Procuring Entity shall do so in the time and manner stated in the Specification. However, the Procuring Entity may withhold any such right or possession until the Performance Security has been received.
- If no such time is stated in the Special Conditions of Contract, the Procuring Entity shall give the Contractor right of access to, and possession of, the Site within such times as required to enable the Contractor to proceed without disruption in accordance with the programme submitted under Sub-Clause 8.3 [Programme].

- 2.13 If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Procuring Entity to give any such right or possession within such time, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
- 2.1.4 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- However, if and to the extent that the Procuring Entity's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

## 22 Permits, Licenses or Approvals

- 22.1 The Procuring Entity shall provide, at the request of the Contractor, such reasonable assistance as to allow the Contractor to obtain properly:
  - a) Copies of the Laws of Kenya which are relevant to the Contract but are not readily available, and
  - b) any permits, licenses or approvals required by the Laws of Kenya:
    - i) which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],
    - ii) for the delivery of Goods, including clearance through customs, and
    - iii) for the export of Contractor's Equipment when it is removed from the Site.

## 23 Procuring Entity's Personnel

The Procuring Entity shall be responsible for ensuring that the Procuring Entity's Personnel and the Procuring Entity's other contractor son the Site:

- a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation], and
- b) take action ssimilar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment].

## 24 Procuring Entity's Financial Arrangements

The Procuring Entity shall make and maintain all necessary financial arrangements which will enable the Procuring Entity to pay the Contract Price punctually (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment].

#### 3. THE ENGINEER

# 3.1 Architect Duties and Authority

- 31.1 The Procuring Entity shall appoint the Architect who shall carry out the duties as signed to him in the Contract. The Architect staff shall include suitably qualified Assistants and other professionals who are competent to carry out these duties. The Architect Name and Address shall be provided in the **Special Conditions of Contract.**
- 3.12 The Architect shall have no authority to amend the Contract.
- 3.13 The Architect May exercise the authority attributable to the Architect as specified in or necessarily to be implied from the Contract. If the Architects required to obtain the approval of the Procuring Entity before exercising a specified authority, the requirements shall be as stated in the Special Conditions of Contract. The Procuring Entity shall promptly inform the Contractor of any change to the authority attributed to the Engineer.
- 3.14 However, whenever the Architect exercises a specified authority for which the Procuring Entity's approvalis required, then (for the purposes of the Contract) the contractor shall require the Architect toprovideevidence

of such approval before complying with the instruction.

- 3.15 Except as otherwise stated in these Conditions:
  - a) Whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Architect shallbedeemedtoactfortheProcuring Entity;
  - b) the Architect has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract;
  - c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Architect (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances; and
  - d) anyact by the Architect in response to a Contractor's request shall be notified in writing to the Contractor within 14 days of receipt.
- 3.1.6 The following provisions shall apply:

The Architect shall obtain the specific approval of the Procuring Entity before taking action under thefollowing Sub-Clauses of these Conditions:

- a) Sub-Clause 4.12: agreeing or determining an extension of time and/or additional cost.
- b) Sub-Clause 13.1: instructing a Variation, except;
  - i) In an emergency situation as determined by the Engineer, or
  - ii) If such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the **Special Conditions of Contract.**
- c) Sub-Clause 13.3: Approving a proposal for Variation submitted by the Contractor in accordance with Sub Clause 13.1 or 13.2.
- d) Sub-Clause 13.4: Specifying the amount payable in each of the applicable three currencies.
- 3.1.7 Not withstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forth with comply, despite the absence of approval of the Procuring Entity, with any such instruction of the Engineer. The Architect shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Procuring Entity.

# 3.2 Delegation by the Engineer

321 The Architect may from time to time assign duties and delegate authority to assistants and may also revoke such assignment or delegation. These assistants may include a resident Engineer, and/or independent inspectors appointed to inspect and/ or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. However, unless otherwise agreed by both Parties, the Architect shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:

- a) Any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Architect to reject the work, Plant or Materials;
- b) If the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.

## 33 Instructions of the Engineer

- 33.1 The Architect may issue to the Contractor (at anytime) instructions and additional or modified Drawings which may benecessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under Clause 3.2.1.
- The Contractor shall comply with the instructions given by the Architect or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Architec tor a delegated assistant:
  - a) Gives an oral instruction,
  - b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and
  - c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation,

Then the confirmation shall constitute the written instruction of the Architect or delegated assistant (as the case may be).

## 3.4 Replacement of the Engineer

If the Procuring Entity intends to replace the Engineer, the Procuring Entity shall, in not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended person to replace the Engineer.

### 35 Determinations

- 35.1 Whenever these Conditions provide that the Architect shall proceed in accordance with this Sub-Clause3.5 to agreeor determine any matter, the Architect shall consult with each Party in an endeavor to reach agreement. If agreement is not achieved, the Architect shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.
- 3.5.1 The Architect shall give notice to both Parties of each agree mentor determination, with supporting particulars, within 30 days from the receipt of the corresponding claim or request except when otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

## 4. THE CONTRACTOR

# 4.1 Contractor's General Obligations

- 4.1.1 The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Architect instructions, ands hall remedy any defects in the Works.
- 4.12 The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.
- All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible source country.

- 4.1.4 The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the designor specification of the Permanent Works.
- 4.15 The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.
- 4.1.6 If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Special Conditions:
  - a) The Contractor shall submit to the Architect the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
  - these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Architect to add to the Drawings for co-ordination of each Party's designs;
  - c) the Contractor shall be responsible for this part and it shall, when the Works are completed, befit for such purposes for which the part is intended as are specified in the Contract; and
  - d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Architectthe "as-built" documents and, if applicable, operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Procuring Entity to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Engineer.

### **42** Performance Security

- 4.21 The Contractor shall obtain (at his cost) a Performance Security for proper performance, in the amount stated in the **Special Conditions of Contract** and denominated in the currency (ies) of the Contract or in a freely convertible currency acceptable to the Procuring Entity. If an amount is not stated in the Special Conditions of Contract, this Sub-Clause shall not apply.
- The Contractor shall deliver the Performance Security to the Procuring Entity within 30 days after receiving the Notification of Award and shall send a copy to the Engineer. The Performance Security shall be issued by a reputable bank selected by the Contractor and shall be in the form annexed to the Special Conditions, as stipulated by the Procuring Entity in the Special Conditions of Contract, or in another form approved by the Procuring Entity.
- The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 30 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.
- The Procuring Entity shall not make a claim under the Performance Security, except for amounts to which the Procuring Entity is entitled under the Contract.
- The Procuring Entity shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Procuring Entity was not entitled to make the claim.
- The Procuring Entity shall return the Performance Security to the Contractor within 14 days after receiving a copyof the Taking-Over Certificate.

42.7 Without limitation to the provisions of the rest of this Sub-Clause, whenever the Architect determines an addition or a reduction to the Contract Price as a result of a change in cost and/ or legislation, or as a result

of a Variation, amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Architect request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that currency by an equal percentage.

## 43 Contractor's Representative

- 43.1 The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract. The Contractor's Representative's Name and Address shall be provided in the **Special Conditions of Contract.**
- Unless the Contractor's Representative **is named in the Contract**, the Contractor shall, prior to the Commencement Date, submit to the Architect for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is with held or subsequently revoked in terms of Sub-Clause 6.9 [Contractor's Personnel], or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of an other suitable person for such appointment.
- The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint are placement.
- The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Architect prior consent, and the Architect shall be notified accordingly.
- The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].
- The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Architect has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.
- 43.7 The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreter savailable during all working hours in a number deemed sufficient by the Engineer.

#### 4.4 Sub-contractors

- 44.1 The Contractor shall not subcontract the whole of the Works. The contractor may however subcontract the works as provided in Clause 34.2.
- The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if theyweret heacts or defaults of the Contractor. Unless otherwise stated in the Special Conditions:
  - a) The Contractor shall not be required to obtain consent to suppliers solely of Materials, or to a subcontract for which the Subcontractor is named in the Contract;
  - b) The prior consent of the Procuring Entity shall be obtained to other proposed Subcontractors;
  - c) the Contractor shall give the Procuring Entity not less than 14 days' notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site; and
  - d) each subcontract shall include provisions which would entitle the Procuring Entity to require the subcontract to be assigned to the Procuring Entity under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Procuring Entity].
- The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidential Details] apply equally to each Subcontractor.
- Wher epracticable, the Contractor shall give fair and reasonable opportunity for contractors from Kenya to be appointed as Subcontractors.

# 45 Assignment of Benefit of Subcontract

If a Subcontractor's obligations extend beyond the expiry date of the relevant Defects Notification Period and the Engineer, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Procuring Entity, then the Contractor shall do so. Unless otherwise stated in the assignment, the Contractor shall have no liability to the Procuring Entity for the work carried out by the Subcontractor after the assignment takes effect.

## 4.6 Co-operation

- 46.1 The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:
  - a) The Procuring Entity's Personnel,
  - b) Any other contractors employed by the Procuring Entity, and
  - c) The personnel of any legally constituted public authorities, who may be employed in the execution on or near the Site of any work not included in the Contract.
- 4.62 Any such instruction shall constitute a Variation if and to the extent that it cause sthe Contractor to suffer delays and/ortoincur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.
- 4.63 If, under the Contract, the Procuring Entity is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Architect in the time and manner stated in the Specification.

## 4.7 Setting Out of the Works

- 4.7.1 The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contractor notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.
- The Procuring Entity shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.
- 4.73 If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an errorin these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/ or Cost, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) payment of any such costs accrued, which shall be included in the Contract Price.
- 4.7.4 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to thise.

# 4.8 Safety Procedures

The Contractor shall:

- a) Comply with all applicable safety regulations,
- b) Takec are for the safety of all persons entitled to be on the Site,
- c) Use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Procuring Entity's Taking Over], and
- e) provide any Temporary Works (including roadways, footways, guards and fences) which may be

necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

# 4.9 Quality Assurance

- 4.9.1 The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Architect shall be entitled audit any aspect of the system.
- 4.92 Details of all procedures and compliance documents shall be submitted to the Architectf or information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor itself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

#### 4.10 Site Data

- 4.10.1 The Procuring Entity shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Procuring Entity's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Procuring Entity shall similarly make available to the Contractor all such data which come into the Procuring Entity's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.
- 4.10.2 To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):
  - a) The form and nature of the Site, including sub-surface conditions,
  - b) the hydrological and climatic conditions,
  - c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
  - d) the Laws, procedures and labour practices of Kenya, and
  - e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

## 4.11 Sufficiency of the Accepted Contract Amount

- 4.11.1 TheContractor shall be deemed to:
  - a) Have satisfied itself as to the correctness and sufficiency of the Accepted Contract Amount, and
  - b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data].
- 4.11.2 Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper execution and completion of the Works and the remedying of any defects.

- 4.12.1 In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.
- 4.12.2 If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to the Architect as soon as practicable.
- 4.12.3 This notice shall describe the physical conditions, so that they can be inspected by the Architect and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Architect may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.
- 4.12.4 If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to notice under Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) payment of any such Cost, which shall be included in the Contract Price.
- 4.125 Upon receiving such notice and inspecting and/or investigating these physical conditions, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.
- 4.12.6 However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Architect may also review whether other physical conditions in similar parts of the Works (if any) were more favorable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favorable conditions were encountered, the Architect may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.
- 4.127 The Architect shall take account of any evidence of the physical conditions foreseen by the Contractorwhen submitting the Tender, which shall be made available by the Contractor, but shall not be bound by the Contractor's interpretation of any such evidence.

## 4.13 Rights of Way and Facilities

Unless otherwise specified in the Contract the Procuring Entity shall provide effective access to and possession of the Site including special and/or temporary rights-of-way which are necessary for the Works. The Contractor shall obtain, at his risk and cost, any additional rights of way or facilities out side the Site which he may require for the purposes of the Works.

### 4.14 Avoidance of Interference

- 4.14.1 The Contractor shall not interfere unnecessarily or improperly with:
  - a) The convenience of the public, or
  - b) The access to and use and occupation of all roads and foot paths, irrespective of whether they are public or in the possession of the Procuring Entity or of others.
- 4.142 The Contractor shall indemnify and hold the Procuring Entity harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

#### 4.15 Access Route

- 4.15.1 The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site at Base Date. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.
- 4.152 Except as otherwise stated in these Conditions:
  - a) The Contractor shall (as be tween the Parties) be responsible for any maintenance which may be required for his use of access routes;
  - b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions:
  - c) the Procuring Entity shall not be responsible for any claims which may arise from the use or otherwise of any access route;
  - d) the Procuring Entity does not guarantee the suitability or a vailability of particular access routes; and
  - e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

## 4.16 Transport of Goods

Unless otherwise stated in the Special Conditions:

- a) the Contractor shall give the Architect not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- c) the Contractor shall indemnify and hold the Procuring Entity harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from thetransport of Goods and shall negotiate and pay all claims arising from their transport.

### 4.17 Contractor's Equipment

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

## 4.18 Protection of the Environment

- 4.18.1 The contractor shall comply with the applicable environmental laws, regulations and policies.
- 4.18.2 The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.
- 4.18.3 The Contractors hall ensure that emissions, surfaced is charges and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

## 4.19 Electricity, Water and Gas

- 4.19.1 The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the Specifications, for the tests.
- 4.192 The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specifications. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these

services and for measuring the quantities consumed.

4.19.3 The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Architect in accordance with Sub-Clause 2.5 [Procuring Entity's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Procuring Entity.

## 4.20 Procuring Entity's Equipment and Free-Issue Materials

- 420.1 The Procuring Entity shall make the Procuring Entity's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification. Unless otherwise stated in the Specification:
  - a) The Procuring Entitys hall be responsible for the Procuring Entity's Equipment, except that
  - b) the Contractor shall be responsible for each item of Procuring Entity's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.
- 420.1 The appropriate quantities and the amounts due (at such stated prices) for the use of Procuring Entity's Equipment shall be agreed or determined by the Architect in accordance with Sub-Clause 2.5 [Procuring Entity's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Procuring Entity.
- 4202 The Procuring Entity shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Specification. The Procuring Entity shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them and shall promptly give notice to the Architect of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Procuring Entity shall immediately rectify the notified shortage, defector default.
- 420.3 After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Procuring Entity of liability for any shortage, defect or default not apparent from a visual inspection.

### 4.21 Progress Reports

- 421.1 Unless otherwise stated in the Special Conditions, monthly progress reports shall be prepared by the Contractor and submitted to the Architect in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.
- 4212 Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works. Each report shall include:
  - charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [NominatedSubcontractors]),
  - b) photographs showing the status of manufacture and of progress on the Site;
  - c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
    - i) commencement of manufacture,
    - ii) Contractor's inspections,
    - iii) tests, and
    - iv) shipment and arrival at the Site;
  - d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
  - e) copies of quality assurance documents, test results and certificates of Materials;
  - f) list of notices given under Sub-Clause 2.5 [Procuring Entity's Claims] and notices given under Sub- Clause 20.1 [Contractor's Claims];
  - g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
  - h) comparison so factual and planned progress, with details of any events or circumstances which

may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

## 4.22 Security of the Site

Unless otherwise stated in the Special Conditions:

- a) The Contractor shall be responsible for keeping unauthorized persons off the Site, and
- b) authorized persons shall be limited to the Contractor's Personnel and the Procuring Entity's Personnel; and to any other personnel notified to the Contractor, by the Procuring Entity or the Engineer, as authorized personnel of the Procuring Entity's other contractors on the Site.

## 4.23 Contractor's Operations on Site

- 423.1 The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Architect as additional working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacentl and.
- 423.2 During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.
- 4233 Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

#### 4.24 Fossils

- All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Procuring Entity. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.
- 424.2 The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) payment of any such Cost, which shall be included in the Contract Price.

    After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5

    [Determinations] to agree or determine these matters.

### 5. NOMINATED SUBCONTRACTORS

### 5.1 Definition of "nominated Subcontractor"

In this Contract, "nominated Subcontractor" means a Subcontractor:

- a) Who is nominated by the Procuring Entity, or
- b) Contractor has nominated as a Subcontractor subject to Sub-Clause 5.2 [Objection to Notification].

## 52 Objection to Nomination

The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Procuring Entity as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of

the following matters, unless the Procuring Entity agrees in writing to indemnify the Contractor against and from the consequences of the matter:

- a) there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;
- b) the nominated Subcontractor does not accept to indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or
- c) the nominated Subcontractor does not accept to enter into a subcontract which specifies that, for the subcontracted work (including design, if any), the nominated Subcontractor shall:
  - i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge hisobligations and liabilities under the Contract;
  - ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities, and
  - iii) be paid only if and when the Contractor has received from the Procuring Entity payments for sums due under the Subcontract referred to under Sub-Clause 5.3 [Payment to nominated Subcontractors].

## **5.3** Payments to nominated Subcontractors

The Contractor shall pay to the nominated Subcontractor the amounts shown on the nominated Subcontractor's invoices approved by the Contractor which the Architect certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5 [Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].

## **54** Evidence of Payments

- 54.1 Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Architect may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:
  - (a) Submits this reasonable evidence to the Engineer, or
  - (b) i) Satisfies the Architect in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
    - ii) Submits to the Architect reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement, then the Procuring Entity may (at his sole discretion) pay, directto the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Procuring Entity, the amount which the nominated Subcontractor was directly paid by the Procuring Entity.

# 6. STAFF AND LABOR

#### 6.1 Engagement of Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, feeding, transport, and, when appropriate, housing. The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within Kenya.

### **62** Rates of Wages and Conditions of Labor

621 The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by Procuring Entity's whose trade or industry is similar to that of the Contractor.

The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in Kenya in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the Laws of Kenya for the time being in force, and the Contractor shall perform such duties in regard to such deductions there of as may be imposed on him by such Laws.

## 63 Persons in the Service of Procuring Entity

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Procuring Entity's Personnel.

#### 6.4 Lab or Laws

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, employment of children, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights. The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

# 65 Working Hours

Nowork shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated in the **Special Conditions of Contract**, unless:

- a) Otherwise stated in the Contract,
- b) The Architect gives consent, or
- c) The work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer, provided that work done outside the normal working hours shall be considered and paid for as overtime.

#### 6.6 Facilities for Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities on site for the Contractor's Personnel. The Contractor shall also provide facilities for the Procuring Entity's Personnel as stated in the Specifications. The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

## 6.7 Health and Safety

- 67.1 The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with loca lhealth authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Procuring Entity's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.
- The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide what ever is required by this person to exercise this responsibility and authority.

- The Contractor shall send, to the Engineer, details of any accident as soon as practicable after itsoccurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Architect may reasonably require.
- 6.7.4 The Contractor shall conduct an awareness programme on HIV and other sexually transmitted diseases via an approved service provider and shall undertake such other measures taken to reduce the risk of the transfer of these diseases between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

### **68** Contractor's Superintendence

- Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary super intendence to plan, arrange, direct, manage, inspect and test the work.
- Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

### 69 Contractor's Personnel

- 69.1 The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Contractors Key personnel shall be named in the Special Conditions of Contract. The Architect may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:
  - a) Persists in any misconduct or lack of care,
  - b) Carries out duties in competently or negligently,
  - c) fails to conform with any provisions of the Contract,
  - d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment, or
  - e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution ofthe Works.
- 692 If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

## 6.10 Records of Contractor's Personnel and Equipment

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

## 6.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

## 6.12 Foreign Personnel

- 6.12.1 The Contractor shall not employ foreign personnel unless the contractor demonstrates that there are no Kenyans with the required skills.
- 6.12.2 The Contractor shall be responsible for the return of any foreign personnel to the place where they were recruited or to their domicile. In the event of the death in Kenya of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

## 6.13 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Sitea n adequate supply of drinking and other water for the use of the Contractor's Personnel.

### 6.14 Measures against Insect and Pest Nuisance

The Contractor shall a tall times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce the danger to their health. The Contractor shall comply

with all the regulations of the local health authorities, including use of appropriate insecticide.

## 6.15 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of Kenya, onsite, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal there of by Contractor's Personnel.

## 6.16 Prohibition of Forced or Compulsory Labour

The Contractor shall not employ forced labor, which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labor, such as indentured labor, bonded labor or similar labor-contracting arrangements.

#### 6.17 Prohibition of Harmful Child Labor

The Contractor shall not employ children in a manner that is economically exploitative, or is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. Where the relevant labour laws of Kenya have provisions for employment of minors, the Contractor shall follow those laws applicable to the Contractor. Children below the age of 18 years shall not be employed in dangerous work.

## **6.18** Employment Records of Workers

The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the Engineer. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment].

## 6.19 Workers' Organizations

The Contractor shall comply with the relevant labor laws that recognize workers' rights to form and to join workers' organizations of their choosing without interference.

## 620 Non-Discrimination and Equal Opportunity

The Contractor shall base the labour employment on the principle of equal opportunity and fair treatment and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employ mentor retirement, and discipline.

## 7. PLANT, MATERIALS AND WORKMANSHIP

### 7.1 Manner of Execution

The Contractor shall carry out the manufacture/assemble of plant, the production and manufacture of Materials, and all other execution of the Works:

- a) In the manner (if any) specified in the Contract,
- b) in a proper workman like and careful manner, in accordance with recognized good practice, and
- with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

### 7.2 Samples

The Contractor shall submit the following samples of Materials, and relevant information, to the Architect for consent prior to using the Material sin or for the Works:

 manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and b) additional samples instructed by the Architect as a Variation.

Each sample shall be labeled as to origin and intended use in the Works.

## 7.3 Inspection

- 73.1 The Procuring Entity's Personnel shall at all reasonable times:
  - a) Have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
  - b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.
- 732 The Contractor shall give the Procuring Entity's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.
- 733 The Contractor shall give notice to the Architect whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Architect shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Architect does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer, uncover the work and there after reinstate and make good, all at the Contractor's cost.

## 7.4 Testing

- 7.4.1 This Sub-Clause shall apply to all tests specified in the Contract.
- 7.4.2 Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labor, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer, the time and placef ort he specified testing of any Plant, Materials and other parts of the Works.
- 7.43 The Architect may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, not withstanding other provisions of the Contract.
- 7.4.4 The Architect shall give the Contractor not less than 24 hours' notice of the Architect intention to attend the tests. If the Architect does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, and the tests shall then be deemed to have been made in the Architect presence.
- 7.4.5 If the Contractor suffers delay and/ or incurs Cost from complying with these instructions or as a result of a delay for which the Procuring Entity is responsible, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
- 74.6 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- 7.4.7 The Contractor shall promptly forward to the Architect duly certified reports of the tests. When thespecified tests have be enpassed, the Architect shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Architect has not attended the tests, he shall be deemed to have accepted the readings as accurate.

### 75 Rejection

- 75.1 If, as a result of an examination, inspection, measurement or testing, any Plant, Materials or workmanship is found to be defective or otherwise not in accordance with the Contract, the Architect may reject the Plant, Materials or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.
- 7.52 If the Architect requires this Plant, Materials or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Procuring Entity to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay these costs to the Procuring Entity.

### 7.6 Remedial Work

- 7.6.1 Not withstanding any previous test or certification, the Architect may instruct the Contractorto:
  - a) Remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
  - b) remove and re-execute any other work which is not in accordance with the Contract, and
  - c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseen able event or otherwise.
- 7.62 The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).
- 7.63 If the Contractor fails to comply with the instruction, the Procuring Entity shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay to the Procuring Entity all costs arising from this failure.
- 7.6.4 If the contractor repeatedly delivers defective work, the Procuring Entity may consider termination in accordance with Clause 15.

## 7.7 Ownership of Plant and Materials

Except as otherwise provided in the Contract, each item of Plant and Materials shall become the property of the Procuring Entity at whichever is the earlier of the following times, free from liens and other encumbrances:

- a) When it is in corporated in the Works;
- b) when the Contractor is paid the corresponding value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].

## 7.8 Royalties

Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for:

- a) Natural materials obtained from outside the Site, and
- b) the disposal of material from demolitions and excavations and of other surplus material (whether natural orman-made), except to the extent that disposal are as within the Site are specified in the Contract.

## **8** COMMENCEMENT, DELAYS AND SUSPENSION

### 8.1 Commencement of Works

- 8.1.1 Except as otherwise specified in the Special Conditions of Contract, the Commencement Date shall be the date at which the following precedent condition shave all been fulfilled and the Architect notification recording the agreement of both Parties on such fulfilment and instructing to commence the Work is received by the Contractor:
  - a) Signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities of Kenya;

- b) except if otherwise specified in the Special Conditions of Contract, effective access to and possession of the Site given to the Contractor together with such permission(s) under (a) of Sub-Clause 1.13 [Compliance with Laws] as required for the commencement of the Works.
- c) Receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor.
- 8.12 If the said Architect instruction is not received by the Contractor within 180 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Sub-Clause 1 6.2 [Termination Contractor].
- The Contractor shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date and shall then proceed with the Works with due expedition and without delay.

## **82** Time for Completion

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:

- a) Achieving the passing of the Testson Completion, and
- b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections].

# 83 Programme

- 83.1 The Contractor shall submit a detailed time programme to the Architect within 1 4 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:
  - a) The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,
  - b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
  - c) the sequence and timing of inspections and tests specified in the Contract, and
  - d) a supporting report which includes:
    - i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
    - ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

- Unless the Engineer, within 14 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Procuring Entity's Personnel shall be entitled to rely upon the programme when planning their activities.
- The Contractor shall promptly give notice to the Architect of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works.
- 83.4 If, at anytime, the Architect gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contractor to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Architect in accordance with this Sub-Clause.

## **8.4** Extension of Time for Completion

- The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over of the Works and Sections] is or will be delayed by any of the following causes:
  - a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3
    [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract.
  - b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,
  - c) exceptionally adverse climatic conditions,
  - d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
  - e) any delay, impediment or prevention caused by or attributable to the Procuring Entity, the Procuring Entity's Personnel, or the Procuring Entity's other contractors.
- 842 If the Contractor considers itself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Architect in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Architect shall review previous determinations and may increase, but shall not decrease, the total extension of time.

### 8.5 Delays Caused by Authorities

If the following conditions apply, namely:

- a) The Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in Kenya,
- b) These authorities delay or disrupt the Contractor's work, and
- c) the delay or disruption was Unforeseeable, then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

### 8.6 Rate of Progress

- 8.6.1 If, at anytime:
  - a) Actual progress is too slow to complete within the Time for Completion, and/or
  - b) Progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme], other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Architect may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.
- Unless the Architect notifies otherwise, the Contractor shall adopt these revised methods, which mayrequire increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Procuring Entity to incur additional costs, the Contractor shall subject to notice under Sub-Clause 2.5 [Procuring Entity's Claims] pay these costs to the Procuring Entity, in addition to delay damages (if any) under Sub-Clause 8.7 below.

Additional costs of revised methods including acceleration measures, instructed by the Architect to reduce delays resulting from causes listed under Sub-Clause 8.4 [Extension of Time for Completion] shall be paid by the Procuring Entity, without generating, however, any other additional payment benefit to the Contractor.

## 8.7 Delay Damages

- 87.1 If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to notice under Sub-Clause 2.5 [Procuring Entity's Claims] pay delay damages to the Procuring Entity for this default. These delay damages shall be the sum stated in the **Special Conditions of Contract**, which shall be paid for everyday which shall elapse between the relevant Time for Completion and the date stated in the taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Special Conditions of Contract.
- These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Procuring Entity] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

## 8.8 Suspension of Work

- 88.1 The Architect may at anytime instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works a gainst any deterioration, loss or damage.
- The Architect may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9, 8.10 and 8.11 shall not apply.

## 8.9 Consequences of Suspension

- 89.1 If the Contractor suffers delay and/or incurs Cost from complying with the Architect instructions under Sub-Clause 8.8 [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) Payment of any such Cost, which shall be included in the Contract Price.
- After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [Suspension of Work].

### 8.10 Payment for Plant and Materials in Event of Suspension

The Contractor shall be entitled to payment of the value (as at the date of suspension) of Plant and/ or Materials which have not been delivered to Site, if:

- a) The work on Plant or delivery of Plant and/ or Materials has been suspended for more than 30 days, and
- b) the Contractor has marked the Plant and/or Materials as the Procuring Entity's property in accordance with the Architect instructions.

### 8.11 ProlongedSuspension

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 84 days, the Contractor may request the Architect permission to proceed. If the Architect does not give permission within 30 days after being requested to do so, the Contractor may, by giving notice to the Engineer, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

## 8.12 Resumption of Work

After the permission or instruction to proceed is given, the Contractor and the Architect shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension after receiving from the Architect an instruction to this effect under Clause 13 [Variations and Adjustments].

### 9. TESTS ON COMPLETION

## 9.1 Contractor's Obligations

- 9.1.1 The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with sub-paragraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].
- 9.12 The Contractor shall give to the Architect not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Architect shall instruct.
- 9.13 In considering the results of the Tests on Completion, the Architect shall make allowances for the effect of any use of the Works by the Procuring Entity on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Contractor shall submit a certified report of the resultsof these Tests to the Engineer.

# 92 Delayed Tests

- If the Tests on Completion are being unduly delayed by the Procuring Entity, Sub-Clause 7.4 [Testing] (fifth paragraph) and/ or Sub-Clause 10.3 [Interference with Tests on Completion] shall be applicable.
- 922 If the Tests on Completion are being unduly delayed by the Contractor, the Architect may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Testson such day or days within that period as the Contractor may fix and of which he shall give notice to the Engineer.
- 923 If the Contractor fails to carryout the Tests on Completion within the period of 21 days, the Procuring Entity's Personnel may proceed with the Test sat the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted asaccurate.

## 93 Retesting of related works

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Rejection] shall apply, and the Architect or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

# 9.4 Failure to Pass Tests on Completion

- 94.1 If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Architect shall be entitled to:
  - a) Order further repetition of Tests on Completion under Sub-Clause 9.3; or
  - b) if the failure deprives the Procuring Entity of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Procuring Entity shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 1 1.4 [Failure to Remedy Defects].

#### 10. PROCURING ENTITY'S TAKING OVER

### 10.1 Taking Over of the Works and Sections

10.1.1 Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Procuring Entity when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for Completion] and except as allowed in sub-paragraph (a) below,

- and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.
- 10.12 The Contractor may apply by notice to the Architect for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contract or may similarly apply for a Taking-Over Certificate for each Section.
- 10.13 The Architect shall, within 30 days after receiving the Contractor's application:
  - a) Issue the Taking-Over Certificate to the Contract or, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor out standing work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or
  - b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice undert his Sub-Clause.
- 10.14 If the Architect fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 30 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on thel ast day of that period.

## 10.2 Taking Over of Parts of the Works

- 102.1 The Architect may, at the sole discretion of the Procuring Entity, issue a Taking-Over Certificate for any part of the Permanent Works.
- The Procuring Entity shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Architect has issued a Taking-Over Certificate for this part. However, if the Procuring Entity does use any part of the Works before the Taking-Over Certificate is issued:
  - a) The part which is used shall be deemed to have been taken over as from the date on which it is used,
  - b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Procuring Entity, and
  - c) if requested by the Contractor, the Architect shall issue a Taking-Over Certificate for this part.
- 1023 After the Architect has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.
- 1024 If the Contractor incurs Cost as a result of the Procuring Entity taking over and/or using a part of the Works, other than such use as is specified in the Contractor agreed by the Contractor, the Contractor shall (i) give notice to the Architect and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such accrued costs, which shall be included in the Contract Price. After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this accrued cost.
- 1025 If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages there after for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced. For any period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [Delay Damages] and shall not affect the maximum amount of these damages.

## 10.3 Interference with Tests on Completion

- 103.1 If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Procuring Entity is responsible, the Procuring Entity shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.
- 1032 The Architect shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the

Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Architect shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

- If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) payment of any such accrued costs, which shall be included in the Contract Price.
- After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

## 10.4 Surfaces Requiring Reinstatement

Except as otherwise stated in a Taking-Over Certificate, a certificate for a Section or part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

#### 11. DEFECTS LIABILITY

## 11.1 Completion of Outstanding Work and Remedying Defects

- 11.1.1 In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fairwear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable there after, the Contractor shall:
  - a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and
  - b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Procuring Entity on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).
- 11.12 If a defect appears or damage occurs, the Contractor shall be notified accordingly by the Engineer.

## 11.2 Cost of Remedying Defects

- 112.1 All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:
  - a) Any design for which the Contractor is responsible,
  - b) Plant, Materials or workmanship not being in accordance with the Contract, or
  - c) Failure by the Contractor to comply with any other obligation.
- If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Procuring Entity, and Sub-Clause 13.3 [Variation Procedure] shall apply.

#### 113 Extension of Defects Notification Period

- 113.1 The Procuring Entity shall be entitled subject to Sub-Clause 2.5 [Procuring Entity's Claims] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or by reason of damage attributable to the Contractor. However, a Defects Notification Period shall not be extended by more than two years.
- 1132 If delivery and/ or erection of Plant and/ or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work], the Contractor's obligations under this Clause shall not apply to any defectsor damage occurring more than two years after the Defects Notification Period for the Plant and/ or Materials would otherwise have expired.

# 11.4 Failure to Remedy Defects

If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by the Engineer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable

notice of this date.

- 11.42 If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2[ Costo f Remedying Defects], the Procuring Entity may (at his option):
  - (a) Carry out the work itself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay to the Procuring Entity the costs reasonably incurred by the Procuring Entity in remedying the defect or damage;
  - (b) Require the Architect to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations]; or
  - (c) if the defect or damage deprives the Procuring Entity of substantially the whole benefit of the Works or any major part of the Works, terminate the Contractas a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the Contractor otherwise, the Procuring Entity shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

## 11.5 Removal of Defective Work

If the defector damage cannot be remedied expeditiously on the Site and the Procuring Entity gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.

#### 11.6 Further Tests

- 11.6.1 If the work of remedying of any defector damage may affect the performance of the Works, the Architect may require the repetition of any of the tests described in the Contract. The requirement shall be made by notice within 14 days after the defect or damage is remedied.
- 11.62 These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.

### 11.7 Right of Access

Unti Ithe Completion Certificate has been issued, the Contractor shall have such right of access to the Works as is reasonably required in order to comply with this Clause, except as may be inconsistent with the Procuring Entity's reasonable security restrictions.

### 11.8 Contractor to Search

The Contractor shall, if required by the Engineer, search for the cause of any defecton parts of the works that have already accepted, under the direction of the Engineer. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Cost of the search plus profit shall be agreed or determined by the Architect in accordance with Sub-Clause 3.5 [Determinations] and shall be included in the Contract Price.

### 11.9 Completion Certificate

- 119.1 Performance of the Contractor's obligations shall not be considered to have been completed until the Architect has issued the Completion Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.
- The Architect shall issue the Completion Certificate within 30days after the latest of the expiry dates of the Defects Liability Period, or as soon there after as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. A copy of the Completionn Certificate shall be issued to the Procuring Entity.
- 1193 Only the Completion Certificate shall be deemed to constitute acceptance of the Works.

## 11.10 Unfulfilled Obligations

After the Completion Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

#### 11.11 Clearance of Site

- 11.11.1 Upon receiving the Completion Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.
- 11.112 If all these items have not been removed within 30 days after receipt by the Contractor of the Completion Certificate, the Procuring Entity may sell or otherwise dispose of any remaining items. The Procuring Entity shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.
- 11.113 Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Procuring Entity's costs, the Contractor shall pay the outstanding balance to the Procuring Entity.

#### 12 MEASUREMENT AN DEVALUATION

#### 12.1 Works to be Measured

- 12.1.1 The Works shall be measured, and valued for payment, in accordance with this Clause. The Contractorshall show in each application under Sub-Clauses 14.3 [Application for Interim Payment Certificates], 14.10 [Statement on Completion] and 14.11 [Application for Final Payment Certificate] the quantities and other particulars detailing the amounts which he considers to be entitled under the Contract.
- 12.12 Whenever the Architect requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:
  - a) promptly either attend or send another qualified representative to assist the Architect in making the measurement, and
  - b) supply any particulars requested by the Engineer.
- 12.13 If the Contractor fails to attend or send a representative, the measurement made by the Architect shall be accepted as accurate.
- 12.14 Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Engineer. The Contractor shall, as and when requested, attend to examine and agreet her ecords with the Engineer, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.
- 12.15 If the Contractor examines and disagrees the records, and/ or does not sign them as agreed, then the Contractor shall give notice to the Architect of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Architect shall review the records and either confirm or vary them and certify the paymentofthe undisputed part. If the Contractor does not so give notice to the Architect within 14 days after being requested to examine the records, they shall be accepted as accurate.

#### 12.2 Method of Measurement

Except as otherwise stated in the Contract:

- a) Measurement shall be made of the net actual quantity of each item of the Permanent Works, and
- b) the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.

### 12.3 Evaluation

- Except as otherwise stated in the Contract, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of workd one by evaluating each item of work, applying the measurement agreed or determined in accordance with the above Sub-Clauses 12.1 and 12.2 and the appropriate rate or price for the item.
- For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contractor, if there is no such item, specified for similar work.
- 1233 Any item of work included in the Bill of Quantities for which no rate or price was specified shall be considered as included in other rates and prices in the Bill of Quantities and will not be paid for separately.

- 123.4 However, for a new item of work, a new rate or price shall be appropriate for such item of work if:
  - a) The work is instructed under Clause 13 [Variations and Adjustments],
  - b) no rate or price is specified in the Contract for this item, and
  - c) no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract.
- Each new rate or price shall be derived from any relevant rates or prices in the Contract. If no rates or prices are relevant for the new item of work, it shall be derived from the reasonable Cost of executing such work, prevailing market rates, together with profit, taking account of any other relevant matters.
- 123.6 Until such time as an appropriate rate or price is agreed or determined, the Architect shall determine a provisional rate or price for the purposes of Interim Payment Certificates as soon as the concerned work commences.
- 123.7 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 <u>plus or minus</u> percentage. The percentage already worked out during tender evaluation is worked out as follows: (*corrected tender price* tender price)/ tender price X 100.

### 12.4 Omissions

Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

- a) The Contractor will incur (or has incurred) cost which, if the work had not been omitted, wouldhavebeen deemed to be covered by a sum forming part of the Accepted Contract Amount;
- b) The omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
- c) this cost is not deemed to be included in the evaluation of any substituted work; then the Contractor shall give notice to the Architect accordingly, with supporting particulars. Upon receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this cost, which shall be included in the Contract Price.

#### 13. VARIATIONS AND ADJUSTMENTS

## 13.1 Right to Vary

- 13.1.1 Variations may be initiated by the Architect at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal. No Variation instructed by the Architect under this Clause shall in any way vitiate or in validate the Contract.
- 13.12 The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Architect stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, or (ii) such Variation triggers a substantial change in the sequence or progress of the Works. Upon receiving this notice, the Architect shall cancel, confirm or vary the instruction.
- 13.13 Each Variation may include:
  - a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
  - b) changes to the quality and otherc haracteristics of any item of work,
  - c) changes to the levels, positions and/ or dimensions of any part of the Works,
  - d) omission of any work unless it is to be carried out by others,
  - e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
  - f) changes to the sequence or timing of the execution of the Works.
- 13.14 The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Architect instructs after obtaining approval of the Procuring Entity.

#### 132. Variation Order Procedure

Priortoany Variation Order under Sub-Clause 13.1.4 the Architect shall notify the Contractor of the nature and form of such variation. As soon as possible after having received such notice, the Contractor shall submit

to the Engineer:

- a) A description of work, if any, to be performed and a programme for its execution, and
- b) the Contractor's proposals for any necessary modifications to the Programme according to Sub-Clause 8.3 or to any of the Contractor's obligations under the Contract, and
- c) the Contractor's proposals for adjustment to the Contract Price.

Following the receipt of the Contractor's submission the Architect shall, after due consultation with the Employer and the Contractor, decide as soon as possible whether or not the variation shall be carried out. If the Architect decides that the variation shall be carried out, he shall issue a Variation Order clearly identified as such in accordance with the Contractor's submission or as modified by agreement.

If the Architect and the Contractor are unable to agree the adjustment of the Contract Price, the provisions of Sub-Clause 13.2.2 shall apply.

## 1322 Disagreement on Adjustment of the Contract Price

If the Contractor and the Architecture unable to agree on the adjustment of the Contract Price, the adjustment shall be determined in accordance with the rates specified in the Bills of Quantities or Schedule of Daywork Prices. If the rates contained in the Bills of Quantities or Dayworks Prices are not directly applicable to the specific work in question, suitable rates shall be established by the Architect reflecting the level of pricing in the Dayworks Prices. Where rates are not contained in the said Prices, the amount shall be such as is in all the circumstances reasonable, reflecting a market price. Due account shall be taken of any over-or underrecovery of overheads by the Contractor in consequence of the variation. The Contractor shall also be entitled to be paid:

- a) The cost of any partial execution of the Work srendered useless by any such variation,
- b) The cost of making necessary alterations to Plant already manufactured or in the course of manufacture or of any work done that has to be altered in consequence of such a variation,
- any additional costs incurred by the Contractor by the disruption of the progress of the Works as detailed in the Programme, and
- d) the net effect of the Contractor's financec osts, including interest, caused by the variation.

The Architect shall on this basis determine the rates or prices to enable on-account payment to be included in certificates of payment.

## 1323 Contractor to Proceed

On receipt of a Variation Order, the Contractor shall forth with proceed to carry out the variation and be bound to these Conditions in so doing as if such variation was stated in the Contract. The work shall not be delayed pending the granting of an extension of the Time for Completion or an adjustment to the Contract Price under Sub-Clause31.3.

# 133 Value Engineering

- 13.1 The Contractor may, at anytime, submit to the Architect written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Procuring Entity of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Procuring Entity of the completed Works, or
  - (iv) otherwise be of benefit to the Procuring Entity.
- 13.3.2 The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [Variation Procedure].
- 1323 If a proposal, which is approved by the Engineer, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:
  - a) The Contractor shall design this part,
  - b) sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and
  - c) if this change results in a reduction in the contract value of this part, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine a fee, which shall be included in the Contract Price. This fee shall behalf (50%) of the difference between the following amounts:
    - such reduction in contract value, resulting from the change, excluding adjustments under Sub-Clause 13.8 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost], and
    - ii) the reduction (if any) in the value to the Procuring Entity of the varied works, taking account of any improvement in quality, anticipated life or operational efficiencies.

13.3.3 However, if the amount established in item 13.2.3 (c) (i) is less than amount established in item 13.2.3 (c (ii), there shall not be a fee. However, if the if the amount established in item 13.2.3 (c) (i) is more than amount established in item 13.2.3 (c (ii), it shall result in a price variation to the Procuring Entity.

## 134 Variation Procedure for Value Engineering proposal

- 13.4.1 If the Architect requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing a soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:
  - a) A description of the proposed work to be performed and a programme for its execution,
  - b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion, and
  - c) the Contractor's proposal for evaluation of the Variation.
- 13.42 The Architect shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Project Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst a waiting a response.
- Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Architect to the Contractor, who shall acknowledge receipt.
- 13.44 Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Architect instructs or approves otherwise in accordance with this Clause.

## 135 Paymentin Applicable Currencies

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

### 13.6 Provisional Sums

- 13.6.1 Each Provisional Sum shall only be used, in whole or inpart, in accordance with the Architect instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include onlysuch amounts, for the work, supplies or services to which the Provisional Sum relates, as the Architect shall have instructed. For each Provisional Sum, the Architect May instruct:
  - a) Work to be executed (including Plant, Materialso r services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or
  - b) Plant, Materials or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]) or otherwise; and for which there shall be included in the Contract Price:
    - i) The actual amounts paid (or due to be paid) by the Contractor, and
    - ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in **the Special Conditions of Contract** shall be applied.
- The Contractor shall, when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

### 13.7 Dayworks

- 13.7.1 For work of a minor or incidental nature, the Architect may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the Daywork Schedule included in the Contract, and the following procedure shall apply. If a Daywork Schedule is not included in the Contract, this Sub-Clause shall not apply.
- Before ordering Goods for the work, the Contractor shall submit quotations to the Engineer. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

- 13.73 Except for any items for which the Daywork Schedule specifies that payment is not due, the Contractor shall delive reach day to the Architect accurate statements induplicate which shall include the following details of the resources used in executing the previous day's work:
  - a) The names, occupations and time of Contractor's Personnel,
  - b) the identification, type and time of Contractor's Equipment and Temporary Works, and
  - c) the quantities and types of Plant and Materials used.
- 13.7.4 One copy of each statement will, if correct, or when agreed, be signed by the Architect and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Engineer, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

# 138 Adjustments for Changes in Legislation

- 138.1 The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of Kenya (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.
- 1382 If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) payment of any such Cost, which shall be included in the Contract Price.
- 1383 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- 13.84 Not withstanding the foregoing, the Contractor shall not be entitled to an extension of time if the relevant delay has already been taken into account in the determination of a previous extension of time and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause 13.8 [Adjustments for Changes in Cost].

### 139 Adjustments for Changes in Cost

- In this Sub-Clause, "table of adjustment data" means the completed table of adjustment data for local and foreign currencies included in the Schedules. If there is no such table of adjustment data, this Sub-Clause shall not apply.
- 1392 If this Sub-Clause applies, the amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labor, Goods and other inputs to the Works, by the addition or deduction of the amounts determined by the formulae prescribed in this Sub-Clause. To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this or other Clauses, the Accepted Contract Amount shall be deemed to have included a mounts to cover the contingency of other rises and falls in costs.
- 1393 The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable. No adjustment is to be applied to work valued on the basis of Cost or current prices. The formulae shall be of the following general type:

# **Price Adjustment Formula**

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 Im/Io

where:

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

A and B a recoefficients **specified in the SCC**, representing then on 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 Ioc is the index prevailing 30 days before Bid opening for inputs payable.

**NOTE:** The 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 nonadjustable components. The sum of the adjustments for each currency are added to the Contract Price.

- 1394 The cost indices or reference prices stated in the table of adjustment data shall be used. If their source is in doubt, itshall be determined by the Engineer. Forth is purpose, reference shall be made to the values of the indices at stated dates (quoted in the fourth and fifth columns respectively of the table) for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.
- Incases where the "currency of index" is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the Central Bank of Kenya, of this relevant currency on the above date for which the index is required to be applicable.
- 139.6 Until such time as each current cost index is available, the Architect shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.
- 139.7 If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices there after shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price, whichever is more favorable to the Procuring Entity.
- The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or in applicable, as a result of Variations.

### 14. CONTRACT PRICE AND PAYMENT

#### 14.1 The Contract Price

- 14.1.1 Unless otherwise stated in the Special Conditions:
  - The value of the payment certificate shall be agreed or determined under Sub-Clause 12.3 [Evaluation] and be subject to adjustments in accordance with the Contract;
  - b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 13.7 [Adjustments for Changes in Legislation];

- c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:
  - i) of the Works which the Contractor is required to execute, or
  - ii) for the purposes of Clause12 [Measurement and Evaluation]; and
- d) the Contractor shall submit to the Engineer, within 30 days after the Commencement Date, a proposed breakdown of each lump sum price in the Schedules. The Architect may take account of the break down when preparing Payment Certificates but shall not be bound by it.
- 14.12 Notwithstanding the provisions of subparagraph (b), Contractor's Equipment, including essential spare parts there for, imported by the Contractor for the sole purpose of executing the Contract shall not be exempt from the payment of import duties and taxes upon importation.

### 14.2 Advance Payment

- The Procuring Entity shall make an advance payment, as an interest-free loan for mobilization and cashflow support, when the Contractor submits a guarantee in accordance with this Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the **Special Conditions of Contract.**
- Unless and until the Procuring Entity receives this guarantee, or if the total advance payment is not stated in the Special Conditions of Contract, this Sub-Clause shall not apply.
- 1423 The Architect shall deliver to the Procuring Entity and to the Contractor an Interim Payment Certificate for the advance payment or its first instalment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the Procuring Entity receives (i) the Performance Security in accordance with Sub-Clause 4.2 [Performance Security] and (ii) a guarantee in amounts and currencies equal to the a dvance payment. This guarantee shall be issued by a reputable bank or financial institutions elected by the Contractor and shall be in the form annexed to the Special Conditions or in another form approved by the Procuring Entity.
- 142.4 The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount shall be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 30 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.
- Unless stated otherwise in **the Special Conditions of Contract**, the advance payment shall be repaid through percentage deductions from the interim payments determined by the Architect in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates], as follows:
  - a) Deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment and deductions and repayments of retention) exceeds 30 percent (30%) of the Accepted Contract Amount less Provisional Sums; and
  - b) deductions shall be made at the amortization rate stated in the **Special Conditions of Contract** of the amount of each Interim Payment Certificate (excluding the advance payment and deductions for its repayments as well as deductions for retention money) in the currencies and proportions of the advance payment until such time as the advance payment has been repaid; provided that the advance payment shall be completely repaid prior to the time when 90 percent (90%) of the Accepted Contract Amount less Provisional Sums has been certified for payment.
- 142.6 If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Procuring Entity], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as thec ase may be), the whole of the balance then outstanding shall immediately become due and in case of termination under Clause 15 [Termination by Procuring Entity], except for Sub-Clause 14.2.7 [Procuring Entity's Entitlement to Termination for Convenience], payable by the Contractor to the Procuring Entity.

- 143.1 The Contractor shall submit a Statement (in number of copies indicated in the **Special Conditions of Contract**) to the Architect after the end of each month, in aform approved by the Engineer, showing in detail the amounts to which the Contractor considers itself to be entitled, together with supporting documents which shall include there porton the progress during this month in accordance with Sub-Clause4.21 [Progress Reports].
- The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:
  - a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below);
  - b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost];
  - any amount to be deducted for retention, calculated by applying the percentage of retention stated in the
    Special Conditions of Contract to the total of the above amounts, until the amount so retained by the
    Procuring Entity reaches the limit of Retention Money (if any) stated in the Special Conditions of
    Contract;
  - d) any amounts to be added for the advance payment and (if more than one instalment) and to be deducted for its repayments in accordance with Sub-Clause 14.2 [Advance Payment];
  - e) any amounts to be added and deducted for Plant and Materials in accordance with Sub-Clause 14.5 [Plant and Materials intended for the Works];
  - f) any other additions or deductions which may have become due under the Contractor otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and
  - g) the deduction of amounts certified in all previous Payment Certificates.

# 14.4 Schedule of Payments

- 14.4.1 I fthe Contract includes a schedule of payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this schedule:
  - a) The instalments quoted in this schedule of payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates];
  - b) Sub-Clause 14.5 [Plant and Materials intended for the Works] shall not apply; and
  - c) If these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less or more than that on which this schedule of payments was based, then the Architect may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less or more than that on which the instalments were previously based.
- 14.4.2 If the Contract does not include a schedule of payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

#### 14.5 Plant and Materials intended for the Works

- 145.1 If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3, (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates].
- 1452 If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the Schedules, this Sub-Clause shall not apply.
- 1453 The Architect shall determine and certify each addition if the following conditions a resatisfied:
  - a) The Contractor has:
    - i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and

(ii) submitted statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence;

and either:

- b) the relevant Plant and Materials:
  - i) are those listed in the Schedules for payment when shipped,
  - ii) have been shipped to Kenya, enroute to the Site, in accordance with the Contract; and
  - are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Architect together with evidence of payment of freight and insurance, any other documents reasonably required, and a bank guarantee in a form and issued by an entity approved by the Procuring Entity in amounts and currencies equal to the amount due under this Sub-Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause14.2 [Advance Payment] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration; or
- c) the relevant Plant and Materials:
  - i) are those listed in the Schedules for payment when delivered to the Site, and
  - ii) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration and appear to be in accordance with the Contract.
- 145.4 The additional amount to be certified shall be the equivalent of eighty percent (80%) of the Architect determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials.
- 1455 The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.

### 14.6 Issue of Interim Payment Certificates

- 14.6.1 No amount will be certified or paid until the Procuring Entity has received and approved the Performance Security. Thereafter, the Architect shall, within 30 days after receiving a Statement and supporting documents, deliver to the Procuring Entity and to the Contractor an Interim Payment Certificate which shall state the amount which the Architect fairly determines to be due, with all supporting particulars for any reduction or withholding made by the Architect on the Statemen tif any.
- 14.62 However, prior to issuing the Taking-Over Certificate for the Works, the Architect shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the Special Conditions of Contract. In this event, the Architect shall give notice to the Contractor accordingly.
- 14.63 An Interim Payment Certificate shall not be withheld for any other reason, although:
  - a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
  - b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.
- 4.6.4 The Architect may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Architect acceptance, approval, consent or satisfaction.

# 14.7 Payment

- 14.7.1 The Procuring Entity shall pay to the Contractor:
  - The advance payment shall be paid within 60 days after signing of the contract by both parties or within 60 days after receiving the documents in accordance with Sub-Clause 4.2 [Performance Security] and

- Sub- Clause 14.2 [Advance Payment], which ever is later;
- b) The amount certified in each Interim Payment Certificate within 60 days after the Architect Issues Interim Payment Certificate; and
- c) the amount certified in the Final Payment Certificate within 60 days after the Procuring Entity Issues Interim Payment Certificate; or after determination of any disputed amount shown in the Final Statement in accordance with Sub-Clause 16.2 [Terminationby Contractor].
- 14.72 Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (forth is currency) specified in the Contract.

### 14.8 Delayed Payment

- 14.8.1 If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall be entitled to receive financing charges (simple interest) monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7 [Payment], irrespective (in the case of its sub-paragraph (b) of the date on which any Interim Payment Certificate is is sub-paragraph.
- 14.8.2 These financing charges shall be calculated at the annual rate of three percentage points above the mean rate of the Central Bank in Kenya of the currency of payment, or if not available, the inter bank offered rate, and shall be paid in such currency.
- 14.83 The Contractor shall be entitled to this payment without formal notice and certification, and without prejudice to any other right or remedy.

# 14.9 Payment of Retention Money

- 14.9.1 When the Taking-Over Certificate has been issued for the Works, the first half of the Retention Money shall be certified by the Architect for payment to the Contractor. If a Taking-Over Certificate is issued for a Section or part of the Works, a proportion of the Retention Money shall be certified and paid. This proportion shall behalf (50%) of the proportion calculated by dividing the estimated contract value of the Section or part, by the estimated final Contract Price.
- 14.92 Promptly after the latest of the expiry dates of the Defects Liability Periods, the outstanding balance of the Retention Money shall be certified by the Architect for payment to the Contractor. If a Taking-Over Certificate was issued for a Section, a proportion of the second half of the Retention Money shall be certified and paid promptly after the expiry date of the Defects Notification Period for the Section. This proportion shall behalf (50%) of the proportion calculated by dividing the estimated contract value of the Section by the estimated final Contract Price.
- 14.93 However, if any work remains to be executed under Clause 11 [Defects Liability], the Architects hall be entitled to withhold certification of the estimated cost of this work until it has been executed.
- When calculating these proportions, no account shall be taken of any adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost].
- 14.95 Unless otherwise stated in the Special Conditions, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a Retention Money Security guarantee, in the form annexed to the Special Conditions or in another form approved by the Procuring Entity and issued by a reputable bank or financial institution selected by the Contractor, for the second half of the Retention Money.
- 14.9.6 The Procuring Entity shall return the Retention Money Security guarantee to the Contractor within 14 days after receiving a copy of the Completion Certificate.

# 14.10 Statement at Completion

14.10.1 Within 84 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Architect three copies of a Statement at completion with supporting documents, in accordance with Sub-

Clause 14.3 [Application for Interim Payment Certificates], showing:

- a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,
- b) any further sums which the Contractor considers to be due, and
- c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.
- 14.10.2 The Architect shall then certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates].

# 14.11 Application for Final Payment Certificate

- 14.11.1 Within 60 days after receiving the Completion Certificate, the Contractor shall submit, to the Engineer, six copies of a draft final statement with supporting documents showing in detail in a form approved by the Engineer:
  - a) The value of all work done in accordance with the Contract, and
  - b) Any further sums which the Contractor considers to be due to him under the Contractor otherwise.
- 14.11.2 If the Architect disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Architect may reasonably require within 30 days from receipt of said draft and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Architect the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".
- 14.11.3 However, if, following discussions between the Architect and the Contractor and any changes to the draft final statement which are agreed, it be comes evident that a dispute exists, the Architect shall deliver to the Procuring Entity (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 [Obtaining Dispute Board's Decision] or Sub-Clause 20.5 [Amicable Settlement], the Contractor shall then prepare and submit to the Procuring Entity (with a copy to the Engineer) a Final Statement.

### 14.12 Discharge

When submitting the Final Statement, the Contractor shall submit a discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the out standing balance of this total, in which event the discharge shall be effective on such date.

# 14.13 Issue of Final Payment Certificate

- 14.13.1 Within 30days after receiving the Final Statement and discharge in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Architect shall deliver, to the Procuring Entity and to the Contractor, the Final Payment Certificate which shall state:
  - a) The amount which he fairly determines is finally due, and
  - b) After giving credit to the Procuring Entity for all amounts previously paid by the Procuring Entity and for all sums to which the Procuring Entity is entitled, the balance (if any) due from the Procuring Entity to the Contractor or from the Contractor to the Procuring Entity, as the case may be.
- 14.13.2 If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Architect shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 30 days, the Architect shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

# 14.14 Cessation of Procuring Entity's Liability

14.14.1 The Procuring Entity shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

- a) in the Final Statement and also,
- b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [Statement at Completion].
- 14.14.2 However, this Sub-Clause shall not limit the Procuring Entity's liability under his in demnification obligations, or the Procuring Entity's liability in any case of fraud, deliberate default or reckless misconduct by the Procuring Entity.

### 14.15 Currencies of Payment

The Contract Price shall be paid in the currency or currencies named in the Schedule of Payment Currencies. If more than one currency is so named, payments shall be made as follows:

- a) If the Accepted Contract Amount was expressed in Local Currency only:
  - i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Schedule of Payment Currencies, except as otherwise agreed by both Parties;
  - ii) payments and deductions under Sub-Clause 13.5 [Provisional Sums] and Sub-Clause 13.7 [Adjustments for Changes in Legislation] shall be made in the applicable currencies and proportions; and
  - iii) otherpayments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [Application for Interim Payment Certificates] shall be made in the currencies and proportions specified in sub-paragraph (a) (i) above;
- b) payment of the damages specified in the Special Conditions of Contract, shall be made in the currencies and proportions specified in the Schedule of Payment Currencies;
- c) other payments to the Procuring Entity by the Contractor shall be made in the currency in which the sum was expended by the Procuring Entity, or in such currency as may be agreed by both Parties;
- d) if any amount payable by the Contractor to the Procuring Entity in a particular currency exceeds the sum payable by the Procuring Entity to the Contractor in that currency, the Procuring Entity may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and
- e) if no rates of exchange are stated in the Schedule of Payment Currencies, they shall be those prevailing on the Base Date and determined by the Central Bank of Kenya.

### 15 TERMINATION BY PROCURING ENTITY

#### 15.1 Notice to correct any defects or failures

If the Contractor fails to carry out any obligation under the Contract, the Architect may by notice require the Contractor to make good the failure and to remedy it within 30 days.

# 15.2 Termination by Procuring Entity

- 152.1 The Procuring Entity shall be entitled to terminate the Contract if the Contractor breaches the contract based on following circumstances which shall include but not limited to:
  - a) fails to comply with Sub-Clause 4.2 [Performance Security] or with a notice under Sub-Clause 15.1 [Notice to Correct],

#### CC/44

- b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
- c) without reasonable excuse fails:
  - i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or
  - ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 30 days after receiving it,
- d) subcontracts the major part or whole of the Works or assigns the Contract without the consent of the Procuring Entity,
- e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made

against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of theseacts or events, or

- f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an induce mentor reward:
- i) for doing or for bearing to do any action in relation to the Contract, or
- ii) for showing or for bearing to show favor or disfavor to any person in relation to the Contract, or
- iii) if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such induce mentor reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination, or
- g) If the contract or repeatedly fails to remedy delivers defective work,
- h) based on reasonable evidence, has engaged in Fraud and Corruption as defined in paragraph 2.2 of the Appendix B to these General Conditions, incompeting for or in executing the Contract.
- In any of these events or circumstances, the Procuring Entity may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of subparagraph (e) or (f) or (g) or (h), the Procuring Entity may by notice terminate the Contract immediately.
- The Procuring Entity's election to terminate the Contract shall not prejudice any other rights of the Procuring Entity, under the Contractor otherwise.
- 1524 The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.
- After termination, the Procuring Entity may complete the Works and/ or arrange for any other entities to do so. The Procuring Entity and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor.
- The Procuring Entity shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Procuring Entity, these items may be sold by the Procuring Entity in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

### 15.3 Valuation at Date of Termination

Assoon as practicable after a notice of termination under Sub-Clause 15.2 [Termination by Procuring Entity] has taken effect, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract.

CC/45

# 15.4 Payment after Termination

After a notice of termination under Sub-Clause 15.2 [Termination by Procuring Entity] has taken effect, the Procuring Entity may:

- a) Proceed in accordance with Sub-Clause 2.5 [Procurin Entity's Claims],
- b) withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Procuring Entity, have been established, and/or

c) recover from the Contractor any losses and damages incurred by the Procuring Entity and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation at Date of Termination]. After recovering any such losses, damages and extra costs, the Procuring Entity shall pay any balance to the Contractor.

# 155 Procuring Entity's Entitlement to Termination for Convenience

The Procuring Entity shall be entitled to terminate the Contract, at any time at the Procuring Entity's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 30 days after the later of the dates on which the Contractor receives this notice or the Procuring Entity returns the Performance Security. The Procuring Entity shall not terminate the Contract under this Sub-Clausein order to execute the Works itself or to arrange for the Works to be executed by another contractor or to avoid a termination of the Contract by the Contractor under Clause 16.2 [Termination by Contractor]. After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment] and shall be paid in accordance with Sub-Clause 16.4 [Payment on Termination].

### 15.6 Fraud and Corruption

The Contractor shall ensure compliance with the Kenya Government's Anti-Corruption Laws and its prevailing sanctions.

# 15.7 Corrupt gifts and payments of commission

- 15.7.1 The Contractor shall not:
  - a) Offer or give or agree to give to any person in the service of the Procuring Entity any gift or consideration of any kind as an inducement or reward for doing or for bearing to door for having done or for borne to do any act in relation to the obtaining or execution of this or any other Contract for the Procuring Entity or for showing or for bearing to show favor or disfavor to any person in relation to this or any other contract for the Procuring Entity.
  - b) Enter into this or any other contract with the Procuring Entity in connection with which commission has been paid or agreed to be paid by him or on his behalf or to his knowledge, unless before the Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment there of have been disclosed in writing to the Procuring Entity.
- 15.72 Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the provisions of the Public Procurement and Asset Disposal Act (2015) and the Anti-Corruption and Economic Crimes Act (2003) of the Laws of Kenya.

### 16 SUSPENSION AND TERMINATION BY CONTRACTOR

# 16.1 Contractor's Entitlement to Suspend Work

16.1.1 If the Architect fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or Sub-Clause 14.7 [Payment], or not receiving instructions that would enable the contractor to proceed with the works in accordance with the program, the Contractor may, after giving not less than 30 days' notice to the Procuring Entity, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.

CC/46

- 16.12 The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Terminationby Contractor].
- 16.13 If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.
- 16.14 If the Contractor suffers delay and/ori neurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Architect and shall be

entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
- After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

# 16.3 Termination by Contractor

- 163.1 The Contractor shall be entitled to terminate the Contract if:
  - a) the Architect fails, within 60 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,
  - b) the Contractor does not receive the amount due under an Interim Payment Certificate within 90 days after the expiry of the time stated in Sub-Clause1 4.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Procuring Entity's Claims]),
  - c) the Procuring Entity substantially fails to perform his obligations under the Contract in such manner as to materially and adversely affect the economic balance of the Contract and/or the ability of the Contractor to perform the Contract,
  - d) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or
  - e) the Procuring Entity becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.
  - f) the Contractor does not receive the Architect instruction recording the agreement of both Parties on the fulfilment of the conditions for the Commencement of Works under Sub-Clause 8.1 [Commencement of Works].
- In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Procuring Entity, terminate the Contract. However, in the case of sub-paragraph (f) or (g), the Contractor may by notice terminate the Contract immediately.
- 1633 The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contractor otherwise.

# 16.4 Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 15.5 [Procuring Entity's Entitlement to Termination for Convenience], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 19.6 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

- a) cease all further work, except for such work as may have been instructed by the Architect for the protection of life or property or for the safety of the Works,
- b) hand over Contractor's Documents, Plant, Materials and other work, for which the Contractor has received payment, and
- c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

# CC/47

# 16.5 PaymentonTermination

After a notice of termination under Sub-Clause 16.2 [Termination by Contractor] has taken effect, the Procuring Entity shall promptly:

- a) Return the Performance Security to the Contractor,
- b) pay the Contractor in accordance with Sub-Clause 19.6 [Optional Termination, Payment and Release], and
- pay to the Contractor the amount of any loss or damage sustained by the Contractor as a result of this termination.

### 17. RISK AND RESPONSIBILITY

#### 17.1 Indemnities

- 17.1.1 The Contractor shall indemnify and hold harmless the Procuring Entity, the Procuring Entity's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:
  - a) Bodily injury, sickness, disease or death, of any person what so ever arising outo for in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, willful actor breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, or any of their respective agents, and
  - b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.
- 17.12 The Procuring Entity shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property], unless and to the extent that any such damage or loss is attributable to any negligence, willful actor breach of the Contract by the contractor, the contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

### 17.2 Contractor's Care of the Works

- The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Procuring Entity. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Procuring Entity.
- After responsibility has accordingly passed to the Procuring Entity, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.
- If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractorisresponsible for their care, from any cause not listed in Sub-Clause 17.3 [Procuring Entity's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.
- 172.4 The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

# 17.3 Procuring Entity's Risks

The risks referred to in Sub-Clause 17.4 [Consequences of Procuring Entity's Risks] below, in so far as they directly affect the execution of the Works in Kenya, are:

- a) War hostilities (whether war be declared or not),
- b) rebellion, riot, commotion or disorder, terrorism, sabotage by persons other than the Contractor's Personnel,
- c) explosive materials, ionizing gradiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such explosives, radiation or radio-activity,
- d) pressure waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds,

- e) use or occupation by the Procuring Entity of any part of the Permanent Works, except as may be specified in the Contract,
- f) design of any part of the Works by the Procuring Entity's Personnel or by others for whom the Procuring Entity is responsible, and
- g) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventive precautions.

### 17.4 Consequences of Procuring Entity's Risks

- 17.4.1 If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Architect and shall rectify this loss or damage to the extent required by the Engineer.
- 17.42 If the Contractor suffers delay and/ or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- (a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of TimeforCompletion], and
- (b) paymentofany such Cost, which shall be included in the Contract Price. In the case of sub-paragraphs (e)and (g) of Sub-Clause 17.3 [Procuring Entity's Risks], Accrued Costs shall be payable.
- After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

# 17.5 Intellectual and Industrial Property Rights

- In this Sub-Clause, "infringement" shall refer to an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" shall refer to a claim (or proceedings pursuing a claim) alleging an infringement.
- Whenever a Party does not give notice to the other Party of any claim within 30 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.
- 1753 The Procuring Entity shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:
  - a) An un avoidable result of the Contractor's compliance with the Contract, or
  - b) A result of any Works be ingused by the Procuring Entity:
    - i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
    - ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.
- 175.4 The Contractor shall indemnify and hold the Procuring Entity harmless again stand from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.
- 1755 IfaPartyisentitledtobeindemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.
- For operation and maintenance of any plan to requipment installed, the contractor shall grant a non-exclusive and non-transferable license to the Procuring Entity under the patent, utility models ,or other intellectual rights owned by the contractor or a third party from whom the contract or has received the rights to grant sub-licenses and shall also grant to the Procuring Entity a non-exclusive and non-transferable rights (without the rights to sub-license) to use the know how and other technical information disclosed to the contract or under the contract. Nothing contained here-in shall be construed as transferring ownership of any patent, utility model, trademark, design, copy right, know-how or other intellectual rights from the contractor or any other third party to the Procuring Entity.

### 17.6 Limitation of Liability

- Neither Party shall be liable to the other Party for loss of use of anyW orks, loss of profit, loss of any contractor for any in director consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4(b) [Consequences of Procuring Entity's Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights].
- The total liability of the Contractor to the Procuring Entity, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Procuring Entity's Equipment and Free- Issue Materials], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in **the Special Conditions of Contract**, or (if such multiplier or other sum is not so stated) the Accepted Contract Amount.
- 17.63 This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

# 17.7 Use of Procuring Entity's Accommodation/Facilities

- 17.7.1 The Contractor shall take full responsibility for the care of the Procuring Entity provided accommodation and facilities, if any, as detailed in the Specification, from the respective dates of hand-over to the Contractor until cessation of occupation (where hand-over or cessation of occupation may take place after the date stated in the Taking-Over Certificate for the Works).
- 17.72 If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Procuring Entity is liable, the Contractor shall, at his own cost, rectify the loss or damage to the satisfaction of the Engineer.

### 18 INSURANCE

### 18.1 General Requirements for Insurances

- 18.1.1 In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.
- 18.12 Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Procuring Entity. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.
- 18.13 Wherever the Procuring Entity is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.
- 18.14 If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Procuring Entity shall act for Procuring Entity's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.
- 18.15 Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.
- 18.16 The relevant insuring Party shall, within the respective periods stated in **the Special Conditions of Contract** (calculated from the Commencement Date), submit to the other Party:
  - a) Evidence that the insurances described in this Clause have been affected, and
  - b) copies of the policies for the insurances described in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to

Property].

- When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Engineer.
- 18.18 Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.
- 18.19 Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or at tempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.
- 18.1.10 If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contractor fails to provide satisfactory evidence and copies of policies in accordance with this Sub- Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.
- 18.1.11 Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Procuring Entity, under the other terms of the Contractor otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Procuring Entity.
- 18.1.12 Procuring Entity in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.
- 18.1.13 Payments by one Party to the other Party shall be subject to Sub-Clause 2.5 [Procuring Entity's Claims] or Sub- Clause 20.1 [Contractor's Claims], as applicable.
- 18.1.14 The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to the insurance referred to Clause 18) with insurers from any eligible source country.

# 182 Insurance for Works and Contractor's Equipment

- The insuring Party shall insure the Works, Plant, Material sand Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.
- The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 [Defects Liability]).
- 1823 The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.
- 1824 Unless otherwise stated in the Special Conditions, insurances under this Sub-Clause:
  - a) Shal lbe effected and maintained by the Contractor as insuring Party,
  - b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated to the Party actually bearing the costs of rectifying the loss or damage,
  - c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Procuring Entity's Risks],
  - d) shall also cover, to the extent specifically required in the tendering documents of the Contract, loss or damage to a part of the Works which is attributable to the use or occupation by the Procuring Entity of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h)of Sub-Clause 17.3 [Procuring Entity's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Special Conditions of Contract (if an amount is not so stated,t his sub-paragraph (d) shall not

- apply), and
- e) may however exclude loss of, damage to, and reinstatement of:
  - i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
  - ii) apart of the Works which is lost or damaged inorder to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,
  - iii) apart of the Works which has been taken over by the Procuring Entity, except to the extent that the Contractor is liable for the loss or damage, and
  - iv) Goods while they are not in Kenya, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].
- If, more than one year after the Base Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Procuring Entity, with supporting particulars. The Procuring Entity shall then (i) be entitled subject to Sub-Clause 2.5 [Procuring Entity's Claims] to payment of an amount equivalent to such commercially reasonable terms asthe Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

# 183 Insurance against Injury to Persons and Damage to Property

- 183.1 The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.
- This insurance shall be for a limit per occurrence of not less than the amount stated in **the Special Conditions of Contract**, with no limit on the number of occurrences. If an amount is not stated in the **Special Conditions of Contract**, this Sub-Clause shall not apply.
- 1833 Unless otherwise stated in the Special Conditions, the insurances specified in this Sub-Clause:
  - a) Shall be effected and maintained by the Contractor as insuring Party,
  - b) shall be in the joint names of the Parties,
  - c) shall be extended to cover liability for all loss and damage to the Procuring Entity's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
  - d) may however exclude liability to the extent that it arises from:
    - i) the Procuring Entity's right to have the Permanent Works executed on, over, under, in or
    - ii) through any land, and to occupy this land for the Permanent Works,
    - iii) damage which is an unavoidable result of the Contractor's obligations to execute the
    - iv) Works and remedy any defects, and
    - v) a cause listed in Sub-Clause 17.3 [Procuring Entity's Risks], except to the extent that cover is available at commercially reasonable terms.

### 18.4 Insurance for Contractor's Personnel

- 184.1 The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.
- 1842 The insurance shall cover the Procuring Entity and the Architect against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractoror any otherrof the Contractor's Personnel, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Procuring Entity or of the Procuring Entity's Personnel.
- 18.43 The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

# 19.1 Definition of Force Majeure

- 19.1.1 In this Clause, "Force Majeure" means an exceptional event or circumstance:
  - a) Which is beyond a Party's control,
  - b) Which such Party could not reasonably have provided against before entering into the Contract,
  - c) which, having arisen, such Party could not reasonably have avoided or over come, and
  - d) which is not substantially attributable to the other Party.
- 19.12 Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, s olong as conditions (a) to (d) above are satisfied:
  - a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
  - b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
  - c) riot, commotion, disorder, strike or lock out by persons other than the Contractor's Personnel,
  - d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as maybeattributabletotheContractor'suseofsuchmunitions, explosives, radiation or radio-activity, and
  - e) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

### 19.2 Notice of Force Majeure

- 192.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.
- 1922 The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.
- Not withstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

# 193 Duty to Minimize Delay

Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure. A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

# 19.4 Consequences of Force Majeure

- 194.1 If the Contractor is prevented from performing his substantial obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
  - a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
  - b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of Sub-Clause 19.1 [Definition of Force Majeure] and, in sub-paragraphs (ii) to (iv), occurs in Kenya, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment].
- 19.42 After receiving this notice, the Architect shall proceed in a ccordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

### 195 Force Majeure Affecting Subcontractor

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

#### 19.6 Optional Termination, Payment and Release

- 19.6.1 If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment].
- 19.62 Upon such termination, the Architect shall determine the value of the work done and issue a Payment Certificate which shall include:
  - a) theamountspayableforanyworkcarriedoutforwhichapriceisstatedintheContract;
  - b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Procuring Entity when paid for by the Procuring Entity, and the Contractor shall place the same at the Procuring Entity'sdisposal;
  - c) other Cost or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works;
  - d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and
  - e) the Cost of repatriation of the Contractor's staff and lab or employed wholly in connection with the Works at the date of termination.

### 19.7 Release from Performance

Not withstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Partyofsucheventorcircumstance:

- The Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and
- b) The sum payable by the Procuring Entity to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [Optional Termination, Payment and Release] if the Contract had been terminated under Sub-Clause 19.6.

### 20. SETTLEMENT OF CLAIMS AND DISPUTES

### 20.1 Contractor's Claims

- 20.1.1 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 Engineer, 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.
- 20.12 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.
- 20.13 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.
- 20.14 TheContractorshallkeepsuch contemporary records as may be necessary to substantiate any claim, either on the Site or at an other location acceptable to the Engineer. Without admitting the Procuring Entity's liability, the Architect 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 Architect to inspect all these records and shall (if instructed) submit copies to the Engineer.
- 20.15 Within 42days 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 Engineer, the Contractor shall send to the Architect 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 Architect may reasonably require; and
  - c) The Contractor shall send a final claim within 30 days after the end of the effects resulting from the eventor circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer.
- 20.1.6 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 Architect and approved by the Contractor, the Architect 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.
- 20.1.7 Within the above defined period of 42 days, the Architect shall proceed in accordance with Sub-Clause 3.5 [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.
- 20.18 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.
- 20.19 If the Architect does not respond within the time frame defined in this Clause, either Party may consider that the claim is rejected by the Architect and any of the Parties may refer the dispute for amicable settlement in accordance with Clause 20.3.

20.1.10 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 20.3.

# 20.2 Procuring Entity's Claims

- 202.1 If the Procuring Entity considers itself to be entitled to any payment under any Clause of these Conditionsor otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Procuring Entity or the Architect shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Procuring Entity's Equipment and Free-Issue Materials], or for other services requested by the Contractor.
- The notice shall be given as soon as practicable and no longer than 30 days after the Procuring Entity became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.
- The particulars shall specify the Clause or other basis of the claim and shall include substantiation of the amount and/or extension to which the Procuring Entity considers itself to be entitled in connection with the Contract. The Architect shall then proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the amount (if any) which the Procuring Entity is entitled to be paid by the Contractor, and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [Extension of Defects Notification Period].
- 2024 This amount may be included as a deduction in the Contract Price and Payment Certificates. The Procuring Entity shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

#### **20.3** Amicable Settlement

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 20.1 above should move to commence arbitrationa fter 60 days from the day on which a notice of a claim was given, even if no attempt at an amicable settlement has been made.

# 20.4 Matters that may be referred to arbitration

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) Whether or not the issue of an instruction by the Architect is empowered by these Conditions.
- b) Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
- c) Any dispute arising in respect risks arising from matters referred to in Clause 17.3 and Clause 19.
- e) 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.

### 20.5 Arbitration

- 205.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 20.3 shall be finally settled by arbitration.
- 2052 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.

- Not withstanding 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.
- 2054 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 a ward any sums which ought to have been the subject of or included in any certificate.
- 2055 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 require mentor notice had been given.
- 2056 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Architect from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.
- 205.7 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.
- 205.7 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Architect shall not be altered by reason of any arbitration being conducted during the progress of the Works.
- 2058 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.

#### **20.6** Arbitration with National Contractors

- 20.6.1 If the Contractis 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
- 20.62 The institution written to first by the aggrieved party shall take precedence over all other institutions.

# **20.7** Arbitration with Foreign Contractors

- 20.7.1 Arbitration with foreign contractors shall be conducted in accordance with the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL); or with proceedings administered by the International Chamber of Commerce (ICC) and conducted under the ICC Rules of Arbitration; by one or more arbitrators appointed in accordance with said arbitration rules.
- 20.72 The place of arbitration shall be a location specified in the SCC; and the arbitration shall be conducted in the language for communications defined in Sub-Clause1.4 [Law and Language].

# **20.8** Alternative Arbitration Proceedings

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.

# 20.9 Failureto Comply with Arbitrator's Decision

- 20.9.1 The award of such Arbitrator shall be final and binding up on the parties.
- 20.92 In the even 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.

# 20.10 Contract operations to continue

Notwithstanding any reference to arbitration herein,

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

# **Section IX - Special Conditions of Contract**

The following Special Conditions shall supplement the GCC. Whenever there is a conflict, the provisions here in shall prevail over those in the GCC.

Conditions	Sub-	Data
	Clause	
		Contract Data
Procuring Entity's name and address	Heading	Murang'a University of Technology
Name and Reference No. of the Contract	Heading and 1.1	Proposed completion of the Hostel Block Phase 1 Wing 2 for Murang'a University of Technology Ref No. MUT/T 05/HB PH I W2/2023/2024
Engineer's Name and address	Heading and 3.1.1	Dept. Public Works Murang'a County
Contractor's Representative's name	4.3.1	Dept. Public Works Murang'a County
Key Personnel names	16.9.1	Dept. Public Works Murang'a County
Time for Completion	1.1.	24 Weeks
Defects Notification Period	1.1	183 days
Sections	1.1	Not Applicable
Electronic transmission systems	1.3	
Time for the Parties entering into a Contract Agreement	1.6	Within 30 days
Commencement Date	8.1.1	After Contract Signing
Time for access to the Site	2.1.1	No later than the Commencement Date, and not later than fourteen (14) days after Commencement Date
Architect Duties and Authority	3.1.6 (b) (ii)	Variations resulting in an increase of the Accepted Contract Amount in excess of 10 % shall require approval of the Procuring Entity.
Performance Security	4.2.1	The performance security will be in the form of a <b>performance bond</b> in the amount(s) of <b>Ten (10%)</b> percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount.
Normal working hours	6.5	08.00 to 17.00 Hours
Delay damages for the Works	8.7 & 14.15(b)	0.18 % of the Contract Price per day.
Maximum amount of delay damages	8.7.1	10 % of the final Contract Price.
Provisional Sums	13.6. (b)(ii)	3%
Adjustments for Changes in Cost	13.9	Period "n" applicable to the adjustment multiplier "Pn": Not Applicable
Total advance payment	14.2.1	Not Applicable
Repayment amortization rate of advance payment	14.2.5 (b)	Not Applicable
Percentage of Retention	14.3.2 (c)	10 %
Limit of Retention Money Plant and Materials	14.3.2 (c)	10 % of the Accepted Contract Amount Sub-Clause 14.5 is Not Applicable
I mily und triumituis	14.5.3(b)(i)	Sub-Clause 1 110 10 110t Exphicable
	14.5.3(c)(i)	Plant and Materials for payment when delivered to the Site <b>Not Applicable</b>
Minimum Amount of Interim Payment Certificates	14.6.2	5 % of the Accepted Contract Amount.

Publishing source of commercial	14.8	Specify	% rate per month of delayed
interest rates for financial charges		payment.	
in case of delayed payment			

Maximum total liability of the	17.6.2	The Accepted Contract Amount,
Contractor to the Procuring Entity		
Periods for submission of	18.1.6	
insurance:		
a. evidence of insurance.		14 days
b. relevant policies		30 days
Maximum amount of deductibles	18.2.4 (d)	[Insert maximum amount of deductibles]
for insurance of the Procuring		
Entity's risks		
Minimum amount of third-party	18.3.2	[Insert amount of third-party insurance]
insurance		
The place of arbitration	20.7.2	Nairobi, Kenya

# **SECTION X - CONTRACT FORMS**

FORM No. 1 - NOTIFICATION OF INTENTION TO AWARD

FORM NO. 2 – REQUEST FOR REVIEW

FORM No. 3-LETTEROF AWARD

FORM No. 4 - CONTRACT AGREEMENT

FORM No. 5 - PERFORMANCE SECURITY [Option 1 - Unconditional Demand Bank Guarantee]

FORM No. 6- PERFORMANCE SECURITY [Option 2- Performance Bond]

FORM No. 7 - ADVANCE PAYMENT SECURITY

FORM No. 8 - RETENTION MONEY SECURITY

# FORM No 1: NOTIFICATION OF INTENTION TOAWARD OF CONTRACT

This Notification of Award shall be sent to each Tenderer that submitted a Tender and was not successful. Send this Notification to the Tenderer's Authorized Representative named in the Tender Information Form on the format below.

# **FORMAT**

1.	For 1	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]		
		PORTANT: insert the date that this Notification is transmitted to Tenderers. The Notification must be sent [I 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.	<u>Noti</u>	fication of Award		
	i)	Procuring Entity: [insert the name of the ProcuringEntity]		
	ii)	Project: [insert name ofproject]		
	iii)	Contract title: [insert the name of thecontract]		
	iv)	ITT No: [insert ITT reference number from ProcurementPlan]		
		Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. transmission of this Notification begins the Standstill Period. During the Standstill Period, you may:		
4.		uest a debriefing in relation to the evaluation of your tender by submitting a Procurement-related aplaint in relation to the decision to award the contracts.		
	a)	The successful tenderers		
	i)	Name of successful Tender		
	ii)	Address of the successful Tender		
	iii)	Contract price of the successful Tender Kenya Shillings(in words)		
		b) The reasons for your tender being unsuccessful are as follows:		
		c) OtherTenderers		

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.

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				

(Note a) State NE if not evaluated

# 5. How to request a debriefing

- a) DEADLINE: The dead line to request a debriefing expires at midnight on [insert date] (local time).
- 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]
  - iii) Agency: [insert name of Procuring Entity]
  - iv) 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 receip tof 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 a vailable from the Website www.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. Stand still 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:							

# FORM NO. 2- REQUEST FOR REVIEW

**Board Secretary** 

# FORM FOR REVIEW (r.203(1))

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD
APPLICATION NOOF20
BETWEEN
APPLICANT
AND
RESPONDENT (Procuring Entity)
Request for review of the decision of the
REQUEST FOR REVIEW
I/We
1.
2.
By this memorandum, the Applicant requests the Board for an order/orders that:
1.
2.
SIGNED(Applicant) Dated onday of/20
FOR OFFICIAL USE ONLY Lodged with the Secretary Public Procurement Administrative Review Board onday of20
SIGNED

# 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 [amoun tin numbers and words] [name of currency], as corrected and modified in accordance with the Instructions to Tenderers, is here by accepted by
You are requested to furnish the Performance Security within 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

ГΗΙ	IS AG	GREEMENT made the day ofof	20	, betweenthe Dresswing
Enti	ity"),	of the one part, and	of	(hereinafter the Procuring(hereinafter
WH exec	IERE/	AS the Procuring Entity desires that the by the Contractor, and has accepted a d the remedying of any defects there in	Tender by the Contractor for the	should be execution and completion of these
Γhe	Proc	curing Entity and the Contractor agree a	s follows:	
		nis Agreement words and expressions sl Contract documents referred to.	hall have the same meanings as	are respectively assigned to them in
2		following documents shall be deemed eement shall prevail over all other Cont		ued as part of this Agreement. This
3. I.	Agree defector The of the	The Notification of Award the Form of Tender the addenda Nos(if any) the Special Conditions of Contract the General Conditions of Contract; the Specifications the Drawings; and the completed Schedules and any oth consideration of the payments to be meement, the Contractor here by covena tests therein in conformity in all respects  Procuring Entity here by covenants to be the Works and the remedying of defects the er the provisions of the Contract at the test	ande by the Procuring Entity to ents with the Procuring Entity to swith the provisions of the Cont pay the Contractor in considerat here in, the Contract Price or suc	the Contractor as specified in this of execute the Works and to remedy ract.
		VITNESS where of the parties here to have of Kenya on the day, month and year		executed in accordance with the
	Sign	ned and sealed by		(for the Procuring Entity)
	Sign	ned and sealed by		(for the Contractor).

# FORM NO. 5 - PERFORMANCE SECURITY

<b>[O</b> ]	ption 1 - Unconditional Demand Bank Guarantee]
[G]	uarantor letterhead]
Be	neficiary: [insert name and Address of Procuring Entity]
Da	te:[Insert date of issue]
Gu	narantor: [Insert name and address of place of issue, unless indicated in the letterhead]
1.	We have been informedthat (hereinafter called "the
	Contractor") has entered into Contract Nodatedwith (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.	Atthe request of the Contractor, we as Guarantor, here by 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 it self 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
5.	The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], inresponse 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]
	<b>Note:</b> All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

<sup>&</sup>lt;sup>1</sup>The 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.

<sup>&</sup>lt;sup>2</sup>Insert 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 a readvised to use Performance Security – Unconditiona lDemand Bank Guarantee in stead of Performance Bond due to difficulties involved in calling Bond holder to action]

[G	uara	ntor le	tterhead or S	WIFT identifier code	2]	
Be	nefic	iary:	[insertnam	eandAddressofProcu	ringEntity]	
Da	te:			[Insert date of issu	e]	
PE	RFC	)RMA	NCE BOND	No.:		
Gı	ıarar	ntor: [	Insert name a	nd address of place	of issue, unless indicated in the letterhead]	
1.	Ву	this Bo	ond		as Principal (hereinafter called "the Contractor") and	
	type the	ount of es and	f proportions o	of currencies in which	as Surety (hereinafter called to_] as Obligee (hereinafter called "the Procuring Entity") in the for the payment of which sum well and truly to be made in the ch the Contract Price is payable, the Contractor and the Surety bind rators, successors and assigns, jointly and severally, firmly by these	
2.	of_ spe	cificati	ions, and ame		a written Agreement with the Procuring Entity dated thedayin accordance with the documents, plans, iich to the extent here in provided for, are by reference made part here entract.	
3.	periothe Ent	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 there under, the Surety may promptly remedy the default, or shall promptly:				
	a)	Comp	plete the Cont	ract in accordance w	vith its terms and conditions; or	
	b)	the C and t Procusucce sufficiently included first p total	contract in accide Surety of aring Entity assion of deficient funds to ding other cosparagraph her amount payal	tordance with its ter the lowest responsi- and make a vailable aults under the Cor pay the cost of cor ts and damages for veof. The term "Bala"	need tenderers for submission to the Procuring Entity for completing ms and conditions, and upon determination by the Procuring Entity ive Tenderers, arrange for a Contract between such Tenderer, and as work progresses (even though there should be a default or a nitract or Contracts of completion arranged under this paragraph) impletion less the Balance of the Contract Price; but not exceeding, which the Surety may be liable hereunder, the amount set forth in the ince of the Contract Price," as used in this paragraph, shall mean the tity to Contractor under the Contract, less the amount properly paid	
	c)				equired by Procuring Entity to complete the Contract in accordance al not exceeding the amount of this Bond.	
4.	The	Suret	y shall not be	liable for a greater s	num than the specified penalty of this Bond.	
5.	Tak oth	ing-O er than	ver Certificate	. No right of action s	before the expiration of one year from the date of the issuing of the shall accrue on this Bond to or for the use of any person or corporation in or the heirs, executors, administrators, successors, and assigns of	
6.		se pres	ents to be sea		ere unto set his hand and affixed his seal, and the Surety has caused te seal duly at tested by the signature of his legal representative, this	

SIGNED ON	on behalf of	
Ву	in the capacity of	
Inthepresenceof		
SIGNED ON	on behalf of	
Ву	in the capacity of	
Inthepresence of		

# FORM NO. 7 - ADVANCE PAYMENT SECURITY

	remand Bank Guarantee] Suarantor letterhead]
_	eneficiary:[Insert name and Address of ProcuringEntity]
	nte:[Insert date of issue]
	DVANCE PAYMENT GUARANTEE No.: [Insert guarantee reference number]
	uarantor: [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 (hereinafter called" the Contract").
	(incremater cancer the contract).
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, here by irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of
4.	
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, oronthe
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.

<sup>&</sup>lt;sup>1</sup>The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency of the advance paymen tas specified in the Contract.

Insert 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

[D	emand Bank Guarantee]		
[G	uarantor letterhead]		
Beneficiary:[Insert name and Address of Procuring Entity]  Date:[Insert date of issue]			
		Ad	vance payment guarantee no. [Insert guarantee reference number]
Gı	Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]		
1.	We have been informed that		
2.	Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys upto 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 <code>[insert amount in figures] ([insert amount in words])' upon receipt by us of the Beneficiary's complying demands upported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifyingthedemand, stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or showgrounds for your demand or the sum specified there in.</code>		
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 numberat [insert name and address of Applicant's bank].		
5.	This guarantee shall expire no later than the		
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.

<sup>&</sup>lt;sup>1</sup>The Guarantor shall insert an amount representing the amount of the second half of the Retention Money.

Insert a date that is twenty-eight days after the expiry of retention period after the actua lcompletion 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

(Amended and issued pursuant to PPRA CIRCULAR No. 02/2022)

#### 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 pursuant to Regulation 13 (2A) and 13 (6) of the Companies (Beneficial Ownership Information) Regulations, 2020. 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 legal person (tenderer) or arrangements or a natural person on whose behalf a transaction is conducted, and includes those persons who exercise ultimate effective control over a legal person (Tenderer) or arrangement.

Tender Reference No.:			[insert identification n	o]
Name of the Tender Title/Description:	[insert name of the assignment] to:			
	nsert complete	name of Procuring	Entity]	
In response to the requirement in your no additional information on beneficial own options that are not applicable]  I) We here by provide the following by the solutions of Paraficial appropriate the solutions of the solutions	ership:	[selec	t date of notification of a t one option as applicab	
Details of Beneficial ownership  Details of all Beneficial Owners	% of shares a person holds in the company Directly or	% of voting rights a person holds in the company	Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company	Whether a person directly or indirectly exercises significant influence or control over the Company

				a person holds in the company Directly or indirectly	rights a person holds in the company	or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer (Yes / No)	directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)
		Full Name		Directly	Directly	1. Having the right to appoint a majority of	1. Exercises significant influence or control
	1.	National identity card number or Passport number	card number or		% of voting rights  Indirectly % of voting rights	the board of the directors or an equivalent governing	over the Company body of the Company (tenderer)
	Personal Identification Number (where applicable)		Indirectly % of shares	body of the Tenderer: YesNo 2. Is this right held directly or indirectly?:		YesNo  2. Is this influence or control exercised	
		Nationality					directly or
		Date of birth [dd/mm/yyyy]				Direct	indirectly?
İ		Postal address					Direct
		Residential address				Indirect	Indirect
		Telephone number					
		Email address					
		Occupation or profession					

	Details of all Beneficial Owners	% of shares a person holds in the company Directly or indirectly	% of voting rights a person holds in the company	Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer (Yes / No)	Whether a person directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)
2.	Full Name  National identity card number or Passport number  Personal Identification Number (where applicable)  Nationality(ies)  Date of birth [dd/mm/yyyy]  Postal address  Residential address  Telephone number  Email address  Occupation or profession	Directly % of shares  Indirectly % of shares	Directly% of voting rights  Indirectly% of voting rights	1. Having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer: YesNo  2. Is this right held directly or indirectly?:  Direct	1. Exercises significant influence or control over the Company body of the Company (tenderer) YesNo  2. Is this influence or control exercised directly or indirectly?  Direct
3. etc.					

- II) Am fully aware that beneficial ownership information above shall be reported to the Public Procurement Regulatory Authority together with other details in relation to contract awards and shall be maintained in the Government Portal, published and made publicly available pursuant to Regulation 13(5) of the Companies (Beneficial Ownership Information) Regulations, 2020.(Notwithstanding this paragraph Personally Identifiable Information in line with the Data Protection Act shall not be published or made public). Note that Personally Identifiable Information (PII) is defined as any information that can be used to distinguish one person from another and can be used to deanonymize previously anonymous data. This information includes National identity card number or Passport number, Personal Identification Number, Date of birth, Residential address, email address and Telephone number.
- III) In determining who meets the threshold of who a beneficial owner is, the Tenderer must consider a natural person who in relation to the company:
  - (a) holds at least ten percent of the issued shares in the company either directly or indirectly;
  - (b) exercises at least ten percent of the voting rights in the company either directly or indirectly;

- (c) holds a right, directly or indirectly, to appoint or remove a director of the company; or
- (d) exercises significant influence or control, directly or indirectly, over the company.
- IV) What is stated to herein above is true to the best of my knowledge, information and belief.

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]
Designation of the person signing the Tender: [insert complete title of the person signing the
Tender]
Signature of the person named above:
are shown above]
Date this

Bidder Official Stamp

# **SPECIFICATIONS AND PRICING NOTES**

#### **SPECIFICATIONS AND PRICING NOTES**

#### BILL NO. 1

#### **SPECIFICATIONS AND PRICING NOTES**

The contractor should read carefully the following specification for workmanship prepared in accordance with standard specifications for building works 1976 Edition prepared by the Ministry of Public Works

#### **GENERAL ITEMS**

#### **Materials Generally**

A.1 All materials used on the works shall be new and of the qualities and kinds specified herein and equal to approved samples. Deliveries shall be made sufficiently in advance to enable samples to be taken and tested if required. No materials shall be used until approved and all materials which are not approved or which are damaged, contaminated or have deteriorated in any way or do not comply in any way with the requirements of this specification shall be rejected and shall be immediately removed from the site at the Contractors expense.

#### A.2 Material for which there is a Kenya Bureau of Standard specification

All materials used in the works for which a Kenya Bureau of Standards Specification has been published shall conform with the latest edition thereof in every way. The Architect reserves the right to demand that the Contractor shall obtain at his own expense a certificate in respect of any materials to state that is in accordance with the Kenya Bureau of Standard specification.

#### A.3 Materials for which there is no Kenya Bureau of Standards specification

All materials used in the works for which no Kenya Bureau of Standards specifications has been published shall conform with the British Standards Specification for such materials. If there are no published standards as specified for any materials, the quality of such materials shall be generally of a standard equal to those for which there is a Kenya Bureau of Standards or British Standard specification.

# **EXCAVATION AND EARTHWORK**

#### B.1 Site Clearance

Site Clearance shall include the cutting down of all trees, stumps, bushes, vegetation and rubbish, burning the debris arising in approved locations and carting remaining material to a tip provided by the Contractor.

#### B.2 Nature of the Soil

The Contractor is advised to visit the site and ascertain the nature of the ground to be excavated and the shall price accordingly and no claim will be allowed for want of knowledge in this respect.

Rates for excavation shall include for excavation in soil, earth, black cotton, sandy soil, murram, tuff, soft rock, boulders or whatever other subsoil is encountered except hard rock as defined below..

#### **B.3** Foundation Excavations

a) The foundation trenches and column bases shall be excavated to the widths and depths of the concrete foundations shown on the drawings or to such widths and depths as the Engineer may instruct after examination of the excavations. Quantities of all excavations shall be measured and valued by the Quantity Surveyor and any difference between such measurements and the measurements herein given shall be dealt with as a variation to the Contractor.

If however, the Contractor excavates to any greater depths than shown in the drawings or as instructed by the Engineer, then he shall at his own expense fill in such extra depth of excavation with concrete as specified for the foundations to the satisfaction of the Engineer. The Contractor shall not be paid for the cost of any excavation executed deeper or wider than shown on the drawings or instructed by the Engineer nor the cost of back filling such excavation or disposing of surplus.

#### B.4 Surplus Soil Disposal

Excavated material not required for subsequent refilling shall be removed to areas off site which shall be approved by the Architect.

#### B.5 Top Soil for Spreading

Where required in the Bills of Quantities, top soil required for subsequent spreading over finished work shall be especially selected and shall be dumped in special heaps as indicated by the Architect. Such top soil shall be reasonably free from vegetation to the satisfaction of the Architect and shall be compacted as little as possible in the heaps.

#### B.6 Filling under Surface Beds in Buildings

#### i) Murram filling

Murram for filling as base course shall be from an approved source and of the highest quality. It shall be laid in layers not less than 150mm thick and not greater than 230 mm thick prior to compaction. Water will be applied to O.M.O. and each layer will be thoroughly compacted by at least 8 passes of a 10 tonne smooth wheeled roller or a 2 tonne vibrating roller until all movement ceases and 100% C.B.R. is obtained.

#### ii) Hardcore filling

Hardcore filling shall be crushed rock, broken concrete or other approved hard granular materials broken to pass not greater than a 150mm ring or to be 75% of the finished thickness of the layers being compacted whichever is the less and graded so that it can be easily and thoroughly compacted by rolling. The filling is to be laid in layers each of a consolidated thickness not exceeding 230 mm.

#### B.7 Anti-termite treatment

Where described the top surface of filling shall be treated with Gladiator T C Pesticides to be supplied and applied by Rentokil Ltd. P.O. Box, 44360, Nairobi or other equal and approved firm strictly in accordance with the satisfaction of the Architect. The Contractor must destroy any termite nests found within the perimeter of the building and within 20 metres from the building externally and take out and destroy queens, impregnate holes and tunnels with approved insecticide and backfill with hard material, well rammed rammed and consolidated. The specialist shall be required to issue a 10 year guarantee to the Engineer.

#### B.8 Polythene Sheeting

Polythene sheeting shall be produced by an approved manufacturer. Joints in sheeting shall be treble folded with a 150mm fold and taped at 300mm intervals with 50mm wide back plastic adhesive tapes. The sheeting shall not stretched but shall be laid with sufficient wrinkles to permit shrinkage up to 15%.

The Contractor shall ensure that the membrane is not pierced buying laying and concreting.

#### **B.9** Existing Services

Before commencing works, the Contractor shall at his own expense ascertain in writing from the relevant Local Authorities and all other Public bodies, companies and persons who may be affected, the position and depths of their respective ducts, cables, mains or pipes and appurtenance. He shall thereupon search for and locate such services.

Active existing services shall be adequately protected from damage or relocated as directed by the Architect. Inactive services shall be removed or sealed off in accordance with the direction of the Architect.

#### B.10 Protection

The Contractor shall protect all graded and filled areas from the actions of the elements. Any settlement or washing away that occur prior to acceptance of the works shall be repaired and grades re-established to the required elevations and slopes.

#### **CONCRETE WORK**

#### C.1 Codes of Practice

All workmanship, materials, tests and performances in connection with reinforced concrete shall be in conformity with the latest edition of the British Standard for concrete works 9B.S. B 10 parts 1 & 2, B.S 8004, BS. 8007) and any other approved Local and International Standards. Where inconsistency exists between these preambles and these Standards, the Contractor shall notify the Engineer in good time for his Clarification as to which of the two implications on the Contract.

#### C.2 Supervision

A competent person approved by the Engineer shall be employed by the Contractor whose duty will be to supervise all stages in the preparation and placing of the concrete. All cubes shall be made and site tests carried out under his direct supervision on Consultation with the Engineer.

#### C.3 Cement

Cement unless otherwise specified shall be ordinary Portland Cement of a brand and source approved by the Engineer and shall comply With the requirements of K.S.02-21. A manufacturers certificate of test in accordance with K.S.0221 shall be supplied for each consignment delivered to the site.

#### C.4 Aggregate

Aggregates shall conform with the requirement K.S.02-95 and all the proposed sources, types and grading test results of all aggregates are to be approved in all respects by the Engineer before work commences.

If in the opinion of the Engineer the aggregate meets with the above requirements but is dirty or adulterated in any manner, it shall be screened and/or washed with clean water at the Contractors expense.

Aggregate shall be delivered to the Site in their prescribed sizes or gradings and shall be stock-pilled on paved areas to boarded platforms in separate units to avoid intermixing. On no account shall premixed cores aggregates be brought to the batching plant. On no account shall aggregates be stock-piled on the ground.

#### C.5 Water

The water used for mixing concrete shall be from an approved source, clean, fresh and free from harmful matter and comply with the requirements of B.S.3148.

#### C.6 Quality Control at Works Stage

Once the concrete mix is accepted from preliminary to works stage, the principal basis of control shall be analysis of the cube test results at 28 days.

#### C.7 Cement

The Quantity of cement shall be measured by weight. Where delivered in bags, each batch of concrete is to contain one or more bags of cement in accordance with the proportions specified.

For non-structural concrete, volume batching may be used as indicated below:

Class of Concrete Nominal mix by volume	15 10	1:3:6		1:4:8	
Cubic metres of fine aggregate Per 50 kg. bag of cement	0.12		0.16		
Cubic metres of coarse aggregate Per 50kg bag of cement	0.24		0.32		
Max. size of coarse aggregate *or 20mm for blinding concrete where descri	bed.	40mm <sup>*</sup>	r		40mm*

Where batching is by volume, approved gauge boxes of such a size as will give the correct proportions shall be used, and full account shall be taken of bulking due to high moisture contest.

#### C.8 Construction Joints

Construction joints shall be permitted only at the positions predetermined on the drawings or as instructed on the site by the Engineer. In general they shall be located at points of minimum shear, viz, vertical at, or near micspans of slabs, ribs and deems.

#### C.9 Faulty Concrete

Any concrete which fails to comply with these Preambles, or which shows signs or setting before it is placed small be taken Out and removed from the bite, where concrete is round to be defective after set the concrete shall be cut out and replaced in accordance with the Engineers instructions. On no account shall any faulty, honeycombed or otherwise defective concrete be required or patched until the Engineer has made an inspection and issued instructions for the repair.

#### C.10 Steel reinforcement

The steel reinforcement shall comply with the latest requirements of the following British Standards:-

Hot rolled MS for the Reinforcement of concrete KS 02-22

Hot rolled MS for the Reinforcement of concrete KS 4449

Cold worked H.Y. steel for the Reinforcement of concrete BS 4461

Hard drawn steel wire BS 4482

#### C.11 Fabric Reinforcement

Fabric reinforcement shall be electrically cross-welded steel wire mesh reinforcement to BS. 1483 and of the size and weight specified and made of wire to B.S. 4482.

#### C.12 Fixing Steel Reinforcement

Reinforcement shall be accurately bent to the shapes and dimensions shown on the Drawings and Schedules and in accordance with B.S. 4466 and B.S. 8110. Reinforcement must be cut and bent cold and no welded joints will be permitted unless to detailed or directed by the Engineer.

#### C.13 Formwork

The method and system of formwork which the Contractor proposed to use shall be approved by the Engineer before construction commences. Formwork shall be substantially and rigidly constructed of timber, steel, plastic, pre-cast concrete or other approved material.

All timber formwork shall be good, sound, clean, sawn, well-seasoned timber free from warps and loose knots and scantlings sufficiently strong for their purpose.

#### WALLING

#### **MATERIALS**

#### D.1 Cement

Cement Used for making mortar shall be as described in concrete work.

#### D.2 Lime

The lime for making mortar shall be obtained from an approved source and shall comply with BS 890 class A for non-hydraulic lime. The lime to be run to putty in an approved lined pit or container. The water to be first run into the pit or container and the lime to be added until it is completely submerged, stirred vigorously until all lumps are disintegrated and shall be kept constantly covered with water and regularly stirred for at least four weeks. The resulting milk-lime then to be run through a fine sieve and run into a pit or other container and kept clean and moist for not less than two weeks before being used in the works.

#### D.3 Sand

Sand used for making mortar shall be clean, well graded siliceous sand of good sharp hard quality equal to samples which shall be deposited with and approved by the Architect. It shall be free from lumps of stone, earth, earth, loam, dust, salt, organic matter and other deleterious substances, passed through a fine sieve and washed with clean water if so directed by the Architect.

#### D.4 Water

Shall be as described in Concrete work.

#### D.5 Stone

All stone shall comply with the requirements of CP 121.202 for masonry and rubble walls respectively except where amended or extended by the following clauses.

#### D.6 Reinforced Walls

Steel reinforcing bars in walls shall be carefully placed and spacers used to ensure that a minimum of 20 mm cover is given to the reinforcement unless otherwise specified.

Horizontal reinforcement in mortar joints shall be laid such that the reinforcement is not in contact with the blocks or stone.

#### D.7 Wall Ties

Wall ties shall be provided to connect walls to steel or concrete columns and beams to connect two unbounded leaves of wall.

Wall ties shall be provided at 450mm centres both vertically and 900mm centres horizontally and shall be staggered when used to connect two leaves of unbounded wall. Wall ties shall be embedded into each material by a minimum of 50mm

#### D.8 Fair Face

All concrete and hollow blockwork described as finished with a fair face is to be built to a true and even face with the joints finished as specified hereinafter.

#### D.9 **Pointing**

Pointing of walls shall be prepared for pointing by raking out all loose or friable material to a minimum of 15 mm to form a square recess. The joints shall then be wetted and new mortar shall be forced into the joints and finished as directed.

# **GLAZING**

# **MATERIALS**

# E.I General

Glass used in glazing and for mirrors shall be best quality clear glass free from visible defects so that to afford uninterrupted vision or reflection as appropriate and without obvious distortion.

#### E.2 Standards

Glass for glazing and mirrors shall be approved manufacture and is to comply with B.S. 952 in all respects free from flaws, bubbles, specks and other imperfections.

# E.3 Clear sheet glass etc

The clear sheet glass shall be ordinary glazing (OG) quality.

#### E.4 Obscured Glass

To be of type described and as approved Architect.

# E.5 **Putty**

a) The putty for glazing to wood sashes is to be linseed oil putty all as B.S. 644. Workmanship

#### WORKMANSHIP

#### E.6 General

Glazing of all types in all locations shall be carefully executed by artisans skilled in this type of work and in conformance with the recommendations of CP 152. Glazing shall be carefully fitted so that it is not subject to pressure and stresses imposed by being an oversight fit within framing.

#### **METALWORK**

#### **MATERIALS**

#### F.1 Generally

All material shall be the best of their respective kinds free from defects and all work to be carried out in the most workmanlike manner and strictly as directed by the Architect. The materials in all stages of transportation, handling and stacking shall be kept clean and prevented from injury by breaking, bending or distortion and weather action.

#### F.2 Mild Steel

Mild steel shall comply with B.S. 15.

#### F.3 Hollow Section Tubing

Square and rectangular hollow section tubing shall be hot rolled mild steel in accordance with Grade 43C of BS 4360.

#### F.4 Bolts, Nuts and Washers

These shall be fabricated from materials which comply with B.S.15 and each manufactured item shall comply with the appropriate B.S.

#### F.5 Galvanized Sheet Steel

To be No.24 S.W.G. of approved manufacture to B.S. 2989 of quality mild steel sheets cold rolled close annealed patent flattened and hot dip galvanized.

#### F.6 Stainless Steel

Stainless steel tube shall be Austenic steel B.S. comparable to B.S. 1449 Type 316 S 16.

#### F.7 Steel Grilles

Steel Grilles shall be manufactured from section confirming with B.S.990 of heavy duty sections of the metric W20 range of approved manufacture and design approved by the Architect.

After manufacture and before delivery to site steel windows are to be hot galvanized by dipping in a bath of molten zinc or painted with one coat primer.

#### WORKMANSHIP

# F.8 Welding

All welding is to be in accordance with the requirements of B.S.1856 and 938 and the electrodes shall comply with B.S. 639.

#### F.9 **Painting**

All steel is to be wire brushed and any loose scale, dirt or grease shall be removed before any painting is commenced. One coat of red oxide primer type A to B.S. 2523 shall be applied at the shop.

Any damage to the printing paint shall be made good to the Architects satisfaction.

#### F.10 Fixing of Steel Grilles

Fixing of metal grilles shall include for assembling and fixing, including screwing to sub-frames or cutting mortices for lugs in concrete or walling and running with cement mortar (1:4), bedding frames in similar mortar, pointing in mastic, bedding sills, transoms and mullions in mastic, making good finishings around both sides and fixing, and adjusting all fittings and frames.

#### FLOOR, WALL AND CEILING FINISHINGS

#### **PLASTERWORK**

#### G.1 Generally

Render, both internal and external shall be cement and sand in the proportions 1:4 finished to the thickness specified.

Plaster shall consist of an undercoat of 1 part cement to 6 parts sand by volume, and a finishing coat of 1 part cement to 10 parts lime putty. Each coat shall be finished to the thickness specified.

#### G.2 Cement

Ordinary Portland cement and shall comply with KS. 02-21. White and coloured cements shall comply with B.S. 12 and be obtained from an approved manufacturer.

#### G.3 Lime

Lime shall be prepared from hydrated lime complying with B.S. 890, Part 2.

#### G.4 Sands

Sands for cement and lime mixes shall comply with B.S. 1199, Table 1.

#### G.5 Water

Water shall be clean and kept free from all impurities.

#### G.6 Mixing of materials

All materials shall be thoroughly mixed in the proportions described. No mixes of plasters, other than described shall be used.

#### G.7 Period between coats

Cement - lime undercoats shall be allowed to dry out thoroughly before a further coat is applied.

#### G.8 Surfaces of beds and backings

<u>Screeded beds</u> for insitu finishings of floor finishings bedded in mortar, shall be left rough from the screeding board.

Floated beds for inflexible floor finishings bedded in mastic, shall be left with a plain untextured surface.

Trowelled beds for flexible finishings shall be finished smooth and free from score marks, or depressions.

Screeded backings for insitu wall finishings or wall finishings bedded in mortar shall be scratched for key.

Floated backings for inflexible wall finishings fixed with adhesive shall be left with a plain surface.

<u>Trowelled backing for flexible wall finishings shall be finished smooth and free from score marks or depressions.</u>

Beds and Backings for finishings by specialists shall be to the approval of the specialist.

# G.9 Preparation of surfaces

All surfaces to receive the finishings in this section shall be thoroughly cleaned. Screech to receive finishings bedded in mortar shall be well wetted before laying is commenced.

#### **PAINTING AND DECORATING**

#### **MATERIALS**

#### H.1 Colour range

Painting and decorative schemes shall be carried out in colours selected by the Architect from the approved range of colours.

#### H.2 Approval of brands

The Contractor shall seek, in writing, approval from the Architect for all brands of paint he wishes to use.

#### H.3 Quality of Products

Where a type of paint is produced by the Manufacturer in more than one quality, only paints and materials of the first or best quality shall be used in the works. The container label shall indicate clearly the quality of the paint being used.

Where it is not evident that the first or best quality of paint is being used, the Architect will order the removal of such materials from the site and rectification of any work executed with those materials, all at the Contractors expense.

#### H.5 Same makers materials used for coating

While materials for the work may be obtained from several makers, undercoats and finishing coats for a particular surface must be obtained from the same maker, (i.e. one makers undercoat).

#### H.8 Remedying defects due to defective materials

All materials, which in the opinion of the Architect are unsatisfactory shall be immediately removed from the site and any work executed with such defective materials shall be made good by the Contractor expense, to the satisfaction of the Architect.

#### H.15 Emulsion paint

Emulsion paint (interior and/or exterior), shall have a **P.V.A.** base and shall be of an approved band. The first coat shall be thinned in accordance with the manufactures instructions. Where described as applied externally, the paint shall incorporate an approved fungicide to prevent fungus growth.

#### H.16 Black bituminous paint

Black bituminous paint shall comply with B.S. 3416, Type I for general use, Type II for drinking water tanks.

#### H.20 Primer for iron and steelwork

Primer for iron and steelwork shall be:

- a) Lead based priming paint complying with B.S. 2523, Type B.
- a) Calcium plumbate priming paint complying with B.S. 3698, Type A.

#### H.25 Primer for woodwork

Primer for internal woodwork, other than the internal surfaces of external doors, windows and their frames and backs of frames and linings, etc. in contact with masonry, concrete or plaster, shall be leadless white or light grey priming paint not darker than 9-093 of B.S. 4800 which shall be compatible with the subsequent coats and obtained from the same maker.

#### H.26 Oil paints

Hard gloss, semi-gloss matt and flat oil paints, and respective undercoats, shall be approved quality, as appropriate.

#### H.27 Polyurethane lacquer

Polyurethane lacquer shall be an approved single pack or two pack lacquer as described of interior or exterior quality, as appropriate.

#### H.31 Plaster, rendering, concrete blockwork and brickwork

All plaster or mortar splashes, etc shall be removed from plaster rendering, concrete, block, work and brickwork by careful scraping; all holes, cracks, etc., shall be stopped and the whole of the surfaces shall be brushed down to remove dust and loose materials. In addition, all traces of mould oil shall be removed from concrete surfaces by scrubbing with water and detergent and rinsing with clean water to remove all detergent.

#### H.35 Iron and steel

Before fixing, all rust and scale shall be removed from iron and steel surfaces by wire-brushing, scraping, hammering, flame cleaning etc.

#### H.37 Hardwood

All dirt and grease shall be removed from hardwood surfaces. After priming, all nail holes and other imperfections shall be stopped.

#### H.38 Fibreboard

All dirt shall be brushed off from fibreboard surfaces. After priming all nail holes and other imperfections shall be stopped.

#### H.39 Plywood

Surfaces of plywood to be painted shall be filled as required with a plaster based filler for internal work, and a filler as described in stopping here before for external work, and then rubbed down and all dust and loose materials brushed off.

#### H.40 Woodwork to be painted

Before fixing woodwork, all surfaces which will be visible after fixing shall be rubbed down and all knots and resin pockets shall be scorched back and coated with knotting.

After priming and fixing, all nail holes and other imperfections shall be stopped and the whole surface shall be rubbed down and all dust brushed off.

#### H.41 Woodwork to receive clear finish

All holes and other imperfections in surfaces to receive a clear finish shall be stopped and the whole surface shall be rubbed down to a fine satin finish and all dust brushed off.

#### Workmanship

#### H.42 Standard of workmanship

Prior to the commencement of internal or external decoration, areas not exceeding 50 square metres in total area, and designated by the Architect, shall be completely decorated, and after approval shall be used as a standard for the whole of the works. Any additional cost involved in carrying out such decoration in advance of the general work shall be deemed be included in the Contract Sum. Such decorated surfaces shall be made good and touched up as necessary prior to the handling over of the works.

#### H.43 Stirring of materials

The contents of all cans and containers of all materials must be properly and thoroughly stirred before and during use and shall be suitably strained as and when necessary.

#### H.44 Manufacturers instructions

All materials shall be used strictly in accordance with instructions issued by the manufacturers concerned. The addition of thinners, driers or other materials will only be permitted when specially required by the maker and the procedure approved by the Architect.

#### H.45. Brush work

Unless otherwise described, all coatings shall be applied by brush. Written permission must be obtained from the Architect for the application of coatings by spray or roller where not so described, and if permission is granted, such application shall not result in extra cost to the Employer.



# REPUBLIC OF KENYA

# MINISTRY OF PUBLIC WORKS

# GENERAL SPECIFICATIONS FOR MECHANICAL PLUMBING AND DRAINAGE WORKS, FIRE FIGHTING EQUIPMENTS, SOLAR WATER HEATING

# **INSTALLATIONS**

**ISSUED BY:** 

CHIEF ELECTRICAL & MECHANICAL ENGINEER (BS)
MINISTRY OF PUBLIC WORKS
P.O. BOX 41191,
NAIROBI.

# **CONTENT PAGE**

CLAUSE	<b>DESCRIPTION</b>	<b>PAGE</b>			
1.00	Part 1: General mechanical specification				
1.01 Int	troduction				
1.02 Qu	uality of materials				
1.03 Re	egulations and standards				
1.04 Ele	ectrical requirements				
	ansport and storage				
	te supervision				
	stallation				
1.08 Te	C				
	blour coding				
1.10 W					
	elding PP-R pipes				
1.12 W	elding Qualifications				
2.00	Part2: Particular specifications for plumbing and drainag	e			
2.01	Introduction				
2.02	Materials and standards				
2.2.1	Pipework and Fittings				
2.2.2	Valves				
2.2.3	Waste Fitment Traps				
2.2.4	Pipe Supports				
2.2.5	Sanitary Appliances				
2.2.6	Pipe Sleeves				
2.03	Installation				
2.3.1	General				
2.3.2	Above Ground Installation				
2.04	Testing Inspection				
2.4.1 2.4.2	Site Tests – Pipework Systems Site Test – Performance				
2.4.2	Sterilization of Hot and Cold Water System				
2.00	Sterment of free and cold water System				
3.00	Part3: Particular specifications for fire extinguishers installation	s			
3.01 In	troduction				
3.02 Wa	ater/CO2 Extinguishers				
3.03 Portable Carbon Dioxide Extinguishers					
3.04 Dry Chemical Portable Fire Extinguisher					
3.05 Air Foam Fire Extinguisher					
3.06 Fire Blanket					
3.07 Fir	re Exit Sign				
3.08 Fire Instruction Notice					

# 4.00 Part4: Particular specifications for hose reel system

4.01	Introduction
4.02	Climatic Conditions
4.03	Fire Hose reel Pump
4.04	Pipework
4.05	Pipe Fittings
4.06	Flanges
4.07	Gaskets
4.08	Non-Return Valves
5.09	Gate Valves
4.10	Sleeves
4.11	Floor and Ceiling Plates
4.12	Hose reels
4.13	Earthling
4.14	Finish Painting
4.15	Testing & Commissioning
4.16	Instruction Period

# 1.00 PART 1: GENERAL MECHANICAL SPECIFICATION

# 1.01 **Introduction**

This section covers the general requirement for plant, equipment and materials forming part of the mechanical works and shall apply except where specifically stated elsewhere in the Specification.

These works shall be as by regulations and standards.

#### 1.02 Regulations and Standards

The Works shall comply with the current editions of the following:

- a) The Kenya Government Regulations.
- b) The Kenya Bureau of Standards
- c) The National Environmental Management Authority Regulations.
- d) The Kenya Building Code Regulations
- e) Local Authority By-laws.
- f) The Electricity Supply Authority By-Laws
- g) British Standard and Codes of Practice as published by the British Standards Institution (BSI)
- h) The United Kingdom Chartered Institute of Building Services Engineers (CIBSE) Guides.
- i) The United Kingdom Institution of Electrical Engineers (IEE) Regulations for the Electrical Equipment of Buildings.
- j) The United Kingdom Chartered Institute of Building Services Engineers (CIBSE) Guides.

#### 1.03 Quality of Materials

All plant, equipment and materials supplied as part of these works shall be new and of first class commercial quality, shall be free from defects and imperfections and where indicated shall be of grades and classifications designated herein.

All products or materials shall be products of quality standards.

Materials and apparatus supplied by others for installation and connection shall be carefully examined on receipt. Any defects noted, should be brought to the attention of the Engineer.

Defective equipment or that damaged in the course of installation or tests shall be replaced as required to the approval of the Engineer.

# 1.04 Electrical Requirements

Plant and equipment supplied shall be complete with all necessary motor starters, control boards, and other

control apparatus. Where control panels incorporating several starters are supplied they shall be complete with a main isolator.

The supply power up to and including local isolators shall be provided and installed by the Electrical specialist. All other wiring and connections to equipment shall form part of mechanical works.

Three copies of all schematic, cabling and wiring Diagrams shall be supplied for the Engineer's approval.

The starting current of all electric motors and equipment shall not exceed the maximum permissible starting currents of the protective switch gear.

All electrical plant and equipment supplied shall be rated for the supply voltage and frequency applicable in Kenya, that is 415 Volts, 50Hz, 3-Phase or 240Volts, 50Hz, 1-phase.

Any equipment that is not rated for the above voltages and frequencies shall be rejected by the Engineer.

#### 1.05 Transport and Storage

All plant and equipment shall, during transportation be suitably packed, crated and protected to minimize the possibility of damage and to prevent corrosion or other deterioration.

On arrival at site all plant and equipment shall be examined and any damage to parts and protective priming coats made good before storage or installation.

Adequate measures shall be taken to ensure that plant and equipment do not suffer any deterioration during storage.

Prior to installation all piping and equipment shall be thoroughly cleaned.

If, in the opinion of the Engineer any equipment has deteriorated or been damaged to such an extent that it is not suitable for installation, the equipment shall be replace at supplier own cost.

#### 1.06 Site Supervision

There shall be an English-speaking supervisor on the site at all times during normal working hours.

#### 1.07 Installation

Installation of all special plant and equipment shall be carried out by under adequate supervision from skilled staff provided by the plant and equipment manufacturer or his appointed agent in accordance with the best standards of modern practice and to the relevant regulations and standards.

# 1.08 **Testing**

## 1.08.1 Introduction

The Engineer reserves the right to inspect and test or witness of all manufactured plant equipment and materials.

The right of the Engineer relating to the inspection, examination and testing of plant during manufacture shall be applicable to Insurance companies and inspection authorities so nominated by the Engineer.

The Contractor shall give two week's notice to the Engineer of his intention to carry out any inspection or tests and the Engineer or his representative shall be entitled to witness such tests and inspections.

Six copies of all test certificates and performance curves shall be submitted as soon as possible after the completion of such tests, to the Engineer for his approval.

Plant or equipment which is shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the Contractor's own risk and should the test certificate not be approved new tests may be ordered by the Engineer at the Contractor's expense.

The foregoing provisions relate to tests at manufacturer's works and as appropriate to those carried out at site.

#### 1.08.2 Material Tests

All material for plant and equipment to be installed under this works shall be tested, unless otherwise directed, in accordance with the relevant KS or B.S Specification concerned.

For materials where no KS or B.S. Specification exists, tests are to be made in accordance with the best modern commercial methods to the approval of the Engineer, having regard to the particular type of the materials concerned.

Specimens and performance tests and analyses to demonstrate conformance of the various materials with the applicable standards.

If stock material, which has not been specially manufactured for the plant and equipment specified is used, then satisfactory evidence to the Engineer that such materials conform to the requirements stated herein in which case tests of material may be partially or completely waived.

Certified mill test reports of plates, piping and other materials shall be deemed acceptable.

# 1.08.3 Manufactured Plant and Equipment - Work Tests

The rights of the Engineer relating to the inspection, examination and testing of plant and equipment during manufacture shall be applicable to the Insurance Companies or Inspection Authorities so nominated by the Engineer.

A two week's notice shall be given to the Engineer of the manufacturer's intention to carry out such tests and inspections.

The Engineer or his representative shall be entitled to witness such tests and inspections. The cost of such tests and inspections shall be borne by the Manufacturer.

Six copies of all test and inspection certificates and performance graphs shall be submitted to the Engineer for his approval as soon as possible after the completion of such tests and inspections.

Plant and equipment which is shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the Manufacturer's own risk and should the test and inspection certificates not be approved, new tests may be ordered by the Engineer at the manufacturer's expense.

# 1.08.4 Pressure Testing

All pipework installations shall be pressure tested in accordance with the requirements of the various sections of this Specification. The installations may be tested in sections to suit the progress of the works but all tests must be carried out before the work is buried or concealed behind building finishes. All tests must be witnessed by the Engineer or his representative and a 48 hours notice to carry out such tests shall be given to Engineer.

Any pipework that is buried or concealed before witnessed pressure tests have been carried out shall be exposed and the specified tests shall then be applied.

A certificate shall be prepared for signature by the Engineer and shall keep a progressive and up-to-date record of the section of the work that has been tested.

#### 1.09 Colour Coding

Unless stated otherwise, all pipework shall be colour coded in accordance with the latest edition of KSISO10526:1999 or B.S 1710 and to the approval of the Engineer.

#### 1.10 Welding galvanized pipes

#### 1.10.1 Preparation

Joints to be made by welding shall be accurately cut to size with edges sheared, flame cut or machined to suit the required type of joint. The prepared surface shall be free from all visible defects such as lamination, surface imperfection due to shearing or flame cutting operation, etc., and shall be free from rust scale, grease and other foreign matter.

#### 1.10.2 **Method**

All welding shall be carried out by the electric arc processing using covered electrodes in accordance with KS06-206:1981 (Confirmed 1999) or B.S. 639.

Gas welding may be employed in certain circumstances provided that prior approval is obtained from the Engineer.

#### 1.10.3 Welding Code and Construction

All welded joints shall be carried out in accordance with the following Specifications:

#### **Pipe Welding**

All pipe welds shall be carried out in accordance with the requirements of B.S.806.

#### **General Welding**

All welding of mild steel components other than pipework shall comply with the general requirements of KS06-1017-2: 1995 or B.S. 1856.

#### 1.11 Welding PP-R pipes by means of electric coupling.

#### 1.11.1 Preparation

The surfaces of the pipes and fittings must be clean and without blemish. Ends must be clean cut at right angles.

#### 1.11.2 Method

Pipes and fittings are inserted to the edge of the matrix and held steady without rotating. Once the heating has been completed the parts are extracted from the heating element and rapidly joined axially

#### 1.11.3 Welding by means of coupling

As the electric coupling can slide along the pipes, it is possible to carry out repairs and welds in any part of an existing plant. The parts to be joined must be clean free of grease and perfectly aligned. A after inserting the parts to be welded in the coupling, the coupling has to be electrically connected to the welding machine

# 1.12.0 Welders' Qualifications

Any welder employed shall have passed the trade tests as laid down by the Government of Kenya.

The Engineer may require to see the appropriate certificate obtained by any welder and should it be proved that the welder does not have the necessary qualifications the Engineer may instruct to replace him with a qualified welder.

# 2.00 PART2: PARTICULAR SPECIFICATIONS FOR PLUMBING AND DRAINAGE

## 2.01 **Introduction**

This section covers the general requirements for plant, equipment and materials forming for the plumbing and drainage installations.

# 2.20 MATERIALS AND STANDARDS

#### 2.2.1 Pipework and Fittings

Pipework materials are to be used shall be as follows:

#### a) Galvanized Steel Pipework

Galvanized steel pipe work up to 65mm nominal bore shall be manufactured in accordance with KS06.366:1982 or B.S. 1387 Medium Grade, with tapered pipe threads in accordance with B.S. 21. All fittings shall be malleable iron and manufactured in accordance with KS06-885:1995 or B.S. 143.

Pipe joints shall be screwed and socketed and sufficient coupling unions shall be allowed so that fittings can be disconnected without cutting the pipe. Running nipples and long screws shall not be permitted unless exceptionally approved by the Engineer.

Galvanized steel pipe work, 80mm nominal bore up to 150mm nominal bore shall be manufactured to comply in all respects with the specification for 65mm pipe, except that screwed and bolted flanges shall replace unions and couplings for the jointing of pipes to valves and other items of plant. All flanges shall comply with the requirements of B.S. 10 to the relevant classifications contained hereinafter under Section 'C' of the Specification.

Galvanizing shall be carried out in accordance with the requirements of B.S. 1387 and B.S. 143 respectively.

#### Polypropylene Pipes –Random (PP-R) Type 3

PP-R type3 pipe work shall be manufactured in accordance with B.S. 7291part 2001. Dimesnsions and quality of PP-R Pipes shall be in accordance with DIN 8077 and pipelines in plastics materials joints, Components parts, Installation to be in accordance DIN 16928. joints And fittings to be in accordance DIN16962.

#### **Copper Tubing**

All copper tubing shall be as manufactured in accordance with B.S. 2871 from C.160 'Phosphorous Deoxidized Non-Arsenical Copper' in accordance with B.S. 1172.

Pipe joints shall be made with soldered capillary fittings and connections to equipment shall be with compression fittings as manufactured in accordance with B.S. 864.

Short copper connection tubes between galvanized pipe work and sanitary fitments shall not be used because of the risk of galvanic action.

If, as may occur in certain circumstances, it is not possible to make the connection in any way than the use of copper tubing, then a brass straight connector shall be positioned between the galvanized pipe and the copper tube in order to prevent direct contact.

#### d) Poly-vinyl Chloride (P.V.C). Pressure Pipes and Fittings

All P.V.C. pressure pipes and fittings shall be as manufactured in accordance with KS06-478-2:1993 (B.S. 3505: 1968).

# **Jointing**

The method of jointing to be employed shall be that of solvent welding, using the pipe and manufacturer's approved cement. Seal ring joint shall be introduced where it is necessary to accommodate thermal expansion.

#### **Testing**

Pipelines shall be tested in sections under an internal water pressure normally one and a half times the maximum allowable working pressure of the class of pipe used. Testing shall be carried out as soon as practical after laying and when the pipeline is adequately anchored. Precautions shall be taken to eliminate all air from the test section and to fill the pipe slowly to avoid risk of damage due to surge.

#### e) A.B.S. Waste System

Where indicated on the Designs and Schedules, the contractor shall supply and fix A.B.S. waste pipes and fittings.

The pipes, traps and fittings shall be in accordance with the relevant British Standards, including B.S. 3943 or KS06-7831-1:1990, and fixed generally in accordance with manufacturer's instructions and B.S. 5572: 1978.

Jointing of pipes shall be carried out by means of solvent welding, the manufacturer's instructions according to B.S. 5572: 1978.

Standard brackets, as supplied for use with this system, shall be used wherever possible.

Where the building structure renders this impracticable the contractor shall provide purpose made supports, centers of which shall not exceed one meter.

Expansion joints shall be provided as indicated. Supporting brackets and pipe clips shall be fixed on each side of these joints.

#### f) Poly-vinyl Chloride (P.V.C) Pipes and fittings

The contractor shall supply and fix PVC soil pipes and fittings as indicated on the Designs and Schedules.

Pipes and fittings shall be in accordance with relevant British Standards, including B.S. 4514 and fixed to the manufacturer's instructions and B.S. 5572.

The soil system shall incorporate synthetic rubber gaskets as provided by the manufacturer whose fixing instructions shall be strictly adhere to.

Connections to WC pans shall be effected by the use of a WC connector, gasket and cover, fixed to suit pan outlet.

Suitable supporting brackets and pipe clips shall be provided at maximum of one metre centres.

The contractor shall be responsible for the joint into the Gully Trap on Drain as indicated on the Drawings.

## 2.2.2 **Valves**

#### a) Draw-off Taps and Stop Valves (Up to 50mm Nominal Bore)

Draw-off taps and valves up to 50mm nominal bore, unless otherwise stated or specified for attachment or connection to sanitary fitment shall be manufactured in accordance with the requirements of B.S.1010.

#### b) Gate Valves

All gate valves 80mm nominal bore and above, other than those required for fitting to buried water mains shall be of cast iron construction, in accordance with the requirements of B.S. 3464. All gate valves required for fitting to buried water mains shall be of cast iron construction in accordance with the requirements of B.S. 1218.

All gate valves up to and including 65mm nominal bore shall be of bronze construction in accordance with the requirements of B.S. 1952.

The pressure classification of all valves shall depend upon the pressure conditions pertaining to the site of works.

## c) Globe Valves

All globe valves up to and including 65mm nominal bore shall be of bronze construction in accordance with the requirements of B.S.3061 or KS06-885:1995.

The pressure classification of all globe valves shall depend upon the pressure conditions pertaining to the site of works.

# 2.2.3 Waste Fitment Traps

#### a) Standard and Deep Seal P & S Traps

Where standard or deep seal traps are specified they shall be manufactured in suitable non-ferrous materials in accordance with the full requirements of B.S. 1184.

In certain circumstances, cast iron traps may be required for cast iron baths and in these instances bath traps shall be provided which are manufactured in accordance with the full requirements of B.S.1291.

# b) Anti-Syphon Traps

Where anti-syphon traps are specified, these shall be similar or equal to the range of traps manufactured by Greenwood and Hughes Limited, Deacon Works Littleshampton, Sussex, England.or equal and approved.

The tradename for traps manufactured by this company is 'Grevak'.

#### 2.2.4 Pipe Supports

#### a) Introduction

This deals with pipe supports securing pipes to the structure of buildings for above ground application.

The variety and type of support shall be kept to a minimum and their design shall be such as to facilitate quick and secure fixings to metal, concrete, masonry or wood.

Consideration shall be given, when designing supports, to the maintenance of desired pipe falls and the restraining of pipe movements to a longitudinal axial direction only.

The contractor shall supply and install all steelwork forming part of the pipe support assemblies and shall be responsible for making good damage to builders work associated with the pipe support installation.

The contractor shall submit all his proposals for pipe supports to the Engineer for approval before any erection works commence.

# b) Steel and Copper Pipes and Tubes

Pipe runs shall be secured by clips connected to pipe angers, wall brackets, or trapeze type supports. 'U' bolts shall not be used as a substitute for pipe clips without the prior approval of the Engineer.

An approximate guide to the maximum permissible supports spacing in metres for steel and copper pipe and tube is given in the following table for horizontal runs.

Size Nominal Bores	to B.S. 659	Copper Tube Steel Tube to B.S. 1387
15mm	1.25m	2.0m
20mm	2.0m	2.5m
25mm	2.0m	2.5m
32mm	2.5m	3.0m
40mm	2.5m	3.0m
50mm	2.5m	3.0m
65mm	3.0m	3.5m
80mm	3.0m	3.5m
100mm	3.0m	4.0m
125mm	3.0m	4.5m
150mm	3.5m	4.5m

The support spacing for vertical runs shall not exceed one and a half times the distances given for horizontal runs.

#### c) Expansion Joints and Anchors

Where practicable, cold pipework systems shall be arranged with sufficient bends and changes of direction to absorb pipe expansion providing that the pipe stresses are contained within the working limits prescribed in the relevant B.S. specification.

Where piping anchors are supplied, they shall be fixed to the main structure only. Details of all anchor design proposals shall be submitted to the Engineer for approval before erection commences.

The contractor when arranging his piping shall ensure that no expansion movements are transmitted directly to connections and flanges on pumps or other items of plant.

The contractor shall supply flexible joints to prevent vibrations and other Movements being transmitted from pumps to piping systems or vice versa.

# 2.2.5 Sanitary Appliances

All sanitary appliances supplied and installed as part of the works shall comply with the general requirements of B.S. Co Practice 305 and the particular requirements of the latest B.S. Specifications.

#### 2.2.6 **Pipe Sleeves**

Main runs of pipework are to be fitted with sleeves where they pass through walls and floors. Generally the sleeves shall be of P.V.C. except where they pass through the structure, where they shall be mild steel. The sleeves shall have 6mm - 12mm clearance all around the pipe or for insulated pipework all around the installation.

The sleeve will then be packed with slag wool or similar.

#### 2.3 **INSTALLATION**

#### 2.3.1 **Introduction**

Installation of all pipework, valves, fittings and equipment shall be carried out under adequate supervision from skilled s relevant codes and standards as specified herein. The contractor shall be responsible to for ensuring that all builders wo with his piping installation is carried out in a satisfactory manner to the approval of the Engineer.

#### 2.3.2 **Above Ground Installation**

#### a) Water Services

Before any joint is made, the pipes shall be hung in their supports and adjusted to ensure that the joining faces are parallel and any falls which shall be required are achieved without springing the pipe.

Where falls are not shown or stated elsewhere in the Specification, pipework shall be installed parallel to the lines of the buildings and as close to the walls, ceilings, columns, etc., as is practicable.

All water systems shall be provided with sufficient drain points and automatic air vents to enable them to function correctly.

Valves and other user equipment shall be installed with adequate access for operation and maintenance. Where valves and other operational equipment are unavoidably installed beyond normal reach or in such position as to be difficult to reach from a small step ladder, extension spindles with floor or wall pedestals shall be provided.

Screwed piping shall be installed with sufficient number of unions to facilitate easy removal of valves and fittings, and to enable alterations of pipework to be carried out without the need to cut the pipe.

Full allowances shall be made for the expansion and contraction of pipework, precautions being taken to ensure that any force produced by the pipe movements are not transmitted to valves, equipment or plant.

All screwed joints to piping and fittings shall be made with P.T.F.E. tape.

The test pressure shall be maintained by the pump for about one hour and if there is any leakage, it shall be measured by the quantity of water pumped into the main in that time. A general leakage of 4.5 litres per 25mm of diameter, per 1.6 kilometres per 24 hours per 30 metres head, may be considered reasonable but any visible individual leak shall be repaired.

#### b) Sanitary Services

Soil, waste and vent pipe system shall be installed in accordance with the best standard of modern practice as described in B.S. 5572 to the approval of the Engineer.

The contractor shall be responsible for ensuring that all ground waste fittings are discharged to a gully trap before passing to the sewer via a manhole.

All necessary rodding and inspection facilities within the draining system in positions where easy accessibility is available.

Where a branch requires rodding facilities in a position to which normal access is unobtainable, then that branch shall be extended so as to provide a suitable purpose made rodding eye in the nearest adjacent wall or floor to which easy access is available.

The vent stacks shall terminate above roof level and where stack passes through roof, a weather skirt shall be provided. The contractor shall be responsible for sealing the roof after installation of the stacks.

The open end of each stack shall be fitted with a plastic coated or galvanised steel wire guard. Access for rodding and testing shall be provided at the foot of each stack.

#### c) Sanitary Appliances

All sanitary appliances associated with the works shall be installed in accordance with the best standard of modern practice as described in C.P. 305 to the approval of the Engineer.

#### 2.40 TESTING AND INSPECTION

# 2.4.1 Site Tests – Pipework Systems

a) Above Ground Internal Water Services Installation

All water service pipe system installed above ground shall be tested hydraulically for a period of one hour to not less than one and half times to design working pressure.

If preferred, testing the pipelines in sections may be done. Any such section found to be satisfactory need not be the subject of a further test when system has been completed, unless specifically requested by the Engineer.

During the test, each branch and joint shall be examined carefully for leaks and any defects revealed shall be made good by the Sub-contractor and the section re-tested.

All necessary precautions to be taken to prevent damage occurring to special valves and fittings during the tests. Any item damaged shall be repaired or replaced at the Sub-contractor's expenses.

#### b) Above Ground Soil Waste and Ventilation System

All soil, waste and ventilating pipe system forming part of the above ground installation, shall be given appropriate test procedures as described in B.S. 5572, 1972.or KS02-254:1986

Smoke tests on above ground soil, waste and ventilating pipe system shall not be permitted.

Pressure tests shall be carried out before any work which is to be concealed is finally enclosed.

In all respects, tests shall comply with the requirements of B.S. 5572.

## 2.4.2 Site Test – Performance

Following satisfactory pressure test on the pipework system operational tests shall be carried out in accordance with the relevant B. S. Code of practice on the systems as a whole to establish that special valves, gauges, control, fittings, equipment and plant are functioning correctly to the satisfaction of the Engineer.

All hot water pipework shall be installed with pre-formed fibre glass lagging to a thickness of 25mm where the pipe runs above a false ceiling or in areas where the ambient temperature is higher than normal with the result that pipe "sweating", due to condensation will cause nuisance.

All lagged pipes which run in a visible position after erection shall be given a canvas cover and prepared for painting as follows:

- i) Apply a coating of suitable filler until the canvas weave disappears and allow to dry.
  - ii) Apply two coats of an approved paint and finish in suitable gloss enamel to colors
  - iii) Approved by the Engineer.

All lagging for cold and hot water pipes erected in crawlways, ducts and above false ceiling which after erection are not visible from the corridors of rooms, shall be covered with a reinforced aluminium foil finish banded in colours to be approved by the Engineer.

In all respects, unless otherwise stated, the hot and cold water installation shall be carried out in accordance with the best standard of modern practice and described in C.P.342 and C.P.310 respectively to the approval of the Engineer.

The test pressure shall be applied by means of a manually operated test pump or, in the case of long main or mains of large diameter, by a power driven test pump which shall not be left unattended. In either case precautions shall be taken to ensure that the required pressure is not exceeded.

Pressure gauges should be recalibrated before the tests.

The contractor shall be deemed to have included in his price for all test pumps, and other equipment required under this specification.

The test pressure shall be one and a half times the maximum working pressure except where a pipe is manufactured from a material for which the relevant B.S. specification designates a maximum test pressure.

# 2.5 STERILISATION OF COLD WATER SYSTEM

All water distribution system shall be thoroughly sterilized and flushed out after the completion of all tests and before being fully commissioned for handover.

The sterilisation procedures shall be carried out in accordance with the requirements of B.S. Code of Practice 301, Clause 409 and to the approval of the Engineer.

# 3.00 PART 3: PARTICULAR SPECIFICATIONS FOR PORTABLE FIRE EXTINGUISHER.

#### 3.01 INTRODUCTION

The general specification details the requirements for the supply and installation and commissioning of the Portable Fire Extinguishers.

The contractor shall include for all appurtenances and appliances not necessarily called for in this specification or shown on the designs but which are necessary for the completion and satisfactory functioning of the works.

If in the opinion of the Sub-contractor there is a difference between the requirements of the Specifications and th he shall clarify these differences with the Engineer before tendering.

#### 3.02 WATER/CO<sub>2</sub> EXTINGUISHERS

These shall be 9-litre water filled CO2 cartridge operated portable fire extinguishers and shall comply with B.S. B.S. 1288.or KSISO7165:1999 and to the requirements of B.S.1004. Unless manufactured with stainless steel, b have all internal surfaces completely coated with either a lead tin, lead alloy or zinc applied by hot dipping. The no visibly uncoated areas.

The extinguishers shall be clearly marked with the following:

- a) Method of operation.
- b) The words 'WATER TYPE' (GAS PRESSURE) in prominent letters.
- c) Name and address of the manufacturer or responsible vendor.
- d) The nominal charge of the liquid in imperial gallons and litres.
- e) The liquid level to which the extinguisher is to be charged.
- f) The year of manufacture.
- g) A declaration to the effect that the extinguisher has been tested to a pressure of 24.1 bar (350 p.s.i.).
- g) The number of British Standard 'B.S' 1004 or B.S. 1449.

#### 3.03 PORTABLE CARBON DIOXIDE FIRE EXTINGUSHERS

These shall be portable carbon dioxide fire extinguishers and shall comply with B.S. 1004.or KSISO7165:1999

The body of extinguisher shall be a seamless steel cylinder manufactured to one of the following British Standar 401 or B.S. 1288.(EN3:1996)

The filling ratio shall comply with B.S. 5355 with valves fittings for compressed gas cylinders to B.S.341. Wher fitted it shall be flexible and have a minimum working pressure of 206.85 bar (3000 p.s.i.). The hose is not to be internal pressure until the extinguisher is operated.

The nozzle shall be manufactured of brass gunmetal, aluminium or stainless steel and may be fitted with a suitab for temporarily stopping the discharge if such means are not incorporated in the operating head.

The discharge horn shall be designed and constructed so as to direct the discharge and limit the entrainment of ai be constructed of electrically non-conductive material.

The following markings shall be applied to the extinguishers:-

The words "Carbon Dioxide Fire Extinguisher" and to include the appropriate nominal gas content.

- a) Method of operation.
- b) The words "Re-charge immediately after use".
- c) Instructions for periodic checking.
- d) The number of the British Standard B.S. 3326: 1960 or B.S. 5423.
- e) The manufacturers name or identification markings

#### 3.04 DRY CHEMICAL POWDER PORTABLE FIRE EXTINGUISHER

The portable dry powder fire extinguishers shall comply with BS 1449 or KSISO7165:1999 and BS 1004. The be constructed to steel not less than the requirements of BS 1449 or aluminium to BS 1470: 1972(EN3: 1996) a suitably protected against corrosion.

The dry powder charge shall be not-toxic and retain it s free flowing properties under normal storage conditions. pressurizing agent used as an expellant shall be in dry state; in particular compressed air.

The discharge tube and gas tube if either is fitted shall be made of steel, brass, copper or other not less suitable m Where a hose is provided it shall not exceed 1,060mm and shall be acid and alkali resistant.

Provision shall be made for securing the nozzle when not in use.

The extinguisher shall be clearly marked with the following information

- a) The word "Dry Powder Fire Extinguisher"
- b) Method of operation in prominent letters.
- c) The working pressure and the weight of the powder charge in Kilogramme.
- d) Manufacturers name or identification mark
- e) The words "RECHARGE AFTER USE" if rechargeable type.

- f) Instructions to regularly check the weight of the pressure container (gas Cartridge) or inspect the pressure indicator on stored pressure types when fitted, and remedy any loss indicated by either.
- g) The year of manufacture.
- h) The Pressure to which the extinguisher was tested.
- i) The number of this British Standard BS 3465 or BS 5423: 1977.
- j) When appropriate complete instructions for charging the extinguisher shall be clearly marked on the extinguisher or otherwise be supplied with the refill.

#### 3.05 AIR FOAM FIRE EXTINGUISHER

These shall be of 9 litres capacity complete with refills cartridges and wall fixing brackets and complying with B 3/BS 1449 and BS 1004 with the following specifications:-

Cylinder: to B.S. 1449 or KSISO7165:1999

Necking: to be 76mm outside diameter steel EN 3A 23/4 X 8TPI

female thread.

**Head cap**: to be plastic moulding acetyl resin.

**CO2 Cylinder:** to be 75gm P.V.C coated.

**Internal Finish:** to be polythene lining on phosphate coating.

**External finish:** to be phosphated - One coat primer paint and one coat

stove enamel B.S. 381 C.

#### 4.07 FIRE BLANKET

The fire blanket shall be made from cloth woven with pre-asbestos yarn or any other fire proof material and to m 1800 x 1210 mm and shall be fitted with special tapes folded so as to offer instantaneous single action to release from storing jacket to BS 1721.

#### 4.08 SIGNAGE -FIRE EXIT SIGN

Proceed and procure and install as below;

Print Fire Exit signs on the Perspex plate, 5mm thick, with white colour background as follows:-

- 1. Lettering IN RED COLOUR of not less than 50mm in height.
- 2. A pendant sign bearing words, FIRE EXIT and with a directional arrow.

The sign must be capable of being read from both approaches to exit and so is double sided.

#### 4.09 SIGNAGE -FIRE INSTRUCTION NOTICE

Print fire instruction on the Perspex plate, 5mm thick with White Colour Background measuring 510mm lengthx380mm width as follows;

#### FIRE INSTRUCTION NOTICE

In the event of fire;

- (1) Raise the alarm by actuating the nearest alarm system point, Sound Siren /gong or Shout Fire
- (2) Attack fire using the nearest available equipment
- (3) Call fire Brigade 222181 or Police 999 and inform your switchboard (PABX) Operator
- (4) Ensure that all personnel not involved in fire fighting evacuation to safety outside the building.
- (5) Close but DO NOT LOCK doors behind as you leave.
- (6) Evacuate the building using stairs or fire escapes do not use Lifts/escalators walk calmly. Avoid panic. Do not stop or return for personal belongings.
- (7) Assemble as per floor outside the building for roll call.

# 4.00 PART 4: PARTICULAR SPECIFICATIONS FOR THE SUPPLY, INSTALLATION AND COMMISSIO THE HOSEREEL SYSTEM

#### 4.01 Introduction

The general specification details the requirements for the supply, installation and commissioning of the hose reel installation shall comply in all respects to the requirements set out in C.O.P. 5306 PART 1: 1976, AND BS 52

#### 4.02 Climatic Conditions

- a) The following climatic condition apply at the site of the works and all plant equipment, apparatus, materials and installations shall be suitable for these conditions.
- b) Where not otherwise stated, all ratings of plant, equipment apparatus shall be interpreted as site rating and NOT sea level or other ratings.
- c) Maximum temperature oC
- d) Minimum Temperature

e)	Average Temperature	oC –oC
f)	Range of Relative Humidity	-%
g)	Altitude	M
h)	Latitude	o'S
i)	Longitude	o'E

j) Rainfall extremely heavy at certain period of the year.

#### 4.03 Fire Hosereel Pumps

The fire pumpset shall be a fully automatic package unit. The unit shall consist of pumps of appropriate duty at a head

The complete specification of the package pump set to be as follows:-

a) PUMPS (Specify)

#### b) **PUMP MATERIALS**

Suction and Discharge Casing to be made Grey Iron. Shafts, conveyors, diffusers, impellers and the external elem from Stainless Steel.

c) MOTORS

(specify)

d) MECHANICAL SEAL

(specify)

e) **BASEFRAME** 

Welded fabrication from Mild Steel sections. With facility for lifting unit.

#### f) PIPEWOK

Medium gauge Galvanized Pipework to B.S. 1387 and Galvanized fittings to B.S. 143/1256. All Pipework to ter with B.S 4504 NP. 16 Flanges. Flexible connections to be affixed to suction and discharge connections.

#### g) VALVE

Pump Isolating Valves, Butterfly valve to B.S. 5155 with Cast Iron nylon coated disc and black airtrile liner. Non-Return Valve vertical lift type to be manufactured from Cast Iron with nitrile seal.

#### h) **CONTROL PANEL**

Standard Panel cubicle to be manufactured to IP. 55 standards, containing Starters000000000000000 of appropriate ratings

Panel to include power On Light, Run and Trip Lights, Hand/Off/ Auto switches, duty pump selector switch, disconnect switch and line and control circuit fuses, Switches to conform to IP. 54.

Safety features to include 24 volts low voltage controls except for starter coils. Panel mounted on vibration isolators to minimize vibration to electrical equipment.

#### i) PRESSURE SWITCH:

Differential adjustment type switch manufactured to IP.14 standards.

Multi-pump sequencing control to be affected from a single pressure instrument, utilizing control circuitry specially for pressure boosting applications.

j) 4" Dial Bottom Connection to B.S. 1780 calibrated in Bars and KPa..

#### K) MEMBRANE TANK

Fabricated Steel construction housing a natural rubber diaphgram, ideally suited for drinking water applications. Precharged with Nitrogen to correct pressure at test stage.

The panel shall incorporate HRC main fuses and thermal overloads for the pump motors, timer control unit for m run period, start relay incorporating timing element for standby pump delay and one set of voltage free chan contacts to give remote alarm/indication for the indicator lights motioned.

#### L) Pipework

The Pipework for the hose reel installation shall be galvanized wrought steel tubing "Medium" Grade Class "B" 1387:1967 with pipe threads to BS 21.

#### M) Pipe Fittings

The pipe fittings shall be wrought steel pipe fittings welded or seamless fittings conforming to BS 1740 Part 197 malleable iron fittings to BS 143.

All changes in direction will be standard bends or long radius fittings. No. elbows will be permitted.

#### N) Flanges

The flanges shall comply with BS 4504: 1969. All flanges shall comply to a nominal pressure rating of 16 bar (P.N. 16) and shall be of either cast iron or steel.

#### O) Gaskets

The gaskets for the use with flanges to BS 4304: 1969 shall comply with BS 4865 part 1: 1072 for pressure up t exceeding 64 bar.

#### P) Non-return Valves

The non-return valves up to and including 80mm diameter shall be to BS 5153: 1974 with flanges to BS 4504 P

#### Q) Gate Valves

The gate valves upto and including 80mm shall be as Crane NO. D151 non-rising stem and wedge disc to BS 21 thread.

#### R) Sleeves

Where pipework passes through walls, floors or ceilings, a sleeve shall be provided one diameter larger than the of the pipe, the space between to be packed with mineral wool, to the Engineer's approval.

#### S) Floor and ceiling plates

Where pipe pass through floors, walls or ceilings, floor, wall and ceiling plates shall be secured around the pipe. shall be of stainless steel construction and will serve no other purpose than to present a net finish, to the exposed installation.

#### T) Hosereels

The hosereels to the installation shall consist of recess and no-recess automatic hosereels.

All the above hosereels shall comply with BS 5274: 1976 and BS 3169: 1970 and is to requirements C.P. 5306 1976.

The hosereels shall be supplied and installed complete with first-aid non-kinking hose 30 metres long, with nylon spray/jet/shut-off nozzle fitted. A screw down chrome plated globe valve to BS 1010 to the inlet to the reel.

The prifice to the nozzle is to be not less than 4.3 mm to maintain a minimum flow of 0.4L/s to the jet.

#### U) Earthing

The hosereel installation shall be electrically earthed by a direct earth connection.

#### V) Finish Painting

Upon completion of testing and commissioning of the hosereel installation the pipework shall be primed and fini with 2 No. coats of paint to the Engineer's requirements.

#### W) Testing and Commissioning

The hosereel system is to be flushed out before testing to ensure that no builders debris has entered the system. T is to be then tested to one and half times the working pressure of the installation to the approval of the Engineer. fault condition of the pumping equipment, is to be carried out before acceptance of the system by the Engineer an Architect.

#### X) Instruction Period

The Sub-Contractor shall allow in his contract sum for instructing of use of the equipment to the clients maintena. The period of instruction may be within the contract period but may also be required after the contract period has

The period of time required shall be stipulated by the Client but will not eceed seven days staff shall be instructed in the operation and maintenance of the equipment.



# **REPUBLIC OF KENYA**

#### MINISTRY OF PUBLIC WORKS

## **GENERAL SPECIFICATIONS**

#### **FOR**

## **ELECTRICAL INSTALLATION WORKS**

#### **ISSUED BY:**

CHIEF ELECTRICAL & MECHANICAL ENGINEER (BS)

MINISTRY OF PUBLIC WORKS P.O. BOX 41191, NAIROBI.

# TABLE OF CONTENTS

<u>TITLE</u> <u>PAGE</u>
SECTION D: General Specifications of Materials and Works
SECTION E: Schedule of Contract Drawings
SECTION F: Particular Specifications of Materials and Works
SECTION G: Schedule of Unit Rates
SECTION H: Bills of Quantities
SECTION I: Technical Schedule of Items to be supplied

# **SECTION D**

# **GENERAL SPECIFICATION**

**OF** 

# MATERIALS AND WORKS

#### GENERAL SPECIFICATIONS OF MATERIALS AND WORKS

2.1	General
2.2	Standard of Materials
2.3	Workmanship
2.4	Procurement of Materials
2.5	Shop Drawings
2.6	Record Drawings
2.7	Regulations and Standards
2.8	Setting out Works
2.9	Position of Electrical Plant and Apparatus
2.10	M.C.B Distribution Panels and Consumer Units
2.11	Fused Switchgear and Isolators
2.12	Conduits and Conduit Runs
2.13	Conduit Boxes and Accessories
2.14	Labels
2.15	Earthing
2.16	Cables and Flexible Cords
2.17	Armoured PVC Insulated and Sheathed Cables
2.18	Cable Supports; Markers and Tiles
2.19	PVC Insulated Cables
2.20	Heat Resisting Cables
2.21	Flexible Cords

2.22	Cable Ends and phase Colours
2.23	Cable Insulation Colours
2.24	Sub-circuit Wiring
2.25	Space Factor
2.26	Insulation
2.27	Lighting Switches
2.28	Sockets and Switched sockets
2.29	Fused Spur Boxes
2.30	Cooker Outlets
2.31	Connectors
2.32	Lampholders
2.33	Lamps
2.34	lighting Fittings Street lighting Lanterns
2.35	Position of Points and Switches
2.36	Street/Security Lighting Columns
2.37	Timing Control Switch
2.38	Wiring System for Street Lighting
2.39	Metal control Pillar
2.40	Current Operated Earth leakage circuit breaker
2.41	MV Switchboard
2.42	Steel Conduits and Steel Trunking
2.43	Testing on Site

#### 2.1 SHOP DRAWINGS

Before manufacture or Fabrication is commenced the sub-contractor shall submit Two copies of detailed drawings of all control pillars, meter cubicles, medium voltage switchboards including their components showing all pertinent information including sizes, capacities, construction details, etc, as may be required to determine the suitability of the equipment for the approval of the Engineer. Approval of the detailed drawings shall not relieve the sub-contractor of the full responsibility of errors or the necessity of checking the drawings himself or of furnishing the materials and equipment and performing the work required by the plans and specifications.

#### 2.2 RECORD DRAWINGS

These diagrams and drawings shall show the completed installation including sizes, runs and arrangements of the installation. The drawings shall be to scale not less than 1:50 and shall include plan views and section.

The drawings shall include all the details which may be useful in the operation, maintenance or subsequent modifications or extensions to the installation.

Three sets of diagrams and drawings shall be provided, all to the approval of the Engineer.

One coloured set of line diagrams relating to operating and maintenance instructions shall be framed and, mounted in a suitable location.

#### 2.3 REGULATIONS AND STANDARDS

All work executed by the Sub-contractor shall comply with the current edition of the "Regulations" for the Electrical Equipment of Buildings, issued by the Institution of Electrical Engineers, and with the Regulations of the Local Electricity Authority.

Where the two sets of regulations appear to conflict, they shall be clarified with the Engineers. All materials used shall comply with relevant Kenya Bureau of Standards Specification.

#### 2.4 SETTING OUT WORK

The sub-contractor at his own expenses; is to set out works and take all measurements and dimensions required for the erection of his materials on site; making any modifications in details as may be found necessary during the progress of the works, submitting any such modifications or alterations in detail to the Engineer before proceeding and must allow in his Tender for all such modifications and for the provision of any such sketches or drawings related thereto.

#### 2.5 POSITIONS OF ELECTRICAL PLANT AND APPARATUS

The routes of cables and approximate positions of switchboards etc, as shown on the drawings shall be assumed to be correct for purpose of Tendering, but exact positions of all electrical Equipment and routes of cables must be agreed on site with the Engineer before any work is carried out.

#### 2.6 MCB DISTRIBUTION PANELS AND CONSUMER UNITS

All cases of MCB Panels and consumer units shall be constructed in heavy gauge sheet with hinged covers.

Removable undrilled gland plates shall be provided on the top and bottom of the cases. Miniature circuit breakers shall be enclosed in moulded plastic with the tripping mechanism and arc chambers separated and sealed from the cable terminals.

The operating dolly shall be tripfree with a positive movement in both make and break position. Clear indication of the position of the handle shall be incorporated.

The tripping mechanism shall be on inverse characteristic to prevent tripping in temporary overloads and shall not be affected by normal variation in ambient temperature.

A locking plate shall be provided for each size of breaker; A complete list of circuit details on typed cartridge paper glued to stiff cardboards and covered with a sheet of perspex, and held in position with four suitable fixings, shall be fitted to the inner face of the lids of each distribution panel. The appropriate MCB ratings shall be stated on the circuit chart against each circuit in use: Ivorine labels shall be secured to the insulation barriers in such a manner as to indicate the number of the circuits shown on the circuit chart. Insulated barriers shall be fitted between phases, and neutrals in all boards, and to shroud live parts.

Neutral cables shall be connected to the neutral bar in the same sequence as the phase cables are connected to the MCB's. This shall also apply to earth bars when installed

#### 2.7 FUSED SWITCHGEAR AND ISOLATORS

All fused switchgear and isolators whether mounted on machinery, walls or industrial panels shall conform to the requirements of KS 04 - 226 PART: 1: 1985.

All contacts are to be fully shrouded and are to have a breaking capacity on manual operations as required by  $KS\ 04-182:1980$ .

Fuse links for fused switches are to be of high rupturing capacity cartridge type, conforming to KS 04 - 183: 1978.

Isolators shall be load breaking/fault making isolators.

Fused switches and isolators are to have separate metal enclosures. Mechanical interlocks are to be provided between the door and main switch operating mechanism so arranged that the door may not be opened with the switch in the 'ON' position. Similarly; it shall not be possible to close the switch with the door open except that provision to defeat the mechanical interlock and close the switch with the door in the open position for test purposes. The 'ON' and 'OFF' positions of all switches and isolators shall be clearly indicated by a mechanical flag indicator or similar device. In T.P & N fused switch units, bolted neutral links are to be fitted.

#### 2.8 CONDUITS AND CONDUIT RUNS

Conduit systems are to be installed so as to allow the loop-in system of wiring:

All conduits shall be black rigid super high impact heavy gauge class 'A' PVC in accordance with KS 04 – 179: 1988 and IEE Regulations. No conduit less than 20mm in diameter shall be used anywhere in this installation.

Conduit shall be installed buried in plaster work and floor screed except when run on wooden or metal surface when they will be installed surface supported with saddles every 600mm. Conduit run in chases shall be firmly held in position by means of substantial pipe hooks driven into wooden plugs.

The Sub-contractors attention is drawn to the necessity of keeping all conduits entirely separate from other piping services such as water and no circuit connections will be permitted between conduits and such pipes. All conduits systems shall be arranged wherever possible to be self-draining to switch boxes and conduit outlet points for fittings:

The systems, when installed and before wiring shall be kept plugged with well fitting plugs and when short conduit pieces are used as plugs, they shall be doubled over and tied firmly together with steel wire; Before wiring all conduit systems shall be carried out until the particular section of the conduit installation is complete in every respect.

The sets and bends in conduit runs are to be formed on site using appropriate size bending springs and all radii of bends must not be less than 2.5 times the outside diameter of the conduit. No solid or inspection bends, tees or elbows will be used.

Conduit connections shall either be by a demountable (screwed up) assembly or adhesive fixed and water tight by solution. The tube and fittings must be clean and free of all grease before applying the adhesive. When connections are made between the conduit and switch boxes, circular or non-screwed boxes, care shall be taken that no rough edges of conduit stick out into the boxes.

Runs between draw in boxes are not to have more than two right angle bends or their equivalent. The sub-contractor may be required to demonstrate to the Engineers that wiring in any particular run is easily withdrawable and the sub-contractor may, at no extra cost to the contract; be required to install additional draw-in boxes required. If conduit is installed in straight runs in excess of 6000mm, expansion couplings as manufactured by Egatube shall be used at intervals of 6000mm.

Where conduit runs are to be concealed in pillars and beams, the approval of the Structural Engineer, shall be obtained. The sub-contractor shall be responsible for marking the accurate position of all holes, chases etc, on site, or if the Engineer so directs, shall provide the Main Contractor with dimensional drawings to enable him to mark out and form all holes and chases. Should the sub-contractor fail to inform the main contractor of any inaccuracies in this respect they shall be rectified at the sub-contractors expense.

It will be the Sub-contractors responsibility to ascertain from site, the details of reinforced concrete or structural steelwork and check from the builder's drawings the positions of walls, structural concrete and finishes. No reinforced concrete or steelwork may be drilled without first obtaining the written permission of the Structural Engineer.

The drawings provided with these specifications indicate the appropriate positions only of points and switches, and it shall be the Sub-Contractors responsibility to mark out and centre on site the accurate positions where necessary in consultation with the Architect and the Engineer. The sub-contractor alone shall be responsible for the accuracy of the final position.

#### 2.13 CONDUIT BOXES AND ACCESSORIES

All conduit outlets and junction boxes are to be either malleable iron and of standard circular pattern of the appropriate type to suit saddles being used or super high impact PVC manufactured to KS 04 - 179 : 1983.

Small circular pattern boxes are to be used with conduits up to and including 25mm outside diameter. Rectangular pattern adaptable boxes are to be used for conduits of 32mm outside diameter and larger. For drawing in of cables in exposed runs of conduit, standard pattern through boxes are to be used:

Boxes are to be not less than 50mm deep and of such dimensions as will enable the largest appropriate number of cables for the conduit sizes to be drawn in without excessive bending.

Outlet boxes for lighting fittings are to be of the loop-in type where conduit installation is concealed and the sub-contractor shall allow one such box per fitting, except where fluorescent fittings are specified when two such boxes per fitting shall be fitted flush with ceiling and if necessary fitted with break joint rings. Pattresses shall be fitted where required to outlets on surface conduit runs.

Adaptable boxes are to of PVC or mild steel (of not less than 12swg) and black enamelled or galvanised finish according to location. They shall be of square or oblong shape location. They shall be of square or oblong shape complete with lids secured by four 2 BA brass roundhead screws; No adaptable box shall be less than 75mm x 75mm x 50mm or larger than 300mm x 300mm x 75mm and shall be adequate in depth in relation to the size of conduit entering it. Conduits shall only enter boxes by means of conduit bushes.

#### 2.14 LABELS

Labels fitted to switches and fuseboards;-

- (i) Shall be Ivorine engraved black on white.
- (ii) Shall be secured by R.H brass screws of same manufacturing throughout.
- (iii) Shall be indicated on switches:
  - a) Reference number of switch
  - b) Special current rating
  - c) Item of equipment controlled
- (iv) Shall indicate on MCB panels
  - a) Reference number
  - b) Type of board, i.e;, lighting, sockets, etc,.
  - c) Size of cable supplying panel
  - d) where to isolate feeder cable
- (v) Shall be generally not less than 75mm x 50mm.

#### 2.15 EARTHING

The earthing of the installation shall comply with the following requirements;-

- (i) It shall be carried out in accordance with the appropriate sections of the current edition of the Regulations, for the Electrical Equipment of Buildings issued by Institute of Electrical Engineers of Great Britain.
- (ii) At all main distribution panels and main service positions a 25mm x 3mm minimum cross sectional area Copper tape shall be provided and all equipment including the lead sheath and armouring of cables, distribution boards and metal frames shall be bonded thereto.
- (iii) The earth tape in Sub-clause (ii) shall be connected by means of a copper tape or cable of suitable cross sectional area to an earth electrode which shall be a copper earth rod (see later sub-clause).
- (iv) All tapes to be soft high conductivity copper, untinned except where otherwise specified and where run underground on or through walls, floors, etc., it shall be served with corrosion resisting tape or coated with corrosion compound and braided
- (v) Where the earth electrode is located outside the building a removable test link shall be provided inside the building as near as possible to the point of entry to the tape, for isolating the earth electrode for testing purposes.
- (vi) Earthing of sub-main equipment shall be deemed to be satisfactory where the sub-main cables are M.I.C.S. or conduit with separate earth wire, and installation is carried out in accordance with the figures stated in the current edition of the I.E.E Regulations.
- (vii) Where an earth rod is specified (see Sub-clause (iii) it shall be proprietary manufacture, solid hand drawn copper of 15mm diameter driven into the ground to a minimum depth of 3.6m. It shall be made up to 1.2m sections with internal screw and socket joints and fitted with hardened steel tip and driving cap.
- (viii) Earth plates will not be permitted
- (ix) Where an earth rod is used the earth resistance shall be tested in the manner described in the current edition of the IEE Regulations, by the Sub-Contractor in the presence of the Engineer and the Sub-Contractor shall be responsible for the supply of all test equipment.
- (x) Where copper tape is fixed to the building structure it structure it shall be by means of purpose made non-ferrous saddles which space the conductor away from the structure a minimum distance of

- 20mm. Fixings, shall be made using purpose made plugs; No fixings requiring holes to be drilled through the tape will be accepted.
- (xi) Joints in copper tape shall be tinned before assembly riveted with a minimum of two copper rivets and seated solid.
- (xii) Where holes are drilled in the earth tape for connection to items of equipment the effective cross sectional area must not be less than required to comply with the IEE regulations.
- (xiii) Bolts, nuts and washers for any fixing to the earth tape must be of non-ferrous material.
- (xiv) Attention is drawn to the need for the earthing metal parts of lighting fittings and for bonding ball joint suspension in lighting fittings.

#### 2.16 CABLES AND FLEXIBLE CORDS

All cables used in this Sub-Contract shall be manufactured in accordance with the current appropriate Kenya standard Specification which are as follows:-

P.V.C. Insulated Cables and Flexible Cords - Ks 04-192:1988

PVC Insulated Armoured Cables - Ks 04-194:1990

Armouring of Electric cables - Ks 04-290:1987

The successful Sub-Contractor will, at the Engineers discretion be required to submit samples of cables for the Engineers approval; the Engineer reserves the right to call for the cables of an alternative manufacture without any extra cost being incurred.

P.V.C. insulated cables shall be 500/1000 volt grade. No cables smaller than 1.5mm² shall be used unless otherwise specified. The installation and the finish of cables shall be as detailed in later clauses. The colour of cables shall conform with the details stated in the "Cable Braid and insulation Colours" Clause.

#### 2.17 ARMOURED P.V.C. INSULATED AND SHEATHED CABLES:

Shall be 600/1000 volt grade manufactured to Ks 04-194:1988 and Ks 04-187/188 with copper stranded conductors.

The wire armour of the cable shall be used wholly as an earth continuity conductor and the resistance of the wire armour shall have a resistance not more than twice of the largest current carrying conductor of the cable.

P.V.C./S.W.A./P.V.C cables shall be terminated using "Telecom" "B" type or approved equal or approved equal glands and a P.V.C. tapered sleeve shall be provided to shroud each gland.

Where cables rise from floor level to switchgear etc., they shall be protected by P.V.C. conduit, to a height of 600mm from finished floor level, whether the cable is run on the surface or recessed into the wall.

#### 2.18 CABLE SUPPORTS, MARKERS AND TILES

All PVC/SWA/PVC cables run inside the building shall be fixed in rising ducts or on ceilings by means of

die cost cables hooks or clamps, or appropriate size to suit cables, fixed by studs and back nuts to their channel sections.

Alternatively, fixing shall be by BICC claw type cleating system with die-cast cleats and galvanized mild steel back straps or similar approved equal method. For one or two cables run together the cleats shall be fixed a special channel section supports or backstraps described above which shall in turn be secured to walls or ceilings of ducts by rawbolts.

In excessively damp or corrosive atmospheric conditions special finishes may be required and the Subcontractor shall apply to the Engineer for further instructions before ordering cleats and channels for such areas.

The above type of hooks and clamps and channels or cleats and blackstraps shall also be used for securing cables in vertical ducts.

Cables supports shall be fixed at 600mm maximum intervals, the supports being supplied and erected under this Sub-contract. Saddles shall not be used for supporting cables nor any other type of fixing other than one of the two methods described above or other system which has received prior approval of the Engineer;

Cables are to be kept clear of all pipe work and the Sub-contractor shall work in close liaison with other services Sub-contractors.

The Sub-Contractor shall include for the provision of fixing of approved type coloured slip on cables end markers to indicate permanently the correct phase and neutral colours on all ends.

Provision shall be made for supplying and fixing approved non-corrosive metal cable markers to be attached to the outside of all PVC/SWA/PVC cables at 15mm intervals indicating cable size and distinction.

Where PVC/SWA/PVC cables are outside the building they shall be laid underground 750mm deep with protecting concrete interlocking cover tiles laid over which shall be provided and laid under this Subcontract.

All necessary excavations and reinstatement of ground including sanding or trenches will be carried out by the Sub-Contractor, unless otherwise stated.

#### 2.19 PVC INSULATED CABLES

Shall be of non-braided type as CMA reference 6491 x 600/1000/1000 volt grade cables, or equal approved.

PVC cables shall conform to the details of the "Cables and Flexible cords" and "Cable Braid and Insulation Colours" clauses.

#### 2.20 HEAT RESISTING CABLES

Final connections to cookers, water heaters, etc., shall be made using butyl rubber insulated cable as CMA reference 610 butyl (Single core 600/1000 Volt).

This type of cable shall be used in all instances where a temperature exceeding 100°F, but not exceeding 150°F is likely to be experienced. Final connections to all lighting fittings (and other equipment where a temperature in excess of 150°c likely to be experienced) shall be made using silicon rubber insulated cable or equal and approved.

#### 2.21 FLEXIBLE CORDS

Shall be in accordance with the "Cable and Flexible Cords" clause. No cord shall be less than 24/0.2mm in size unless otherwise specified.

Circular white twin TRS flex shall be used for plain pendant fittings up to 100 watts. For all other types of lighting fittings the flexible cable shall be silicone rubber insulated.

No polythene insulated flexible cable shall be used in any lighting fitting or other appliance (see "Heat Resisting Cables" Clause 30).

#### 2.22 CABLE ENDS AND PHASE COLOURS

All cable ends connected up in switchgear, MCB panels etc;, shall have the insulation carefully cut back and the ends sealed with Hellerman rubber slip on cable end markers.

The markers shall be of appropriate phase colour for switch and all other live feeds to the details of the "Cable Insulation Colours" clause. Black cable with black end markers shall only be used for neutral cables.

**2.23 CABLE INSULATION COLOURS**Unless otherwise stated in later clauses the insulation colours shall be in accordance with the following table.

Where other systems are installed the cable colours shall be in accordance with the details stated in the appropriate clause.

**CABLE END** 

STSTEM	<u>INSCLAMON COLOCK</u>	MARKER
Main and Sub-Main		
a) Phase	Red	Red
b) Neutra	l Black	Black
1) Sub-Circuit Single Pha		
a) Phase	Red	Red
b) Neutra	l Black	Black

INSULATION COLOUR

#### 2.24 SUB-CIRCUIT WIRING

**SYSTEM** 

For all lighting and sockets wiring shall be carried out in the "looping in" system and there shall be no joints whatsoever. No lighting circuits shall comprise more than 20 points when protected by 10A MCB. Cables with different cross-section area of copper shall not be used in combination.

Lighting circuits P. V.C. cable 1.5mm<sup>2</sup> for all lighting circuits indicated on the drawing. Power circuits P.V.C cable (minimum sizes).

- (i) 2.5mm<sup>2</sup> for one, two or three 5Amp sockets wired in parallel.
- (ii) 2.5mm<sup>2</sup> for one 15Amp socket.
- (iii) 2.5mm² for maximum of ten switched 13 Amp sockets wired from 30 Amp MCB. The wiring sizes for lighting circuits and sockets are shown on the drawings. In such cases, the sizes shown on the drawings shall prevail over the sizes specified.

Wiring sizes for other appliances shall be shown on the drawing or specified in later clauses of this specification.

#### 2.25 SPACE FACTOR

The maximum number of cables that may be accommodated in a given size of conduit or trunking or duct is not to exceed the number in Tables B.5 and B.6 or as stated in Regulation B.91, B.117 and B.118 of the I.E.E Regulations whichever is appropriate.

#### 2.26 INSULATION

The insulation resistance to earth and between poles of the whole wiring system, fittings and lumps, shall not be less than the requirements of the latest edition of the I.E.E Regulations. Complete tests shall be made on all circuits by the Sub-contractor before the installations are handed over.

A report of all tests shall be furnished by the Sub-Contractor to the Engineer. The Engineer will then check test with his own instruments if necessary.

#### 2.27 LIGHTING SWITCHES

These shall be mounted flush with the walls, shall be contained in steel or alloy boxes and shall be of the gangs ratings and type shown in the drawings. They shall be as manufactured by M.K. Electrical Ltd., or other equal and approved to KS 04 - 247: 1988

#### 2.28 SOCKETS AND SWITCHED SOCKETS

These shall be flush pattern in steel/pvc box and shall be of the gangs and type specified in the drawings.

They shall be 13- Amp, 3-pin, shuttered, switched and as manufactured by "M.K. Electrical Co. Ltd.", or other approved equal to KS 04 - 246: 1987

#### 2.29 FUSED SPUR BOXES

These shall be flush, D.P switched as in steel/pvc box and of type and make specified in the drawings complete with pilot light and as manufactured by "M. K. Electrical Company Ltd", or other approved equal.  $KS\ 04-247$ : 1988

#### 2.30 COOKER OUTLETS

These shall be flush mounted with 13-A switched socket outlet and neon indicator Lamps. The cooker control units shall be as manufactured by "M.K. Electrical Company Ltd", or other approved equal KS 04 - 247: 1988

#### 2.31 CONNECTORS

Shall be specified in the drawings and appropriate rating. These shall be fitted at all conduit box lighting point outlets for jointing of looped P.V.C cables with flexible cables of specified quality.

#### 2.32 LAMPHOLDERS

Shall be of extra heavy H.O skirted and shall be provided for every specified lighting fitting and shall be B.C;, E.S;, or G.E.S as required. All E.S. and G.E.S. holders shall be heavy brass type (except for plain pendants where the reinforced bakelite type shall be used). The screwed cap of the E.S and G.E.S. holders shall be connected to the neutral.

Where lampholders are supported by flexible cable, the holders shall have "cord grip" arrangements and in the case of metal shades earthing screws shall be provided on each of the holders.

The Sub-Contractor must order the appropriate type of holder when ordering lighting fittings, to ensure that the correct types of holders are provided irrespective of the type normally supplied by the manufacturers.

#### 2.33 LAMPS

All lamps shall be suitable for normal stated supply voltage and the number and sizes of lamps detailed on the drawings shall be supplied and fixed. The Sub-Contractor must verify the actual supply voltage with the supply authority before ordering the lamps.

Tungsten filament lamps shall be manufactured in accordance with KS 04 - 112:1978 for general service lamps and KS 04 - 307:1985 for lamps other than general services. Tubular fluorescent lamps shall comply with KS 04 - 464:1982

Pearl lamps shall be used in all fittings unless otherwise specified.

#### 2.34 LIGHTING FITTINGS AND STREET LIGHTING LANTERNS

This Sub-Contract shall include for the provision, handling charges, taking the delivery, safe storage, wiring (including internal wiring) assembling and erecting of all lighting fittings shown on the drawings.

All fittings and pendants shall be fixed to the conduit boxes with brass R/H screws. These to be in line with metal finish of fittings. The lighting fittings are detailed for the purpose of establishing a high standard of finish and under no circumstances will substitute fittings be permitted.

In case of rectangular shaped ceiling fittings, the extreme ends of the fittings shall be secured to suitable support in addition to the central conduit box fittings. Supports shall be provided and fixed by the Sub-Contractor.

The whole of the metal work of each lighting fittings shall be effectively bonded to earth. In the case of ball and/or knuckle joints short lengths of flexible cable shall be provided, bonded to the metal work on either side of the joints. If the above provisions are not made by the manufacturers -, the Sub-contractor shall include cost of additional work necessary in his tender. See "Flexible Cords" clause for details of internal wiring of lighting fittings. Minimum size of internal wiring shall be 20/0.20mm (23/0067). Each lighting fitting shall be provided with number type and size of lamps as detailed on the drawings. It is to be noted that some fittings are suspended as shown on the drawings.

Where two or more points are shown adjacent to each other on the drawings, e.g socket outlet and telephone outlet, they shall be lined up vertically or horizontally on the centre lines of the units concerned

Normally, the units shall be lined up on vertical centre lines, but where it is necessary to mount units at low level they shall be lined up horizontally.

#### 2.35 POSITIONS OF POINTS AND SWITCHES

Although the approximate positions of all points are shown on the drawings, enquiry shall be made as to the exact positions of all M.C.B panels, lighting points, socket outlets etc, before work is actually commenced. The Sub-contractor must approach the Architect with regard to the final layout of all lights on the ceiling and walls.

The Sub-contractor must consult with the Engineer in liaison with the Clerk of Works, or the General Foreman on site regarding the positions of all points before fixing any conduit etc. The Sub-Contractor shall be responsible for all alterations made necessary by the non-compliance with the clause.

#### 2.36 STREET/SECURITY OUTDOOR LIGHTING COLUMNS:

The column shall be at a minimum of 225mm in the ground on 75mm thick concrete foundations and the pole upto 150mm shall be surrounded with concrete. The top bracket and plain section of the columns shall be common to and interchangeable with all brackets with maximum mismatching tolerance of 3mm between any pole and bracket. After manufacture and before erection the columns shall be treated with an approved mordant solution which shall be washed off and the whole allowed to dry. Thereafter, the columns shall be

painted with one undercoat and two coats of gloss paint to an approved colour. All columns shall be complete with fused cut-outs.

#### 2.37 TIMING CONTROL SWITCH

These shall be installed where shown on the drawings. Photocell timing control circuits which will operate 'on' with a specified level of darkness and 'off' with a given level of light. The initial adjustment will be done with approval of the Electrical Engineer.

#### 2.38 WIRING SYSTEM FOR STREETLIGHTING

Cables shall be as indicated on the drawings, and shall be laid in a cable trench 450mm deep along the road sides and 600mm deep across the roads and 900mm away from the road kerb or 1500mm away from the edges of the road. 'Loop-in' and 'Loop-out' arrangement shall be used at every pole. Wiring to the lanterns on each pole shall be with 1.5mm<sup>2</sup> PVC twin insulated and sheathed cable with earth wire shall be laid at least 600mm below the finished road level on a compact bed of murram at least 50mm thick and covered with a concrete surrounded 150mm thick.

#### 2.39 METAL CONTROL PILLAR

These shall be metal clad and fabricated as per contract drawings and specification. The Sub-Contractor shall supply, install, test and commission control pillars including supplying, fixing connecting switchgears as detailed on the appropriate drawings.

#### 2.40 CURRENT OPERATED EARTH LEAKAGE CIRCUIT BREAKER

Current operated earth leakage circuit breaker shall conform to B.S.S. 4293:68 rated at 240 volts D.P. 50 cycles A.C. Mains.

The breaker shall be provided with test switch and fitted in weather proof enclosure for surface mounting. The rated load current and earth fault operating current shall be as specified in the drawings. These shall be as manufactured by Crabtree, Siemens or other equal and approved.

#### 2.41 M.V. SWITCHBOARD AND SWITCHGEAR

The switchboard shall be manufactured in accordance with KS04-226 which co-ordinates the requirements for electrical power switchgear and associated apparatus. It is not intended that this K.S. should cover the requirements for specified apparatus for which separate Kenyan Standard exist. All equipment and material used in the switchboard shall be in accordance with the appropriate Kenya Standard.

The switchboard shall comprise the equipment shown on the drawings together with all current transformers, auxiliary fuses, labels, small wiring and interconnections necessary for the satisfactory operation of the switchboard

Switchboard shall be of the flush fronted, enclosed, metal clad type with full front or rear access as called for in the particular specifications, suitable for indoor use, sectionalized as necessary to facilitate transport and erection. The maximum height of the switchboard is to be approximately 2.0 meters. A suitable connection chamber containing all field terminals shall be provided at the top or bottom of the switchboard as appropriate.

Before manufacture, the Sub-Contractor shall submit to the consulting Engineer for approval of detailed drawings showing the layout, construction and connection of the switchboard.

All bus-bars and bus-bar connections shall consist of high conductivity copper and be provided in accordance with KS 04-226: 1985. The bus-bars shall be clearly marked with the appropriate phase and neutral colours which should be red, yellow, blue for the phases and black for neutral. The bus-bars shall be so arranged in the switchboard that the extensions to the left and right may be made in the future with ease should the need arise.

Small wiring, which will be neatly arranged and cleated, shall be executed in accordance with B.S. 158 and the insulation of the wiring shall be colored according to the phase or neutral connection.

Switches and fuse switches, shall be in strict accordance with KS04-183:1978 Class 2 switches. Means of locking the switch in the "OFF" position shall be provided.

All fuse switches shall comply with KS04-183:1978, PARTS 2 and 3 a fault rating at least equal to the fault rating of the switchboard in which they are installed. Cartridge fuse links to KS 04-183:1978 category A.C. 46, class Q1 and fusing factor not exceeding 1.5 shall be supplied with each fused switch.

Mounting arrangements shall be such that individual complete fuse switches may be disconnected and withdrawn when necessary without extensive dismantling work. When switches are arranged in their formation all necessary horizontal and vertical barriers shall be provided to ensure segregation from adjacent units. Means of locking the switch in the "OFF" position shall be provided.

#### 2.42 STEEL CONDUITS AND STEEL TRUNKING

Conduits shall be of heavy gauge class "B" welded to Standard specification KS 04-180:1985. In no case will conduit smaller than 20mm diameter be used on the works. Conduits installed within buildings shall be black enameled finish except where specified otherwise. Where installed externally or in damp conditions they shall be galvanised. Conduit fittings, accessories or equipment used in conjunction with galvanised

conduits shall also be galvanised or otherwise as approved by the service engineer.

Metal trunking shall be fabricated from mild steel of not less than 18 swg. All sections of trunking shall be rigidly fixed together and attached to the framework or fabric or the building at intervals of not less than 1.2m. Joint trunking shall not overhang fixing points by more than 0.5m.

All trunking shall be made electrically continuous by means of 25 x 3mm copper links across each joint and where the trunking is galvanised, the links shall be made by galvanised flat iron strips.

All trunking fittings (i.e. Bends, tees, etc) shall leave the main through completely clear of obstructions and continuously open except through walls and floors at which points suitable fire resisting barriers shall be provided as may be necessary. The inner edge of bends and tees shall be chamfered where cables larger than 35mm<sup>2</sup> are employed.

Where trunking passes through ceilings and walls the cover shall be solidly fixed to 150mm either side of ceilings and floors and 50mm either side of walls.

Screws and bolts securing covers to trunking or sections of covers together shall be arranged so that damage to cables cannot occur either when fixing covers or when installing cables in the trough.

Where trunking is used to connect switchgear of fuseboards, such connections shall be made by trunking fittings manufactured for this purpose and not by multiple conduit couplings.

Where vertical sections of trunking are used which exceed 4.5m in length, staggered tie off points shall be provided at 4.5m intervals to support the weight of cables.

Unless otherwise stated, all trunking systems shall be painted as for conduit.

# Where a wiring system incorporates galvanized conduit and trunking, the trunking shall be deemed to be galvanized unless specified otherwise.

The number of cables to be installed in trunking shall be such as to permit easy drawing in without damage to the cables, and shall in no circumstances be such that a space factor of 45% is exceeded.

Conduit and trunking shall be mechanically and electrically continuous. Conduit shall be tightly screwed between the various lengths so that they butt at the socketed joints. The internal edges of conduit and all fittings shall be smooth, free from burrs and other defects. Oil and any other insulating substance shall be removed from the screw threads; where conduits terminate in fuse-gear, distribution boards, adaptable boxes, non-spouted switchboxes, etc., they shall, unless otherwise stated, be connected thereto by means of smooth bore male brass bushes, compression washers and sockets. All exposed threads and abrasions shall be painted using an oil paint for black enamelled tubing and galvanising paint for galvanised tubing immediately after the conduits are erected. All bends and sets shall be made cold without altering the section of the conduit. The inner radius of the bed shall not be less than four (4) times the outside diameter of the conduit. Not more than two right angle bends will be permitted without the inter-position of a draw-in-box.

Where straight runs of conduit are installed, draw-in-boxes shall be provided at distances not exceeding 15mm. No tees, elbows, sleeves, either of inspection or solid type, will be permitted.

Conduit shall be swabbed out prior to drawing in cables, and they shall be laid so as to drain of all condensed moisture without injury to end connections.

Conduits and trunking shall be run at least 150mm clear of hot water and steam pipes, and at least 75mm clear of cold water and other services unless otherwise approved by the services engineer.

All boxes shall conform to KS 04-668: 1986, to be of malleable iron, and black enamelled or galvanised according to the type of conduit specified. All accessory boxes shall have threaded brass inserts.

Box lids where required shall be heavy gauge metal, secured by means of zinc plated or cadmium plated steel screws.

All adaptable boxes and lids of the same size shall be interchangeable.

Boxes used on surface work are to be tapped or drilled to line up with the conduit fixed in distance type saddles allowing clearance between the conduit and wall without the need for setting the conduit.

Where used in conjunction with mineral insulated copper sheathed cable, galvanised boxes shall be used and painted after erection.

Draw-in boxes in the floors are generally to be avoided but where they are essential they must be grouped in positions approved by the services engineer and covered and by the suitable floor traps, with non-ferrous trays and covers.

The floor trap covers are to be recessed and filled in with a material to match the floor surface.

The Sub-contractor must take full responsibility for the filling in of all covers, but the filling in material will be supplied and the filling carried out by the main building contractor.

Where buried in the ground outside the building the whole of the buried conduit is to be painted with two coats of approved bitumastic composition before covering up.

Where run on the surface, unpainted fittings and joints shall be painted with two coats of oil bound enamel applied to rust and grease free metalwork.

#### 2.43 TESTING ON SITE

The Sub-contractor shall conduct during and at the completion of the installation and, if required, again at the expiration of the maintenance period, tests in accordance with the relevant section of the current edition of the Regulations for the electrical equipment of buildings issued by the I.E.E of Great Britain, the Government Electrical Specification and the Electric Supply Company's By-Laws.

- (a) Tests shall be carried out to prove that all single pole switches are installed in the 'live' conductor.
- (b) Tests shall be carried out to prove that all socket outlets and switched socket outlets are connected to the 'live' conductor in the terminal marked as such, and that each earth pin is effectively bonded to the earth continuity system. Tests shall be carried out to verify the continuity of all conductors of each 'ring' circuit.

(c) Phase tests shall be carried out on completion of the installation to ensure that correct phase sequence is maintained throughout the installation. Triplicate copies of the results of the above tests shall be provided within 14 days of the witnessed tests and the Sub-contractor will be required to issue to the service engineer the requisite certificate upon completion as required by the regulations referred to above.
Any faults, defects or omissions or faulty workmanship, incorrectly positioned or installed parts of the installation
made apparently by such inspections or tests shall be rectified by the Sub-contractor at his own expense.

(e) The Sub-contractor shall provide accurate instruments and apparatus and all labour required to carry out the above tests. The instruments and apparatus shall be made available to the services engineer to enable him to carry out such tests as he may require.

(d)

The Sub-contractor shall generally attend on other contractors employed on the project and carry out such electrical tests as may be necessary.

The Sub-contractor shall test to the services engineer's approval and as specified elsewhere in this specification or in standards and regulations already referred to, all equipment, plant and apparatus forming part of the works and before connecting to any power or other supply and setting to work.

Where such equipment, etc., forms part of or is connected to a system whether primarily or of an electrical nature or otherwise (e.g. air conditioning system) the Sub-contractor shall attend on and assist in balancing, regulating testing and commissioning, or if primarily an electrical or other system forming part of works, shall balance, regulate, test and commission the system to the service engineer's approval.

#### APPENDIX TO GENERAL SPECIFICATIONS OF MATERIALS AND WORKS

The electrical sub-contractor shall comply with the following:-

- 1. Government Electrical Specifications No. 1 and No. 2.
- 2. All requirements of Kenya Power and Lighting Company Limited, and Communications Commission of Kenya (CCK).

# SECTION E SCHEDULE OF CONTRACT DRAWINGS

## SCHEDULE OF CONTRACT DRAWINGS

(Contract Drawings may be inspected at the Project Manager's office at any time during official working hours)

# SECTION F PARTICULAR SPECIFICATIONS OF MATERIALS AND WORKS

#### **PARTICULAR SPECIFICATIONS**

#### 1.0 SITE LOCATION

The site of the proposed works is at (As stated in the Particular Preliminaries)

#### 2.0 SCOPE OF WORKS

The works to be carried out under this sub-contract comprise supply, installation, testing and commissioning of the following:-

#### **Electrical Works**

This shall include: -

- a. Electrical Installation Works.
- b. Fire Alarm System Works.
- c. Telephone points complete with CAT 5E cable wiring
- d. Computer points.

This shall be as specified in the bills of quantities and to the approval of the Electrical

Engineer.

#### 3.0 MATERIALS FOR THE WORKS

Materials shall be as specified in Section D and in the Bills of Quantities of this document which shall be read in conjunction with contract drawings. Alternative materials shall be accepted only after approval by the Project Manager.

# SECTION G SCHEDULE OF UNIT RATES

#### SCHEDULE OF UNIT RATES

- 1. The tenderer shall insert unit rates against the items in the following schedules and may add such other items as he considers appropriate.
- 2. The unit rates shall include for supply, transport, insurance, delivery to site, storage as necessary, assembling, cleaning, installing, connecting, profit and maintenance in defects liability and any other obligation under this contract.
- 3. The unit rates will be used to assess the value of additions or omissions arising from authorised variations to the contract works.
- 4. Where trade names or manufacturer's catalogue numbers are mentioned in the specification, the reference is intended as a guide to the type of article or quality of material required. Alternative brands of **equal** and **approved** quality will be accepted.

#### SCHEDULE OF UNIT RATES

	SCHEDULE OF UNIT RAT	ГES			
NO	DESCRIPTION	QTY	UNIT	UNIT RATE	
				KSHS	CTS
İ	1) Cables:				
	i) supply and install PVC /SWA/ PVC copper				
	Cables:-				
	a) 2 -core 6mm2	1	LM		
	b) 2 -core 10mm2	1	LM		
	c) 4 -core 10mm2	1	LM		
	ii) supply and install PVC single core copper cables:				
	a) 3 x 4.0 sq. mm	1	LM		
	b) 3 x 6.0 sq. mm	1	LM		
	c) 3 x 10 sq. mm	1	LM		
	2) 8 Way SPN Consumer Unit as Crabtree or equivalent.	1	NO		
	3) 6 Way TPN distribution board as Crabtree or equivalent.	1	NO		
	4) 9Way TPN Distribution Board as Crabtree or equivalent	1	NO		
	5) 12 Way TPN distribution board as Crabtree or equivalent.	1	NO		
	6) 100 A SPN isolator as Crabtree.	1	NO		
	7) 240V-24 hour Time switch	1	NO		
	8) 100A Busbar Chamber	1	NO		
	9) Security floodlight 500W(Metal Halogen)	1	NO		
	10) 20ATPN Contactor	1	NO		
	11) <b>FITTINGS:</b> i) 1 x 36w, 1200mm fluorescent fitting c/w	1	NO		
	decorative louvers as THORN or approved equivalent. ii) 2 x 36w, 1200mm fluorescent fitting c/w opal diffuser as THORN CAT. No. PPD24 or approved	1	NO		
	equivalent. iii) 2 x 58w, 1500mm fluorescent fitting c/w	1	NO		
	louvers as THORN or approved equivalent iv) 1x58w, 1500mm fluorescent fitting c/w louvers as THORN or approved equivalent.	1	NO		

# SECTION H BILLS OF QUANTITIES

# BILLS OF QUANTITIES

#### A) PRICING OF PRELIMINARIES ITEMS.

Prices will be inserted against item of preliminaries in the sub-contractor's Bills of Quantities and specification. These Bills are designated as Bill 1 in this Section. Where the sub-contractor fails to insert his price in any item he shall be deemed to have made adequate provision for this on various items in the Bills of Quantities. The preliminaries form part of this contract and together with other Bills of Quantities covers for the costs involved in complying with all the requirements for the proper execution of the whole of the works in the contract.

The Bills of Quantities are divided generally into three sections:-

#### a) Preliminaries – Bill 1

Sub-contractors preliminaries are as per those described in section C – sub-contractor preliminaries and conditions of contract. The sub-contractor shall study the conditions and make provision to cover their cost in this Bill. The number of preliminary items to be priced by the Tenderer has been limited to tangible items such as site office, temporary works and others. However the Tenderer is free to include and price any other items he deems necessary taking into consideration conditions he is likely to encounter on site.

#### a) Installation Items and Other Bills - Bill 2

The brief description of the items in these Bills of Quantities should in no way modify or supersede the detailed descriptions in the contract Drawings, conditions of contract and specifications.

The unit of measurements and observations are as per those described in clause 1.05 of the section C.

#### c) Summary

The summary contains tabulation of the separate parts of the Bills of Quantities carried forward with provisional sum, contingencies and any prime cost sums included. The sub-contractor shall insert his totals and enter his grand total tender sum in the space provided below the summary.

This grand total tender sum shall be entered in the Form of Tender provided elsewhere in this document

## B) NOTES FOR 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, storage on site, installation, testing, commissioning and all taxes.
  - In accordance with Government policy, the 16% V.A.T and 3% withholding Tax 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 Manager, 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**.
- 6. Tenderers may enclose, together with their submitted tenders, **detailed manufacturer's brochures** detailing Technical Literature and specifications of the items they intend to offer.

The brochures shall be used in the tender evaluation to determine the first line aesthetics and quality of fittings offered.

Statement of Compliance
I confirm compliance of all clauses of the General Conditions, General Specifications and Particular Specifications in this tender.
I confirm I have not made and will not make any payment to any person, who can be perceived as an inducement to win this tender.
Signed:
Date:
Official Rubber Stamp:

1.

#### SCHEDULE 1. SUB-CONTRACT PRELIMINARIES

562	-CONTRACT PRELIMINARIES			1		
ITEM	DESCRIPTION	QTY	UNIT	RATE	KSH S	CTS
1	Discrepancies clause 1.02					
2	Conditions of sub-contract Agreement clause 1.03					
3	Payments clause1.04					
4	Site location clause 1.06					
5	Scope of Contract Works clause 1.08					
6	Extent of the Contractor's Duties clause 1.09					
7	Firm price contract clause 1.12					
8	Variation clause 1.13					
9	Prime cost and provisional sum clause 3.14 (insert profit and attendance which is a percentage of expended PC or provisional sum.)					
10	Bond clause 1.15					
11	Government Legislation and Regulations clause 1.16					
12	Import Duty and Value Added Tax clause 1.17(Note this clause applies for materials supplied only. VAT will also be paid by the subcontractor as allowed in the summary page)					
13	Insurance company Fees clause 1.18					
14	Provision of services by the Main contractor clause 1.19					
15	Samples and Materials Generally clause 1.21					
	SUB-TOTAL CARRIED FORWARD TO PAGE					

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS	CTS
16	Supplies clause 1.20					
17	Bills of Quantities clause 1.23					
18	Contractor's Office in Kenya clause 1.24					
19	Builder's Work clause 1.25					
20	Setting to work and Regulating system clause 1.29					
21	Identification of plant components clause 1.30					
22	Working Drawings clause 1.32					
23	Record Drawings(As Installed) and Instructions clause 1.33					
24	Maintenance Manual clause 1.34					
25	Hand over clause 1.35					
26	Painting clause 1.36					
27	Testing and Inspection – manufactured plant clause 1.38					
28	Testing and Inspection – Installation clause 1.39					
29	Storage of Materials clause 1.41					
30	Initial Maintenance clause 1.42					
31	Attendance Upon Tradesmen, etc. (Insert percentage only) clause 1.58					
	SUB-TOTAL CARRIED FORWARD TO PAGE					

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS	CTS
31	Local and other Authorities notices and fees clause 1.60					
32	Temporary Works clause 1.63					
33	Patent Rights clause 1.64					
34	Mobilization and Demobilization Clause 1.65					
35	Extended Preliminaries Clause 1.66 (see Appendix -clause 1.70)					
36	Supervision by Engineer and Site Meetings Clause 1.67					
37	Allow for profit and Attendance for item 36 above.					
38	Amendment to Scope of Sub-contract Works Clause 1.68					
39	Contractor obligation and Employers Obligation clause 1.69.					
40	Any other preliminaries;					
	Sub-total above					
	Sub-total brought forward from page					
	Sub-total brought forward from page					
	Sub-total For Bill No. 1- PRELIMINARIES- CATO PRICE SUMMARY PAGE	ARRIED FO	ORWARD	1		

# SECTION I TECHNICAL SCHEDULE OF ITEMS TO BE SUPPLIED

### TECHNICAL SCHEDULE

The technical schedule shall be submitted by tenderers to facilitate and enable the Project Manager to evaluate the tenders, especially where the tenderer intends to supply or has based his tender sum on equipment which differs in manufacture, type or performance from the specifications indicated by the Project Manager.

Any tender without this shall be disqualified.

## TECHNICAL SCHEDULE OF ITEMS TO BE SUPPLIED (To be completed by Tenderer)

ITEM	DESCRIPTION	TYPE/MAKE	COUNTRY OF ORIGIN
1.	Lighting switches		
2.	Moulded Socket outlet Plates		
3.	Lighting fittings;  (i) 4 x 18 w, 600mmx600mm, fluorescent fitting.  (ii) 16W, 2D ceiling luminaire.  (iii) Eye ball down lighters.  (iv) Bulkhead fitting		
4.	Consumer Unit.		
5.	Telephone plates.		
6.	Computer plates.		
7.	4 Pair Cat 6E cable.		
8.	Trunking		
9.	MCBs		
10.	Fire alarm panel		
11.	Smoke Detectors.		
12.	Sounders.		
13.	'BREAK GLASS' unit		
14.	Copper tape		
15.	Copper rod		
16.	Test clamp		
17.	Earth rod		

## **PRELIMINARIES**

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
	PARTICULAR				
	PRELIMINARIES				
A	PRICING ITEMS OF PRELIMINARIES				
	Prices <b>SHALL BE INSERTED</b> against items of preliminaries in the tenderers priced Bills o Quantities.				
	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 or the same is included within the prices for the Bills of Quantities.				
В					
	VALUE ADDED TAX				
	The contractor shall allow for addition of 16% Value Added Tax (VAT) at the grand Summary page of these Bills of Quantities. Any omission in respect thereof shall be treated and corrected as an arithmetic error as per the instructions to tenderers.				
	Please note that from every Interim and the Final payment, 16% VAT shall be deducted and paid directly to the Commissioner of Value Added Tax. (VAT).				
	PARTICULAR PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	FIRM PRICE CONTRACT	(1-1-			
	This is a firm price contract and the Contractor must allow in his tender rates for any increase in the cost of labour and/or materials during the currency of the contract.				
В	SCOPE OF CONTRACT				
	The works to be carried out under the contract comprise PROPOSED COMPLETION OF A HOSTEL BLOCK FOR MURANG'A UNIVERSITY OF TECHNOLOGY. WITH ALL ASSOCIATED ELECTRICAL AND MECHANICAL WORKS.				
С	DESCRIPTION OF THE WORKS				
	Site clearing, setting out, construction and completion of COMPLETION OF A 4 STORIED EDUCATIONAL BUILDING; AS DESCRIBED.				
D	FLOOR AREA				
	The total gross approximate floor area is The total gross floor area is given without warranty but for guidance only.				
E	MEASUREMENTS				
	In the event of any discrepancies between the Bills of Quantities and the Actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract document shall immediately be referred to the Project Manager.				
	For purposes of this tender, all the works have been measured provisionally and are subject to re – measurement at execution.				
	PARTICULAR PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	LOCATION OF SITE				
	The site for works is located within:				
	MURANG'A UNIVERSITY OF TECHNOLOGY, MURANG'A COUNTY				
	The tenderer shall be deemed to have visited the site and familiarized himself with all site conditions prior to submission of tenders.				
В	EXISTING BUILDING SERVICES				
	Special precautions shall be required throughout the contract period to avoid damages to the existing cables, drains and other services.				
	The Contractor shall allow for making good any damage arising from the actions during execution of this contract at his own expense.				
С	GENERAL				
	The Contractor is referred to the General Specifications for Building Works 1976 Edition pages B1 – B2 inclusive and must allow for all costs in complying with these clauses.				
	PARTICULAR PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	CONTRACT COMPLETION PERIOD				
	The contract completion period in accordance with the conditions of contract must be strictly adhered to.				
	The PROJECT MANAGER shall strictly monitor the Construction progress in relation to the progress chart and should it be found necessary, the PROJECT MANAGER shall inform the Contractor in writing that the actual performance on site is not satisfactory.				
	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 cost.				
В					
	WORKING CONDITIONS				
С	The Contractor shall allow in his rates for any interference 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 site are completed.				
	SIGN BOARD				
D	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 manager.				
	LABOUR CAMPS				
	The Contractor shall not be allowed to house on site. Allow for transporting workers to and from the site during the tenure of the contract.				
	PARTICULAR PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	MATERIALS FROM DEMOLITIONS				
	Any materials arising from demolitions and not re-used shall become the property of the government. The Contractor shall allow in his rates the cost of assembling and keeping them in the Government premises.				
В	PRICING RATES				
	The tendereer 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.				
C	TRANSPORT FOR THE PROJECT TEAM				
	The Contractor shall provide <b>during</b> site trips <b>only</b> a 4-wheel drive vehicle of approved make and model to comfortably sit seven (7) persons, including maintaining licenses and insurances and provision of a competent driver, all to the satisfaction of the project manager.				
	The vehicle shall be provided specifically for and during site visits by the Ministry of Public Works project technical team.				
	The vehicle shall be in perfect condition for the duration of the trips to and from Ministry of Public Works, Office, Murang'a to the Site including local running.				
	The driver shall be at the sole discretion of the Project Manager for the site visit day and for the entire duration of the trip until released by him/her.				
	Reimbursement to the contractor for providing the transport services will be based per round trip (to the site and back) during the currency of the contract at the rates quoted below.				
	Allow for providing a vehicle as above described including maintaining licenses and comprehensive insurances (NB: This is not a requirement for a Purchase of a Project Vehicle)				
	24 No. round trips x Kshs.				
	PARTICULAR PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A					
	PROJECT MANAGEMENT COSTS				
A	Allow a sum of ( <b>Kshs. 100,000.00</b> ) only for Clerk of Works and Supervision Expenses				
В	Include a percentage for the contractor's Administration and profit for the				
	above%				
E					
	PARTICULAR PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	PARTICULARS INSERTIONS TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT				
	Period of Final Measurements     (3 months from practical completion)				
	Defects Liability Period     (6 months from practical completion)				
	3. Date for Possession (To be agreed with Project Manager)				
	4. Date for Completion (24 Weeks after Commencement)				
	5. Liquidated and Ascertained Damages (At the rate of Kshs. 50,000/= per week or part thereof)				
	6. Period of Issuing Interim Certificates (Monthly)				
	7. Period of Honouring Certificates (Thirty (30) Days)				
	8. Percentage Certified value retained (10%)				
	9. Limit of Retention Fund (10 % of Contract Sum)				
	10. Bonds (From PPOA Approved Institutions ONLY)				
	PARTICULAR PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
	PARTICULAR PRELIMINARIES				
	COLLECTION				
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	Total Brought Forward from Page No.	PP/04			
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	Total Brought Forward from Page No.	PP/07			
	Total Brought Forward from Page No.	PP/08			

PARTICULAR PRELIMINARIES

CARRIED TO SUMMARY

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
	GENERAL PRELIMINARIES				
A	PRICING OF ITEMS PRELIMINARIES AND PREAMBLES				
	Prices will be inserted against items of preliminaries in the Contractor's priced Bill of Quantities and Specifications.				
	The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities and Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.				
В	ABBREVIATIONS Throughout these Bills, units of measurement and terms are abbreviated and shall be interpreted as follows:- C.M Shall mean Cubic metre				
	S.M - Shall mean Square metre				
	L.M shall mean Linear Metre				
	MM shall mean Milimetre				
	KG - shall mean kilogramme				
	NO shall mean Number				
	Prs - shall mean Pairs				
	B.S shall mean the British Standard Specification Published by the				
	British Standards Institution, 2 park				
	Street, London - England				
	Ditto - shall mean the whole of the preceding				
	description except as qualified in the				
	description in which it occurs.				
	M.S - shall mean measured separately A.B.D shall mean as before described. P.M shall mean Project Manager				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	The Employer is:				
	THE VICE CHANCELLOR, MURANG'A UNIVERSITY OF TECHNOLOGY				
В	PROJECT MANAGER				
	The term "P.M" whenever used in these Bills of Quantities shall be deemed to imply the Project manager as described in the Conditions of Contract or such person or persons as may be duly authorized to represent him on behalf of the Government.				
С	ARCHITECT				
	The term "Architect" shall be deemed to mean "The P.M" as defined above.				
D	QUANTITY SURVEYOR				
	The term "Quantity Surveyor" shall be deemed to mean "The P.M" as described above.				
E	ELECTRICAL ENGINEER				
	The term "Electrical Engineer" shall be deemed to mean "The P.M" as defined above.				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	MECHANICAL ENGINEER				
	The term "Mechanical Engineer" shall be deemed to mean "The P.M" as defined above.				
В	STRUCTURAL ENGINEER				
	The term "Structural Engineer" shall be deemed to mean "The P.M" as defined above.				
С	FORM OF CONTRACT				
	The form of Contract shall be as stipulated in the Republic of Kenya's Standard tender Document for Procurement of Building Works (2021 Edition) included herein. The Conditions of contract are also included herein.				
D	Conditions of Contract				
	These are as per these tender documents. 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.				
E	BOND				
	THE Contractor shall find and submit on the Form of tender and approved bank and who will be willing to be bound the Government in and amount equal to Five per cent (5%) of the Contract amount for the due performances of the Contract up to the date of completion as certified by PROJECT MANAGER 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 Government, the Contractor shall furnish within seven (7) days another surety to the approval of the Government.				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	PLANT, TOOLS AND VEHICLES				
	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.				
В					
	TRANSPORT				
	Allow for transport of workmen, materials, etc to				
	and from the site at such hours and by such routes				
	as may be permitted by the competent authorities.				
C					
	MATERIALS AND WORKMANSHIP				
	All materials and workmanship use din 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 order materials to be				
	obtained from local sources as early as necessary				
	to ensure that they are onsite when required for				
	use in the works. The Bills of Quantities shall not				
D	be used for the purpose of ordering materials.				
	CION EOD MATERIAL C CURRI IER				
	SIGN FOR MATERIALS SUPPLIED  The Contractor will be recovered to give a receipt				
	The Contractor will be required to sign a receipt for all articles and materials supplied by the				
	PROJECT MANAGER at the time of taking				
	deliver 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 PROJECT MANAGER at the current				
	market prices including Customs Duty and VAT				
E	all at the Contractors own cost and expense, to the				
	satisfaction of the PROJECT MANAGER.				
	STOP LOD OF LANGUAGE				
	STORAGE OF MATERIALS				
	The Contractor shall provide at his own risk and				
	cost where directed on the 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 their use.				
	for their use.				
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	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				
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ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	SAMPLES				
	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 Project Manager 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 Project manager. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of Roads, Housing and Public Works.				
	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-contractor's work.				
В	GOVERNMENT ACTS REGARDING WORK PERMIT ETC				
	Allow for complying with all government Acts, Orders and regulations in connection with the employment labour and other matters related to the execution of the works. In particular, the Contractor's attention is drawn to the provisions of the factory Act 1950 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 work people or so the safety, health and welfare of the work people.				
	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 organization 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.				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
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-contractor's 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.				
В	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 manager.				
С	EXISTING PROPERTY				
	The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services he will be held responsible for and shall make good all such damage arising from the execution of the contract at his expense to the satisfaction of the project manager.				
D	VISIT SITE AND EXAMINE DRAWINGS8				
	The Contractor is recommended to examine the drawings and visit the site the location of which is described in the particular preliminaries hereof. He shall be deeded 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.				
Е	ACCESS TO SITE AND TEMPORARY ROADS				
	Means of access to the site shall be agreed with the Project manager prior commencement of the work and Contractor must allow for building any necessary temporary access roads approximately 70 metres long) 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 site. 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. The Contractor should also allow for relocating existing fence (approximately 30 metres long).				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	AREA TO BE OCCUPIED BY THE CONTRACTOR				
	The area of the 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 Project manager.				
В	OFFICE ETC FOR THE PROJECT MANAGER				
	The Contractor shall provide, erect and maintain where directed on site and afterwards dismantle the site office of the type approved by the project manager, complete with furniture. He shall also provide a strong metal trunk complete with hasp and staple fastening and two keys. He shall provide, erect and maintain a lockup type water or bucket closet for the sole use of the PROJECT MANAGER including making temporary connections to the drain where applicable to the satisfaction of the government and medical officer of health and shall provide services of a cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from commencement to the completion of the works and dismantle and make good disturbed surface. The office and closet shall be completed before the contractor is permitted to commence the works. The contractor shall make available on the site as and when required by the "PROJECT MANAGER" a modern and accurate level together with the leveling staff, ranging rods and 50 metre metallic or linen tape.				
С	WATER AND ELECTRICITY SUPPPLY FOR THE WORKS				
	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 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 subcontractors are to be made liable for the cost of any water or electric current used and for any installation provided especially for their own use.				
D	SANITATION OF THE WORKS  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				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	SUPERVISION AND WORKING HOURS				
	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 workshops of the Contractor and Sub-Contractors or other places where work is being prepared for the contract.				
В	PROVISIONAL SUMS				
	The term "Provisional Sum" whenever used in these Bills of Quantities shall have the meaning stated in Section A7 (i) of the Standard method of Measurement and the conditions of Contract. Such sums are net and no addition shall be made to them for profit.				
C	PRIME COST (OR P.C.) SUMS				
	The term "Prime Cost" or "P.C. Sum" whenever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement and the conditions of contract. Persons or firms nominated by the Project Manager to exercise work or to provide and fix materials or goods as stated in the Conditions of Contract are described herein as Nominated Sub-Contractors. Persons of firms so nominated to supply goods or materials are described herein as Nominated Suppliers.				
D	PROGRESS CHART				
	The Contractor shall provide within two weeks of Possession of site 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 site. Progress to be recorded and chart to be amended as necessary as the work proceeds.				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	ADJUSTMENT OF P.C. SUMS				
	In the final account all P.C. sums shall e 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, invoice 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" (as previously described0 following P.C Sums shall amount paid) and this shall apply even though the Contractor's priced Bill shows a percentage in the rate column in respect of them.				
	Should the Contractor be permitted to tender and his tender be accepted of 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.				
В	ADJUSTMENT OF PROVISIONAL SUMS				
	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 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.				
С	NOMINATED SUB-CONTRACTORS  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 the Conditions of Contract and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described, the Contractor is to provide for such sub-contractors any or all of the facilities described in these preliminaries. The Contractor should price for these with the nominated sub-contract Contractors work concerned in the P.C. Sums under the description "add for Attendance".				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	DIRECT CONTRACTS				
	Notwithstanding the foregoing conditions, the Government 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 the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.				
В	ATTENDANCE UPON OTHER TRADESMEN, ETC				
	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 from 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 provided in these Bills.				
С	INSURANCE The Contractor shall insure as required in Conditions Nos. 30 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 Contractor who shall if called upon to do so, produce the required premium renewals for the Project manager's inspection.				
D	PROVISIONAL WORK				
	All work described as "Provisional" in these Bills of Quantities is subject to re-measurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other liable to adjustment under this Contract shall 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 expense.				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A B	ALTERATIONS TO BILLS, PRICING, ETC Any unauthorized 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 prices of each item before they will be accepted.				
С	BLASTING OPERATIONS Blasting will only be allowed with the express permission of the Project Manager in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations in force for the time being, and any special regulations laid down by the Project manager governing the use and storage of explosives.				
D	MATERIALS ARISING FROM EXCAVATIONS  Materials of any kind obtained from the excavations shall be the property of the Government. Unless the Project Manager 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 Project Manager 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.				
	PROTECTING OF THE WORKS 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 Project Manager 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 Government.				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	REMOVAL OF RUBBISH, ETC Removal of rubbish and debris from the buildings and site as it accumulates and at the completion of the works and remove all paint, scaffolding and unused materials at completion.				
В	WORKS TO BE DELIVERED UP CLEAN 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 Manager.				
D	FIRM PRICE CONTRACT Unless otherwise specifically stated in the particular Preliminaries, this is a firm price contract and the Contractor must allow in his tender rates for any increase in the cost of labour and/or materials during the currency of the contract.				
E	GENERAL SPECIFICATION  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 and 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.				
	TRAINING LEVY The Contractor's attention is drawn to the legal notice which requires payment by the Contractor of a Training Levy at the rate of ½ % of the Contract Sum on all contracts of more than Kshs. 1,000,000.00 in value.				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
A	MATERIALS ON SITE				
	All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected unless specifically exempted by the Project manager. This includes the materials of the main Contractor, Nominated Sub-Contractor and Nominated Suppliers.				
В	HOARDING				
	The Contractor shall enclose the site or part of the works under construction with a hoarding 2400 mm high consisting of gauge 30 iron sheets on 100 x 50 mm cypress timber posts firmly secured at 1800 mm centres with two 75 x 50 mm timber rails required with 2 No. vehicular gates and 1 No pedestrian gate. The Contractor is in addition required to take all precautions necessary for the safe custody of the works, materials, paint, public and employer's property on the site.				
С	CONTRACTORS SUPERINTENDENCE / SITE AGENT				
D	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 Project Manager and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.  COPYRIGHT  The Copyright of these documents is vested in Chief Quantity Surveyor, Ministry of Public Works. No part of this document may be reproduced in any form or by any means without their prior permission.				
	GENERAL PRELIMINARIES CARRIED TO COLLECTION PAGE				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
	CENEDAL DDELIMINADIEC				
	GENERAL PRELIMINARIES				
	COLLECTION				
	Total Brought Forward from Page No.	GP/01			
	TALE TO BE A				
	Total Brought Forward from Page No.	GP/02			
	Total Brought Forward from Page No.	GP/03			
		GI703			
	Total Brought Forward from Page No.	GP/04			
	Total Brought Forward from Page No.	GP/05			
	Total Brought Forward from Page No.	GP/06			
		GI700			
	Total Brought Forward from Page No.	GP/07			
	Total Brought Forward from Page No.	GP/08			
	Total Brought Forward from Page No.	GP/09			
	Total Brought for ward from Fuge 140.	GP/09			
	Total Brought Forward from Page No.	GP/10			
	Total Brought Forward from Page No.	GP/11			
	Total Drought Forward from Daga No.	CD/12			
	Total Brought Forward from Page No.	GP/12			
	Total Brought Forward from Page No.	GP/13			
	GENERAL PRELIMINARIES				
	CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
	SUMMARY OF PRELIMINARIES	Ç-1.		2	
	SOMMAN OF TREE INTO TREE I				
	PARTICULAR PRELIMINARIES from Page	PP/09			
	CENEDAL DRELIMINADIES C. D.	GP/14			
	GENERAL PRELIMINARIES from Page	01/14			
	PARTICULAR & GENERAL				
	PRELIMINARIES CARRIED TO				
	GRAND SUMMARY				

## BILLS OF QUANTITIES

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BUILDERS WORKS ELEMENT NO.1				
	SUBSTRUCTURES				
	(ALL PROVISIONAL)				
	(In Retaining Walls at the Building Frontage /	Backside)			
A	Excavate for retaining wall bases				
	occurring not exceeding 1.5metres deep commencing from reduced level	320	CM		
В	Excavate for column bases occurring not exceeding 1.5metres deep commencing from reduced level	0	СМ		
C	Extra over excavations for excavating in rock irrespective of class	16	СМ		
D	Allow for keeping excavations free from mud and all water including spring and running water by pumping pailing or other approved means.		ITEM		
E	Allow for planking and strutting to sides of excavations		ITEM		
	Carried to Collections				

BW/1

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Disposal				
A	Load surplus excavated material and cart away	88	СМ		
	Filling				
В	Return fill and ram selected excavated material around foundations.	232	СМ		
	Hardcore as described				
C	300mm Thick layer of imported hardcore filling including levelling and consolidating in 150mm layers	0	СМ		
	Blinding				
D	50mm Thick Quarry dust blinding to the surface of hardcore;rolled smooth to receive polythene sheeting(m.s)	0	SM		
	Insecticide treatment				
E	'TERMIDOL'' or other equal and approved chemical insecticide treatment prepared and applied according to the manufacturer's printed instructions.	0	SM		
	Damp proof membrane				
F	500 Gauge polythene or other equal and approved plastic sheet damp proof membrane laid over blinding(measured nett - allow for laps)	0	SM		
	In-situ concrete work				
	Mass concrete (1:3:6/38-38mm aggregate)				
G	50mm Thick blinding under strip foundations	0	SM		
Н	50mm Thick blinding under retaining wall <b>found</b>	ns190	SM		
	Carried to Collections				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Vibrated reinforced concrete class				
A	(1:1 <sup>1</sup> / <sub>2</sub> :3 / 25 - 20mm aggregate) as described in: Strip foundations	0	СМ		
В	Retaining wall foundations	90	CM		
C	Column bases	0	CM		
D	Columns	0	CM		
E	Ground beams	0	CM		
F	Steps / Staircases / Ramps	9	CM		
G	200 mm thick Retaining walls	580	SM		
	Steel reinforcement Supply and fix bars reinforcement including bending, hooks, tyingwire, cutting spacers and supporting all in position as describ High yield ribbed reinforcement bars to B.S. 4461	ed			
Н	8 mm Diameter	0	KG.		
J	10 mm Diameter	7108	KG.		
K	12 mm Diameter	6864	KG.		
L	16 mm Diameter	6241	KG.		
M	25 mm Diameter	0	KG.		
N	Mesh reinforcement Fabric mesh reinforcement to B.S. 4483 ref: A142 including laps tyingwire and spacer blocks complete(measured nett-allow for laps)	0	SM		
P	Sawn formwork as described to: Vertical sides of strip foundations	0	SM		
Q	Vertical sides of retaining wall foundations	188	SM		
R	Vertical sides of Column bases	0	SM		
S	Vertical sides of Columns	0	SM		
Т	Vertical sides of retaining walls	1160	SM		
U V	Edge of floor slab 75-150mm high Edge of risers 75-150mm high	0 39	LM LM		
	Carried to Collections				

BW/4

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	Foundation walling  200mm Thick rough chisel dressed natural stone walling bedded and jointed in cement and sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoopiron in every alternate course	0	SM		
	Plinth area finishes				
В	12mm Thick cement and sand (1:3) wood float render to plinth area	80	SM		
С	Ditto to retaining wall surfaces	1160	SM		
D	Prepare and apply three coats black bitumastic paint to rendered area	80	SM		
	Expansion Joint				
E	20 mm Thick "Flexcell" or other equal and approexpansion joint filler between concrete / wall sur		SM		
F	20 mm thick mastic sealant to expansion joint	0	LM		
G	Allow a Provisional Sum of KShs. 1,000,000.00 for cutting and filling to make up levels to rear portion of the building	Item			
	Carried to collection	below			
	COLLECTION				
	Brought Forward from Page No. BW		1		
	Brought Forward from Page No. BW		2		
	Brought Forward from Page No. BW		3		
	Brought Down from Page No. BW		4 Abov	e	
	TOTAL FOR ELEMENT NO. 1 SUBSTRUCTURES CARRIED TO SUMMARY				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.2  REINFORCED CONCRETE FRAME (ALL PROVISIONAL) (In Tank Area Extension occuring approx.  18.0 metres above ground floor level; Contractor to allow for necessary scaffoldings				
	to access the area) Vibrated reinforced concrete class				
	$(1:1^{1}/_{2}:3/25 - 20$ mm aggregate) as described in:				
A	described in:- Beam	2	CM		
B C	Columns Ramp/ steps	3 0	CM CM		
D	Staircases; generally	0	CM		
E	150 mm thick suspended slabs/ landings	0	SM		
F	150 mm thick suspended slabs/ landings to worktops	7	SM		
	Steel reinforcement Supply and fix steel bars reinforcement including bending, hooks, tying wire, cutting, spacer blocks and supporting all in position High yield ribbed reinforcement bars to B.S. 4461 as described in;				
G H	8 mm Diameter 10 mm Diameter	315 0	KG. KG.		
J	12 mm Diameter	725	KG.		
K	Mesh reinforcement Fabric mesh reinforcement to B.S. 4483 ref: A142 including laps tyingwire and spacer blocks complete(measured nett-allow for laps)	7	SM		
L	Sawn formwork as described to; Sides and soffits of ringbeam/beams	64	SM		
M	Sides of columns	18	SM		
N	Soffittes of slabs / landings	7	SM		
P	Edges of steps 75-150mm girth high	10	LM		
	TOTAL FOR ELEMENT NO. 2 R.C. SUPERSTRUCTURE CARRIED TO SUMMARY				

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	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3				
	WALLING (ALL PROVISIONAL)				
	Fine chiselled natural stone walling bedded and jointed in cement and sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoopiron; with horizontal keys externally; internally left plain ready for				
A	200mm Thick reinforced in every third course	0	SM		
В	E. o walling for 200 x 200 mm stone piers	0	LM		
C	100 mm Thick reinforced in every third course	0	SM		
D	100 mm thick dwarf walling	15	SM		
E	150mm Thick	30	SM		
F	Parapet Walling	30	SM		
G	Burnt Clav lourvred wall; bedded and jointed in matching cement and sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoopiron; and with horizontal keys both sides 200mm Thick reinforced in every third course	340	SM		
Н	Horizontal damp proof course; one layer of 3 - ply bituminous felt or other equal and approved (measured nett - allow for laps) 200mm Wide levelled and bedded in cement and sand (1:3) mortar under walls	0	LM		
J	100 mm Wide levelled and bedded in cement and sand (1:3) mortar under walls	0	LM		
	Precast Concrete Units				
K	350 x 50 mm throated slanted precast concrete coping laid and jointed in cement and sand (1:3) mortar above walls	160	LM		
	TOTAL FOR ELEMENT NO.3 WALLING CARRIED TO SUMMARY				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO 4  ROOFING AND RAIN WATER DISPOSAL  (ALL PROVISIONAL)				
	CONSTRUCTION  All timber to be sawn cypress of G.S grade seasoned to an equilibrium moisture content between 9% and 15% and to a requirement of K.S 02771 of 1991 treated with approved wood preservative.				
A	100 X 50mm Wall plate on and including 10mm cement and sand (1;4) mortar bed secured to reinforced concrete ring beam (m.s) by mild steel anchor bolts (m.s)	31	LM		
	The following in Nailed triangular timber trusses spanning clear 9000 mm height 2500 mm including hoisting and placing approx. 15000 mm above floor slab level.				
В	100 X 50 mm trussed rafter, Tie beam and the like	e 214	LM		
C	100 X 50 mm Struts / ties	119	LM		
D	100 X 50 mm King Post	28	LM		
E	75 X 50 mm Purlins	412	LM		
F	150 X 25X 450 mm(average)long splice piece.	0	N0		
	Carried to collection				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	Supply and fix Decra roofing tiles size 1320 x 370mm from space and tiles on 50 x 50mm batterns (m/s) - at approved centres:  Laid in approved pattern;  Take From site; Provide labour and any necessary fixing accessories including screws, filler and related components; allow for	116	SM		
	making good existing support framework; Allow for laying in place Client supplied Decra roofing sheets in accordance to Manufacturer's fitting requirement; Contractor to allow in their rate for all profits and overheads related to Client' supplied items				
В	Fixing only Decra roofing sheets	102	SM		
C	Ditto matching 300mm socketed angle ridge or val	ley10	LM		
D	Wrot cypress 25 X200 mm Fascia board fixed to ends of rafters(m.s)	120	LM		
	Sundries				
E	12 mm Diameter x 300 mm long black mild steel anchor bolt embedded 180 mm deep in ring beam a 1200 mm cc including drilling holes in timber	at O	NO		
F	100 X 100 X 6mm Thick galvanised mild steel nailing cleat once bent to form angle :ten times drilled, One flange nailed foot of rafter (m.s), othe nailed to top of wall plate (m.s)	r 0	NO		
	Carried to collection				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Eaves Treatment:				
A	100 X 25 mm Wrot cypress T & G boarding nailed to 50 x 50 mm cypress bearers and including 75 x 50 mm cypress framing and with matching cornices	183	SM		
В	Prepare and apply three coats polyrethane clear vanish to surfaces of T & G	183	SM		
C	Extra over boarding for forming vent size 300x450mm including mosquito gauze	10	NO		
	Rain Water disposal				
	The following in G24 Galvanised mild steel				
D	150 X 100 mm Mild square box gutter fixed to fas board with and including approved pattern bracket at 1000 mm cc		LM		
E	Extra over gutter for stopped end piece with 100 mm diameter outlet	10	NO		
F	100 diameter x 3 mm Thick cold rolled steel pipe fixed to natural stone walling with and including mild steel brackets 600mm centres	126	LM		
G	Extra over down pipe for 100 mm diameter swan neck wall off set	10	NO		
	Carried to collection				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	Extra over down pipe for 100 mm diameter rain water shoe	10	NO		
	Painting				
	Prime only back of wood before fixing				
В	Surfaces 100-200mm girth	120	LM		
	Knot prime stop and prepare and apply one under coat and two finishing coats of gloss oil paint to;				
C	General surfaces of steel fascia 200 - 300mm girth	120	LM		
	Prepare and apply one coat of calcium plumbate and two coats of gloss oil paint to:-				
D	General surfaces metal	126	SM		
	Carried to collection				
	COLLECTION				
	Brought Forward from Page No. BW		7		
	Brought Forward from Page No. BW		8		
	Brought Forward from Page No. BW		9		
	Brought Down from		Above		
	TOTAL FOR ELEMENT NO. 4 ROOFING AND RAINWATER DISPOSAL CARRIED TO SUMMARY				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5  EXTERNAL WALL FINISHES (ALL PROVISIONAL) External wall finishes				
	12mm thick cement,sand render,with wood float finish, as described to:-				
A	Concrete surfaces of gambles, columns and beams	425	SM		
В	Window Reveals	355	SM		
C	Door Jambs	28	SM		
	Allow for neat horizontal joint keying to wall surf	aces:			
D	In 15 mm (average) keys to existing external walls including hacking surfaces to receive new	1898	SM		
	Painting and decorations				
E	Fair faced surfaces of concrete beams and columns	0	SM		
	Prepare and apply textured "Ruff N Tuff / Wall Master" or equivalent textured paint in 3.0 mm thickness; to rendered surfaces:				
F	Columns and Beams	835	SM		
G	Ditto to Window Reveals	355	SM		
Н	Ditto to Door Jambs	28	SM		
	TOTAL FOR ELEMENT NO. 5 EXTERNAL WALL FINISHES CARRIED TO SUMMARY				

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	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 6				
	INTERNAL WALL FINISHES (ALL PROVISIONAL) Internal wall finishes				
A	Hack out joints and apply 12mm thick gauged lime plaster (1:2:9) in two coats finished with steel trowel on natural stone walling and beams	249	SM		
В	10mm Thick cement and sand (1:4) screed finished to receive glazed tiling	245	SM		
	200 x 450 x 6 mm thick quality coloured glazed wall tiles to "Saj" or equivalent match existing on site, jointed and pointed with matching white cement				
C	Tiling on walls	245	SM		
	Take From site; Provide labour and any necessary fixing accessories including adhesive, white cement, grouting, aluminium edge strips and related components; allow for making good existing plastered surfaces; Allow for laying in place Client supplied Wall tiles to match already fixed on site all in accordance to Manufacturer's fitting requirement; Contractor to allow in their rate for all profits and overheads related to Client' supplied items				
D	Fixing only Tiling on walls	45	SM		
E	Painting and decorations  Prepare and apply one undercoat and two finishing coats plastic Vinyl matt or equivalent emulsion paint on:  Plastered surfaces	<b>ng</b> 249	SM		
	Scrap off existing previously painted surfaces, prepare surfaces to receive new; Prepare and apply two finishing coats plastic Vinyl matt or equivalent emulsion paint on:-				
F	Previously painted walls and concrete surfaces	7110	SM		
	TOTAL FOR ELEMENT NO. 6 INTERNAL WALL FINISHES CARRIED TO SUMMARY				

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В	V	V	/1	3

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 7 FLOOR FINISHES (ALL PROVISIONAL) Insitu cement and sand (1:3) screeded beds ,with				
	wood trowelled finish, on concrete				
A	25 mm screed to receive ceramic floor tiles (ms)	80	SM		
В	25 mm screed to receive porcelain floor tiles (ms)	0	SM		
C	Ditto to Worktops	14	SM		
	600 x 600 x 8 mm thick quality "Saj" or equivalent				
	porcelain floor tiles jointed and pointed with				
D	matching white cement (To match existing on site) Tiling	949	SM		
E	Ditto 100 mm high skirting	1396	LM		
	300 x 300 x 6 mm Thick floor "Saj" or equivalent				
	ceramic floor tiles jointed and pointed with				
TC.	matching white cement (To match existing on site)	700	CM		
F	Tiling	790	SM		
G	Ditto 100 mm high skirting	630	LM		
	Terrazzo (1:3) with approved coloured chippings, ground and polished smooth, including approved plastic dividing strips and non slip carborandums on staircase treads and ramps:				
Н	15 mm thick paving in floors (including risers where necessary)	78	SM		
	Fixing Client Supplied Materials:				
J	Take From site; Provide labour and any necessary fixing accessories including adhesive, white cement, grouting, aluminium edge strips and related components; allow for making good existing screeded surfaces; Allow for laying in place Client supplied Floor tiles to match already fixed on site all in accordance to Manufacturer's fitting requirement; Contractor to allow in their rate for all profits and overheads related to Client' supplied items  Fixing only tiles on floors  Take From site; Provide labour and any necessary fixing accessories including chippings; dividing strips, white cement, and related components; allow for making good existing screeded surfaces; Allow for laying in place Client supplied terrrazzo components to match already fixed on site; Contractor to allow in their rate for all profits and overheads related to Client' supplied items	580	SM		
	15 mm thick paving in floors (including risers where				
K	necessary)	60	SM		
L	Ditto to worktops	14	SM		
	Allow for grinding; restoration where necessary;				
M	Polishing of existing laid terrazzo	425	SM		
N	Ditto to staircase risers/treads	320	SM		
P	Ditto 100 mm high skirting	525	LM		
	TOTAL FOR ELEMENT NO. 7 FLOOR FINISHES CARRIED TO SUMMARY				

(	QTY	UNIT	RATE	AMOUNT	
1					
	237	SM			
(m.s); both	_				
i oui i	32	SM			
	950	LM			
	950	LM			
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ring	205	SM			
	2	NO			
nd ke					
	520	LM			
	520	LM			
l <u>y</u> valent					
	237 690 520	SM SM			

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A B	ELEMENT NO. 8 CEILING FINISHES (ALL PROVISIONAL) Insitu cement sand lime (1:1:6) plaster,with steel trowelled finish,on concrete 12mm thick plaster trowelled smooth Chip board ceiling Chipboard ceiling fixed to 50 x 50 mm (m.s) brandering and 75 x 50 mm plugged framing (m.s) all as sawn cypress spaced at 600mm centers both		SM		
	directions fixed with clout headed nails and set out symmetrical panels with 'V' joints.	in 32	SM		
C	50 x 50 mm timber brandering.	950	LM		
D	75 x 50 mm timber brandering.  Take From site; Provide labour and any necessary fixing accessories including nails, tapes and related components; allow for making good existing timber brandering surfaces; Allow for	950	LM		
E F	laying in place Client supplied chipboard ceiling; Contractor to allow in their rate for all profits and overheads related to Client' supplied items Fixing only ceiling boards onto timber brandering (m.s)  Extra over celotex ceiling for forming removable access trap door size 750 x 750mm with 100 x 50mm sawn treated cypress trimming joists 120 x 25mm wrot cypress frame all round and 12mm chip board removable panel set loose on top of framing	205	SM		
	including painting  Prime grade wrot cypress timber selected and lectean	2 <u><b>kept</b></u>	NO		
G H	100 x 25mm cornice with two labours  Painting & decorations  Prime only back of timber before fixing	520	LM		
	surfaces not exceeding 100mm girth  Knot prime and stop and prepare and apply three coats first quality Vinyl matt or equivale emulsion paint to:	520 <u>nt</u>	LM		
J	Soffittes of plastered concrete slabs	237	SM		
K	Chip board ceiling	690 520	SM		
L M	Timber surfaces not exceeding 100mm girth Scrap off existing previously painted surfaces, prepare surfaces to receive new; Prepare and apply two finishing coats plastic Vinyl matt or equivalent emulsion paint on:- Previously painted Soffittes of plastered concretes		LM SM		
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	TOTAL FOR ELEMENT NO. 8 CEILING FINISHES CARRIED TO SUMMARY				

BW/15
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	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 9 WINDOWS (ALL PROVISIONAL) 175 x 75 mm thick precast concrete window;	13	IM		
A	weathered and throated	13	LM		
В	Prime grade wrot cypress 225 x 25mm window board with one labour.	198	LM		
C	25mm quadrant bead	198	LM		
D E	Pelmet boxes in 25 x 150mm bull-nosed top, 25 x 150mm fascia with 8 labours; complete with 19 x 50mmm cypress bearer plugged to wall;  Accessories. Aluminium I section curtain rail complete with brackets, rings, rollers and all other necessary	198 198	LM LM		
F G	Painting Prepare and apply three coats of gloss oil paint to timber pelmet boxes. 200 -300mm girth  Ditto window board surfaces 100 - 200mm girth	198 198	LM LM		
Н	Ditto; not exceeding 100mm girth	198	LM		
J	Steel Casement Windows Purpose made steel window casements in 25 mm thick z - sections, T-sections and flat bars; complete with hinges, stays, fasteners, permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4) (Burglar proofing grilles included where Window Size 1800 x 1500 mm high Take From site; Provide labour and any necessary fixing accessories; allow for making good existing wall / concrete surfaces; Allow for fixing in place Client supplied windows; Contractor to allow in their rate for all profits and overheads related to Client' supplied items  Fixing only window casements; allowing for	0	NO		
K L	priming metal surfaces: Window Size 1500 x 800 mm high Window Size 2500 x 800 mm high	2 4	NO NO		
	Carried to collection				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	GLASS & GLAZING TO METAL WITH PUTTY				
	Clear sheet Glass				
A	4 mm thick one way tinted at select areas	245	SM		
	Obscure sheet Glass				
В	5 mm thick	105	SM		
	Prepare and apply one undercoat and two finishing coats gloss oil paint to				
C	Steel window surfaces / grilles; both sides measured	700	SM		
	Carried to collection				
	COLLECTIONS				
	Brought Forward from Page No. BW		15		
	Brought Down from		Above		
	TOTAL FOR ELEMENT NO. 9 WINDOWS CARRIED TO SUMMARY	<u> </u>			

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 10				
	DOORS (ALL PROVISIONAL) Steel Casement Doors				
	Solid Panel Mahogany doors:				
A	50 mm thick single -leaf size 900 X 2400 mm overall high with 6 No. raised panels both sides; complete with a 5 mm thick glazed fanlight top	0	NO		
В	50 mm thick double -leaf size 1800 X 2400 mm overall high with 12 No. raised panels both sides; complete with a 5 mm thick glazed fanlight top	0	NO		
	Solid core Veneered flush doors:				
C	50 mm thick single -leaf size 900 X 2400 mm overall high quality 4 mm thick veneer facing; complete with a 5 mm thick glazed fanlight top	0	NO		
	Solid core flush doors:				
D	50 mm thick single -leaf size 1100 X 2400 mm overall with high quality 4 mm thick plywood facing; complete with a 5 mm thick glazed fanlight top size 1100 x 300 mm high	4	NO		
E	50 mm thick single -leaf size 1500 X 2400 mm overall with high quality 4 mm thick plywood facing; complete with a 5 mm thick glazed fanlight top size 1500 x 300 mm high	30	NO		
	Take From site; Provide labour and any necessary fixing accessories; allow for making good existing wall / concrete surfaces; Allow for fixing in place Client supplied timber doors; Contractor to allow in their rate for all profits and overheads related to Client' supplied items				
	Fixing only timber flush doors; to timber frames (m.s):				
F	50 mm thick single -leaf size 900 X 2400 mm overall with high quality 4 mm thick plywood facing; complete with a 5 mm thick glazed fanlight top size 900 x 300 mm high	14	NO		
	Carried to Collection				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT	
A	Door Frames Wrot Mahogany backs primed before fixing in aluminium wood primer: 150 x 50 mm Frame once rebated	0	LM			
В	150 x 50 mm transome twice rebated	0	LM			
C	45 x 25 mm architrave with one labour	0	LM			
D	25mm quadrant <u>Take From site; Provide labour and any</u> <u>necessary fixing accessories; allow for making</u> <u>good existing wall / concrete surfaces; Allow</u> <u>for fixing in place Client supplied timber door</u> <u>frames; Contractor to allow in their rate for all</u> <u>profits and overheads related to Client' supplied</u> items	0	LM			
	Fixing only timber door frames to masonry					
E	150 x 50 mm Frame once rebated	270	LM			
F	150 x 50 mm transome twice rebated	58	LM			
G	45 x 25 mm architrave with one labour	270	LM			
H J	25mm quadrant Ironmongery as per Union Catalogue Three lever mortice lock complete with quality	270 30	LM NO			
K	Two lever mortice lock complete with quality	51	NO			
L	38mm rubber door stop fixed with rawl bolt	268	NO			
M	100mm pressed steel butt hinges  Prepare and Apply Three Coats of Gloss Oil  Paint to:-	123	Prs			
N	Steel door general surfaces	40	SM			
P	Timber door general surfaces	260	SM			
Q	Ditto 200 to 300mm girth.	328	LM			
R	Ditto 100 to 200mm girth.	270	LM			
S	Ditto; not exceeding 100mm girth  Prepare and Apply Three Coats of Clear polyurethane varnish to:-	270	LM			
T	Timber door general surfaces	0	SM			
	Carried to Collection					

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
COLLECTION				
Brought Forward from Page No. BW	17			
Brought Forward from Page No. BW	18			
TOTAL FOR ELEMENT NO. 10				
DOORS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 11  BALUSTRADING (ALL PROVISIONAL)				
A	Mild Steel:  Mild steel balustrading 900 mm high overall in 50 x 25 x 3 mm RHS framing; 25 x 25 x 3 mm RHS sections at 150 mm centres; including all the necessary welds and priming  Prepare and Apply Three Coats of Gloss Oil Paint to:-	80	LM		
В	Steel balustrading general surfaces (both sides measured)	320	SM		
_	TOTAL FOR ELEMENT NO. 11 BALUSTRADING CARRIED TO SUMMARY				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 12 EXTERNAL WORKS,				
	(ALL PROVISIONAL)				
	Paving Slabs				
	600 x 600 x 50 mm thick precast concrete paving slabs laid onto and including 50 mm thick sand bed and jointed				
	in cement / sand (1:4) motar; allow for all necessary				
	excavation, carting away and spreading on site excavated				
A	material and laying 200 mm thick hardcore base	340	SM		
	Inverted block drains size 600x450x225mm bedded and				
В	jointed in cement sand mortar	120	LM		
	Shallow Julius 2- 450-225				
C	Shallow drains size 450x225mm bedded and jointed in cement sand mortar	60	LM		
D	Concrete seats size 2000x600mm wide	8	NO.		
	Bardinar / Barda Barina Blada				
	Parkings / Roads Paving Blocks 60 mm thick medium duty precast concrete interlocking				
	paving blocks as "Cabro" or equivalent laid onto and				
	including 50 mm thick sand bed and jointed in sand;				
	allow for all necessary excavation, carting away and spreading on site excavated material and laying 300 mm				
E	thick hardcore base	1000	SM		
	125 x 250 mm thick precast concrete road kerb	200			
F	irrespective of shape	300	LM		
G	100 x 300 mm wide precast concrete road channels; ditto	300	LM		
	Landscaping				
	Dig soil to a depth of approx. 200 mm; remove roots and weeds; mix soil with imported manure to a ratio of 2:1;				
	rake to a fine tilth; fertilise; and plant well selected				
	Kikuyu grass; allow for all necessary care and watering				
Н	till well established to the Architect's approval	600	SM		
	Dig holes to a depth of approx. 600 mm; mix soil with				
	imported manure to a ratio of 2:1; fertilise; and plant well				
	selected Bougainvillea and other related ornamental				
J	bushes; allow for all necessary care and watering; trimming till well established to the Architect's approval	50	NO.		
	Dig holes to a depth of approx. 600 mm; mix soil with	30	110.		
	imported manure to a ratio of 2:1; fertilise; and plant well				
	selected Palm and related ornamental trees; allow for all				
K	necessary care and watering; trimming till well established to the Architect's approval	50	NO.		
	#PP-0 - W				
	Allow a provisional sum for stormwater drainage of				
L	KShs. 300,000.00 Allow a provisional sum for Parking area Street Lighting	Item			
M	of KShs. 400,000.00	Item			
	TOTAL ELEMENT NO. 12				
	EXTERNAL WORKS CARRIED TO GRAND SUMMARY				
<u> </u>	CHARLED TO GREET D SUMMERING				<u> </u>

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 13				
	FITTINGS AND FIXTURES				
	WARDROBES				
A	Wardrobe overall size 1200mm long x 600 mm deep x 2700mm high constructed from 20 mm thick first grade local block board to doors, shelves and divisions and framework; allowing for additional 50 x 50 mm quality treated wrot cypress timber support; anchored to the wall with and including quality wood screws; divided into	164	NO		
	Concrete plinths				
В	1200 x 600 x 100 mm high plinth in mass concrete 1:3:6	12	SM		
C	Supply and fix 8 mm thick ceramic tiles to concrete plinths	-	SM		
D	Study table overall size 1200 x 600mm x 800mm height in 20 mm thick quality local block board plugged on and including 25 x 25 x 3 mm SHS mild steel framing complete with a 50x50x3mm SHS mild steel bottom flat bar railing complete with all necessary angle cleats, rawl bolted into masonry wall, all primed and painted in undercoat and 2 coats gloss oil paint (All to the Architect's design)	106	NO		
	TOTAL FOR ELEMENT NO. 13 FITTINGS AND FIXTURES CARRIED TO SUMMARY				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BUILDERS WORKS				
	SUMMARY	PAGE	NO		
1	SUBSTRUCTURES	BW	4		
2	R.C SUPERSTRUCTURES	BW	5		
3	EXTERNAL WALLING	BW	6		
4	ROOFING AND RAIN WATER DISPOSAL	BW	10		
5	EXTERNAL WALL FINISHES	BW	11		
6	INTERNAL WALL FINISHES	BW	12		
7	FLOOR FINISHES	BW	13		
8	CEILING FINISHES	BW	14		
9	WINDOWS	BW	16		
10	DOORS	BW	19		
11	BALUSTRADING	BW	20		
12	EXTERNAL WORKS	BW	21		
13	FITTINGS AND FIXTURES	BW	22		
	TOTAL FOR BUILDERS WORKS				
	CARRIED TO GRAND SUMMARY				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELECTRICAL WORKS				
	Contractor to take note that all the necessary conduit work and boxes for lighting and				
	power points have been completed; The				
	Contractor to however note that any				
	necessary rectification works to the same				
	should be included within their rates: GROUND FLOOR				
	Supply ,install,Test and commission				
	the following				
	6Ways, 100Amps, TPN Flush mounted DB				
	complete with 100Amps integral TPN isolator				
	with a hinged cover as MEM, crabtree or				
A	approved equivalent	0	No.		
В	MCBs for item A above being:	_			
	i) 10Amps sp	6	No		
	ii) 20Amps sp	2	No		
	iii) 30Amps sp	4	No		
	iv) 30Amps TP	0	No		
	Standard cable loop-in-box				
C	18gauage,galvanisedmild steel overall size	1	NT		
C	770X250X127mm deep	1	No		
D	Lighgting points wired in 3X15mm <sup>2</sup> in 20mm dia				
D	HG conduits all PVC accessories included	(0	NI.		
	i) 1 way	69	No		
	ii)2 way	9	No		
	iii) intermediate	2	No		
т.	Socket outlet points wired in 3X2.5mm <sup>2</sup> in	20			
E	25mm dia. HG conduits all PVC accessories	28	No		
	Sub-mains cables comprising of 5X16mm PVC				
Б	insulated sc-cu cables drawn in 32mm dia PVC	20	T		
F	conduit to DB	20	Lm		
	Sub-mains cables comprising of 3X10mm PVC				
~	insulated sc-cu cables drawn in 32mm dia PVC				
G	conduit from DB to CU	60	Lm		
	Ditto with 4 core 16mm2 sc PVC/SWA/PVC UG				
Н	cables to existing	30	Lm		
	lgang 1 way white moulded plate switches as MK				
I	or approved equivalent	4	No		
	2gang 2way white moulded plate switches as MK				
J	or approved equivalent	15	No		
	TOTAL CARRIED TO COLLECTION				

ΓΕΜ	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	GROUND FLOOR (Contd')				
A	3gang 2way white moulded plate switches as MK or approved equivalent	5	No		
В	Intermediate white moulded plate switches as MK or approved equivalent	4	No		
C	13Amps twin switched socket outlet plate as crabtree or approved equivalent flash mounted Cooker unit outlet point comprising of wiring in 3X6mm <sup>2</sup> PVC -sc-cu cables drawn in 25mm dia PVC conduit concealed in wall and floor slab, complete with 45Amps cooker control unit with neon light and marked "cooker" crabtree stainless steel	28	No		
E	1200mm, 1X36W HPF fluorescent fitting with a highly polished aluminium louvre attachment as LIGHTPACK	0	No		
F	1200mm, 2X36W HPF circular fluorescent fitting with attractive glass shades	0	No		
G	1200mm, 1X36W HPF fluorescent fitting with opal diffuser	0	No		
Н	1200mm, 1X36W HPF batten fluorescent fitting	53	No		
I	150W Floodlights as THORN - LED	9	No		
J	60W spherical fitting as THORN complete with energy saver bulbs	16	No		
K	PME comprising of 16mm dia X 1500mm long pure copper eath rod complete with clamp and all accessories	1	Item		
L	Self illuminated Emergency Exit Light with sign as Thorn	7	No		
	TOTAL CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	GROUND FLOOR (Contd')				
A	16SWG surface mounted and spray painted meter board to accommodate 1No 3phase energy meter complete with 200A busbars, 5No. Cut outs, 200A TPN MCCB and all other necessary	0			
В	Loop-in-box fabricated in 26 gauge metal sheet complete with cut-outs.	0	Item		
C	Complete earthing to KPLC standards at the meter board complete with manhole and cover	1	Item		
D	100mm dia HG PVC conduit from existing adaptable loop-in-box.	35	Lm		
	TOTAL CARRIED TO COLLECTION BELOW		<u>                                     </u>		
	COLLECTION From page BW/24				
	From page BW/25				
	From BW/26 above				
	TOTAL CROUND ELOOP CARRANTE TO THE	EDICAT:	l l	O OTBER	A CP
	TOTAL GROUND FLOOR CARRIED TO ELECT	KICAL '	<u>wurk</u>	<u>S SUMMARY I</u>	<b>TAGE</b>

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	TYPICAL FLOOR (FIRST, SECOND, THIRD &	& FOUR	 <u>                                    </u>		
A	Lighting points wired in 3X15mm2 in 20mm dia HG conduits all PVC accessories included i) 1 way ii)2 way	60 16	No No		
	Socket outlet points wired in 3X2.5mm <sup>2</sup> in		No		
В	25mm dia. HG conduits all PVC accessories included Sub-mains cables comprising of 3X10mm PVC	36	No		
C	insulated sc-cu cables drawn in 32mm dia PVC conduit to DB	10	Lm		
D	1gang 2way white moulded plate switches as MK or approved equivalent	4	No		
E	2gang 2way white moulded plate switches as MK or approved equivalent	23	No		
F	3gang 2way white moulded plate switches as MK or approved equivalent	4	No		
G	13Amps twin switched socket outlet plate as crabtree or approved equivalent flash mounted	36	No		
Н	1200mm, 1X36W HPF fluorescent fitting single baten as light pack	60	No		
J	1200mm, 2X36W HPF circular fluorescent fitting with attractive glass shades	0	No		
K	60W spherical fitting as THORN complete with energy saver bulbs	16	No		
_	6Ways, 100Amps,SPN Flush mounted CU complete with 100Amps integral SPN isolator with a hinged cover as MEM, crabtree or	2			
L	approved equivalent	0	No		
M	MCBs for item A above being: i) 10Amps sp ii) 20Amps sp iii) 30Amps sp	6 2 4	No No No		

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	TYPICAL FLOOR (FIRST, SECOND, THIRD &	FOUR	ТН) (С	ontd')	
	Water heater points comprising of 3X4.0mm2 PVCI copper cables drawn in concealed 25mm dia. HG PVC conduits from CU to double pole				
A	switches  20A Amps double pole switches with neon	0			
В	indicator and marked water as CRIPSAL or approved equivalent for item A	0			
C	Supply and install sub-mains conduits of size 38mm dia and size 10mm sq sc cu cables	75	Lm		
D	Sub-mains cables comprising of 5X16mm PVC insulated sc-cu cables drawn in 32mm dia PVC conduit to DB	30	Lm		
E	450X50mm powder coated cable ladder complete with tees, crossover, bends end cap, jacking, mounting brackets etc and bound to earth	0	Lm		
	TOTAL CARRIED TO COLLECTION BELOW	1	<u> </u>	1	
	COLLECTION From page BW/27				
	From page BW/28 above				
	TOTAL CARRIED TO ELECTRICAL WORKS S	 SUMM	 ARY PAG	J GE	
	MULTIPLY BY 4 NO. TYPICAL FLOORS				

TEMDESCRIPTION	QTY	UNIT	RATE	AMOUNT
2.1.00POWER RETICULATION				
Supply, install, test, commission and maintain Trenching, sifting and backfilling the duct trench after laying the ducts and compaction	8	LM		
150mm duct with 150 mm thick 1:3:6 concrete 2.1.02 surround	0	LM		
2.1.03 600 x 600 x 450mm power manhole complete with cover	2	NO		
Free standing switch board fabricated from 16 2.1.04 SWG steel sheets and frames complete with private meters & the following - 1 No. 200A TPN Adjustable MCCB as ABB with Shunt trip				
- 1 No. 200A TPN COPPER BUSBARS				
- 10 No. 63A TP MCCB as ABB Type D				
- 5 No. 63A DP MCB as ABB Type D				
- 2 No. TPN Spare ways & 2 No. SPN Spare				
- Current, Voltage and power factor meters, surge arrestor complete with all associated accessories				
The Switch board to be finished in auto lacquer, IP55				
Degree of Protection and as manufactured by Power Technics Ltd	1	ITEM		
TOTAL CARRIED FORWARD TO COLLECTION	J PAGE	BELOW		
				1

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY OF ELECTRICAL WORKS				
A	Ground Floor from page BW/26				
В	Typical First, Second,third and fourth floors from page BW/28				
C	Power Reticulation from page BW/29				
D	Allow a provisional sum of Ks 500,000 (Kenya shillings Five Hundred Thousand) only as contingencies.				500,000.00
	TOTAL CARRIED TO CRAND CHMMARY				
	TOTAL CARRIED TO GRAND SUMMARY				

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
MECHANICAL PLUMBING,INTERNAL DRAINAGE AND FIRE FIGHTING WORKS TO MURANG'A UNIVERSITY HOSTE	L BLOCI	К-РНА	SE 2	
Supply, deliver, install and commission the following sanitary appliances complete with all accessories including all connections to services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls				
Note: i) All sanitary fittings shall be in approved colour.				
ii) The model and Ref No. indicated is only a guide to the type and quality of fittings.				
iii) Equivalent and approved models may be acceptable.				
WATER CLOSET Low level water closet suite in approved colour comprising of W.C bowl 'P' or 'S' trap connector, heavy duty matching plastic seat and cover with metal top fixed (chrome plated) hinges. The water closet to be screwed and secured to floor or wall and complete with horizontal outlet to BS 3402 with 7.5litres valveless ceramic cistern and fittings including siphon, 15mm diameter size inlet ball valve, 20mm diameter side overflow, plastic flush bend, inlet connection and chrome plated lever. As	0	No.		
Ditto but for disabled persons complete with 600mm grab rails 6No. as Twyford Avalon with				
Avalon seat or approved equivalent.	2	No		
Sub-total carried to collection page				

R	W	13	2

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	SQUATTING WATER CLOSET Squatting water closet suite in white vitreous china comprising of WC bowl with top plate and integral foot threads, S-trap connector, 9litres high cistern and fittings and pull chain including siphon.  15mm diameter side inlet ball valve, 20mm diameter overflow, plastic flush pipe, inlet connectors and supports. All to be as Twyfords oriental or approved equivalent.	8	No.		
В	Allow for supply and fixing new complete ceramic Cisterns to match existing Low Level W.C bowls to Twyfords oriental or approved equivalent	52	No.		
C	Allow for acid cleaning and rectification of any defective Low level W.C's (52 No.)  STAINLESS STEEL SINK		Item		
D	16SWG round stainless steel sinks size 430mm diameter, 380 x 180mm deep bowl size as manufactured by ASL suitable for mounting on a counter, complete with 1no 20mm chrome plated back inlet biptap ref SF5205CP, 32mm chrome plated bottle trap and chain waste fitting and plug. It should include all other accessories for proper functioning.  Allow for cleaning and rectification of any defective	8	No.		
E	take From site; Provide labour and any necessary fixing accessories; allow for making good existing wall / sink surfaces; Allow for fixing in place Client supplied Pillat taps; Contractor to allow in their rate for all profits and overheads related to Client' supplied items Fixing only pillar taps to Stainless steel sinks:		Item		
F	20mm chrome plated back inlet biptap ref SF5205CP  SHOWER FITTINGS  Concealed shower fitting consisting of 15mm chrome plated riser pipe to connect the concealed shower mixer for hot and cold water to a swivel/ adjustable shower rose, chronme plated handles and stop corks and other	72	NO		
G	necessary fittings & accessories. All to be as Bricon /Aztec or equal and approved.	5	No.		
Н	Allow for supply and fixing new complete 15mm chrome plated riser pipe to connect the concealed shower mixer for hot and cold water to a swivel/ adjustable shower rose, and other necessary fittings & accessories. All to be as Bricon /Aztec or equal and approved.	45	No.		
	Sub-total carried to collection page				

D	1	12	2

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	THREE RANGE URINAL  Ceramic urinal bowl complete with 3No. Urinal bowl divisions chrome plated flush pipes, 9.5litres ceramic cistern, 40mm heavy duty plastic bottle trap and 40mm chrome plated outlet with grating firmly fixed on the wall with chrome plated screws. The fittings shall be as Twyfords or equal and approved.	0	No.		
В	TOILET ROLL HOLDER  Semi recessed toilet roll holder in vitreous china of size 165 x 165mm in approved colour as Twyfords 9806WH or equal and approved.	0	No.		
C	MIRRORS  6mm thick polished plate glass silver backed mirror with beveled edges, size 610 x 610, plugged and screwed to wall with 4No. chrome plated dome capped screws. The mirrors shall rest on a layer of 5mm thick foam.	40	No.		
<b>D</b>	SOAP DISPENSER  Wall mounted soap dispenser with capacity of about one litre having a press action soap release mechanism complete with fixing screws. Allow for initial soap supply. As starmix or approved	10	NI		
D	equivalent.	10	No.		
	Total carried to collection page				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ROBE HOOK				
A	Robe hook in vitreous china and in approved colour mounted on concealed screws. As Twyfords model FR 6858 or approved	50	No.		
	SOAP SPONGE TRAY				
В	Building in soap and sponge tray in approved colour. As Twyford VC 9312.	50	No.		
	TOWEL RAIL				
C	20mm diameter x 600mm long approved towel rail, chrome plated, plugged and screwed into	50	No.		
D	Automatic hand drier in white colour, operating on an infrared automatic sensing. System with heating element safety cutout complete with 30 seconds safety timer, plastic rawl plugs and fixing screws. The hand drier to have a heating capacity of 2.1KW and performance flow rate of 13.5cfm (3.82m3/min) and to be size 270 x 264 x 143mm deep. It shall have a noise level below 72.5dba or 1.5m. It shall be as HeatraeSadia or approved equivalent.	0	No.		
	Total carried to collection page				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	PPR PIPES				
A	15mm diameter pipe work	58	Lm		
В	20mm diameter pipe work	45	Lm		
C	25mm diameter pipe work	45	Lm		
D	32mm diameter pipe work	12	Lm		
E	40mm diameter pipe work	12	Lm		
F	50mm diameter pipe work	34	Lm		
	<u>BENDS</u>				
G	15mm diameter bends	8	No.		
Н	20mm diameter bends	13	No		
I	25mm diameter bends	13	No.		
J	32mm diameter bends	5	No.		
K	40mm diameter bends	4	No.		
L	50mm diameter bends	5	No.		
M	TEES 25mm equal Tees	4	No.		
N	32mm equal Tees	2	No.		
0	40mm equal Tees	2	No.		
P	50mm equal Tees	4	No.		
	REDUCERS				
Q	25 x 15mm diameter reducer	3	No.		
R	25X20mm diameter reducer	1	No.		
S	32 x 20mm diameter reducer	0	No.		
T	32 x 25mm ditto	1	No.		
U	40 x 20mm ditto	0	No.		
V	40 x 25mm ditto	2	No.		
W	50 x 25mm ditto	0	No.		
X	50 x 32mm ditto	0	No.		
Y	50 x 40mm ditto	0	No.		
	Total carried to collection page				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A B	UNIONS 15mm diameter pipe unions 20mm diameter pipe unions	2	No No		
C D E F	25mm diameter pipe unions 32mm diameter pipe unions 40mm diameter pipe unions 50mm diameter pipe unions	1 1 1 1	No No No		
G H I J	THREADED FITTINGS 15mm male/female threaded 900 bend/Elbow 20mm male/female threaded 90 bend/Elbow 25mm male/female threaded 900 bend/Elbow 32mm - ditto –	2 1 1 1	No No No		
L M	40mm - ditto -  PLUGS 40mm diameter pipe threaded plug 50mm diameter pipe threaded plug VALVES	1 1 1	No No No		
N P Q R	25mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 25 for series B rating with wheel and head joints to steep tubing and complete with round male threaded transition fitting AS  32mm gate valve as pegler  40mm diameter ditto  50mm ditto	1 1 1 1 2	No No No No		
T	32mm medium ball valve  Total carried to collection page	6	No		

R	۱۸	11	2	7

	STAND PIPE  15mm diameter bib tap suitable for connecting hose pipe complete with threaded adaptors. The			
A	tap to be complete with 5 meter long 20mm diameter pipe bends etc. The chrome plated bib taps to be as cobra ref. No. 107 EC taps or equal	0	No.	
	WATER STORAGE TANKS			
	Supply, deliver and install vertical close end plastic moulded tank of capacity 5000 litres and diameter 1670 x 2060m high. The tank to be assembled complete with cover and having screwed connections for inlet, outlet, overflow, 32mm high pressure ball valve, drain pipes and any other necessary item for its proper functioning. The tank shall be mounted on a flat			
В	roof slab and shall be as ROTO Model or	6	No.	
C	Ditto 10,000 litre capacity mounted on a raised platform size 2400mm x 2800mm.	1	No.	
D	Supply and install PKm70/10.8HP x 62m x 60litres/min domestic pedrollo booster pump complete with all Electrical controls, pressure switch and accessories.	1	No.	
	Total carried to collection page			

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	INTERNAL FOUL WATER DRAINAGE				
	Supply, deliver and install the following UPVC,				
	MUPVC, soil and waste systems respectively to				
	BS 5255 with fittings fixed to Manufacturers printed instructions and manufactured by				
	reputable manufacturers. Tenderers must allow				
	in their pipework prices for all the couplings,				
	clippings, connectors, joints etc as required in the				
	running lengths of pipework and also where				
	necessary, for pipe fixing clips, holders bats plugged and screwed for the proper and				
	satisfactory functioning of the system.				
		.opu			
	MUPVC AND UPVC WASTE AND SOIL PIPEW				
A	100 diameter heavy gauge golden brown UPVC pi	pe 44	Lm		
В	100mm heavy gauge grey MUPVC pipe	15	Lm		
C	150mm H/G golden brown UPVC pipe	20	Lm		
D	75mm diameter heavy gauge grey MUPVC pipe	15	Lm		
E	50mm diameter waste pipe	15	Lm		
F	40mm diameter waste pipe	0	Lm		
G	32mm diameter waste pipe	15	Lm		
	BENDS				
Н	100mm diameter bend with access	0	No.		
I	100mm diameter long radius bend	0	No.		
J	75mm diameter long radius bend	0	No		
K	100mm diameter sweep bend	0	No.		
L	50mm diameter sweep bend	0	No.		
M	40mm diameter sweep bend	0	No.		
N	32mm diameter sweep bend	0	No.		
	Total carried to Collection page				

RW	/39

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>TEES</u>				
A	75mm diameter sweep tee	0	No.		
В	40mm diameter sweep tee	0	No.		
C	32mm diameter sweep tee	0	No		
	BRANCH				
D	100 mm diameter Single branch	0	No.		
E	100mm diameter double branch	0	No		
	ACCESS CAPS				
F	50mm diameter access cap	0	No.		
G	40mm diameter access cap	0	No.		
Н	32mm diameter access cap	0	No.		
I	WC CONNECTORS 100mm diameter WC connector	0	No		
	<u>TRAPS</u>				
J	100 x 50mm diameter floor trap	0	No		
K	100 x 100mm diameter floor drain and grating Standard 300 x 300 x 450mm masonry gully trap	80	No		
L	complete with 125mm reinforced concrete cover. Extra over concrete boxing for U.P.V.C Waste	8	No.		
M	Pipes( 150 X 300mm)	85	Lm		
	WEATHERING SLATES AND VENT COWLS				
N	100mm diameter weathering slate and apron	0	No.		
P	100mm diameter vent cowl	0	No.		
Q	E XCAVATIONS FOR PIPES Allow for excavations in black cotton soil/murram for drainage pipes not exceeding 1500mm deep and average 900mm deep part return in, fill, ram and surplus cart away	110	Lm		
R	MANHOLES Provide materials and erect a manhole standard including all necessary excavations, backfilling and disposal of surplus materials and formwork and medium duty manhole cover and frame average depth 1000mm	10	No.		
	S 1				
	Total carried to collection page				

R۱	M	11	r

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	FIRE PROTECTION				
	Supply, deliver and install the following				
	firefighting equipment in positions indicted on				
	the contract drawings or as shall be instructed by				
	the Engineer, supply and install the following firefighting installation and equipment as				
	described and shown on the drawings. Tenderers				
	should allow for all fittings, joining couplings				
	including unions and clamps where necessary for				
	the functioning of the installations when pricing.				
	HOSEREEL INSTALLATION				
	HOSEREEL				
	20mm diameter 30m long swinging type hose				
	reel complete with delivery valve, mild steel feed pipe, isolation valve, guide and all other				
A	accessories as "Angus Fire Armour" or equal and	10	No.		
	GMS PIPE, CLASS B				
В	20mm diameter pipework	10	Lm		
C	25mm diameter pipework	10	Lm		
D	50mm diameter pipework.	24	Lm		
	EXTRA OVER PIPEWORK BENDS				
E	20mm diameter bends	8	No.		
F	25mm diameter bends	10	No.		
G	50mm diameter bends	4	No.		
	TEES				
Н	50mm diameter equal tees	6	No.		
	VALVES				
	25mm diameter approved medium pressure screw				
	down full way non-rising stem wedge gate valve				
	to BS 1952, with wheel and head joints to steel tubing. The gate valve to be as PEGLER or				
J	approved equivalent.	10	No.		
K	50mm diameter ditto	12	No.		
	Reducers				
L	50 x 25mm diameter reducer	2	No.		
	Total carried to collection page				
	Total carried to collection page				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	UNIONS				
A	25mm diameter pipe unions	5	No		
В	50mm diameter pipe unions	2	No		
	HOSEREEL PUMPSET				
	Hose reel pumps, one duty, the other standby mounted on a frame with a mild steel base plate.				
	Each pump shall have a duty 5m3/hr against 50m				
	head as Grundfos model CH 4-40 or approved				
	equivalent. In addition, there shall be a 60 litres				
	diaphragm pressure vessel (as Varem or approved equivalent), pressure switches, a switch				
	to protect dry run, 65mm foot valve and strainer,				
	tank connections, gate valves and non-return				
	valves Control shall be effected via a pressure				
	switch through a pre-wired control panel which				
	shall give automatic change –over from duty pump within 5 seconds should the duty pump				
	fail to deliver for any reason. The pumpset shall				
	include all non-returns valves, timer, isolating				
C	valves and pipe connections.	1	Set		
	CONTROL AND CONTROL PANEL Control panel for the above pumps with contactors, over voltage and under voltage protection relays, MCBs, start/stop push buttons and indicators lights. All this shall be housed in a lockable cabinet (with integral isolator) made from SWG 18 mild steel sheet that is oven powder coated. The controls shall also include a float switch or flow switch for prevention against				
D	dry running complete with its cable.	1	Item		
	FIRE HOSE CABINET Surface mounted fire hose cabinet manufactured from electro galvanized steel with folded edges and curled hose plate edges and painted with electro static powder coating, 1800 C baked. The cabinet size shall be capable of housing hosereel and 3 No. portable extinguishers as described in the next page and should conform to BS EN 671-				
E	To be as Germania or equal and approved.	1	No		
	PAINTING Allow for painting of the hosereel installation with two coats of super gloss paint on a primer				
F	coat to the approval of the Project Engineer.	1	Item		
	Total carried to collection page				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
		QII	UNII	KATE	AMOUNI
	PORTABLE FIRE EXTINGUISHERS				
	Supply, deliver, install, test and commission the flowing portable fire extinguishers and conforming to BS EN 3/BS 1449.				
	Water/Carbon Dioxide Gas Fire Extinguisher				
A	9 litres water/carbon dioxide gas portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	10	No		
	Carbon Dioxide Gas Fire Extinguisher				
В	5Kg carbon dioxide gas portable fire extinguisher complete with pressure gauge, initial charge and mountings brackets	10	No		
	Dry Chemical Powder Fire Extinguisher				
С	9Kg dry chemical powder portable fire extinguisher complete with pressure gauge, initial charge and mountings brackets.  Manual Alarm Bell	10	No		
D	9" (225mm) manual operated alarm bell (Gong).	0	No		
	FIRE BLANKET				
E	Fire blanket made of cloth woven with preasbestos yarn or any other fire proof material and to measure 1800 x 1210mm. it shall be fitted with special tapes folded so as to offer instantaneous single action to release blanket from storing jacket to BS 1721.	10	No		
	Fire Notices				
F	Allow for fire signage for the hose reel system, fire exits and fire instructions as described in the particular specifications and to the Project Engineer's approval.	10	No		
G	Testing and Commissioning.	1	Item		

**Total carried to collection page** 

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	COLLECTION PAGE FOR PLUMBING AND DRAINAGE WORKS				
1 2 3 4 5 6 7 8 9 10 11 12	Total brought forward from page BW/32 Total brought forward from page BW/33 Total brought forward from page BW/34 Total brought forward from page BW/35 Total brought forward from page BW/36 Total brought forward from page BW/37 Total brought forward from page BW/38 Total brought forward from page BW/39 Total brought forward from page BW/40 Total brought forward from page BW/41 Total brought forward from page BW/41 Total brought forward from page BW/42				
	Total Plumbing and Drainage Works carried to summary page				

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	PROVISIONAL SUMS FOR MECHANICAL WO				
A.	Allow a sum of Ksh 500,000.00 (Kenya shillings Five Hundred Thousands) only for contingencies.	S	UM		500,000.00
	Total carried to Summary Page				

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
SUMMARY OF MECHANICAL PLU	MBING WORKS			
Plumbing, internal drainage and fire fig	ghting services			
P.C. and Provisional Sums				

BW/46	

	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	PROVISIONAL SUMS				
A	Allow a provisional Sum for Builders Works in connection to Specialist Installations	SUM			500,000.00
В	Allow a provisional Sum for Sewer connection	SUM			500,000.00
C	Allow a provisional Sum for Project Management Expenses	SUM			1,000,000.00
D	Allow a provisional Sum for signage	SUM			350,000.00
E	Allow a provisional sum for contingencies	SUM			2,000,000.00
	TOTAL FOR PROVISIONAL SUMS CARRIED TO GRAND SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT			
	GRAND SUMMARY							
		PAGEO	FFICI <i>!</i>	AL USE	TENDERER'S USE			
1	PRELIMINARIES Particular and General Preliminaries	204						
2	BUILDERS WORKS Builders Works BUILDING SERVICES	BW/23						
3	Electrical Works	BW/30						
4	Mechanical Plumbing and Drainage Works	BW/45						
5	PRIME COST AND PROVISIONAL SUMS Prime Cost and Provisional Sums	BW/46						
	Sub - Total 1	KSHS.						
	Add 16 % VAT	KSHS.						
	GRAND TOTAL CARRIED TO FORM OF TENDER	KSHS.						
	NAME OF TENDERER.							
	ADDRESS	•••••	•••••	•••••				
	SIGNATURESTATUS							
	DATE	•						
	NAME OF WITNESS							
	ADDRESS	•••••		•••••	••••••			
	SIGNATURE		•••••	•••••				

DATE.....