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LAKE VICTORIA SOUTH WATER WORKS DEVELOPMENT AGENCY

PROGRAM: KEGONGA CLUSTER WATER SUPPLY PROJECT

TENDER DOCUMENT

CONSTRUCTION OF KEGONGA CLUSTER WATER SUPPLY PROJECT: LOT 3- GOKEHARAKA – GETAMBWEGA WATER SUPPLY

TENDER No: LVSWWDA/T/35/2025-2026

ALL TENDERERS ARE ADVISED TO READ CAREFULLY THIS TENDER DOCUMENT IN ITS ENTIRETY BEFORE MAKING ANY BID

OPEN

APRIL 2026

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INVITATION TO TENDER

TENDER No: **LVSWWDA/T/35/2025-2026; Construction of Kegonga Cluster Water Supply Project: Lot 3 – Gokeharaka – Getambwega Water Supply.**

The Lake Victoria South Water Works Development Agency (LVSWWDA) invites sealed tenders for **Construction of Kegonga Cluster Water Supply Project: Lot 3- Gokeharaka - -Getambwega Water Supply**

Tendering will be conducted under open tender method (National) using a standardized tender document. Tendering is open to all qualified and interested Tenderers. **Tendering is Open to all qualified Citizen Contractors with the National Construction Authority (NCA) Class 4 - Water works category.**

1. Qualified and interested tenderers may obtain further information and inspect the Tender Documents during office hours from **9.00am to 5.00pm** at the address given below.

2. A complete set of tender documents may be purchased or obtained by interested tenderers upon payment of a non- refundable fee of **Kshs. 1,000** in **Banker's Cheque** and payable to the address given below.

   Tender documents may also be obtained electronically from the Public Procurement Information Portal (PPIP) **www.tenders. go.ke** and the LVSWWDA Website(s) https://www.lvswwda.go.ke/tender/. Tender documents obtained electronically will be **free of charge.**

3. Tender documents may be viewed and downloaded for free from the PPIP www.tenders.go.ke and the LVSWWDA website https://www.lvswwda.go.ke/tender/. Tenderers who download the tender document must forward their particulars immediately to procurement@lvswwda.go.ke *with a copy to* mmayi@lvswwda.go.ke to facilitate any further clarification or addenda.

4. Tenders shall be quoted in Kenya Shillings and shall include all taxes. Tenders shall remain **valid for 98 days** from the date of opening of tenders.

5. All Tenders must be accompanied by a **Tender Security of Kshs 5,000,000 in the format provided in the tender document.**

6. The Tenderer shall chronologically serialize all pages of the tender documents submitted.

7. Completed tenders must be delivered to the **Tender Box** in the address below on or before **30th April, 2026 at 10.00am (Kenya Time)**. Completed tenders should be submitted in one original and one copy.

8. Tenders will be opened immediately after the deadline date and time specified above or any deadline date and times specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.

9. **Late tenders will be rejected.**

10. The addresses referred to above are:

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

Lake Victoria South Water Works Development Agency Office.
Lavictors House, Off Ring Road, Milimani.
P.O Box 3325 -40100, Kisumu, Kenya
Manager, Supply Chain Management: (Tel: +254 (057) 2025128, (020) 2157233, 020-2463081
Email: procurement@lvswwda.go.ke and copy to mmayi@lvswwda.go.ke

B. Address for Submission of Tenders.

Tender Box, situated at the Ground Floor
Lake Victoria South Water Works Development Agency Office.
Lavictors House, Off Ring Road, Milimani.
P.O Box 3325 -40100, Kisumu, Kenya

C. Address for Opening of Tenders.

Lake Victoria South Water Works Development Agency Office.
Lavictors House, Off Ring Road, Milimani.
P.O Box 3325 -40100, Kisumu, Kenya

Name: **Ms. JACKLINE KEMUNTO**

Designation: **CHIEF EXECUTIVE OFFICER**

Signature:

Dated 9th April, 2026

PART 1 - TENDERING PROCEDURES

SECTION I: INSTRUCTIONS TO TENDERERS

A General Provisions

1. Scope of Tender

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

2. Fraud and Corruption

2.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 "Declaration not to engage in corruption". The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.

2.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.

2.3 Unfair Competitive Advantage - Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, the Procuring Entity shall indicate in the **Data Sheet** and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.

2.4 Unfair Competitive Advantage -Fairness and transparency in the tender process require that the Firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender being tendered for. The Procuring Entity shall indicate in the **TDS** firms (if any) that provided consulting services for the contract being tendered for. The Procuring Entity shall check whether the owners or controllers of the Tenderer are same as those that provided consulting services. The Procuring Entity shall, upon request, make available to any tenderer information that would give such firm unfair competitive advantage over competing firms.

3. Eligible Tenderers

3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 3.7 or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. Public employees and their close relatives *(spouses, children, brothers, sisters and uncles and aunts)* are not eligible to participate in the tender. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution. The maximum number of JV members shall be specified in the **TDS.**

3.2 Public Officers of the Procuring Entity, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers are also not allowed to participate in any procurement proceedings.

3.3 A Tenderer shall not have a conflict of interest. Any tenderer found to have a conflict of interest shall be disqualified. A tenderer may be considered to have a conflict of interest for the purpose of this tendering process, if the tenderer:

a) Directly or indirectly controls, is controlled by or is under common control with another tenderer; or

b) Receives or has received any direct or indirect subsidy from another tenderer; or

c) Has the same legal representative as another tenderer; or

d) Has a relationship with another tenderer, directly or through common third parties, that puts it in a position

to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering process; or

e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender; or

f) any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as Engineer for the Contract implementation; or

g) Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the contract specified in this Tender Document or

h) Has a close business or family relationship with a professional staff of the Procuring Entity who:

i) are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract; or

ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.

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

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

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

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

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

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

3.10 Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, subcontracts and labor) from national suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable the Procuring Entity determine if this condition is met shall be provided in for this purpose is be provided in *"SECTION III - EVALUATION AND QUALIFICATION CRITERIA, Item 9"*.

3.11 Pursuant to the eligibility requirements of ITT 4.10, a tender is considered a foreign tenderer, if the tenderer is not registered in Kenya or if the tenderer is registered in Kenya and has less than 51 percent ownership by Kenyan Citizens. JVs are considered as foreign tenderers if the individual member firms are not registered in Kenya or if are registered in Kenya and have less than 51 percent ownership by Kenyan citizens. The JV shall not subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.

3.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website www.nca.go.ke.

3.13 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from the website www.cak.go.ke

3.14 A Kenyan tenderer shall provide evidence of having fulfilled his/her tax obligations by producing a valid tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

4. Eligible Goods, Equipment, and Services

4.1 Goods, equipment and services to be supplied under the Contract may have their origin in any country that is not eligible under ITT 3.9. At the Procuring Entity's request, Tenderers may be required to provide evidence of the origin of Goods, equipment and services.

4.2 Any goods, works and production processes with characteristics that have been declared by the relevant national environmental protection agency or by other competent authority as harmful to human beings and to the environment shall not be eligible for procurement.

5. Tenderer's Responsibilities

5.1 The tenderer shall bear all costs associated with the preparation and submission of his/her tender, and the Procuring Entity will in no case be responsible or liable for those costs.

5.2 The tenderer, at the tenderer's own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings, and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the tenderer's own expense.

5.3 The Tenderer and any of its personnel or agents will be granted permission by the Procuring Entity to enter upon its premises and lands for the purpose of such visit. The Tenderer shall indemnify the Procuring Entity against all liability arising from death or personal injury, loss of or damage to property, and any other losses and expenses incurred as a result of the inspection.

5.4 The tenderer shall provide in the Form of Tender and Qualification Information, a preliminary description of the proposed work method and schedule, including charts, as necessary or required.

B. Contents of Tender Documents

6. Sections of Tender Document

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

PART 1 Tendering Procedures

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

PART 2 Works Requirements

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

PART 3 Conditions of Contract and Contract Forms

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

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

6.3 Unless obtained directly from the Procuring Entity, the Procuring Entity is not responsible for the completeness of the Tender document, responses to requests for clarification, the minutes of the pre-Tender meeting (if any), or Addenda to the Tender document in accordance with ITT 8. In case of any contradiction, documents obtained directly from the Procuring Entity shall prevail.

The Tenderer is expected to examine all instructions, forms, terms, and specifications in the Tender Document and to furnish with its Tender all information and documentation as is required by the Tender document.

7. Site Visit

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

8. Pre-Tender Meeting

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

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

8.3 Minutes of the pre-Tender meeting and the pre-arranged pretender site visit of the site of the works, if applicable, including the text of the questions asked by Tenderers and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Tenderers who have acquired

the Tender Documents in accordance with ITT 6.3. Minutes shall not identify the source of the questions asked.

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

9. Clarification and amendments of Tender Documents

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

10. Amendment of Tendering Document

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

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

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

C. Preparation of Tenders

11. Cost of Tendering

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

12. Language of Tender

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

13. Documents Comprising the Tender

13.1 The Tender shall comprise the following:

a) Form of Tender prepared in accordance with ITT 14;
b) Schedules including priced Bill of Quantities, completed in accordance with ITT 14 and ITT 16;
c) Tender Security or Tender-Securing Declaration, in accordance with ITT 21.1;
d) Alternative Tender, if permissible, in accordance with ITT 15;
e) Authorization: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT 22.3;
f) Qualifications: documentary evidence in accordance with ITT 19establishing the Tenderer's qualifications to perform the Contract if its Tender is accepted;
g) Conformity: a technical proposal in accordance with ITT 18;
h) Any other document required in the TDS.

13.2 In addition to the requirements under ITT 11.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered 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 Agreement. The Tenderer shall chronologically serialize pages of all tender documents submitted.

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

14. Form of Tender and Schedules

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

15. Alternative Tenders

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

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

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

16. Tender Prices and Discounts

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

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

of the item quoted by substantially responsive Tenderers will be added to the Tender price and the equivalent total cost of the Tender so determined will be used for price comparison.

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

16.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 14.1.

16.5 It will be specified in the TDS if the rates and prices quoted by the Tenderer are or are not subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, except in cases where the contract is subject to fluctuations and adjustments, not fixed price. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Procuring Entity may require the Tenderer to justify its proposed indices and weightings.

16.6 Where tenders are being invited for individual lots (contracts)or for any combination of lots (packages), tenderers wishing to offer discounts for the award of more than one Contract shall specify in their Tender the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITT 16.4, provided the Tenders for all lots (contracts) are opened at the same time.

16.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of Tenders, shall be included in the rates and prices and the total Tender Price submitted by the Tenderer.

17. Currencies of Tender and Payment

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

18. Documents Comprising the Technical Proposal

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

19. Documents Establishing the Eligibility and Qualifications of the Tenderer

19.1 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.

19.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section IV, Tender Forms.

19.3 A margin of preference will not be allowed. Preference and reservations will be allowed, individually or in joint ventures. Applying for eligibility for Preference and reservations shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.

19.4 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a contractor or group of contractors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation

to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.

19.5 The purpose of the information described in ITT 19.4 above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be accepted by the Procuring Entity as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.

19.6 The Tenderer shall provide further documentary proof, information or authorizations that the Procuring Entity may request in relation to ownership and control which information on any changes to the information which was provided by the tenderer under ITT 6.3. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.

19.7 All information provided by the 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.

19.8 If a tenderer fails to submit the information required by these requirements, its tender will be rejected. Similarly, if the Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tenderer pursuant to these requirements, then the tender will be rejected.

19.9 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 be disqualified from the procurement process,

ii) if the contract has been awarded to that tenderer, the contract award will be set aside,

iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other persons have committed any criminal offence.

19.10 If a tenderer submits information pursuant to these requirements that is incomplete, inaccurate or out-of-date, or attempts to obstruct the verification process, then the consequences ITT 6.7 will ensue unless the tenderer can show to the reasonable satisfaction of the Procuring Entity that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tenderer.

20. Period of Validity of Tenders

20.1 Tenders shall remain valid for the Tender Validity period specified in the TDS. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by the Procuring Entity in accordance with ITT 24). A Tender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.

20.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 21.1, it shall also be extended for thirty (30) days beyond the deadline of the extended validity period. A Tenderer may refuse the request without forfeiting its Tender security. A Tenderer granting the request shall not be required or permitted to modify its Tender, except as provided in ITT 20.3.

20.3 If the award is delayed by a period exceeding the number of days to be specified in the TDS days beyond the expiry of the initial tender validity period, the Contract price shall be determined as follows**:**

a) in the case of **fixed price** contracts, the Contract price shall be the tender price adjusted by the factor specified in the **TDS**;

b) in the case of **adjustable price** contracts, no adjustment shall be made; or in any case, tender evaluation shall be based on the tender price without taking into consideration the applicable correction from those indicated above.

21. Tender Security

21.1 The Tenderer shall furnish as part of its Tender, either a Tender-Securing Declaration or a Tender Security as specified in the TDS, in original form and, in the case of a Tender Security, in the amount and currency specified in the TDS. A Tender-Securing Declaration shall use the form included in Section IV, Tender Forms**.**

21.2 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security shall be a demand guarantee in any of the following forms at the Tenderer's option:

a) an unconditional Bank Guarantee issued by reputable commercial bank); or

b) an irrevocable letter of credit;

c) a Banker's cheque issued by a reputable commercial bank; or

d) another security specified **in the TDS**,

21.3 If an unconditional bank guarantee is issued by a bank located outside Kenya, the issuing bank shall have a correspondent bank located in Kenya to make it enforceable. The Tender Security shall be valid for thirty (30) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 20.2.

21.4 If a Tender Security or Tender-Securing Declaration is specified pursuant to ITT 19.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by the Procuring Entity as non-responsive.

21.5 If a Tender Security is specified pursuant to ITT 21.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's signing the Contract and furnishing the Performance Security and any other documents required in the TDS. The Procuring Entity shall also promptly return the tender security to the tenderers where the procurement proceedings are terminated, all tenders were determined nonresponsive or a bidder declines to extend tender validity period.

21.6 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract and furnished the required Performance Security, and any other documents required in the TDS.

21.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:

e) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension thereto provided by the Tenderer; or

f) if the successful Tenderer fails to:

i) sign the Contract in accordance with ITT 50; or

ii) furnish a Performance Security and if required in the TDS, and any other documents required in the TDS.

21.8 Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA that PPRA debars the Tenderer from participating in public procurement as provided in the law.

21.9 The Tender Security or the Tender-Securing Declaration of a JV shall be in the name of the JV that submits the Tender. If the JV has not been legally constituted into a legally enforceable JV at the time of tendering, the Tender Security or the Tender-Securing Declaration shall be in the names of all future

members as named in the letter of intent referred to in ITT 4.1 and ITT 11.2.

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

22. Format and Signing of Tender

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

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

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

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

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

D. Submission and Opening of Tenders

23. Sealing and Marking of Tenders

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

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

The inner envelopes or packages or containers shall:
a) bear the name and address of the Procuring Entity.
b) bear the name and address of the Tenderer; and
c) bear the name and Reference number of the Tender.

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

24. Deadline for Submission of Tenders

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

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

25. Late Tenders

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

26. Withdrawal, Substitution, and Modification of Tenders

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

a) prepared and submitted in accordance with ITT 22 and ITT 23 (except that 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 24.

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

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

27. Tender Opening

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

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

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

27.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender. No Tender modification shall be permitted unless the corresponding modification notice contains

a valid authorization to request the modification and is read out at Tender opening.

27.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Price, per lot (contract) if applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security or Tender-Securing Declaration, if required; and any other details as the Procuring Entity may consider appropriate.

27.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further for evaluation. The Form of Tender and pages of the Bills of Quantities are to be initialed by the members of the tender opening committee attending the opening. The number of representatives of the Procuring Entity to sign shall be specified in the TDS.

27.7 At the Tender Opening, the Procuring Entity shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 25.1).

27.8 The Procuring **Entity shall prepare minutes of the Tender Opening that shall include, as a minimum:**

a) the name of the Tenderer and whether there is a withdrawal, substitution, or modification;
b) the Tender Price, per lot (contract) if applicable, including any discounts;
c) any alternative Tenders;
d) the presence or absence of a Tender Security, if one was required.
e) number of pages of each tender document submitted.

27.9 The Tenderers' representatives who are present shall be requested to sign the minutes. The omission of a Tenderer's signature on the minutes shall not invalidate the contents and effect of the minutes. A copy of the tender opening register shall be distributed to all Tenderers upon request.

E. Evaluation and Comparison of Tenders

28. Confidentiality

28.1 Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderers or any other persons not officially concerned with the Tender process until information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 46.

28.2 Any effort by a Tenderer to influence the Procuring Entity in the evaluation of the Tenders or Contract award decisions may result in the rejection of its tender.

28.3 Notwithstanding ITT 28.2, from the time of tender opening to the time of contract award, if a tenderer wishes to contact the Procuring Entity on any **matter related to the tendering process, it shall do so in writing.**

29. Clarification of Tenders

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

29.2 If a tenderer does not provide clarifications of its tender by the date and time set in the Procuring Entity's request for clarification, its Tender may be rejected.

30. Deviations, Reservations, and Omissions

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

a) "Deviation" is a departure from the requirements specified in the tender document;

b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the tender document; and

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

31. Determination of Responsiveness

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

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

a) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or

b) limit in any substantial way, inconsistent with the tender document, the Procuring Entity's rights or the tenderer's obligations under the proposed contract; or

c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders.

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

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

32. Non-material Non-conformities

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

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

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

33. Arithmetical Errors

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

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

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

b) Any errors in the submitted tender arising from a miscalculation of unit price, quantity, and subtotal

and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive. and

c) if there is a discrepancy between words and figures, the amount in words shall prevail

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

34. Currency provisions

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

35. Margin of Preference and Reservations

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

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

36. Nominated Subcontractors

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

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

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

37. Evaluation of Tenders

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

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

a) price adjustment due to discounts offered in accordance with ITT16;
b) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT39;
c) price adjustment due to quantifiable nonmaterial non-conformities in accordance with ITT 30.3; and
d) any additional evaluation factors specified **in the TDS** and Section III, Evaluation and Qualification Criteria.

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

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

38. Comparison of Tenders

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

39. Abnormally Low Tenders

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

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

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

40. Abnormally High Tenders

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

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

i) If the tender price is abnormally high based on wrong estimated cost of the contract, the Procuring Entity may accept or not accept the tender depending on the Procuring Entity's budget considerations.

ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.

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

41. Unbalanced and/or Front-Loaded Tenders

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

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

a) accept the Tender; or

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

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

d) reject the Tender,

42. Qualifications of the Tenderer

42.1 The Procuring Entity shall determine to its satisfaction whether the eligible Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender, meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.

42.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 19. The determination shall not take into consideration the qualifications of other firms such as the Tenderer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the Tender document), or any other firm(s) different from the Tenderer.

42.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in disqualification of the Tender, in which event the Procuring Entity shall proceed to the Tenderer who offers a substantially responsive Tender with the next lowest evaluated price to make a similar determination of that Tenderer's qualifications to perform satisfactorily.

42.4 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price.

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

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

43. Best Evaluated Tender

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

a) Most responsive to the Tender document; and

b) The lowest evaluated price.

44. Procuring Entity's Right to Accept Any Tender, and to Reject Any or All Tenders.

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

F. Award of Contract

45. Award Criteria

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

46. Notice of Intention to enter into a Contract

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

a) the name and address of the Tenderer submitting the successful tender;

b) the Contract price of the successful tender;

c) a statement of the reason(s) the tender of the unsuccessful tenderer to whom the letter is addressed was unsuccessful, unless the price information in (c) above already reveals the reason;

d) the expiry date of the Standstill Period; and

e) instructions on how to request a debriefing and/or submit a complaint during the standstill period;

47. Standstill Period

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

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

48. Debriefing by the Procuring Entity

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

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

49. Letter of Award

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

50. Signing of Contract

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

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

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

51. Appointment of Adjudicator

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

Conditions of Contract (GCC), to appoint the Adjudicator.

52. Performance Security

52.1 Within twenty-one (21) days of the receipt of the Letter of Acceptance from the Procuring Entity, the successful Tenderer shall furnish the Performance Security and, any other documents required in the TDS, in accordance with the General Conditions of Contract, subject to ITT 40.2 (b), using the Performance Security and other Forms included in Section X, Contract Forms, or another form acceptable to the Procuring Entity. A foreign institution providing a bank guarantee shall have a correspondent financial institution located in Kenya, unless the Procuring Entity has agreed in writing that a correspondent bank is not required.

52.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security and other documents required in the TDS, or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the Tenderer offering the next Best Evaluated Tender.

52.3 Performance security shall not be required for contracts estimated to cost less than Kenya shillings five million shillings**.**

53. Publication of Procurement Contract

53.1 Within fourteen days after signing the contract, the Procuring Entity shall publish the awarded contract at its notice boards and websites; and on the Website of the Authority. At the minimum, the notice shall contain the following information:

a) name and address of the Procuring Entity;
b) name and reference number of the contract being awarded, a summary of its scope and the selection method used;
c) the name of the successful Tenderer, the final total contract price, the contract duration.
d) dates of signature, commencement and completion of contract;
e) names of all Tenderers that submitted Tenders, and their Tender prices as read out at Tender opening.

54. Procurement Related Complaints

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

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.

A. General	
ITT 1.1	The name of the Contract is: **Construction of Kegonga Cluster Water Supply Project: Lot 3- Gokeharaka – Getambwega Water Supply** The Reference Number of the Contract is: **LVSWWDA/T/35/2025-2026**
ITT 2.3	The information made available on competing firms is as follows*: **N/A***
ITT 3.1	Maximum number of members in the Joint Venture (JV) shall be: ***N/A***
B. Content of Tender Document	
ITT 8.1	There shall be a **Mandatory** Pre-Tender site meeting on **17th April, 2026.** The meeting point shall be **Mahuntutu Dam** site in Gokeharaka – Getambwega Ward at 11.30am. Pre- Tender Site Attendance Certificate shall be issued on site.
ITT 8.2	The Tenderer will submit any questions in writing, to reach the Procuring Entity not later than **20th April, 2026 at 5.00pm**
ITT 8.4	The Procuring Entity's website where Minutes of the pre-Tender meeting and the pre-arranged pretender site visit will be published is; www.lvswwda.go.ke and www.tenders.go.ke
ITT 9.1	For Clarification of Tender purposes, for obtaining further information and for purchasing tender documents, the Procuring Entity's address is: ***1.*** Name of Procuring Entity; ***Lake Victoria South Water Works Development Agency (LVSWWDA)*** ***2.*** Physical address for hand Courier Delivery to an office or Tender Box; ***Tender documents to be deposited in the Tender Box provided at the First Floor, Reception Area of LVSWWDA.*** ***3.*** Postal Address; ***LVSWWDA, P. O. Box 3325-40100, Kisumu.*** 4. Insert name, telephone number and e-mail address of the officer to be contacted.; ***Manager, Supply Chain Management, Email;*** *procurement@lvswwda.go.ke* ***and cc to*** *mmayi@lvswwda.go.ke*
C. Preparation of Tenders	
ITP 13.1 (h)	The Tenderer shall submit the following additional documents in its Tender; ***All documents to be submitted shall be included under Section III – Evaluation and Qualification Criteria***
ITT 15.1	Alternative Tenders ***shall not*** be considered.
ITT 15.2	Alternative times for completion ***shall not be permitted***.
ITT 15.4	Alternative technical solutions shall be permitted for the following parts of the Works: ***Not Applicable***
ITT 16.5	The prices quoted by the Tenderer ***shall be fixed.***

ITT 20.1	The Tender validity period shall be ***98 days*.**
ITT 20.3 (a)	(a) The award is delayed by over 120 number of days, after validity period, (b) The Tender price shall be adjusted by the following percentages of the tender price: (i) By 2.5% of the local currency portion of the Contract price adjusted to reflect local inflation during the period of extension, and (ii) By_*Nil*_% the foreign currency portion of the Contract price adjusted to reflect the international inflation during the period of extension. ***Prevailing consumer price index obtained from Kenya National Bureau of Statistics or the monthly inflation rate issued by the Central Bank of Kenya for both (i) and (ii)***
ITT 21.1	Tenderer shall submit ***a Tender Security*** as per the invitation to tender**.**
ITT 21.2 (d)	The other Tender Security shall be: ***Kenya Shillings Five Million (Ksh.5,000,000) only from a reputable bank in Kenya.***
ITT 21.8	The Procuring Entity may declare the Tenderer ineligible to be awarded a contract by the Procuring Entity for a period of: ***as provided in the law***
ITT 22.1	In addition to **1 original**, the number and type of copies to be submitted with the tender is: **One (1) paper copy** and **one (1) digital copy** (flash disk) for the **Priced Bills of Quantities**. In the event of any discrepancy between the original and the copies, the original shall prevail.
ITT 22.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of: ***Tender Specific Written Power of Attorney***
D. Submission and Opening of Tenders	
ITT 24.1	(A) For Tender submission purposes only, the Procuring Entity's address is: Lake Victoria South Water Works Development Agency Physical Address: Lavictors House, Off Ring Road, Milimani. Postal Address, P.O. Box 3325-40100, Kisumu Date and time for submission of Tenders: **on or before 30th April, 2026 at 10.00am** Tenderers ***shall not submit*** tenders electronically.
ITT 27.1	The Tender opening shall take place at the time and the address for Opening of Tenders Provided below: Lake Victoria South Water Works Development Agency Physical Address: Lavictors House, Off Ring Road, Milimani. Postal Address: P.O. Box 3325-40100, Kisumu State date and time of tender opening **30th April 2026 at 10.00am**
ITT 27.6	The number of representatives of the procurement entity to sign are: ***At least Three (3)***
E. Evaluation, and Comparison of Tenders	
ITT 32.3	The adjustment shall be based on the ***highest*** price of the item or component as quoted in other substantially responsive Tenders. If the price of the item or component cannot be derived from the price of other substantially responsive Tenders, the Procuring Entity shall use its best estimate.

ITT 35.2	The invitation to tender is open to ***All qualified and experienced construction firms registered in Kenya.***
ITT 36.1	At this time, the Procuring Entity ***does not intend*** to execute certain specific parts of the Works by subcontractors selected in advance.
ITT 36.2	Contractor's may propose subcontracting: ***Not Applicable***
ITT 36.3	The parts of the Works for which the Procuring Entity permits Tenderers to propose Specialized Subcontractors are designated as follows: ***Not Applicable***
ITT 37.2 (d)	Additional requirements apply. ***All requirements are detailed in the evaluation criteria in Section III,***
ITT 45.1	**Award Criteria:** ***The Procuring Entity shall award the Contract to the successful tenderer whose tender has been determined to be the Lowest Evaluated Tender.*** ***In addition, any contractor terminated on grounds of integrity and/or fraud or corruption is ineligible to tender.***
ITT 46	***Notification of intent to enter into a contract shall be communicated through E-mail. Tenderers must therefore provide their E-mail addresses:*** ***Email Address 1 (Mandatory):*** _____ ***Email Address 2: (Optional):*** _____
ITT 51.1	The person named to be appointed as Adjudicator is: ***N/A*** _
ITT 52.1	***Performance Security: Performance Guarantee/ Security shall be a Bank Guarantee of 10% of the Contract Amount from a reputable Bank registered in Kenya.***
ITT 52.2	Other documents required in addition to the Performance Security are: ***Detailed Work Program & Insurances of Works.***
ITT 54.1	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 www.ppra.go.ke or email complaints@ppra.go.ke. If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to: For the attention: **Ms. Jackline Kemunto** Title/position: **Chief Executive Officer** Procuring Entity: **Lake Victoria South Water Works Development Agency** Email address: info@lvswwda.go.ke In summary, a Procurement-related Complaint may challenge any of the following (among others): (i) the terms of the Tender Documents; and the Procuring Entity's decision to award the contract.

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

1. General Provisions

Wherever a Tenderer is required to state a monetary amount, Tenderers shall indicate the Kenya Shilling equivalent using the exchange rate specified in the Tender Data Sheet.

For purposes of conversion:

- annual construction turnover or other annual financial data shall be converted using the exchange rate prevailing on the last day of the respective calendar year in which the amount was originally established;
- a single contract value shall be converted using the exchange rate prevailing on the date of contract signature.

Exchange rates shall be obtained from the source specified in the Tender Data Sheet. Any error in the use of exchange rates in the Tender may be corrected by the Procuring Entity.

This Section contains the criteria that the Procuring Entity shall use to examine, evaluate, and qualify tenders. No other criteria, methodology, or factor shall be used other than those specified in this Tender Document. The Tenderer shall provide all information requested in the forms contained in Section IV - Tendering Forms.

2. Evaluation and Award Criteria

The Procuring Entity shall use the criteria and methodologies set out in this Section to determine the lowest evaluated responsive Tender and the qualified Tenderer for award.

The Tenderer that:

- passes the Preliminary / Mandatory Evaluation,
- is found to be technically responsive,
- has the lowest evaluated tender price, and
- meets the Qualification / Post-Qualification Criteria,

shall be recommended for award of contract.

3. Preliminary / Mandatory Evaluation

The Procuring Entity shall first examine all tenders to determine whether they are complete and substantially responsive to the mandatory requirements of the Tender Document.

A Tender that fails any of the mandatory requirements listed below shall be treated as non-responsive and shall not be considered further.

Preliminary / Mandatory Criteria

	Mandatory Requirement	Requirement
1	Certificate of Incorporation / Registration	Submit proof of registration with the Registrar of Companies. Companies incorporated under the Companies Act shall additionally submit a current CR12 issued within the last twelve (12) months from the tender opening date.
2	NCA Registration	Submit a valid National Construction Authority registration certificate for Water Works, Category NCA 4 or above (.i.e NCA 3, NCA 2 or NCA1) and Electromechanical Works, Category NCA 6 and above.
3	NCA Practicing License	Submit a valid current National Construction Authority Practicing Licence for Water Works, Category NCA 4 or above and Electromechanical Works, Category NCA 6 and above
4	Tax Compliance	Submit a valid Tax Compliance Certificate issued by the Kenya Revenue Authority, valid as at the Tender Closing Date.
5	Form of Tender	Submit a duly completed, signed and stamped Form of Tender in the format provided.

6	Confidential Business Questionnaire	Submit a duly completed, signed and stamped Confidential Business Questionnaire / Tenderer's Eligibility Form in the format provided.
7	Mandatory Pre-Tender Site Visit	Attend the mandatory pre-tender site visit and sign the official attendance register.
8	Certificate of Independent Tender Determination	Submit a duly completed, signed and stamped Certificate of Independent Tender Determination.
9	Self-Declaration - Debarment	Submit a duly completed, signed and stamped Self Declaration that the Tenderer is not debarred under the Public Procurement and Asset Disposal Act, 2015 (Form SD1).
10	Self-Declaration - Corrupt or Fraudulent Practice	Submit a duly completed, signed and stamped Self Declaration that the Tenderer will not engage in corrupt or fraudulent practices (Form SD2).
11	Code of Ethics	Submit a duly completed, signed and stamped Declaration and Commitment to the Code of Ethics.
12	Bills of Quantities	Submit duly completed, signed and stamped Bills of Quantities in the format provided.
13	Tenderer Information Form	Submit a duly completed, signed and stamped Tenderer Information Form in the format provided.
14	Tender Security	Submit a Tender Security in the amount of Kenya Shillings Five Million (KShs. 5,000,000.00)only from a reputable bank in Kenya, in the format provided.
15	Power of Attorney	Submit a tender-specific Power of Attorney, duly signed, sealed and witnessed, with a valid practicing certificate for the Commissioner for Oaths attached where applicable.

Note: Bidders can incorporate and propose qualified sub-contractor with a complementary qualification on the mandatory registration with NCA or Experience. For purpose of Evaluation, the sub-contractor/Joint Venture partners shall be required to submit the full documents together with the bidder.

Technical Evaluation

The following are not grounds for preliminary disqualification and shall not be used as standalone rejection criteria: document presentation/binding, pagination format, and county trading licence unless expressly required by law and directly relevant to contract execution.

4. Technical Responsiveness Evaluation

Only tenders that pass the Preliminary / Mandatory Evaluation shall proceed to Technical Responsiveness Evaluation. This stage shall be assessed on a pass / fail basis only. No technical marks shall be applied.

A Tender shall be considered technically responsive if the Tenderer submits the following documents and the Procuring Entity is satisfied that they are responsive to the Employer's Works Requirements.

Technical Responsiveness Criteria

No.	Technical Requirement	Requirement
1	Method Statement	Submit a clear and project-specific method statement for execution of the dam, associated water works and Electromechanical Works
2	Work Programme	Submit a realistic work programme showing sequence of activities, durations, and completion period. Logical sequence of different

		components of works in a sync manner. Resourced detailed Workplan.
3	Mobilization Schedule	Submit a mobilization schedule showing proposed mobilization of plant, personnel, and key resources.
4	Site Organization and Organogram	Submit a site organization structure and organogram showing proposed staffing and reporting lines for the project.
5	Environmental Health and Safety	Submit a comprehensive site specific EHS Plan including qualified EHS officer.

Any Tender that fails to submit any of the above, or whose submissions are materially non-responsive to the Employer's requirements, shall not proceed to Financial Evaluation.

5. Financial Evaluation

Only tenders that pass the Technical Responsiveness Evaluation shall proceed to Financial Evaluation.

Financial Evaluation shall include:

- checking for arithmetic errors,
- application of any discounts offered,
- consideration of any acceptable deviations in accordance with the Tender Document, and
- determination of the lowest evaluated tender price.

The tenderer with the lowest evaluated tender price shall proceed to Qualification / Post-Qualification Evaluation.

6. Qualification / Post-Qualification Evaluation

The Tenderer with the lowest evaluated tender price shall be subjected to Qualification / Post-Qualification Evaluation to confirm its capacity and resources to perform the contract.

A Tenderer that fails any of the qualification requirements set out below shall be disqualified, and the Procuring Entity shall proceed to the next lowest evaluated responsive Tenderer.

6.1 Qualification / Post-Qualification Criteria Summary

Item No.	Qualification Subject	Qualification Requirement	Document / Form
1	Nationality	Nationality in accordance with the Instructions to Tenderers.	Forms ELI-1.1 and ELI-1.2, with attachments
2	Conflict of Interest	No conflict of interest in accordance with the Instructions to Tenderers.	Form of Tender
3	PPRA Eligibility	Tenderer not declared ineligible by PPRA.	Form of Tender / Self-Declaration
4	State-Owned Enterprise	Where applicable, meets the requirements for State-Owned Enterprises in the Instructions to Tenderers.	Forms ELI-1.1 and ELI-1.2
5	Suspension under Tender Securing Declaration	Not under suspension pursuant to execution of a Tender / Proposal Securing Declaration.	Form of Tender
6	History of Non-Performing Contracts	Non-performance of a contract shall not have occurred as a result of Tenderer's default within the last five (5) years.	Form CON-2

7	Pending Litigation	Tenderer's financial position and prospective long-term profitability shall remain sound assuming all pending litigation is resolved against the Tenderer.	Form CON-2
8	Litigation History	No consistent history of court/arbitral awards against the Tenderer in the last five (5) years.	Form CON-2
9	Financial Capability	Access to or availability of liquid assets, unencumbered real assets, lines of credit and other financial means, net of other commitments, of not less than Kenya Shillings One Hundred Million (KShs. 100,000,000).	Form FIN-3.1 with attachments
10	Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings Two Hundred Million (KShs. 200,000,000) within the last five (5) years.	Form FIN-3.2
11	General Construction Experience	Experience under construction contracts as prime contractor, JV member, sub-contractor or management contractor for at least five (5) years prior to tender submission deadline.	Form EXP-4.1
12	Specific Similar Works Experience	At least two (2) contracts of similar nature, each of minimum value Kenya Shillings One Hundred Million (KShs. 100,000,000), satisfactorily and substantially completed within the last five (5) years.	Form EXP-4.2(a), with attachments
13	Key Personnel	Tenderer shall demonstrate availability of the required key personnel.	CVs, academic certificates, professional registration, letters of commitment
14	Key Equipment	Tenderer shall demonstrate availability of the required key equipment, whether owned, leased or under firm hire commitment.	Logbooks, lease agreements, letters of commitment

6.2 Specific Similar Works Experience

For purposes of this tender, a similar contract shall mean a project involving one or more of the following:

(a) Component A: dam/pan (of min capacity 50,000m^3 rehabilitation) or water retaining structures/ water supply systems and Reinforced Concrete reservoirs of 200m3 capacity and 3,500m3/day.

or

(b) Component B: electromechanical installation of pumps, solar-powered pumping systems, associated civil and pipeline works.

The Tenderer shall demonstrate that it has satisfactorily and substantially completed at least two (2) such contracts within the last eight (8) years, each of minimum value KShs. 100,000,000 or equivalent.

The Tenderer shall provide for each contract: project name, employer / client, contract value, date of contract, completion date, contact details of employer / client, signed contract agreement, and completion certificate or equivalent evidence of substantial completion.

6.3 Key Personnel Requirements

No.	Position	Minimum Qualification	Total Experience (Years)	Similar Works Experience (Years)	Minimum Number
1	Project Manager	B.Sc. Civil Engineering or equivalent, registered by Engineers Board of Kenya	10	5	1
2	Site Agent	B.Sc. Civil Engineering or equivalent	8	5	1
3	Engineering Surveyor	B.Sc. Surveying or HND in Surveying and Photogrammetry or equivalent	8	5	1
4	Foreman (Civil Works)	Diploma / HND in Civil Engineering / Building / Construction or equivalent	8	5	1
5	Electromechanical Engineer	B.Sc/ B.Tech. Electrical /Mechanical Engineering	10	7	1
6	Engineering Technician	Diploma / HND in Electrical / Mechanical Engineering or equivalent	8	5	1
7	Plumber	Certificate in Plumbing from a recognized institution	8	5	2
8	Mason	Certificate in Masonry from a recognized institution	8	5	1

The Tenderer shall provide signed CVs, copies of academic and professional certificates, and letters of commitment for the proposed personnel.

6.4 Key Equipment Requirements

No.	**Equipment Type and Characteristics**	**Minimum Number Required**
1	15-ton Tipper Lorries	2
2	Excavators	2
3	Dozers	2
4	Roller, 15 Ton Vibrating	1
5	Pick-Up, 1 Ton	1
6	Concrete Mixers (0.3m3 to 1.0m3), including batch weighing	1
7	Concrete Vibrators (40mm - 60mm)	1
8	HDPE Butt Fusion Machine	1

9	Portable Dewatering Pumps	2
10	Other relevant earth moving equipment	2

The Tenderer shall submit evidence of ownership, lease, or firm commitment to hire the equipment for the contract period.

7. Alternative Tenders, Alternative Completion Times, Alternative Technical Solutions, Multiple Contracts, and Margin of Preference

Unless expressly permitted in the Tender Data Sheet, the following shall apply:

- Alternative Completion Times: Not Applicable
- Alternative Technical Solutions: Not Applicable
- Alternative Tenders: Not Applicable
- Margin of Preference: Not Applicable
- Multiple Contracts / Lots: A contractor who is already undertaking more than one of the Lots (previously tendered but works still ongoing) will not be awarded if the Lots if more than one lots have not been fully completed.

If this procurement is for a single dam project, all template wording on lots / multiple contracts should be deleted in full.

FINANCIAL EVALUATTION

Stage 1

This will include the following: -

- Confirmation of and considering Bill of Quantities completed and signed.
- Conducting a financial comparison for the firms that passed preliminary and technical evaluation

Stage 2 and Post Qualification

The lowest evaluated tender having passed stage 1 above shall be the winning bid subject to the employer's right to exercise due diligence relating to confirmation of information submitted by the bidder. **The LVSWWDA may conduct post-qualification as it deems necessary** in accordance with ''The Public Procurement & Disposal Act 2015 Section 83 (1), which provides that *''An evaluation committee may, after tender evaluation, but prior to the award of the tender, conduct due diligence and present the report in writing to confirm and verify the qualifications of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract in accordance with this Act''***.** Any bidder who shall be found to have supplied false or misleading information shall be disqualified and the next lowest tender that has passed stage 1 shall be considered

In addition, any contract terminated on grounds of integrity and/or fraud or corruption is ineligible to tender. These bidders shall be disqualified and the next lowest tender that has passed stage 1 shall be considered.

QUALIFICATION FORMS

1. FORM EQU: EQUIPMENT

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

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment ☐ 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 agreements specific to the project	

2. FORM PER-1

Contractor's Representative and Key Personnel Schedule

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

Contractor' Representative and Key Personnel

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

3. FORM PER-2:

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

Name of Tenderer		
Position [#1]: [title of position from Form PER-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): _____

4. TENDERERS QUALIFICATION WITHOUT PRE-QUALIFICATION

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

4.1 FORM ELI -1.1 Tenderer Information Form

Date: _____

ITT No. and title: _____

Tenderer's name
In case of Joint Venture (JV), name of each member:
Tenderer's actual or intended country of registration: *[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 ☐ 1. In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents establishing: • Legal and financial autonomy • Operation under commercial law • Establishing that the Tenderer is not under the supervision of the Procuring Entity 2. Included are the organizational chart and a list of Board of Directors.

4.2 FORM ELI -1.2

Tenderer's JV Information Form

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

Date:_____

ITT No. and title:_____

Tenderer's JV name:
JV member's name:
JV member's country of registration:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ☐ 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 3.8. 2. Included are the organizational chart and a list of Board of Directors.

4.3 FORM CON - 2

Historical Contract Non-Performance, Pending Litigation and Litigation History

Tenderer's Name: _____

Date:_____ J

V Member's Name_____I

TT No. and title: _____

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

Year of dispute	**Amount in dispute (currency)**	**Contract Identification**	**Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)**
		Contract Identification: _____ Name of Procuring Entity: _____ Address of Procuring Entity: _____ Matter in dispute: _____ Party who initiated the dispute: ____ Status of dispute: _____	
		Contract Identification: Name of Procuring Entity: Address of Procuring Entity: Matter in dispute: Party who initiated the dispute: Status of dispute:	
Litigation History in accordance with Section III, Evaluation and Qualification Criteria			
☐ No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4. ☐ Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as indicated below.			
Year of award	**Outcome as percentage of Net**	**Contract Identification**	**Total Contract Amount (currency),**

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

4.4 FORM FIN – 3.1:

Financial Situation and Performance

Tenderer's Name: _____

Date:_____

JV Member's Name_____

ITT No. and title: _____

4.4.1 Financial Data

Type of Financial information in_____ (currency)	**Historic information for previous _____*years,*** _____ **(Amount in currency, currency, exchange rate*, USD equivalent)**				
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

4.4.2 Sources of Finance

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

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

Financial documents

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

1.1.1.1. 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).

1.1.1.2. be independently audited or certified in accordance with local legislation.

1.1.1.3. be complete, including all notes to the financial statements.

1.1.1.4. correspond to accounting periods already completed and audited.

Attached are copies of financial statements[1] for the_____years required above; and complying with the requirements

4.5 FORM FIN – 3.2

Average Annual Construction Turnover

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

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

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

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

4.6 FORM FIN – 3.3:

Financial Resources

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

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

4.7 FORM FIN – 3.4:

Current Contract Commitments / Works in Progress

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

Current Work Commitments

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

4.8 FORM EXP - 4.1

General Construction Experience

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

Page _____ of _____ pages

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

4.9 FORM EXP - 4.2(a)

Specific Construction and Contract Management Experience

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

Similar Contract No.	**Information**			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	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:				

4.10 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	

4.11 FORM EXP - 4.2(b)

Construction Experience in Key Activities

Tenderer's Name: _____

Date: _____

Tenderer's JV Member Name: _____

Sub-contractor's Name[2] (as per ITT 34): _____

ITT No. and title: _____

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

1. Key Activity No One: -

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

2. Activity No. Two

3. ……

[2] If applicable

OTHER FORMS

5. FORM OF TENDER

INSTRUCTIONS TO TENDERERS

i) The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address.

ii) All italicized text is to help Tenderer in preparing this form.

iii) Tenderer must complete and sign CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF DECLARATION OF THE TENDERER attached to this Form of Tender.

iv) The Form of Tender shall include the following Forms duly completed and signed by the Tenderer.

- *Tenderer's Eligibility- Confidential Business Questionnaire*
- *Certificate of Independent Tender Determination*
- *Self-Declaration of the Tenderer*

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

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

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

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

To: Lake Victoria South Water Works Development Agency

Dear Sirs,

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

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

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

2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Project Manager's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Special Conditions of Contract.

3. We agree to adhere by this tender until_____*[Insert date],* and it shall remain binding upon us and may be accepted at any time before that date.

4. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us. We further understand that you are not bound to accept the lowest or any tender you may receive.

5. We, the undersigned, further declare that:
   i) *No reservations:* We have examined and have no reservations to the tender document, including Addenda issued in accordance with ITT 28;
   ii) *Eligibility:* We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3 and 4;
   iii) *Tender-Securing Declaration:* We have not been suspended nor declared ineligible by the Procuring Entity

based on execution of a Tender-Securing or Proposal-Securing Declaration in the Procuring Entity's Country in accordance with ITT 19.8;

iv) *Conformity:* We offer to execute in conformity with the tendering documents and in accordance with the implementation and completion specified in the construction schedule, the following Works: *[insert a brief description of the Works];*

v) *Tender Price:* The total price of our Tender, excluding any discounts offered in item 1 above is: *[Insert one of the options below as appropriate]*

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

Option 2, in case of multiple lots:

a) Total price of each lot [*insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies*]; and

b) Total price of all lots (sum of all lots) [*insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies*];

vii) *Discounts:* The discounts offered and the methodology for their application are:

viii) The discounts offered are: [*Specify in detail each discount offered.*]

ix) The exact method of calculations to determine the net price after application of discounts is shown below: [*Specify in detail the method that shall be used to apply the discounts*];

x) *Tender Validity Period:* Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

xi) *Performance Security:* If our Tender is accepted, we commit to obtain a Performance Security in accordance with the Tendering document;

xii) *One Tender Per Tender:* We are not submitting any other Tender(s) as an individual Tender, and we are not participating in any other Tender(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITT 3.4, other than alternative Tenders submitted in accordance with ITT 13.3;

xiii) *Suspension and Debarment:* We, along with any of our subcontractors, suppliers, Project Manager, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Public Procurement Regulatory Authority or any other entity of the Government of Kenya, or any international organization.

xiv) *State-owned enterprise or institution:* [*select the appropriate option and delete the other*] [*We are not a state-owned enterprise or institution*] / [*We are a state-owned enterprise or institution but meet the requirements of ITT 3.8*];

xv) *Commissions, gratuities, fees:* We have paid, or will pay the following commissions, gratuities, or fees with respect to the tender process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity].*

Name of Recipient	Address	Reason	Amount

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

xvi) Binding Contract: We understand that this Tender, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;

xvii) Not Bound to Accept: We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other Tender that you may receive;

xviii) Fraud and Corruption: We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;

xix) Collusive practices: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.

xx) We undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copy available from_____(*specify website*) during the procurement process and the execution of any resulting contract.

xxi) We, the Tenderer, have completed fully and signed the following Forms as part of our Tender:
   a) Tenderer's Eligibility; Confidential Business Questionnaire – to establish we are not in any conflict to interest.
   b) Certificate of Independent Tender Determination – to declare that we completed the tender without colluding with other tenderers.
   c) Self-Declaration of the Tenderer – to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
   d) Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal

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

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

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

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

Signature of the person named above: [*insert signature of person whose name and capacity are shown above*]

Date signed [*insert date of signing*] day of [*insert month*], [*insert year*]

Date signed_____day of_____, _____

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

A. TENDERER'S ELIGIBILITY- CONFIDENTIAL BUSINESS QUESTIONNAIRE

Instruction to Tenderer

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

(a) **Tenderer's details**

	ITEM	**DESCRIPTION**
1	Name of the Procuring Entity	
2	Reference Number of the Tender	
3	Date and Time of Tender Opening	
4	Name of the Tenderer	
5	Full Address and Contact Details of the Tenderer.	1. Country 2. City 3. Location 4. Building 5. Floor 6. Postal Address 7. Name and email of contact person.
6	Current Trade License Registration Number and Expiring date	
7	Name, country and full address (*postal and physical addresses, email, and telephone number*) of Registering Body/Agency	
8	Description of Nature of Business	
9	Maximum value of business which the Tenderer handles.	
10	State if Tenders Company is listed in stock exchange, give name and full address (*postal and physical addresses, email, and telephone number*) of state which stock exchange	

General and Specific Details

b) Sole Proprietor, provide the following details.

Name in full_____Age_____ Nationality_ _____Country of Origin_____ Citizenship __ _____

c) Partnership, provide the following details.

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

d) Registered Company, provide the following details.

i) Private or public Company_____

ii) State the nominal and issued capital of the Company_____

Nominal Kenya Shillings (Equivalent)..... Issued Kenya Shillings (Equivalent).....

iii) Give details of Directors as follows.

	Names of Director	Nationality	Citizenship	% Shares owned
1				
2				
3				

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

i) Are there any person/persons in Lake Victoria South Water Works Development Agency who has/have an interest or relationship in this firm? Yes/No……

If yes, provide details as follows.

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

ii) Conflict of interest disclosure

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

f) Certification

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

Full Name_____ Title or

Designation_____

_____ _____

(Signature) *(Date)*

B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

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

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

1. I have read and I understand the contents of this Certificate;

2. I understand that the Tender will be disqualified if this Certificate is found not to be true and complete in every respect;

3. I am the authorized representative of the Tenderer with authority to sign this Certificate, and to submit the Tender on behalf of the Tenderer;

4. For the purposes of this Certificate and the Tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
   a) has been requested to submit a Tender in response to this request for tenders;
   b) could potentially submit a tender in response to this request for tenders, based on their qualifications, abilities or experience;

5. The Tenderer discloses that [check one of the following, as applicable:
   a) The Tenderer has arrived at the Tender independently from, and without consultation, communication, agreement or arrangement with, any competitor;
   b) the Tenderer has entered into consultations, communications, agreements or arrangements with one or more competitors regarding this request for tenders, and the Tenderer discloses, in the attached document(s), complete details thereof, including the names of the competitors and the nature of, and reasons for, such consultations, communications, agreements or arrangements;

6. In particular, without limiting the generality of paragraphs (5)(a) or (5)(b) above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
   a) prices;
   b) methods, factors or formulas used to calculate prices;
   c) the intention or decision to submit, or not to submit, a tender; or
   d) the submission of a tender which does not meet the specifications of the request for Tenders; except as specifically disclosed pursuant to paragraph (5)(b) above;

7. In addition, there has been no consultation, communication, agreement or arrangement with any competitor regarding the quality, quantity, specifications or delivery particulars of the works or services to which this request for tenders relates, except as specifically authorized by the procuring authority or as specifically disclosed pursuant to paragraph (5)(b) above;

8. the terms of the Tender have not been, and will not be, knowingly disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening, or of the awarding of the Contract, whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph (5)(b) above.

Name_____ Title__ Date _____

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

C. SELF - DECLARATION FORMS

FORM SD1

SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENTAND ASSET DISPOSALACT 2015.

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

1. THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of ……...…….. *(Insert name of the Company)* who is a Bidder in respect of Tender No. **LVSWWDA/T/18/2025-2026** for Construction of Kegonga Cluster Water Supply Project: Lot 3- Gokeharaka – Getambwega Water Supply for Lake Victoria South Water Works Development Agency and duly authorized and competent to make this statement.

2. THAT the aforesaid Bidder, its directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.

3. THAT what is deponed to herein above is true to the best of my knowledge, information and belief.

……	……...……	.....……
(Title)	(Signature)	(Date)

Bidder Official Stamp

FORM SD2

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

I, ……. of P. O. Box …….....……. being a resident of ……... in the Republic of …… do hereby make a statement as follows: -

1. THAT I am the Chief Executive/Managing Director/Principal Officer/Director of ……..... *(insert name of the Company)* who is a Bidder in respect of Tender No **LVSWWDA/T/35/2025-2026** for Construction of Kegonga Cluster Water Supply Project: Lot 3 - Gokeharaka – Getambwega Water Supply for Lake Victoria South Water Works Development Agency *and* duly authorized and competent to make this statement.

2. THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and/or employees and/or agents of Lake Victoria South Water Works Development Agency which is the procuring entity.

3. 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 Lake Victoria South Water Works Development Agency

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 herein 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 Procurement and Asset Disposal and my responsibilities under the Code.

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

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

Position…….....…….....

Office address……. Telephone…….....……

E-mail…….....….....…

Name of the Firm/Company…….....……

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

Witness

Name ……..... Sign.....

Date……

D. APPENDIX 1- FRAUD AND CORRUPTION

(Appendix 1 shall not be modified)

1. Purpose

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

3. Requirements

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

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

1) a person to whom this Act applies shall not be involved in any corrupt, coercive, obstructive, collusive or fraudulent practice; or conflicts of interest in any procurement or asset disposal proceeding;

2) A person referred to under subsection (1) who contravenes the provisions of that sub-section commits an offence;

3) Without limiting the generality of the subsection (1) and (2), the person shall be: -

   a) disqualified from entering into a contract for a procurement or asset disposal proceeding; or

   b) if a contract has already been entered into with the person, the contract shall be voidable;

4) The voiding of a contract by the procuring entity under subsection (7) does not limit any legal remedy the procuring entity may have;

5) An employee or agent of the procuring entity or a member of the Board or committee of the procuring entity who has a conflict of interest with respect to a procurement: -

   a) shall not take part in the procurement proceedings;

   b) shall not, after a procurement contract has been entered into, take part in any decision relating to the procurement or contract; and

c) shall not be a subcontractor for the bidder to whom was awarded contract, or a member of the group of bidders to whom the contract was awarded, but the subcontractor appointed shall meet all the requirements of this Act.

6) An employee, agent or member described in subsection (1) who refrains from doing anything prohibited under that subsection, but for that subsection, would have been within his or her duties shall disclose the conflict of interest to the procuring entity;

7) If a person contravenes subsection (1) with respect to a conflict of interest described in subsection (5)(a) and the contract is awarded to the person or his relative or to another person in whom one of them had a direct or indirect pecuniary interest, the contract shall be terminated and all costs incurred by the public entity shall be made good by the awarding officer. Etc.

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

a) Defines broadly, for the purposes of the above provisions, the terms set forth below as follows:

   i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

   ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or

recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

v) "obstructive practice" is:

- deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation by Public Procurement Regulatory Authority (PPRA) or any other appropriate authority appointed by Government of Kenya into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
- acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3 e. below.

b) Defines more specifically, in accordance with the above procurement Act provisions set forth for fraudulent and collusive practices as follows:

"fraudulent practice" includes a misrepresentation of fact in order to influence a procurement or disposal process or the exercise of a contract to the detriment of the procuring entity or the tenderer or the contractor, and includes collusive practices amongst tenderers prior to or after tender submission designed to establish tender prices at artificial non-competitive levels and to deprive the procuring entity of the benefits of free and open competition.

c) Rejects a proposal for award[1] of a contract if PPRA determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

d) Pursuant to the Kenya's above stated Acts and Regulations, may sanction or recommend to appropriate authority (ies) for sanctioning and debarment of a firm or individual, as applicable under the Acts and Regulations;

e) Requires that a clause be included in Tender documents and Request for Proposal documents requiring (i) Tenderers (applicants/proposers), Consultants, Contractors, and Suppliers, and their Sub-contractors, Sub-consultants, Service providers, Suppliers, Agents personnel, permit the PPRA or any other appropriate authority appointed by Government of Kenya to inspect[2] 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.

7. FORM OF TENDER SECURITY - DEMAND BANK GUARANTEE

Beneficiary: _____

Request for Tenders No: _____

Date: _____

TENDER GUARANTEE No.: _____

Guarantor: _____

1. We have been informed that _____ (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Tender (hereinafter called "the Tender") for the execution of _____

2. under Request for Tenders No. _____ ("the ITT").

3. Furthermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender guarantee.

4. 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 thereto provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance.

5. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) twenty-eight days after the end of the Tender Validity Period.

6. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

[signature(s)]

FORM OF TENDER SECURITY (TENDER BOND)

[The Surety shall fill in this Tender Bond Form in accordance with the instructions indicated.]

BOND NO. _____

1. BY THIS BOND *[name of tenderer]* as Principal (hereinafter called "the Principal"), and *[name, legal title, and address of surety],* **authorized to transact business in** *[name of country of* Procuring Entity*],* as Surety (hereinafter called "the Surety"), are held and firmly bound unto *[name of* Procuring Entity*]* as Obligee (hereinafter called "the Procuring Entity") in the sum of *[amount of Bond][amount in words]*, for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

2. WHEREAS the Principal has submitted or will submit a written Tender to the Procuring Entity dated the____day of_____, 20 , for the supply of *[name of Contract]* (hereinafter called the "Tender").

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

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

4. The Surety hereby agrees that its obligation will remain in full force and effect up to and including the date 30 days after the date of expiration of the Tender Validity Period set forth in the Principal's Letter of Tender or any extension thereto provided by the Principal.

5. IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executed in their respective names this_____day of_____20_____.

Principal:_____ Surety _____
Corporate Seal (where appropriate) :

_____ _____
(Signature) *(Signature)*

(Printed nameand title) *(Printed name and title)*

TENDER-SECURING DECLARATION FORM

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

Date: ..... *[insert date (as day, month and year) of Tender Submission]*
Tender No.: ..... *[insert number of tendering process]*
To:..... *[insert complete name of Purchaser]* I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Tender-Securing Declaration.

2. I/We accept that I/we will automatically be suspended from being eligible for tendering in any contract with the Purchaser for the period of time of [insert number of months or years] starting on [insert date], if we are in breach of our obligation(s) under the bid conditions, because we – (a) have withdrawn our tender during the period of tender validity specified by us in the Tendering Data Sheet; or (b) having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the instructions to tenders.

3. I/We understand that this Tender Securing Declaration shall expire if we are not the successful Tenderer(s), upon the earlier of:
   a) our receipt of a copy of your notification of the name of the successful Tenderer; or
   b) thirty days after the expiration of our Tender.

4. I/We understand that if I am/we are/in a Joint Venture, the Tender Securing Declaration must be in the name of the Joint Venture that submits the bid, and the Joint Venture has not been legally constituted at the time of bidding, the Tender Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed:……..……..….. Capacity / title (director or partner or sole proprietor, etc.) …….…….....……. Name: …….. Duly authorized to sign the bid for and on behalf of: *[insert complete name of Tenderer]*

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

Appendix to Tender

Schedule of Currency requirements

Summary of currencies of the Tender for Construction of Kegonga Cluster Water Supply Project: Lot 3 - Gokeharaka – Getambwega Water Supply

Name of Currency	Amount Payable
Local Currency:	Accepted Contract Price
Foreign Currency No. 1	
Foreign Currency No. 2	
Foreign Currency No. 3	
Provisional Sum expressed in local currency	

PART II - WORK REQUIREMENTS

SECTION V – DRAWINGS
Drawings provided separately

SECTION VI - SPECIFICATIONS

The Specifications to be used for the Works are the General and Technical Specifications given in Volume II of the Bidding Documents.

SECTION VII- BILLS OF QUANTITIES

Preambles

1. The method of measurement of completed work for payment shall be in accordance with Civil Engineering Standard Methods of Measurement.

2. The Site for Construction of the Project is in Gokeharaka - Getambwega Ward in Kuria East Constituency in Migori County.

   The Contractor shall visit the site and acquaint itself with its nature and position, the nature of the ground, substrata and other local conditions, positions of existing power, water and other services, access roads or any other limitations that might affect his cost or progress. No claim for extras shall be considered on account of lack of knowledge in this respect.

3. The Contractor shall obtain the Project Manager's approval on the siting of all temporary buildings, spoil heaps, temporary access path, and storage of materials. The Contractor shall also obtain the Project Manager approval and direction regarding the use of any materials found on the Site.

4. The drawings used in the preparation of these Bills of Quantities can be inspected at the offices of the Procuring Entity or Procuring Entity's Representative during normal working hours. Two sets of the Working Drawings shall be provided to the contractor but additional copies shall be provided at a cost to be determined by the Engineer.

5. The Contractor shall allow for the payment of all bank charges in connection with the procurement of Bank Guarantees and stamp charges in connection with this contract Agreement.

6. The Contractor shall carry out the various sections of the Works in such an order as the Project Manager May direct. The Procuring Entity reserves the right to occupy the Works by sections on completion provided that such occupation is considered to be both practical and reasonable and will not interfere with the Works. The Contractor shall allow any costs associated with such occupation.

7. The main Contractor will be fully responsible for paying his Sub-Contractor but the Procuring Entity reserves the right in very exceptional circumstances to make such payments direct in the interests of the project where the completion thereof might be jeopardized by any dispute or vicariousness between the Contractor and the Sub- Contractor involve.

8. The Contractor shall complete and deliver the Works in the period inserted in the Form of Tender as his time for completion of the Works from the date for Possession, to be agreed with the Engineer. The Contract Period is presumed to have been calculated making due allowance for seasonal inclement weather conditions. No claim for extension of time due to the normal inclement weather for this area shall be entertained.

9. The Contractor shall, upon receiving instructions to proceed with the Works, draw up a Programme and Progress Chart setting out the order in which the Works are to be carried out, with the appropriate dates thereof. This Chart shall be agreed with the Project Manager and no deviation from the order set out in it will be permitted without the written consent of the Engineer. The Contractor will be responsible for arranging the above Programme with all his sub-Contractors and Specialties. The Contractor shall allow in his rates for carrying out this exercise, and for updating it as required.

10. The Contractor shall arrange for photographs of the Site to be taken by a professional photographer approved by the Engineer. The Photographs shall provide a record of the Site and adjacent are as prior to the commencement of the Works and shall cover such portion of the works in progress and completion as the Project Manager shall direct. All prints shall be full plate size, unmounted, and marked on the reverse side with the date of exposure, identification reference and brief description. The copyright of all photographs shall be vested in the Procuring Entity. The negatives and four prints from each negative shall be delivered to the Project Manager within two weeks of exposure.

11. Figured dimensions are to be followed in preference to dimensions scaled from the Drawings, but whenever possible dimensions are to be taken on the Site or from the buildings. Before any work is commenced by Sub- Contractors or Specialist Firms, dimensions must be checked on the site comparable dimensions shown on the drawings. The Contractor shall be responsible for the accuracy of such dimensions.

12. Prior to commencement of any work the Contractor is to ascertain from the relevant Authorities the exact position, depth and level of all existing electric cables, waterpipes or other services in the area and he shall make whatever provisions may be required by the Authorities concerned for the support and protection of such services. Any damage or disturbance caused to any services shall be reported immediately to the Architect and the relevant Authority and shall be made good to their satisfaction at the Contractor's expense. Where appropriate the Contractor shall open up the ground in advance of the main work by hand digging, if necessary, to locate precisely the position and details of the services which are likely to affect his operations.

13. The Contractor shall include in his prices for the transport of materials, workmen, etc./, to and from the site of the proposed works, at such hours and by such route as are permitted by the Authorities.

14. The Contractor will be required to make good, at his own expense and damage he may cause to the present road surface and pavements within or beyond the boundary of the Site, during the period of the works. All existing paths, storm water channels, etc., that may be destroyed or damaged during the progress of the Works shall be reinstated by the Contractor to the satisfaction of the Engineer.

15. The Contractor is to allow for complying with all instructions and regulations of the Police Authorities.

16. All water shall be fresh, clean and pure, free from earthly, vegetable or organic matter, acid or alkaline substance in solution. The Contractor shall provide at his own risk and cost all water for use in connection with the Works, (including works of sub–contractors). If need be, he shall make arrangements with the Local Water Authority for the installation of a separate meter for all water used by him throughout the Contract and pay all cost and fees in connection therewith. He shall also provide temporary storage tanks and tubing, etc., as may be necessary, and clear away at completion.

17. The Contractor shall provide all artificial lighting and power for his own use on the Works, (including Sub – Contractor's) including all temporary connections, wiring, fittings, etc., and clearing away on completion. The Contractor shall pay all fees and obtain all permits in connection there with.

18. 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 time to the superintendence of the works. (Including works of sub – contractors). Such Agent or Representative shall receive on behalf of the Contractor directions and instruction from the Engineer, and such directions and instructions shall be deemed to be given to the contractor in accordance with the Conditions of Contract. The Agent shall not be replaced without the specific approval of the Engineer.

19. The Contractor shall ensure that the safety of his work people and all authorized visitors to the site are protected at all times. In particular, there shall be the proper provision of guard–rails to scaffolding, protection against falling materials, tools on site, dust, nail and other sharp objects. The site shall be kept tidy and clear of dangerous rubbish. The Project Manager shall be empowered to suspend work on site should it be considered this condition is not being observed and no claim arising from such suspension will be allowed.

20. The areas available to the Contractor for work yards, offices and other facilities shall be directed by the Project Manager and any existing features to remain shall be protected from damage throughout the Contract Period and handed back in good condition when they are vacated at the end of the Contract. If additional areas are required, the contractor shall source then at own cost.

21. The Contractor shall give the Project Manager reasonable notice of the intention to set out or take levels for any part of the Works so that arrangements may be made for checking the work. The accuracy of setting out and leveling shall be within the tolerances specified in the Specifications or on the Drawings. The checking of setting out or leveling by the Project Manager shall not relieve the Contractor of his duties or responsibilities under the Contract.

22. The Contractor must take steps necessary to safe guard and shall beheld fully responsible for any damage caused to existing and adjacent property, including buildings that are not a subject of demolition. He shall make good at his own cost damage to persons and property caused there on, and he shall indemnify the Procuring Entity against any loss or claim that may arise.

23. The Contractor shall take such steps and exercise such care and diligence as to minimize nuisance arising from dust, noise or any other cause to the occupiers of the existing and adjacent property. He must provide such temporary and special screens and tarpaulins or gummy bags, hoarding, barriers, warning signs etc. as he considers necessary and sufficient for the protection of the existing and adjacent property and or prevention of nuisance etc. as directed by Engineer.

24. The Contractors attention is drawn to the standards levy order which was amended on 15thOctober 1998.Legal notice No.154 of 1998. The Contractor is required to pay a monthly level of 0.2% of his factory price of construction works with effect from January 1999. Tenderer shall allow for this in the build-up of his rates.

25. The Contractor shall provide temporary sheds, offices washrooms, sanitary, accommodation and other temporary buildings for the use of the contractor and sub-contractors, including lighting furniture equipment and attendance.

26. Contractor shall provide/build labor camp sat areas to be agreed with the Engineer. Labor camps shall be complete with sanitary accommodation and fencing gates.

27. The Contractor must provide the necessary toilet facilities to the requirement and satisfaction of the Health Authorities and maintain the same in a thoroughly clean and sanitary condition and pay all conservancy fees during the period of the Works and remove when no longer required.

28. The Contractor shall provide at his own risk and cost all watching and lighting as necessary to safeguard the Works, Plant and materials against damage and theft.

29. The Contractor shall provide all necessary hoists, tackle, plant, equipment, vehicles, tools and appliances of every description for the due and satisfactory completion of the Works and shall remove the same on completion. All such plant, tools and equipment shall comply with all regulations in force throughout the period of the Contract and shall be altered or adopted during the Contract period as may be necessary to comply with any amendments in or additions to such regulations.

30. Provide, erect and maintain all necessary scaffolding, sufficiently strong and efficient for the due performance of the works, including Sub-Contract Works, provide special scaffolding as required by Sub-Contractors, alter and adopt all scaffolding as and when required during the Works, and remove on completion. No scaffolding is measured here in after and the Contractor must allow in his rates for this.

31. The Contractor shall take all necessary precautions such as temporary fencing, hoarding fans, planked footways, guard–rails gantries screen, etc., for the safe custody of the Works, materials and public protection and adjacent properties.

32. Cover up all and protect from damage, including damage from inclement weather, all finished work and unfixed materials, including that of Sub-Contractors, etc., to the satisfaction of the Project Manager until the completion of the Contract.

33. The Contractor shall, after completion of the works, at his own expense, remove and clear away all surplus excavated demolition materials, plant, rubbish and unused materials and shall leave the whole of the Site and Works in a clean and tidy state to the satisfaction of the Engineer, sheds, camps, etc. Particular care shall be taken to leave clean all floors and windows and tore move all paint and cement all rubbish and dirt as it accumulates. The Contractor is to find his own dump and shall pay all charges in connection there with.

34. Concrete test cubes shall be prepared in a set of three, as described including testing fees, labor and materials, making molds, transport, handling, etc. Allow in your rates for making at least four cubes on

each occasion, from different batches; the concrete being taken from the point of deposit.

35. The Contractors Hall furnish at the earliest possible opportunity before work commences, and at his own cost, any samples of materials and workmanship that may be called for by the Project Manager for the approval or rejection, and any further samples in the case of rejection, until such samples are approved by the Engineer. Such samples, when approved, shall be the minimum standard for the work to which they apply. The procedure for submitting samples of materials for testing or approval and the method of marking for identification shall be as laid down by the Engineer. The Contractor shall allow in his Tender for such samples and tests, including those in connection with his Sub-Contractors work.

36. The Contractors attention is drawn to the Finance Bill of the year 2000/2001 on withholding tax on contractual payment section 35(7) (i)(ii) which became effective on 1st August 2000. A 3% withholding tax will be applicable to all interim payments for work done in respect of building or civil works. The contractor shall allow for any costs arising resulting there from in the build-up of rates.

37. Blasting will only be allowed with the express permission of the Architect 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.

38. The National Construction Authority is a state corporation established under the national construction authority Act No.14 of 2011. The broad Mandate of the Authority is to oversee the construction industry and coordinate its development. The National Construction Authority Regulations 2014 with an effective date of 6th June 2014, regulation 25, - Allow 0.5% of the tender sum/contract sum for construction levy.

39. The Contractor attention is drawn to Finance Bill of 1993 where VAT was introduced in all contracts for construction services. The tenderer is also drawn to VAT Act Cap 476 clause 19(9). The tenderer must allow for VAT 1.19 as instructed elsewhere.

40. The contractor shall allow and pay for all insurance to cover risks and indemnities required in the Conditions of contract and also specified in the Special Conditions of Contract.

BILL OF QUANTITIES

SUMMARY SHEET

S/No.	Description	Amount (KSh.)
1	Bill No.1 Preliminaries and General Items	
2	Bill No. 2 Rehabilitation of Gokeharaka Dam Works	
3	Bill No. 3 Raw Water Main to Gokeharaka T/Works	
4	Bill No. 4 Treated Water Pump House	
5	Bill No. 5 Inlet Works	
6	Bill No. 6 Compact Filtration Units	
7	Bill No. 7 Clear Water Tank (200m^3)	
8	Bill No. 8 Backwash Tank	
9	Bill No. 9 Treated Water Rising Mains	
10	Bill No. 10 Storage Tanks	
11	Bill No. 11 Distribution Pipelines and LMC	
12	Bill No. 12 Water Kiosks	
13	Bill No. 13 Sanitation Facilities	
14	Bill No. 14 Drilling and Equipping of Boreholes	
15	Bill No. 15 Electro-Mechanical Equipment	
16	Bill No. 16 Site and Ancillary Works at Treatment Plant	
17	Bill No. 17 Day Works	
	Sub-Total 1 (A)	
	Add 5% for Physical Contingencies (B)	
	Sub-Total 2	
	Add 0.03% for Public Procurement Capacity Building Levy	
	Sub-Total 3	
	Add 16% VAT to Sub-Total 3	
	Grand Total Carried to Bid	

Item No.	Description	Unit	Qty	Rate (KShs)	Amount (KShs)
1.01	Allow for provision of Insurance of Works in accordance with Clause 18 of the General Conditions of Contract.	Sum	1		
1.02	Allow for provision of Third Party Insurance (including Employer's Property) all in accordance with Clause 18 of the General Conditions of Contract.	Sum	1		
1.03	Allow for provision of Insurance against Accident to Workmen (WIBA) in accordance with Clause 18 of the General Conditions of Contract.	Sum	1		
1.04	Allow for Setting out the Works as specified or directed by the Engineer. The rate shall include provision of high precision handheld GPS complete with pole, brackets and all accessories for exclusive use by the Engineer.	Sum	1		
1.05	Allow for provision of Construction drawings and As-Built Drawings (4copies of A0 each drawing	Sum	1		
1.06	Allow for provision of Operation and Maintenance Manuals.	Sum	1		
1.07.1	Attendance upon Engineer's staff by Inspector of Works.	Month	18		
1.07.2	Allow for Prime Cost Sum (PC Sum) for Purchase of 1No Double Cabin Pick Up Vehicle for Supervision and finally Transfer to the Employer. The Vehicle shall be brand new and roadworthy at the delivery.	PC Sum	1	10,000,000	10,000,000
1.07.3	Attendance upon Engineer's staff by 1Nr Chainman, 1Nr Driver, 1Nr Office Assistant.	Month	18		
1.08	Allow for Project supervision and management by Project Manager's staff.	Month	18		
1.09	Supply, deliver, assemble and place office desks for Resident Engineer's office complete as specified.	Nr			
1.10	Supply, deliver and place office chairs for Resident Engineer's office complete as specified.	Nr			
1.11	Supply, deliver and place filing cabinets for Resident Engineer's office complete as specified.	Nr			
1.12	Supply, deliver and place meeting table / office table for Resident Engineer's office complete as specified.	Nr			
1.13	Supply, deliver, install and commission printer / scanner / copier for Resident Engineer's office complete with accessories.	Nr			
1.14	Supply, deliver and place shelves / bookcases for Resident Engineer's office complete as specified.	Nr			
1.15	Maintain all furniture and equipment supplied for Resident Engineer's office for the duration of the Contract and hand over in good working condition at completion.	Item	1		
1.16	Provide on hire RTK survey equipment for the sole use of the Engineer, including base station, rover, controller, software licence, batteries, chargers and all accessories.	Month	18		
1.17	Maintain, calibrate and replace defective RTK survey equipment supplied under Item 1.16 for the duration of use.	Month	18		
1.18	Allow for inspection and witness testing of pipes, fittings and equipment at manufacturer's premises by the Employer, Engineer and their representatives.	Sum	1		
1.19	Carry out pre-commissioning inspection, checks and functional verification of all civil, mechanical, electrical and instrumentation installations.	Item	1		
1.20	Carry out wet testing and trial operation of pumps, valves, treatment units and associated systems, including all labour, tools and temporary arrangements.	Day			
1.21	Carry out commissioning and performance testing of the treatment works and associated water conveyance systems in accordance with the Specifications.	Item	1		
1.22	Provide consumables, lubricants, chemicals, minor accessories and operator support necessary for commissioning and test running.	Item	1		
1.23	Train Employer's operations staff during commissioning and test running, including preparation of commissioning records and reports.	Day	30		
1.24	Carry out concrete cube compression tests complete, including sampling, curing, transport and reporting.	Nr	25		

Item No.	Description	Unit	Qty	Rate (KShs)	Amount (KShs)
1.25	Carry out soil compaction / field density tests complete, including reporting.	Nr	5		
1.26	Carry out pipe pressure tests, leakage tests and disinfection tests for all the pipeline laid under the contract as specified in the Technical Specifications	Sum	1		
1.27	Carry out weld testing / NDT where specified or instructed under the Contract.	Sum	1		
1.28	Carry out water quality sampling and laboratory testing as specified for physiochemical and biological tests	Nr	5		
1.29	Allow Prime Cost Sum upon attendance byKPLC for alteration / connection of electrical supply to the Treatment Works and Booster Station, including applications, liaison, provision of access, receiving materials, coordinated installation and handover.	PC Sum	1	5,000,000	5,000,000
1.30	Allow for establishment of project signboards, including removal after completion of project as per the Drawings	Nr	2		
1.31	Contractor's camp and storage yard: Allow for establishment of Contractor's camp(s), offices, storage yard and other facilities including mobilization, demobilization and removal on completion. Include all equipment, temporary measures, machines, tools, materials, workers' facilities, water and electricity supply, etc., all as specified for execution of the Works for the entire Contract Period.	Sum	1		
1.32	Attendance upon relevant Authorities and utility agencies for permits, inspections, approvals and coordination of service crossings and protection works.	Item	1		
1.33	Prepare and submit applications, drawings, method statements and traffic / crossing proposals required for statutory approvals.	Item	1		
1.34	Execute protection works to existing utilities at road crossings and service crossings as detailed on the Drawings or instructed by the Engineer.	Nr			
1.35	Temporary support, protection and reinstatement of existing water, telecom or similar services affected by the Works.	Nr			
1.36	Attendance at monthly site meetings, including preparation and submission of progress reports, updated work programme, minutes follow-up, and all associated contractor representation for the duration of the Contract.	Month	18		

BILL NO. 2 REHABILITATION OF GOKEHARAKA DAM WORKS					
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kshs)**	**Amount (Kshs)**
	NOTES				
	The dam works will entail rehabilitation works. The Contractor's rates shall cover costs for safely draining the existing dam, reinstatements, keeping excavations free from water during working. Contractor should thoroughly familiarise themselves with existing ground conditions				
	General site clearance				
1.01	Clear site of all vegetation from the reservoir area and cart away as directed by the Engineer	M^2	40,000		
1.02	Cut trees and dispose, tree girth 0.5-1m	Nr	50		
	Excavation				
	Excavation rates includes for preparation of the excavated surfaces. maintaining and supporting sides and keeping free from water and falling materials and haul to Contractor's own tipping point. Contractor to liaise with local authorities on disposal of the excavated materials				
1.03	Excavation depth n.e 1.5m	M^3	55,000		
1.04	Depth range 1.5-3.5m	M^3	45,000		
	Embankment Protection				
1.05	Place approved soil and compact in 100mm layers to achieve 95% MDD. Rate to include trimming of slopes to required grades	M^3	15,000		
	Inlet & Spillway Works	-	-	-	
1.06	Excavate common soil from spillway and stockpile for reuse or dispose as directed by the Engineer . Rates to include trimming of the spillway bank slopes and spillway channel slopes to required grades.	M^3	2,250		
	Hardcore				
1.07	Provide and place hardcore compacted in 150mm layers	M^3	2450		
	Vibrated reinforced concrete ; C20/20				
1.08	250mm thick RC slab for the spillway channel	M^3	60		
	Steel Reinforcement				
1.09	Fabric mesh reinforcement BRC A142 in ground slab	M^2	250		
1.10	Assorted steel reinforcement, rate to include for bending and fixing	Kg	550		
	Silt trap	-	-	-	
	Excavation rates include for preparation of the excavated surfaces. maintaining and supporting sides and keeping free from water and falling materials and haul to tip within 300meters				

1.11	Excavation depth n.e 1800mm	M^3	4,000		
	Grassing of dam embankment slopes	-	-	-	
1.12	Provide and plant approved grass in areas prepared under the item above and maintain until it takes roots	m^2	4,500		-
	DRAW OFF SYSTEM				
1.13	900*900mm water tight fabricated steel manhole cover complete with frame and lock system .The cover and frame to be coated with bitumen to protect against rust.	Nr	1		
1.14	Concrete slab, Concrete C20/20 at bottom of intake chamber as per drawing no 1	M^3	1.5		
1.15	Intake chamber walling 1000mm*1000mm using natural stones 225mm*225mm leaving opening for GI pipes 300mm with 90 degree bend on concrete slab	M^2	4		
1.16	Cast in situ concrete collars 400mm*400mm*300mm to off take pipe for anchoring.	Nr	2		
	Pipes and fittings.				
1.17	PN10, DN300mm dia. GI Equal Tee.	Nr	1		
1.18	PN10, DN300mm GI. End cap	Nr	1		
1.19	DN300, PN10 epoxy coated steel pipe in trenches from intake to raw water sump, depth n.e 2.5m	M	60		
1.20	PN10, DN 300, 2.9m long GI Pipe threaded both sides and perforated 1.5m section	Nr	1		
1.21	PN10, DN 300 Elbow.2	Nr	2		
1.22	PN10, DN 300 dia. Gate valve	Nr	1		
1.24	PN10, DN300x200 GI Tee	Nr	1		
	Valve Chambers				
1.25	Provide materials and construct masonry chambers complete with 125mm thick RC concrete cover with internal dimensions of length 1000mm, width 1000 and depth n.e 1500mm	Nr	2		
	Access Culverts				
1.26	Provide materials and construct 2x1200mm diameter access culverts complete with wingwalls	M	18		
TOTAL BILL NO. 2 CARRIED FORWARD TO GRAND SUMMARY					-

BILL NO. 3 - RAW WATER MAIN TO GOKEHARAKA T/WORKS					
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kshs)**	**Amount (Kshs)**
	CLASS A - GENERAL ITEMS				
	Testing of the Works				
3.01	Carrying out tests on pipeline as specified . Include provision of all equipment and materials	m	30		
	CLASS D - DEMOLITION AND SITE CLEARANCE				
3.02	General site clearance through undeveloped land over the wayleave (n.e 4m wide), rate to include for any additional clearance required	m^2	50		
	CLASS I: PIPEWORK - PIPES				
	The rates entered against the items in this section shall include for stripping top soil, laying aside or hauling ,and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting, spreading surplus soil evenly over and alongside pipe trench compacting, supply lay and joint pipes to correct line and level. Depths are stated from to correct line and level. Depths are stated from ground level to invert level.				
	Ferrous Pipes				
3.04	DN300, PN10 epoxy coated steel pipe in trenches from intake to raw water sump, depth n.e 2.5m	m	30		
	CLASS J: PIPEWORK - FITTINGS AND VALVES				
	Rate to include for Supply and Installation fittings,; PN 10				
3.08	DN300 All Flanged 90 degree bend	nr	2		
3.09	300x80 All Flanged Tee	nr	1		
	Couplings				
3.1	300mm VJ Stepped Coupling	nr	1		
PAGE TOTAL CARRIED OVER TO NEXT PAGE					
SUB-TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE					
3.11	300mm Flexible Coupling	nr	1		
	DN300, Straight Specials; Steel				
3.15	All Flanged Spigot 1200 mm long , nominal bore 200mm	nr	2		
3.16	Straight Spigot 1000 mm long , nominal bore 200mm	nr	2		

3.17	Straight Spigot 1200 mm long , nominal bore 200mm	nr	3		
	Valves and Meters; PN10				
3.19	Double flanged Gate Valves; nominal bore 300mm	nr	1		
3.21	Double Flanged Bulk Meter; nominal bore 300 mm	nr	1		
	CLASS K: PIPEWORK - MANHOLES AND				
	PIPEWORK ANCILLARIES				
	Excavation quantities are given net. The rates entered are to include for manhole concrete slabs and covers, step irons or ladder, excavation, working space, trimming the base of the excavation, shuttering where necessary, refiIIing and compacting around the finished manholes, and disposing of surplus spoil local to the trench. Surplus spoil is to be evenly spread.				
	Chambers				
3.23	Washout Gate chamber ; depth 1.5 - 2.0m, plan area n.e $3m^2$	nr	1		
	Marker Posts				
3.24	Marker Posts for Washouts inscribed WO	nr	1		
3.25	Ditto but for Water Main inscribed WM	nr	2		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
3.26	Nominal bore 300mm; volume n.e 0.1 m^3	nr	2		
	Anchor blocks for tapers and Gate valves				
3.27	Nominal bore 300mm; volume n.e 0.1 m^3	nr	1		
	Raw Water Pump House				
3.28	Provide materials and construct a raw water pump house with a plan area of $12m^2$ complete with an epoxy coated floor, painted walls and roofing with 28G, IT5 Roofing Sheets laid at 22.5° on Timber Trusses	Lumpsum	1		
	Wet well chamber				
3.29	Provide materials and construct a wet well concrete chamber with internal dimensions of length 2mxwidth 1.5m, height 4m	Nr	1		
TOTAL BIL NO. 3 CARRIED FORWARD TO GRAND SUMMARY					

BILL NO. 4 - TREATED WATER PUMP HOUSE					
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kshs)**	**Amount (Kshs)**
	DEMOLITION AND SITE CLEARANCE				
1.01	General clearance.	ha	0.01		
	EARTHWORKS				
	Excavation				
1.02	Excavation shall include for strutting, shuttering, stabilising excavated surfaces and keeping excavations free of water. Cost to include excavated surfaces preparation and disposal of excavated material				
	Excavation for foundations				
1.03	Topsoil; maximum depth n.e. 0.25 m	m^3	75		
1.04	Bulk excavation in material other than rock	m^3	140		
1.05	Extra over for rock material	m^3	100		
	Filling				
	Filling to completed structures including compaction as specified				
1.06	Selected excavated material other than topsoil	m^3	70		
1.07	Selected imported material for hardcore	m^3	70		
	IN SITU CONCRETE				
	PROVISION AND PLACING OF CONCRETE				
1.08	Blinding Concrete Grade C15/20	m^3	7		
1.09	Reinforced concrete Grade C25/20 for foundation	m^3	4		
1.1	Reinforced concrete Grade C25/20 for slab	m^3	9		
1.11	Reinforced concrete Grade C25/20 for beam	m^3	2		
1.12	Reinforced concrete Grade C25/20 for column	m^3	2		
1.13	Reinforced concrete Grade C25/20 for pump plinths, generator and fuel tank seats	m^3	3		
	REINFORCEMENT STEEL TO BS 4449				
1.14	Provide, cut, bend and fix high yield steel reinforcement as per the drawings and specifications	ton	21		
1.15	A142 Steel mesh fabric to floor slab	m^2	30		

	FORMWORK				
1.16	F3 vertical plane formwork to foundation	m²	7		
1.17	F3 vertical Plane formwork to slab	m²	6		
1.18	F3 vertical plane formwork to beam	m²	11		
1.19	F3 vertical plane formwork to columns	m²	18		
	JOINTS				
1.2	Joint in plinths and seats, rubber water stop to specifications, width 150-200 mm including sealant filler.	m	20		
	PRECAST CONCRETE UNITS				
1.21	Precast concrete 600 x 600 x 50mm paving slabs around the building including 50mm thick sand/quarry dust bedding	m²	20		
	BRICKWORK, BLOCKWORK, AND MASONRY				
1.22	Approved quality machine cut quarry masonry stone walling; 200 mm thick. Rate including plasterning 25mm internal surfaces and pointing external all exposed surfaces	m²	48		
1.23	Approved quality machine cut quarry masonry stone walling; 150 mm thick including 25mm plastering all surfaces	m²	15		
1.24	Approved hard quarry stones foundation walling below floor slab; 200mm thick	m²	35		
1.25	Approved louvered concrete vent blocks; 200mm thick for generator room	m²	21		
1.26	Damp proof course (DPC) between floor slab and walls; width n.e 300mm	m	28		
	PAINTING				
1.27	Apply one coat alkali resisting primer to rendered and internal wall surfaces	m²	90		
1.28	Apply two coats of plastic emulsion paint on rendered internal walls and surfaces	m²	90		
	WATER PROOFING				
1.29	1000 Gauge diothene or other equal and approved polyethene sheeting as damp proof membrane laid on blinded hardcore with welt laps.	m²	43		
1.30	Cement sand screed floor finish to fall in the pump and generator rooms	m²	40		
	ROOFING				
1.31	Supply and erection of roof trusses, purlins, Pre-painted Gauge 28 IT5 Roofing Sheets laid at 22.5° on Timber Trusses, etc as per the drawings and specification including complete associated roofing works	nr	1		
	MISCELLANEOUS WORK				
1.32	**Drainage to structures above ground**				

1.33	200mm dia. Half round rain water gutters complete with fittings and fixing accessories	m	18		
1.34	150mm dia. PVC rain water downpipes complete with fittings	m	12		
	Windows and doors (including ironmongery and glazing)				
1.35	1.8m wide and 2.5m high double leaf louvred steel door complete with ironmongery	nr	2		
1.36	Double louvred PVC frame window with glass panes and double vermin proof wire gauze as specified (1.5m X 1.5m)	nr	1		
1.37	Provide and install 5m wide clear span overhead electrically operated 5 ton travelling crane with chain block lifting on I section complete with runway beams including all accessories.	nr	1		
	PIPEWORK, FITTINGS AND VALVES - NP16				
	Note: All Pipes, Fittings and Valves to Pressure Rating PN16 unless otherwise specified				
	Supply, and installation; Including Jointing Material, Bolts, Gaskets, Packing, Jointing Glues, etc. as Applicable				
	Treated Water Pumps - Suction Pipework (Approved Lined Ferrous Pipe Fittings)				
1.38	300mm dia. Double flanged 90º bend	Nr	1		
1.39	300mm dia. Flanged spigot pipe, 2800 mm long (cut to suit on site)	Nr	1		
1.4	300mm dia. Flange adaptor	Nr	2		
1.41	300mm dia. Double flanged gate valve	Nr	2		
1.42	300mm x 200mm dia. Double flanged Eccentric Taper	Nr	2		
1.43	300mm dia. Double flanged pipe, 1200mm longwith puddle flange at 447mm from one end	Nr	2		
1.44	300mm dia. Double flanged 45º bend	Nr	2		
1.45	300mm dia. Flanged strainer	Nr	2		
	Treated Water Pumps - Delivery Pipework (Approved Lined Ferrous Pipe Fittings)				
1.46	65mm x 200mm dia. Double flanged reducer, 200mm long with 25mm female threaded tapping for pressure gauge	Nr	2		

1.47	25mm dia. Pressure gauge, pressure class upto 25 Bars, Hunter or approved equivalent	Nr	2		
1.49	200mm dia. Double flanged gate valve	Nr	2		
1.5	200mm dia. Dismantling joint	Nr	2		
1.51	200mm dia. Double flanged 90^0 bend	Nr	2		
1.52	200mm dia. Double flanged pipe, 1412mm long	Nr	2		
1.53	300mm x 300mm x 200mm dia. Special all flanged radial tee	Nr	2		
1.54	300mm dia. Double flanged pipe, 1225mm long with blanked flange at one end and bolted to the wall	Nr	1		
1.55	300mm dia. Double flanged pipe, 751mm long	Nr	1		
1.56	200mm dia. Double flanged free acting check valve (Non return valve)	Nr	2		
1.57	200mm dia. Double flanged pipe, 1250mm long with puddle flange at 625mm from one end	Nr	1		
1.58	200mm dia. Flanged spigot pipe, 3500mm long (cut to sit on site) (Mark 14)	Nr	1		
1.59	200mm dia. Coupling	Nr	2		
1.60	200mm dia. Flanged spigot pipe, 1200mm long	Nr	1		
1.61	200mm dia. Double flanged 45^o bend	Nr	2		
1.62	200mm dia. Plain ended pipe, 5500mm long (cut to suit on site)	Nr	1		
1.63	200mm dia. Flanged spigot pipe, 1200mm long with puddle flange at 425mm from flanged end	Nr	2		
1.64	200mm dia. All Flanged water meter	Nr	1		
1.65	200mm dia. Flanged spigot pipe, 1200mm long with puddle flange at 385mm from flanged end	Nr	1		
1.66	200mm dia. Flange Adaptor	Nr	1		

1.67	200mm dia. Double flanged pressure relief valve, pressure rating upto 25bars	Nr	1		
1.69	200mm dia. Flanged spigot pipe, 1200mm long with puddle flange at 415mm from spigot end	Nr	1		
TOTAL BILL NO. 4 CARRIED FORWARD TO SUMMARY PAGE					-

BILL NO. 5 INLET WORKS					
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kes)**	**Amount (Kes)**
	STILLING WELL				
	CLASS E: EARTHWORKS				
	The rates shall include for all strutting, shuttering, stabilizing the excavation faces and keeping the excavation free of water by pumping, bailing or other means				
	Excavate for foundations, part backfill after construction and remainder, cart away to tips or use as fill on site, all as directed by the Engineer				
5.01	Topsoil, depth n.e. 0.5m	m^3	14		
5.02	Material other than topsoil or weathered rock depth 0.5 - 1.0m	m^3	14		
5.03	Material other than topsoil or weathered rock depth depth 1.0 - 2.0 m	m^3	15		
5.04	Excavation on rock depth 2.0 - 3.0m	m^3	8		
	Filling				
	To structures				
5.05	Selected approved excavated material from site and use as fill and compact in 200mm layers as specified on site as and when directed by the Engineer. Rate to include compaction tests as per specifications	m^3	52		

5.06	Provide approved hardcore material and compact in layers of 200mm, blinded with final material 25mm thick	m^3	3		
	CLASS F: IN SITU CONCRETE				
	-				
	Provision of Concrete				
5.08	Designed mix; Grade C30; Cement to BS12 and 20mm maximum aggregate size	m^3	14		
5.09	Prescribed mix; Grade C15; 20 mm aggregate; Cement to BS12	m^3	2		
5.10	**Placing of Concrete**				
	-				
	Mass Concrete				
	-				
5.11	Plain concrete Class 15/20 in 75mm blinding layer under base slab	m^3	2		
	Place, compact and cure concrete in the following elements of the structure as per detail on Drawings				
	Vibrated, reinforced concrete class 30 for:-				
5.12	Base slab	m^3	5		
5.13	Walls - 200mm thick walls	m^3	6		
5.14	Top slab	m^3	3		
	CLASS G: CONCRETE ANCILLARIES				
	Formwork				
	Provide and fix shuttering including propping, strutting and striking all as specified				
	(i) Vertical Formwork - Class Rough Finish				
5.15	Sides of 300mm Base Slabs	m^2	4		
5.16	Sides of 200mm Top slab	m^2	3		
5.17	Outer faces of Walls - width n.e. 2m	m^2	22		
	(ii) Vertical Formwork - Class smooth surface Finish				

5.18	Inner Sides of Walls	m	27		
	Other Formwork				
5.19	Boxing out 700x500 mm holes in concrete walls of stilling well for weir plate	Nr	1		
5.20	Ditto - but 200 mm x 200 mm holes	Nr	1		
5.21	Ditto - but 300 mm x 300 mm holes	Nr	3		
5.22	Ditto - but 925 mm x 950 mm holes	Nr	2		
	Reinforcement				
	-				
	Deformed High Yield steel Deformed bars to BS 4449				
	-				
	Provide and fix high tensile steel reinforcement to BS 4449 including cutting, bending, propping, with spacers and tying as specified				
5.23	Reinforcement, all diameters	kg	2,800		
	Construction Joints				
	-				
	Provide and install the following waterstops in construction joints including all surface treatment, formwork, forming of rebate 20mm x 20mm and sealing of rebate with polysulphide sealant all as per Drawings and Specifications.				
5.24	Provide and fix 200mm wide expandite super-cast water foil PVC or similar approved waterstop in construction joints in walls.	m	26		
	CLASS M: STRUCTURAL METALWORK				
	Metal Work				
	-				
	All steel work to be completely cleaned by acid dipping prior to galvanising				
5.25	Provide and fix GS pipe step well	Nr	12		
	CLASS W: WATERPROOFING				
	Leak Proof Testing				
	-				
5.26	Allow lumpsum for watertightness testing of Stilling Well as specified	sum	1		
	Measuring Gauge, Weir & Flow Meter				
	-				

5.27	Supply & fix Measuring Gauge as per details on Drawing	Nr	1		
5.28	Provide and install remote indicator located in the chemical building of instantaneous flow and total flows from the treated water flow meter. Include for control cables, ducting, trenching for installation of remote indicators. Maximum length 45m from meter to remote location of indicator.	Nr	1		
5.29	Design, Supply, install and calibirate weir plate having a depth of 350 mm and 45 deg angle. The claibiration shall be done togheter with staff gauge to be supplied under Item 5.1.9 above	Nr	1		
	PIPEWORK: PIPES, FITTINGS AND VALVES				
	-				
	Supply, Transport to Site and Store in Secure Place Including Jointing Material, Bolts, Gaskets, Packing, Jointing Glue, etc., As Applicable. The rate to include the excavation and filling				
	All steel pipes to have PN 16 Epoxy coated/Cement lined steel pipe socket and spigot joint to BS EN10244/BS3601, Pushfit socket and spigot with rubber casket joints				
	-				
	STILLING WELL AND DOSING CHANNEL				
	Raw Water Pipework				
	-				
	CLASS I: PIPE WORK - PIPES				
5.30	DN 300 flanged steel pipe between valve chamber and intake channel L=1950mm long with puddle flange	nr	2		
5.31	DN300 puddle flange pipe length L=700 mm	nr	3		
5.32	DN300 puddle flange pipe length L=700 mm for drain	nr	3		
5.33	PN10, DN300 flange pipe mm for drain	m	20		
	CLASS J: FITTINGS AND VALVES, Steel				
	Flanged Bends , Bell mouth Ferrous Steel Pipe				
5.34	DN 350 bell mouth , 200mm long	nr	1		
	Valves				

5.35	DN 300 Gate valve flanged jointed with handwheel	nr	1		
5.36	DN 150 Gate valve flanged jointed with handwheel	nr	2		
	Bends				
5.37	DN 150 double flanged 90deg bend	nr	2		
TOTAL BILL 5 CARRIED FORWARD TO GRAND SUMMARY					**-**

BILL NO 6.1.: 25M^3/HR COMPOSITE FILTRATION UNIT 1					
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**
				KES.	**KES.**
	EXCAVATION				
	The rates should include strutting, shuttering, stabilising the excavation and keeping the excavation free from water by pumping, bailing or other means. Excavate for foundation part backfill after construction and remainder cart away to tips or use as fill on site, all as directed.				
3.2.1	Maximum depth less than 1.0m	m^3	91		
3.2.2	Ditto- but depth 1.0 to 2.0m	m^3	91		
3.2.3	Extra over excavation in rock Class 'A'	m^3	12		
3.2.4	Ditto - in rock Class 'B'	m^3	19		
3.2.5	Ditto - in rock Class 'C'	m^3	10		
	IN SITU CONCRETE				
	Provide, mix and place concrete as directed.				
3.2.6	Concrete Class 15/20 in 75mm blinding layer under base slab and footings allowing for sloping sides.	m^2	70		
3.2.7	Concrete Class 15/20 in 400mm thick pipe surround	m^3	6		
3.2.8	Cement mortar mix 1:4 for 50mm screed to fall on base slab (average 25mm thick)	m^2	66		
3.2.9	Mass concrete thickness 300mm Class 15/20 for surround to 'Hudo' nozzles and wash water channel.	m^3	20		
3.2.10	Vibrated reinforced concrete Class 25/20 to floor slab 150mm thick	m^3	10		
3.2.11	-Ditto - but for suspended beams	m^3	2		
3.2.12	-Ditto - but for ring beams	m^3	2		
	STEEL REINFORCEMENT				
	Provide and fix steel reinforcements including cutting, bending, propping with spacers and tying as specified.				
3.2.13	16mm dia. high tensile and under	Ton	6		

	FORMWORK				
	Provide and fix shuttering including propping, strutting and striking all as specified, allowing for curvature where necessary.				
3.2.14	Sides of base slab	m^2	10		
3.2.15	Sides for thickening base slab for pipes	m^2	9		
3.2.16	Sides for beams (vertical and horizontal)	m^2	10		
3.2.17	Sides of ring beams	m^2	15		
	SEALER				
3.2.18	Provide and lay plastic joint 25mm x 25mm sealer or approved equivalent on base slab/external walls.	m	35		
	Epoxy Floor and Wall Paint as 'Masterseal 180' or approved equivalent Apllied strictly in accordance with the Manufacturer's printed instruction:-				
3.2.19	Paint to filtration unit	m^2	60		
3.2.20	Paint to Sedimentation unit	m^2	120		
	WALLS				
3.2.21	Walls to be constructed using approved hard natural stone				
3.2.22	Construct stone masonry walls with cement mortar 1:3 thickness 225mm	m^2	40		
3.2.23	Construct stone masonry walls with cement mortar 1:3 thickness 150mm	m^2	130		
	D.P.C				
3.2.24	Provide for bituminous felt and paint D.P.C. to foot of walls	m^2	25		
	PIPES AND FITTINGS				
	Supply and install all pipework and fittings including concrete surrounds etc. to the filter unit as specified in the drawing.				
	Inlet Pipework and Ferrous Fittings to Class NP16 (Approved GMS Pipes and Fittings)				
3.2.25	150mm dia. Coupling (Mark 1)	Nr	1		

3.2.26	150mm dia single threaded (male) pipe 1040mm long with puddle flange at 400mm from threaded end (Mark 2)	Nr	1		
3.2.27	150mm dia female threaded Socket (Mark 3)	Nr	1		
3.2.28	150mm dia. single threaded (male) 90º bend (Mark 4)	Nr	1		
3.2.29	200mm dia double threaded (male) pipe 360mm long with cap (Mark 5)	Nr	1		
3.2.30	200mm dia. Nut (Mark 6)	Nr	2		
3.2.31	200mm dia. double threaded (male) pipe 1130mm long (Mark 7)	Nr	1		
3.2.32	200mm dia. Sockets (Mark 8)	Nr	2		
3.2.33	200mm dia. all threaded (female) 90º bend (Mark 9)	Nr	1		
3.2.34	200mm dia single threaded (male) pipe 1040mm long (Mark 10)	Nr	1		
	Outlet Pipework and Ferrous Fittings to Class PN16 (Approved GMS Pipes and Fittings)				
3.2.35	150mm dia double threaded (male) nipple (Mark A)	Nr	2		
3.2.36	150mm x 150mm dia all threaded tee (female) with puddle flange welded at 145mm from the end of the branch (Mark B)	Nr	1		
3.2.37	150mm dia single threaded (male) nipple (Mark C)	Nr	1		
3.2.38	150mm dia. all threaded (Female) 90º Elbow (Mark D)	Nr	1		
3.2.39	150mm dia flanged spigot pipe 5000mm long with threaded spigot (male) with puddle flange at 400mm from flanged end (Mark E)	Nr	1		
3.2.40	150mm x 150mm dia All flanged cross (Mark F)	Nr	1		
3.2.41	150mm dia. All Flanged Gate Valve with 2.0m long Extension Spindle (Mark G)	Nr	3		
3.2.42	150mm dia Flange Adaptor (Mark H)	Nr	3		
3.2.43	150mm dia Plain ended pipe 1.2m long with puddle flange (Mark I)	Nr	1		
3.2.44	150mm dia Single Flanged pipe 1.2m long (Mark J)	Nr	1		

3.2.45	150mm dia Plain ended pipe 4.8m long with one end bevelled (Cut to suit on site) (Mark K)	Nr	1		
	Washwater Outlet Pipework and Fittings (Approved G.I Pipes and Fittings)				
3.2.46	Single threaded (male) concentric wash water collector, 420mm x 150mm and 375mm long (Mark i)	Nr	1		
3.2.47	150mm dia socket - female threaded (Mark ii)	Nr	1		
3.2.48	150mm dia all threaded (male) pipe 1625mm long with puddle flange at 145mm from one end (Mark iii)	Nr	1		
3.2.49	150mm dia. all threaded (Female) 90º Elbow (Mark iv)	Nr	1		
3.2.50	150mm dia single threaded (male) pipe 5000mm long with puddle flange at 400mm from spigot end (Mark v)	Nr	1		
3.2.51	150mm dia flange adaptor (Mark vi)	Nr	1		
3.2.52	150mm dia. all flanged gate valve with 2.0m long Extension Spindle (Mark vii)	Nr	1		
3.2.53	150mm dia. single flanged 90º bend (Mark viii)	Nr	1		
	Scour Pipework and Fittings (Approved G.I Pipes and Fittings)				
3.2.54	100mm dia plain ended pipe 2700mm long (Mark a)	Nr	3		
3.2.55	100mm dia flange adaptor (Mark b)	Nr	3		
3.2.56	100mm dia all flanged gate valve with 2.0m long Extension Spindle (Mark c)	Nr	3		
3.2.57	100mm dia single flanged 90º bend (DRILLED TO PN 16) (Mark d)	Nr	3		
	Overflow Pipework and Fittings (Approved G.I Pipes and Fittings)				
3.2.58	150mm x 100mm dia reducing socket (smaller dia female threaded) (Mark e)	Nr	1		
3.2.59	100mm dia. double threaded (male) 90º bend (Mark f)	Nr	2		
3.2.60	100m dia socket (female threaded) (Mark g)	Nr	3		

3.2.61	100mm dia double threaded (male) nipple 240mm long with puddle flange at 100mm from one end (Mark h)	Nr	1		
3.2.62	100m dia single threaded (male) pipe length 1500mm (Mark i)	Nr	1		
	Other Pipework and Fittings (Approved G.I Pipes and Fittings) and Metalwork				
3.2.63	Supply and install 75 dia flap valve as specified	Nr	4		
3.2.64	Allow for formation of a 100mm wide, 18m long channel in concrete benching as required.	Nr	1		
3.2.65	Install 3mm G.M.S. steel plate 170mm x 200mm x 2050mm long channel for wash water to be set in mass concrete Class 15/20.	Nr	2		
3.2.66	Install 6mm G.M.S plate 250mm x 2100mm long cover for water channel with slots size 20mm x 150mm, 200mm c/c	Nr	2		
3.2.67	Supply and install 50mm dia. G.I pipe, 1700mm long with 9Nr. 19mm dia. holes as shown	Nr	2		
3.2.68	Supply and install 50mm dia. G.I pipe, 2100mm long with 11Nr. 19mm dia. holes as shown	Nr	4		
3.2.69	Supply and install 50mm dia. G.I pipe, 900mm long with 5Nr. 19mm dia. holes as shown	Nr	4		
3.2.70	Supply and install 50mm dia. G.I pipe, 1300mm long with 7Nr. 19mm dia. holes as shown	Nr	2		
3.2.71	Supply and install 'Hudo' nozzles in underdrain pipes	Nr	96		
	FILTER MEDIA				
	Filter Media details are shown on Drawing				
3.2.72	Supply and lay graded gravel of size 2mm to 38mm in 4 layers 75mm thick	m^3	4		
3.2.73	Supply and lay coarse sand of size 1mm in one layer 75mm thick	m^3	1		
3.2.74	Supply and lay graded sand of size 0.5mm - 1.0mm in two layers as directed	m^3	6		
3.2.75	Test and commission the composite filtration unit including disinfection of media for 24 hours.	Nr	1		
	MISCELLANEOUS WORKS				

3.2.76	Provide and fix GMS sheet 6mm thick settled water collection weir length 3000mm as detailed on Drawings	Nr	1		
3.2.77	Provide all materials and fix an external access ladder to Composite Filtration Unit as per details on Drawings.	Item	LS		
3.2.78	Provide all materials and fix 1200mm wide Chequered Plate Walking Platform over the Composite Filtration Unit complete with handrails as per details on Drawings.	Item	LS		
3.2.79	Provide for water proofing Plaster for internal masonry walls to Composite Filtration Unit.	Item	LS		
	Chemical Mixing				
3.2.80	Allow for mixing chamber and construction of the baffle walls to the Composite Filtration Unit as directed by the Engineer	Item	1		
	Chlorine Dozer				
3.2.82	Supply and install FRO Chemical dozers for chlorine complete with 500l fibre glass mixing tanks	nr	1		
3.2.83	Allow for connection of the composite filtration unit to the inflow 150mm dia. GMS pipe and outflow as directed.	Nr	1		
	Alum Dozer				
3.2.84	Supply and install FRO Chemical dozers for Alum complete with a 500l fibre glass mixing tanks and nozzle	Nr	1		
3.2.85	Provide all materials and fix hand stirrer for chemical mixing tanks as per details	Nr	1		
	CHAMBERS				
3.2.86	Construction of standard chambers size 1.2m×1.2m×2m	Nr	4		
TOTAL BILL NO. 6.1 CARRIED FORWARD TO BILL 6 COLLECTION PAGE					**-**

BILL NO 6.2.: 25M^3/HR COMPOSITE FILTRATION UNIT 2					
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**
				KES.	**KES.**
	EXCAVATION				
	The rates should include strutting, shuttering, stabilising the excavation and keeping the excavation free from water by pumping, bailing or other means. Excavate for foundation part backfill after construction and remainder cart away to tips or use as fill on site, all as directed.				
3.2.1	Maximum depth less than 1.0m	m^3	91		
3.2.2	Ditto- but depth 1.0 to 2.0m	m^3	91		
3.2.3	Extra over excavation in rock Class 'A'	m^3	12		
3.2.4	Ditto - in rock Class 'B'	m^3	19		
3.2.5	Ditto - in rock Class 'C'	m^3	10		
	IN SITU CONCRETE				
	Provide, mix and place concrete as directed.				
3.2.6	Concrete Class 15/20 in 75mm blinding layer under base slab and footings allowing for sloping sides.	m^2	70		
3.2.7	Concrete Class 15/20 in 400mm thick pipe surround	m^3	6		
3.2.8	Cement mortar mix 1:4 for 50mm screed to fall on base slab (average 25mm thick)	m^2	66		
3.2.9	Mass concrete thickness 300mm Class 15/20 for surround to 'Hudo' nozzles and wash water channel.	m^3	20		
3.2.10	Vibrated reinforced concrete Class 25/20 to floor slab 150mm thick	m^3	10		
3.2.11	-Ditto - but for suspended beams	m^3	2		
3.2.12	-Ditto - but for ring beams	m^3	2		
	STEEL REINFORCEMENT				
	Provide and fix steel reinforcements including cutting, bending, propping with spacers and tying as specified.				
3.2.13	16mm dia. high tensile and under	kg	3,270		

	FORMWORK				
	Provide and fix shuttering including propping, strutting and striking all as specified, allowing for curvature where necessary.				
3.2.14	Sides of base slab	m^2	10		
3.2.15	Sides for thickening base slab for pipes	m^2	9		
3.2.16	Sides for beams (vertical and horizontal)	m^2	10		
3.2.17	Sides of ring beams	m^2	15		
	SEALER				
3.2.18	Provide and lay plastic joint 25mm x 25mm sealer or approved equivalent on base slab/external walls.	m	35		
	Epoxy Floor and Wall Paint as 'Masterseal 180' or approved equivalent Apllied strictly in accordance with the Manufacturer's printed instruction:-				
3.2.19	Paint to filtration unit	m^2	60		
3.2.20	Paint to Sedimentation unit	m^2	120		
	WALLS				
3.2.21	Walls to be constructed using approved hard natural stone				
3.2.22	Construct stone masonry walls with cement mortar 1:3 thickness 225mm	m^2	40		
3.2.23	Construct stone masonry walls with cement mortar 1:3 thickness 150mm	m^2	130		
	D.P.C				
3.2.24	Provide for bituminous felt and paint D.P.C. to foot of walls	m^2	25		
	PIPES AND FITTINGS				
	Supply and install all pipework and fittings including concrete surrounds etc. to the filter unit as specified in the drawing.				
	Inlet Pipework and Ferrous Fittings to Class PN16 (Approved GMS Pipes and Fittings)				
3.2.25	150mm dia. Coupling (Mark 1)	Nr	1		

3.2.26	150mm dia single threaded (male) pipe 1040mm long with puddle flange at 400mm from threaded end (Mark 2)	Nr	1		
3.2.27	150mm dia female threaded Socket (Mark 3)	Nr	1		
3.2.28	150mm dia. single threaded (male) 90º bend (Mark 4)	Nr	1		
3.2.29	200mm dia double threaded (male) pipe 360mm long with cap (Mark 5)	Nr	1		
3.2.30	200mm dia. Nut (Mark 6)	Nr	2		
3.2.31	200mm dia. double threaded (male) pipe 1130mm long (Mark 7)	Nr	1		
3.2.32	200mm dia. Sockets (Mark 8)	Nr	2		
3.2.33	200mm dia. all threaded (female) 90º bend (Mark 9)	Nr	1		
3.2.34	200mm dia single threaded (male) pipe 1040mm long (Mark 10)	Nr	1		
	Outlet Pipework and Ferrous Fittings to Class NP16 (Approved GMS Pipes and Fittings)				
3.2.35	150mm dia double threaded (male) nipple (Mark A)	Nr	2		
3.2.36	150mm x 150mm dia all threaded tee (female) with puddle flange welded at 145mm from the end of the branch (Mark B)	Nr	1		
3.2.37	150mm dia single threaded (male) nipple (Mark C)	Nr	1		
3.2.38	150mm dia. all threaded (Female) 90º Elbow (Mark D)	Nr	1		
3.2.39	150mm dia flanged spigot pipe 5000mm long with threaded spigot (male) with puddle flange at 400mm from flanged end (Mark E)	Nr	1		
3.2.40	150mm x 150mm dia All flanged cross (Mark F)	Nr	1		
3.2.41	150mm dia. All Flanged Gate Valve with 2.0m long Extension Spindle (Mark G)	Nr	3		
3.2.42	150mm dia Flange Adaptor (Mark H)	Nr	3		
3.2.43	150mm dia Plain ended pipe 1.2m long with puddle flange (Mark I)	Nr	1		
3.2.44	150mm dia Single Flanged pipe 1.2m long (Mark J)	Nr	1		

3.2.45	150mm dia Plain ended pipe 4.8m long with one end bevelled (Cut to suit on site) (Mark K)	Nr	1		
	Washwater Outlet Pipework and Fittings (Approved G.I Pipes and Fittings)				
3.2.46	Single threaded (male) concentric wash water collector, 420mm x 150mm and 375mm long (Mark i)	Nr	1		
3.2.47	150mm dia socket - female threaded (Mark ii)	Nr	1		
3.2.48	150mm dia all threaded (male) pipe 1625mm long with puddle flange at 145mm from one end (Mark iii)	Nr	1		
3.2.49	150mm dia. all threaded (Female) 90º Elbow (Mark iv)	Nr	1		
3.2.50	150mm dia single threaded (male) pipe 5000mm long with puddle flange at 400mm from spigot end (Mark v)	Nr	1		
3.2.51	150mm dia flange adaptor (Mark vi)	Nr	1		
3.2.52	150mm dia. all flanged gate valve with 2.0m long Extension Spindle (Mark vii)	Nr	1		
3.2.53	150mm dia. single flanged 90º bend (Mark viii)	Nr	1		
	Scour Pipework and Fittings (Approved G.I Pipes and Fittings)				
3.2.54	100mm dia plain ended pipe 2700mm long (Mark a)	Nr	3		
3.2.55	100mm dia flange adaptor (Mark b)	Nr	3		
3.2.56	100mm dia all flanged gate valve with 2.0m long Extension Spindle (Mark c)	Nr	3		
3.2.57	100mm dia single flanged 90º bend (DRILLED TO PN 16) (Mark d)	Nr	3		
	Overflow Pipework and Fittings (Approved G.I Pipes and Fittings)				
3.2.58	150mm x 100mm dia reducing socket (smaller dia female threaded) (Mark e)	Nr	1		
3.2.59	100mm dia. double threaded (male) 90º bend (Mark f)	Nr	2		
3.2.60	100m dia socket (female threaded) (Mark g)	Nr	3		

3.2.61	100mm dia double threaded (male) nipple 240mm long with puddle flange at 100mm from one end (Mark h)	Nr	1		
3.2.62	100m dia single threaded (male) pipe length 1500mm (Mark i)	Nr	1		
	Other Pipework and Fittings (Approved G.I Pipes and Fittings) and Metalwork				
3.2.63	Supply and install 75 dia flap valve as specified	Nr	4		
3.2.64	Allow for formation of a 100mm wide, 18m long channel in concrete benching as required.	Nr	1		
3.2.65	Install 3mm G.M.S. steel plate 170mm x 200mm x 2050mm long channel for wash water to be set in mass concrete Class 15/20.	Nr	2		
3.2.66	Install 6mm G.M.S plate 250mm x 2100mm long cover for water channel with slots size 20mm x 150mm, 200mm c/c	Nr	2		
3.2.67	Supply and install 50mm dia. G.I pipe, 1700mm long with 9Nr. 19mm dia. holes as shown	Nr	2		
3.2.68	Supply and install 50mm dia. G.I pipe, 2100mm long with 11Nr. 19mm dia. holes as shown	Nr	4		
3.2.69	Supply and install 50mm dia. G.I pipe, 900mm long with 5Nr. 19mm dia. holes as shown	Nr	4		
3.2.70	Supply and install 50mm dia. G.I pipe, 1300mm long with 7Nr. 19mm dia. holes as shown	Nr	2		
3.2.71	Supply and install 'Hudo' nozzles in underdrain pipes	Nr	96		
	FILTER MEDIA				
	Filter Media details are shown on Drawing				
3.2.72	Supply and lay graded gravel of size 2mm to 38mm in 4 layers 75mm thick	m^3	3		
3.2.73	Supply and lay coarse sand of size 1mm in one layer 75mm thick	m^3	1		
3.2.74	Supply and lay graded sand of size 0.5mm - 1.0mm in two layers as directed	m^3	6		
3.2.75	Test and commission the composite filtration unit including disinfection of media for 24 hours.	Nr	1		
	MISCELLANEOUS WORKS				

3.2.76	Provide and fix GMS sheet 6mm thick settled water collection weir length 3000mm as detailed on Drawings	Nr	1		
3.2.77	Provide all materials and fix an external access ladder to Composite Filtration Unit as per details on Drawings.	Item	LS		
3.2.78	Provide all materials and fix 1200mm wide Chequered Plate Walking Platform over the Composite Filtration Unit complete with handrails as per details on Drawings.	Item	LS		
3.2.79	Provide for water proofing Plaster for internal masonry walls to Composite Filtration Unit.	Item	LS		
	Chemical Mixing				
3.2.80	Allow for mixing chamber and construction of the baffle walls to the Composite Filtration Unit as directed by the Engineer	Item	1		
	Chlorine Dozer				
3.2.82	Supply and install FRO Chemical dozers for chlorine complete with 500l fibre glass mixing tanks	nr	1		
3.2.83	Allow for connection of the composite filtration unit to the inflow 150mm dia. GMS pipe and outflow as directed.	Nr	1		
	Alum Dozer				
3.2.84	Supply and install FRO Chemical dozers for Alum complete with a 500l fibre glass mixing tanks and nozzle	Nr	1		
3.2.85	Provide all materials and fix hand stirrer for chemical mixing tanks as per details	Nr	1		
	CHAMBERS				
3.2.86	Construction of standard chambers size 1.2m×1.2m×2m	Nr	4		
TOTAL BILL NO. 6.2 CARRIED FORWARD TO BILL 6 COLLECTION PAGE					**-**

BILL NO.6 COLLECTION PAGE		
COMPACT FILTRATION UNITS		
PAGE	**BILL COLLECTION PAGE**	**AMOUNT (KSH)**
1	Bill No.6 1Compact Filtration Unit 1	-
2	Bill No.6 2 Compact Filtration Unit 2	-
	Bill No. 6 Total Carried Over to Summary Sheet	

BILL 7 - CLEAR WATER CONTACT TANK (200M^3)					
Item No.	**Description**	**Unit**	**Qty**	**Rate (KES)**	**Amount (KES)**
	DEMOLITION AND SITE CLEARANCE				
9.01	General clearance.	m^2	100.0		
	EARTHWORKS				
9.02	Bulk excavation in normal material not exeed 0-1.5 m	m^3	250		
9.03	Bulk excavation in normal material not exeed 1.5-3 m	m^3	250		
9.05	Extra over for rock material (**Provisional**)	m^3	100		
9.06	Provide, place and compact in layers approved selected granular material for base slab and column foundation	m^3	150		
9.07	300mm approved hardcore fill	m^2	150		
	IN SITU CONCRETE				
	PROVISION AND PLACING OF CONCRETE				
9.08	Class 15/20 blinding 100 mm thick.	m^3	10		
9.09	Class 30/20 reinforced concrete to foundation.	m^3	14		
9.10	Class 30/20 reinforced concrete to tank roof.	m^3	20		
9.11	Class 30/20 reinforced concrete to horizontal tank floor.	m^3	18		
9.12	Class 30/20 reinforced concrete to tank walls.	m^3	41		
9.13	Class 30/20 reinforced concrete to column	m^3	3		
	FORMWORK				
9.14	F2 horizontal plane formwork to soffit of tank roof.	m^2	121		
9.15	F3 vertical Plane formwork to inside wall of tank	m^2	60		

9.16	F3 vertical plane formwork to outside wall of tank	m^2	176		
9.17	Plane sloping formwork to columns, width 0.4-1.22m.	m^2	17		
	REINFORCEMENT STEEL TO BS 4449				
9,18	Diameter ranging from 8 mm to 20mm.	tons	25		
9.19	**STRUCTURAL JOINTS**				
SUB-TOTAL CARRIED FORWARD TO NEXT PAGE					-
SUB-TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE					-
	Note: The following items only cover construction joints in reservoir slab/wall junctions. Where the contractor requires additional joints to suit his method of working, the cost of such joints will be deemed to suit his method of working, the cost of such joints will be deemed to be included elsewhere in his rates.				
9.20	Horizontal contruction joint in tank wall,rubber water stop to specifications, width 200-350 mm including sealant filler.	m	50		
	PRECAST CONCRETE UNITS				
9.21	PCC paving slabs, thickness 50 mm.	m^2	58		
	PIPEWORK – FITTINGS AND VALVES				
	All pipes and fittings to be PN 6				
	Include supply, storage, laying in trenches and chambers, including all jointing materials; Rubbers welding etc. All steel pipe fittings to be fusion bonded epoxy powder coated and lined with fusion bonded/solvent free epoxy. All flanges drilled to EN 1092.				
	Inlet pipework				
9.22	DN 300 PN 10 double flanged float valve with its ball (mark 1)	nr	1		
9.23	DN 300 PN 10 double flanged anchoring pipes with puddle flange Length = 700mm (mark 2)	nr	1		
9.24	DN 300 PN 10 double flanged 900 bend (mark 3)	nr	2		

9.25	DN 300 PN 10 double flanged pipe, L=3000mm (mark 4)	nr	1		
9.26	DN300 PN 10 flange spigot pipe, L=900mm (mark 5)	nr	1		
9.27	DN 300 PN 10 flexible coupling (mark 6)	nr	2		
9.28	DN 300 PN 10 double spigot pipe with puddle flange,L=1200mm (mark 7)	nr	1		
9.29	DN 300 PN 10 flanged adaptor (mark 8)	nr	2		
9.30	DN 300 PN 10 double flanged gate valve (mark 9)	nr	1		
9.31	DN 300 PN 10 flange spigot pipe with puddle flange, Length=1200mm (mark 10)	nr	1		
	Outlet pipework				
9.32	DN 300 PN 10 double flanged Strainer (mark 1)	nr	1		
9.33	DN 300 PN 10 flanged spigot pipe anchoring with puddle flange Length = 1200mm (mark 2)	nr	1		
9.34	DN 300 flexible coupling (mark 3)	nr	2		
9.35	DN 300 PN 10 double spigot pipe anchoring with puddle flange 1200 mm long (mark 4)	nr	2		
9.36	DN 300 PN 10 flanged adaptor (mark 5)	nr	2		
9.37	DN 300 PN 10 double flanged gate valve (mark 6)	nr	1		
9.38	DN 300 PN 10 double flanged water meter (mark 7)	nr	1		
9.39	DN 300 PN 10 double flanged steel pipe 600mm long (mark 8)	nr	1		
	Over Flow pipework				
9.40	DN 200 PN 10 flanged bell mouth (mark 1)	nr	1		
9.41	DN 200 PN 10 double flanged 90^0 bend (mark 2)	nr	3		
9.42	DN 200 PN 10 double flanged anchoring pipes with puddle flange Length = 700mm (mark 3)	nr	1		
9.43	DN 200 PN 10 double flanged pipe, L=3000mm (mark 4)	nr	1		

9.44	DN 200 PN 10 flange spigot pipe, L=1200mm (mark 5)	nr	1		
	Washout Pipework (Scour)				
9.45	DN 100 PN 10 double spigot pipe with puddle flange, L = 1350mm (mark 7)	nr	1		
9.47	DN 100 PN 10 Flexible Coupling (mark 8)	nr	1		
9.48	DN 100 PN 10 flanged pipe with puddle flange, L=1200mmm (mark 9)	nr	1		
9.49	DN 100 PN 10 double flanged gate valve (mark 10)	nr	1		
9.50	DN 100 PN 10 flange spigot steel pipe 700 mm long (mark 11)	nr	1		
9.51	DN 100 PN 10 flanged adaptor (mark 12)	nr	1		
9.52	DN 100 PN 10 HDPE 50,000mm long connect to the rearest ditch (mark 13)	m	50		
	MISCELLANEOUS METALWORK				
9.53	Internal access galvinized steel ladder to tank complete with cage, as shown in the drawings	nr	1		
9.54	Supply and install DN 80mm vent steel pipe with Female threaded Tee mosquito wire gauge with clamps at ends.L= 650mm	nr	4		
9.55	Supply and install chequred plate steel lockable cover complete in tank roof access opening as shown in the drawings.	nr	1		
9.56	Construct inlet, outlet and scour valve chambers including manhole covers as detailed in the drawings	nt	3		
	GENERAL ITEMS				
	Testing of the Works				
9.57	Testing of 200m^3 tank for water tightness	LS	1		
	Sterilization and Flushing of Tank in Accordance with the Specifications				
9.58	Sterilization and Flushing of 200m^3 tank	LS	1		

	OVERFLOW DRAINAGE WORKS				
9.59	Supply and install DN 300mm ogee rigid joint concrete pipes , depth n.e 3m	m	50		
					-
9.60	Construct manholes complete with cover slabs and polyresin manhole covers, depth n.e 4m	nr	3		
TOTAL BILL NO. 7 CARRIED FORWARD TO GRAND SUMMARY					**-**

BILL NO. 8 : BACKWASH WATER TANK (50m³)

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
1	**ELEVATED BACKWASH TANK & TOWER**				
1.01	Supply and transport to site Pressed Steel Galvanised Steel Tank with cover, minimum net storage capacity 50m^3 in accordance with approved specifications on and including 12m high galvanised steel U.B and U.C. section tower, including provision of connections and vents base plates, ladder and platform on all 4 sides, etc. **Note**: Contractor to submit to the Engineer for approval, detailed design calculations and workshop drawings of all steel work from an approved and reputable structural steel fabricator prior to fabrication and delivery of tank and tower.	Item	L.S		
1.02	Allow for the erection of tank and tower and all assembling, welding, drilling holes, cleats bolts and nuts, cutting , fixing clamps and ladder, platform and paint and all other works all in accordance with Specifications.	Item	L.S		
1.03	Allow for testing, finishing and sterilising of the tank and pipework as specified.	Item	L.S		
2	**PIPES & FITTINGS**				
	Supply & installation to include Jointing Material, Bolts, Gaskets, Packing, Jointing Glue, etc. l As applicable				
	Inlet Pipework - Approved Epoxy Lined Externally & Internally Ferrous Pipes to Class PN16				
2.02	80 mm dia. all flanged pipe 300mm long (with puddle flange welded to tank well panel)	Nr	1		
2.03	80mm dia. all flanged 90^0 bend	Nr	2		
2.04	80mm dia. all flanged pipe 2500mm long	Nr	1		
2.05	80mm dia. flanged spigot pipe 12000mm long (cut to suit on site) (Mark E)	Nr	1		
2.06	80mm dia. flange adaptor	Nr	1		
2.07	80mm dia. flanged spigot pipe 1200mm long	Nr	1		
2.08	80mm dia. Coupling	Nr	1		
2.09	PN16, OD90 HDPE Pipe in trenches, depth n.e 1500mm	M	200		
	Outlet Pipework - Approved Epoxy Lined Externally & Internally Ferrous Pipes & Fittings to Class PN10				

2.9	100mm dia. flanged bellmouth (Mark a)	Nr	1		
2.10	100mm dia. all flanged pipe 600mm long with puddle flange at 160mm from one end welded to tank base panel (Mark b)	Nr	1		
2.11	100mm dia. flanged spigot pipe 11m long (cut to suit on site) (Mark c)	Nr	1		
2.12	100mm dia. flange adaptor (Mark d)	Nr	2		
2.13	100mm dia. all flanged 90^0 bend (Mark e)	Nr	1		
SUB-TOTAL CARRIED FORWARD TO NEXT PAGE					-
SUB-TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE					-
2.14	100mm dia. all flanged pipe 1200mm long (Mark f)	Nr	1		
2.15	100x100x50mm dia. all flanged Tee (Mark g)	Nr	1		
2.16	100mm dia. all flanged gate valve (to Euro 20 Series, Type 23 short face to face type valves) as made by PONTA-Mousson (Saint Gobain Pam) or approved equivalent (Mark h)	Nr	1		
2.17	100mm dia. all flanged gate valve (to Euro 20 Series, Type 23 short face to face type valves) as made by PONTA-Mousson (Saint Gobain Pam) or approved equivalent (Mark i)	Nr	1		
2.18	100mm dia. plain ended pipe 1200mm long (Mark j)	Nr	1		
2.19	100mm dia. coupling (Mark k)	Nr	1		
2.19.1	OD110, PN10 HDPE pipe in trenches to filters; depth n.e 1.5	M	100		
	Scour and Overflow Pipework -Approved Epoxy Lined Externally & InternallyFerrous Pipes & Fittings to Class NP16				
2.20	100mm dia. flanged spigot pipe, length 300mm (with puddle flange welded to tank panel (Mark 1)	Nr	1		
2.21	100mm dia. all flanged 90^0 bend (Mark 2)	Nr	3		
2.22	100mm dia. all flanged pipe 2800mm long (Mark 3)	Nr	1		
2.23	100mm dia. flanged spigot pipe 12m long (cut to suit on site) (Mark 4)	Nr	1		
2.24	100mm dia. flange adaptor (Mark 5)	Nr	2		
2.25	100mm dia. flanged spigot pipe 1200mm long (Mark 6)	Nr	3		
2.26	100mm dia. Flanged bellmouth, 200mm long (welded to base of tank with water tight joint (Mark 7)	Nr	1		

2.27	100mm dia. all flanged pipe 1200mm long (Mark 8)	Nr	1		
2.28	100mm dia. flanged spigot pipe 10m long (cut to suit on site) (Mark 9)	Nr	1		
2.29	100mm dia. coupling (Mark 10)	Nr	1		
2.30	100mm dia. all flanged gate valve (to Euro 20 Series, Type 23 short face to face type valves) as made by PONTA-Mousson (Saint Gobain Pam) or approved equivalent (Mark 11)	Nr	1		
2.31	100mm dia. flanged 90^0 bend (Mark 12)	Nr	1		
2.56	100mm dia. flanged spigot pipe 1200mm long (Mark 6)	Nr	3		
2.57	100mm dia. Flanged bellmouth, 200mm long (welded to base of tank with water tight joint (Mark 7)	Nr	1		
2.58	100mm dia. all flanged pipe 1200mm long (Mark 8)	Nr	1		
	-				
2.59	100mm dia. flanged spigot pipe 10m long (cut to suit on site) (Mark 9)	Nr	1		
2.60	100mm dia. coupling (Mark 10)	Nr	1		
2.61	100mm dia. all flanged gate valve (to Euro 20 Series, Type 23 short face to face type valves) as made by PONTA-Mousson (Saint Gobain Pam) or approved equivalent (Mark 11)	Nr	1		
2.62	100mm dia. flanged 90^0 bend (Mark 12)	Nr	1		
3	**CHAMBERS**				
	Chambers, ducts, culverts, crossings, thrust and anchor blocks, reinstatement and others as listed and specified in Drawings.				
	Note: Items for work in this shall include:-				
	- Excavation, preparation of surfaces, disposal of excavated material, shoring sides of excavation, backfilling and removal of redundant services.				
	- Concrete, reinforcement, formwork, joints & finishes				
	- Tips for dispoal of excavated material or debris to be identified by the Contractor in liaison with the Local Authority.				
	Concrete Chambers				
	Depth not exceeding 2.0m				
3.1	Provide all materials and construct valve chambers internal dimensions 1500mm x 1500mm depth not exceeding 2.0m. Include for supply and fixing of lockable mild steel checkered plate cover & step irons	Nr	2		
4	**REINFORCED CONCRETE FOUNDATIONS**				

4.1	**Excavation**				
	The Rates shall include for all Strutting, Shuttering, Stabilising the Excavation Faces, and Keeping the Excavation Free of Water by Pumping, Bailing or Other Means.				
	Excavate in Common Material, Part Backfill after Construction and Remainder, Cart Away to Tips or use as Fill on Site, all as Directed by the Engineer.				
4.1.1	Maximum depth n.e. 1.0 m	m^3	50		
4.1.2	-Ditto- but maximum depth 1.0 m to 2.0 m	m^3	50		
4.1.3	Transport approved excavated material from site and use as fill and compact in 200 mm layers as specified on site as and where directed by the Engineer. Compaction tests to be done and rates to include for this.	m^3	90		
4.1.4	Extra over Items 4.1.1 to 4.1.2 for excavation in rock Class 'A', blasting not permitted (Provisional)	m^3	15		
4.1.5	- Ditto- for excavation in rock Class 'B' (Provisional)	m^3	20		
4.1.6	-Ditto- for excavation in rock Class 'C' (Provisional)	m^3	25		
4	**REINFORCED CONCRETE FOUNDATIONS**				
4.2	**Concrete Works**				
	Provide, mix and place concrete as directed				
4.2.1	Plain concrete Class 15/20 in 75 mm blinding layer under base slab of tank	m^2	45		
	Vibrated, Reinforced Concrete Class 25/20 in:				
4.2.2	Column base slab	m^3	35		
4.2.3	Column wall	m^3	7		
4.3	**Reinforcement**				
	Provide and Fix High Tensile Steel Reinforcement including Cutting, Bending, Propping with Spacers and Tying as Specified				
4.3.1	Reinforcement, all diameters	Kg	1,800		
4.4	**Formwork**				
	Provide and Fix Shuttering Including Propping, Strutting and Striking all as Specified				

	(i) Vertical Formwork - Class F1 Finish				
4.4.1	Sides of 500 mm Column Base Slab - Tank	m^2	24		
4.4.2	Sides of Column Wall	m^2	30		
TOTAL BILL NO. 8 CARRIED FORWARD TO GRAND SUMMARY					**-**

BILL NO. 9.1 GOKEHARAKA TREATED WATER RISING MAIN

Item No.	**Description**	**Unit**	**Qty**	**Rate (KES)**	**Amount (KES)**
	CLASS A: GENERAL ITEM	-	-		-
	-				
	Sections of the Treated Water Pumping Main alignment is to be laid within the available road reserves				
	Testing of works				
14.01	Pipeline testing and commissioning of the Pipeline (OD 225 HDPE) including provision of all equipment, materials and works necessary for testing	m	4,800		
14.02	Disinfection of Pipeline (OD 225) : flushing with clear water, filling with water containing 0.05g/l calcium hyperchlorite, left for 24 hours. This includes supply of necessary equipment, materials, chemicals and water, measurement of residual chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval.	m	4,800		
	CLASS D: DEMOLITION AND SITE CLEARANCE				
	-				
14.03	General site clearance along the pipeline allignment.	m^2	1,000		
	-				
	Tree Cutting (Provisional)				
	Cut down trees, grub up roots and cart away to tips				
14.04	Girth: 0.5 m - 1.0 m	Nr	12		
14.05	Remove stump dia. 0.5 - 1m	Nr	12		
	Note:- Girth shall be measured 1.0m above ground level				
	CLASS I: PIPE WORK - PIPES				

	The rates entered against the items in this section shall include for stripping of soil, laying aside or hauling and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting, spreading surplus soil evenly over and alongside pipe trench compacting, supply, lay and joint pipes to correct line and level. Depths are stated from ground level to invert level.				
	-				
	Ferrous pipes				
	-				
14.06	DN 200. PN 25 Steel Pipe	m	50		
	-				
	High Density Polyethylene Pipes (HDPE) - Butt fussed				
	-				
14.07	OD 225, PN 25 HDPE pipes in trenches; Depth not exceeding 1.5 m	m	1,000		
14.08	OD 225, PN 20 HDPE pipes in trenches; Depth not exceeding 1.5 m	m	1,000		
14.09	OD 225, PN 16 HDPE pipes in trenches; Depth 1.5 m - 2.0 m	m	2,800		
-	**CLASS J: PIPE WORK - FITTINGS AND VALVES**	-	-		-
-		-	-		-
-	**Rate to include for supply and installation of fittngs: PN 16**	-	-		-
	-				-
14.09'	DN 200 All flanged 90 degree bend	nr	3		
14.10	200x80 All Flanged Tee	nr	2		
	Couplings				
14.11	200mm VJ Stepped Coupling	nr	2		
14.12	200mm Flexible Coupling	nr	2		
14.13	225mm HDPE/ Stepped Flexible Coupling	nr	4		
	Adaptors				
14.14	PE Flange Adaptor complete with metal backup ring nominal bore 200mm	nr	4		
14.15	200mm VJ Flange adaptor	nr	4		
	Straight Specials: Steel				
14.16	All Flanged Spigot 1200 mm long , nominal bore 200mm	nr	4		
14.17	Straight Spigot 1000 mm long , nominal bore 200mm	nr	4		

14.18	Straight Spigot 1200 mm long , nominal bore 200mm	nr	6		
	HDPE Bends				
14.19	90 Deg Double Flanged Bends;OD 225mm	nr	1		
14.20	Double Flanged Bulk Meter; DN 200mm	nr	2		
	Double flanged DN50 Double orifice air valve	nr	1		
14.21	DN 200 Non Return Valve	nr	1		
	-	-			-
	Fittings to Air Valve	-			
	-	-			
14.22	Stepped coupling DN 200 mm	nr	3		
14.23	Flanged spigot pipe piece DN 200mm 1.2m long with a puddle flange	nr	6		
14.24	Flanged reducing tee 200mm x 200mm x 50mm	nr	3		
					-
14.25	Double flanged pipe piece DN 200mm 0.25m long	nr	3		
14.26	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	3		
	Fittings to Washout				
14.27	Stepped coupling DN 200mm	nr	2		
14.28	Flanged spigot pipe DN 200mm 1.2m long with a puddle flange	nr	2		
14.29	Flanged reducing tee DN 200mm x 200mm x 80mm	nr	2		
14.30	Double flanged pipe piece DN 200 0.5m long	nr	2		
14.31	DN 200mm flanged sluice valve	nr	2		
14.32	DN 80mm flanged sluice valve	nr	2		
14.33	Double flanged pipe piece DN 200 1.2m long with puddle flange	nr	2		
14.34	Flanged flap valve DN 200mm	nr	2		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				

	Chambers ducts, culverts, crossings, thrust, anchor blocks, reinstatement and other pipework ancillaries				
	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
14.35	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1000mm x 1000mm, depth not exceeding 1500mm. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	3		
	Crossings				-
14.38	Allow for crossing existing drains and reinstating these after construction of water main is completed. Include for provision of diverting the Drains and keeping them operational during construction	nr	10		
	-	-	-		
14.39	Allow for crossing existing underground services (specifically community water lines, sewerlines, telephone/electricity ducts, fibre optic cable duct etc.) including reistatement to the original status and liason with the relevant body for inspection/approval during execution of the works. Pilot excavation shall be done to establish exact location of any buried services prior to actual excavation. The rate shall be demeed to include for pilot excavations, repairs and reistatement of any damages to the existing buried services as a result of execution of the works.	Item	L.S		
	Reinstatement				
	-	-	-		
14.40	Allow for micro-tunnelling at tarmac road crossing, complete with 300mm dia. HDPE pipe sleeve	m	24		
	Other Pipework Ancillaries				
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				
14.41	Marker posts for Gate Valves inscribed GV	nr	1		
14.42	Ditto but for Washouts inscribed WO	nr	4		
14.43	Ditto but for Air Valve inscribed AV	nr	2		
14.44	Ditto but for Water Main inscribed WM	nr	26		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				

	-	-	-		
	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	-	-	-		
	In Pipe Trenches and Chambers				
	-	-	-		
14.46	Excavation in trench for rock class "A"	m^3	800		
	-	-	-		
14.47	Excavation in trench for rock class "B"	m^3	600		
14.48	Excavation in trench for rock class "C"	m^3	400		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
14.49	Nominal bore 200mm; volume n.e 0.1 m^3	nr	4		
	Anchor blocks for tapers and Gate valves				
14.50	Nominal bore 200mm; volume n.e 0.1 m^3	nr	4		
	MISCELLANEOUS				
	-				
14.52	Provisional Sum of KES. 200,000/- to cater for Disturbances and or relocation of Temporary / semi-permanent structures along the pipeline route etc.	Item	PS		
TOTAL BILL NO. 9.1 CARRIED FORWARD TO BILL 9 SUMMARY PAGE					-

BILL NO. 9.2 MASANGORA BOOSTER RISING MAIN

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
	CLASS A: GENERAL ITEM	-	-		-
	-				
	Sections of the Treated Water Pumping Main alignment is to be laid within the available road reserves				
	Testing of works				
14.01	Pipeline testing and commissioning of the Pipeline (OD 110 HDPE) including provision of all equipment, materials and works necessary for testing	m	2,600		
14.02	Disinfection of Pipeline (OD 110) : flushing with clear water, filling with water containing 0.05g/l calcium hyperchlorite, left for 24 hours. This includes supply of necessary equipment, materials, chemicals and water, measurement of residual chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval.	m	2,600		
	CLASS D: DEMOLITION AND SITE CLEARANCE				
	-				
14.03	General site clearance along the pipeline alignment.	m²	500		
	-				
	Tree Cutting (Provisional)				
	Cut down trees, grub up roots and cart away to tips				
14.04	Girth: 0.5 m - 1.0 m	Nr	10		
14.05	Remove stump dia. 0.5 - 1m	Nr	10		
	Note:- Girth shall be measured 1.0m above ground level				
	CLASS I: PIPE WORK - PIPES				
	The rates entered against the items in this section shall include for stripping of soil, laying aside or hauling and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting, spreading surplus soil evenly over and alongside pipe trench compacting, supply, lay and joint pipes to correct line and level. Depths are stated from ground level to invert level.				
	-				
	Ferrous pipes				
	-				
14.06	DN 100. PN 16 Steel Pipe	m	50		
	-				

	High Density Polyethylene Pipes (HDPE) - Butt Fused				
	-				
14.07	OD 110, PN 16 HDPE pipes in trenches; Depth not exceeding 1.5 m	m	1,800		
14.08	OD 110, PN 16 HDPE pipes in trenches; Depth range 1.5 - 2.0 m	m	800		
-	**CLASS J: PIPE WORK - FITTINGS AND VALVES**	-	-		-
-		-	-		-
-	**Rate to include for supply and installation of fittngs**	-	-		-
	-				-
14.09'	DN 100,PN16 All flanged 90 degree bend	nr	2		
14.10	DN100x50, PN16 All Flanged Tee	nr	2		
	Couplings; PN16				
14.11	100mm VJ Stepped Coupling	nr	2		
14.12	100mm Flexible Coupling	nr	2		
14.13	110mm HDPE/ 100 Stepped Flexible Coupling	nr	4		
	Adaptors; PN16				
14.14	PE Flange Adaptor complete with metal backup ring nominal bore 110mm	nr	4		
14.15	100mm VJ Flange adaptor	nr	4		
	Straight Specials: Steel; PN16				
14.16	All Flanged Spigot 1200 mm long , nominal bore 100mm	nr	4		
14.17	Straight Spigot 1000 mm long , nominal bore 100mm	nr	4		
14.18	Straight Spigot 1200 mm long , nominal bore 100mm	nr	6		
	HDPE Bends; PN16				
14.19	90 Deg Double Flanged Bends;OD 110mm	nr	1		
14.19	PN16, Double flanged DN50 Double orifice air valve	nr	1		
14.21	PN16, DN 110 Non Return Valve	nr	1		
	-	-			
	Fittings to Air Valve; PN16	-			
	-	-			
14.22	Stepped coupling DN 50 mm	nr	1		

14.23	Flanged spigot pipe piece DN 100mm 1.2m long with a puddle flange	nr	2		
14.24	Flanged reducing tee 100mm x 100mm x 50mm	nr	2		
14.25	Double flanged pipe piece DN 100mm 0.25m long	nr	2		
14.26	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	2		
	Fittings to Washout; PN16				
14.27	Stepped coupling DN 100mm	nr	1		
14.28	Flanged spigot pipe DN 100mm 1.2m long with a puddle flange	nr	1		
14.29	Flanged reducing tee DN 100mm x 100mm x 50mm	nr	1		
14.30	Double flanged pipe piece DN 100, 0.5m long	nr	1		
14.31	DN 50mm flanged sluice valve	nr	1		
14.33	Double flanged pipe piece DN 100 1.2m long with puddle flange	nr	1		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	Chambers ducts, culverts, crossings, thrust, anchor blocks, reinstatement and other pipework ancillaries				
	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
14.35	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1000mm x 1000mm.. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	3		
	Crossings				-
14.38	Allow for crossing existing drains and reinstating these after construction of water main is completed. Include for provision of diverting the Drains and keeping them operational during construction	nr	10		
	Reinstatement				
	-	-	-		
14.40	Breaking up, Temporary and Permanent Reinstatement of murram roads. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm.	m	30		

	Other Pipework Ancillaries				
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				
14.41	Marker posts for Gate Valves inscribed GV	nr	1		
14.42	Ditto but for Washouts inscribed WO	nr	2		
14.43	Ditto but for Air Valve inscribed AV	nr	2		
14.44	Ditto but for Water Main inscribed WM	nr	12		
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	-	-	-		
	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	-	-	-		
	In Pipe Trenches and Chambers				
	-	-	-		
14.46	Excavation in trench for rock class "A"	m^3	800		
	-	-	-		
14.47	Excavation in trench for rock class "B"	m^3	500		
14.48	Excavation in trench for rock class "C"	m^3	500		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
14.49	Nominal bore 80mm; volume n.e 0.1 m^3	nr	4		
	Anchor blocks for tapers and Gate valves				
14.50	Nominal bore 80mm; volume n.e 0.1 m^3	nr	4		
	MISCELLANEOUS				
	-				

14.52	Provisional Sum of KES. 200,000/- to cater for Disturbances and or relocation of Temporary / semi-permanent structures along the pipeline route etc.	Item	PS		
TOTAL BILL NO. 9.2 CARRIED FORWARD TO BILL 9 SUMMARY PAGE					-

BILL NO.9 COLLECTION PAGE		
RISING MAINS		
PAGE	**BILL COLLECTION PAGE**	**AMOUNT (KSH)**
1	Bill No.9.1 Gokeharaka Rising Main	
2	Bill No.9. 2 Masangora Booster Rising Main	
	Bill No. 9 Total Carried Over to Summary Sheet	

BILL 10.1 - GOKEHARAKA RC TANK (500M^3)					
Item No.	**Description**	**Unit**	**Qty**	**Rate (KES)**	**Amount (KES)**
	DEMOLITION AND SITE CLEARANCE				
1.01	General clearance.	m^2	100.0		
	EARTHWORKS				
1.02	Bulk excavation in normal material not exeed 0-1.5 m	m^3	96		
1.03	Extra over for rock material (**Provisional**)	m^3	18		
1.04	Provide, place and compact in layers approved selected granular material for base slab and column foundation	m^3	150		
1.05	300mm approved hardcore fill	m^2	150		
	IN SITU CONCRETE				
	PROVISION AND PLACING OF CONCRETE				
1.06	Class 15/20 blinding 100 mm thick.	m^3	10		
1.07	Class 30/20 reinforced concrete to foundation.	m^3	14		
1.08	Class 30/20 reinforced concrete to tank roof.	m^3	20		
1.09	Class 30/20 reinforced concrete to horizontal tank floor.	m^3	18		
1.10	Class 30/20 reinforced concrete to tank walls.	m^3	41		
1.11	Class 30/20 reinforced concrete to column	m^3	3		
	FORMWORK				
1.12	F2 horizontal plane formwork to soffit of tank roof.	m^2	121		
1.13	F3 vertical Plane formwork to inside wall of tank	m^2	60		
1.14	F3 vertical plane formwork to outside wall of tank	m^2	176		

1.15	Plane sloping formwork to columns, width 0.4-1.22m.	m^2	17		
	REINFORCEMENT STEEL TO BS 4449				
1.16	Diameter ranging from 8 mm to 20mm.	tons	30		
	STRUCTURAL JOINTS				
	Note: The following items only cover construction joints in reservoir slab/wall junctions. Where the contractor requires additional joints to suit his method of working, the cost of such joints will be deemed to suit his method of working, the cost of such joints will be deemed to be included elsewhere in his rates.				
1.17	Horizontal construction joint in tank wall,rubber water stop to specifications, width 200-350 mm including sealant filler.	m	50		
	PRECAST CONCRETE UNITS				
1.18	PCC paving slabs, thickness 50 mm.	m^2	58		
	PIPEWORK – FITTINGS AND VALVES				
	All pipes and fittings to be PN 16				
	Include supply, storage, laying in trenches and chambers, including all jointing materials; Rubbers welding etc. All steel pipe fittings to be fusion bonded epoxy powder coated and lined with fusion bonded/solvent free epoxy. All flanges drilled to EN 1092.				
	Inlet pipework				
1.20	DN 200 PN 10 double flanged anchoring pipes with puddle flange Length = 700mm	nr	1		
1.21	DN 200 PN 10 double flanged 90 degree bend	nr	2		
1.22	DN 200 PN 10 double flanged pipe, L=3000mm)	nr	1		
1.23	DN 200 PN 10 flange spigot pipe, L=900mm	nr	1		
1.24	DN 200 PN 10 flexible coupling	nr	2		
1.25	DN 200 PN 10 double spigot pipe with puddle flange,L=1200mm	nr	1		

1.26	DN 200 PN 10 flanged adaptor	nr	1		
	Outlet pipework				
1.29	DN 200 PN 10 double flanged Strainer	nr	1		
1.30	DN 200 PN 10 flanged spigot pipe anchoring with puddle flange Length = 1200mm	nr	1		
1.31	DN 200 flexible coupling	nr	2		
1.32	DN 200 PN 10 double spigot pipe anchoring with puddle flange 1200 mm long	nr	2		
1.33	DN 200 PN 10 flanged adaptor	nr	2		
1.34	DN 200 PN 10 double flanged gate valve	nr	1		
1.35	DN 200 PN 10 double flanged water meter	nr	1		
1.36	DN 200 PN 10 double flanged steel pipe 600mm long	nr	1		
	Over Flow pipework				
1.37	DN 200 PN 10 flanged bell mouth	nr	1		
1.38	DN 200 PN 10 double flanged 90^0 bend	nr	3		
1.39	DN 200 PN 10 double flanged anchoring pipes with puddle flange Length = 700mm	nr	1		
1.40	DN 200 PN 10 double flanged pipe, L=3000mm	nr	1		
1.41	DN 200 PN 10 flange spigot pipe, L=1200mm	nr	1		
	Washout Pipework (Scour)				
1.42	DN 100 PN 10 double spigot pipe with puddle flange, L = 1350mm	nr	1		
1.43	DN 100 PN 10 Flexible Coupling	nr	1		
1.44	DN 100 PN 10 flanged pipe with puddle flange, L=1200mmm	nr	1		
1.45	DN 100 PN 10 double flanged gate valve	nr	1		

1.46	DN 100 PN 10 flange spigot steel pipe 700 mm long	nr	1		
1.47	DN 100 PN 10 flanged adaptor	nr	1		
1.48	DN 100 PN 10 HDPE pipe in trench connected to the rearest ditch	m	50		
	MISCELLANEOUS METALWORK				
1.49	Internal access galvinized steel ladder to tank complete with cage, as shown in the drawings	nr	1		
1.50	Supply and install DN 80mm vent steel pipe with Female threaded Tee mosquito wire gauge with clamps at ends.L= 650mm	nr	4		
1.51	Supply and install chequred plate steel lockable cover complete in tank roof access opening as shown in the drawings.	nr	1		
1.52	Construct outlet and scour valve chambers including manhole covers as detailed in the drawings	nr	2		
	GENERAL ITEMS				
	Testing of the Works				
	-				
1.53	Testing of 200m^3 tank for water tightness	LS	1		
	Sterilization and Flushing of Tank in Accordance with the Specifications				
	-				
1.54	Sterilization and Flushing of 200m^3 tank	LS	1		
	OVERFLOW DRAINAGE WORKS				
1.55	Supply and install DN 300mm ogee rigid joint concrete pipes , depth n.e 3m	m	50		
1.56	Construct manholes complete with cover slabs and polyresin manhole covers, depth n.e 4m	nr	3		
	Fencing				
1.57	Provide materials and construct a fence made of 12.5G chain link wire and topped with 3 strands of 12.5G barbed wire and Concrete fencing posts complete with corner and centre strainers. Posts spaced at 3 meter intervals. Fence height of 1.8 meters.	M	100		

1.58	Provide all materials, fabricate and fix double leaf access steel gate, 4m wide, including 2nr. concrete pillars	Nr	1		
TOTAL BILL NO. 10.1 CARRIED FORWARD TO BILL 10 SUMMARY PAGE					**-**

BILL NO. 10.2: MASANGORA ELEVATED TANK (200m³)

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
1	**ELEVATED BACKWASH TANK & TOWER**				
1.1	Supply and transport to site Pressed Steel Galvanised Steel Tank with cover, minimum net storage capacity 200m^3 in accordance with approved specifications on and including 12m high galvanised steel U.B and U.C. section tower, including provision of connections and vents base plates, ladder and platform on all 4 sides, etc. **Note**: Contractor to submit to the Engineer for approval, detailed design calculations and workshop drawings of all steel work from an approved and reputable structural steel fabricator prior to fabrication and delivery of tank and tower.	Item	L.S		
1.2	Allow for the erection of tank and tower and all assembling, welding, drilling holes, cleats bolts and nuts, cutting , fixing clamps and ladder, platform and paint and all other works all in accordance with Specifications.	Item	L.S		
1.3	Allow for testing, finishing and sterilising of the tank and pipework as specified.	Item	L.S		
2	**PIPES & FITTINGS**				
	Supply & installation to include Jointing Material, Bolts, Gaskets, Packing, Jointing Glue, etc. l As applicable				
	Inlet Pipework - Approved Epoxy Lined Externally & Internally Ferrous Pipes to Class PN10				
2.2	100 mm dia. all flanged pipe 300mm long (with puddle flange welded to tank well panel)	Nr	1		
2.3	100mm dia. all flanged 90^0 bend	Nr	2		
2.4	100mm dia. all flanged pipe 2500mm long	Nr	1		
2.5	100mm dia. flanged spigot pipe 12000mm long (cut to suit on site)	Nr	1		
2.6	100mm dia. flange adaptor	Nr	1		
2.7	100mm dia. flanged spigot pipe 1200mm long	Nr	1		
2.8	100mm dia. Coupling	Nr	1		
	Outlet Pipework - Approved Epoxy Lined Externally & Internally Ferrous Pipes & Fittings to Class PN10				
2.9	100mm dia. flanged bellmouth	Nr	1		

2.10	100mm dia. all flanged pipe 600mm long with puddle flange at 160mm from one end welded to tank base panel	Nr	1		
2.11	100mm dia. flanged spigot pipe 10m long (cut to suit on site)	Nr	1		
2.12	100mm dia. flange adaptor	Nr	2		
2.13	100mm dia. all flanged 90^0 bend	Nr	1		
2.14	100mm dia. all flanged pipe 1200mm long	Nr	1		
2.15	100x100x80mm dia. all flanged Tee	Nr	1		
2.17	100mm dia. all flanged gate valve	Nr	1		
2.17	80mm dia. all flanged gate valve	Nr	1		
2.18	100mm dia. plain ended pipe 1200mm long	Nr	1		
2.19	100mm dia. Coupling	Nr	1		
	Scour and Overflow Pipework -Approved Epoxy Lined Externally & InternallyFerrous Pipes & Fittings to Class PN 10				
2.20	100mm dia. flanged spigot pipe, length 300mm (with puddle flange welded to tank panel	Nr	1		
2.21	100mm dia. all flanged 90^0 bend	Nr	3		
2.22	100mm dia. all flanged pipe 2800mm long	Nr	1		
2.23	100mm dia. flanged spigot pipe 12m long (cut to suit on site)	Nr	1		
2.24	100mm dia. flange adaptor	Nr	2		
2.25	100mm dia. flanged spigot pipe 1200mm long	Nr	3		
2.26	100mm dia. Flanged bellmouth, 200mm long (welded to base of tank with water tight joint	Nr	1		
2.27	100mm dia. all flanged pipe 1200mm long	Nr	1		
2.28	100mm dia. flanged spigot pipe 10m long (cut to suit on site)	Nr	1		
2.29	100mm dia. coupling	Nr	1		
2.30	100mm dia. all flanged gate valve	Nr	1		
2.31	100mm dia. flanged 90^0 bend	Nr	1		
	WASHOUT DRAIN PIPE				

	The rate for this item shall include for excavation in normal soil, supply and installation of pipe, backfilling and reinstatement of land				
2.56	OD125, PN10 HDPE pipe in trenches	M	30		
3	**CHAMBERS**				
	Chambers, ducts, culverts, crossings, thrust and anchor blocks, reinstatement and others as listed and specified in Drawings.				
	Note: Items for work in this shall include:-				
	- Excavation, preparation of surfaces, disposal of excavated material, shoring sides of excavation, backfilling and removal of redundant services.				
	- Concrete, reinforcement, formwork, joints & finishes				
	- Tips for dispoal of excavated material or debris to be identified by the Contractor in liaison with the Local Authority.				
	Concrete Chambers				
	Depth not exceeding 2.0m				
3.1	Provide all materials and construct valve chambers internal dimensions 1500mm x 1500mm depth not exceeding 2.0m. Include for supply and fixing of lockable mild steel checkered plate cover & step irons	Nr	2		
4	**REINFORCED CONCRETE FOUNDATIONS**				
4.1	**Excavation**				
	The Rates shall include for all Strutting, Shuttering, Stabilising the Excavation Faces, and Keeping the Excavation Free of Water by Pumping, Bailing or Other Means.				
	Excavate in Common Material, Part Backfill after Construction and Remainder, Cart Away to Tips or use as Fill on Site, all as Directed by the Engineer.				
4.1.1	Maximum depth n.e. 1.0 m	m^3	60		
4.1.2	-Ditto- but maximum depth 1.0 m to 2.0 m	m^3	60		
4.1.3	Transport approved excavated material from site and use as fill and compact in 200 mm layers as specified on site as and where directed by the Engineer. Compaction tests to be done and rates to include for this.	m^3	90		
4.1.4	Extra over Items 4.1.1 to 4.1.2 for excavation in rock Class 'A', blasting not permitted (Provisional)	m^3	12		
4.1.5	- Ditto- for excavation in rock Class 'B' (Provisional)	m^3	6		

4.1.6	-Ditto- for excavation in rock Class 'C' (Provisional)	m^3	6		
4	**REINFORCED CONCRETE FOUNDATIONS**				
4.2	**Concrete Works**				
	Provide, mix and place concrete as directed				
4.2.1	Plain concrete Class 15/20 in 75 mm blinding layer under base slab of tank	m^2	65		
	Vibrated, Reinforced Concrete Class 25/20 in:				
4.2.2	Column base slab	m^3	38		
4.2.3	Column wall	m^3	8		
4.3	**Reinforcement**				
	Provide and Fix High Tensile Steel Reinforcement including Cutting, Bending, Propping with Spacers and Tying as Specified				
4.3.1	Reinforcement, all diameters	Kg	2,800		
4.4	**Formwork**				
	Provide and Fix Shuttering Including Propping, Strutting and Striking all as Specified				
	(i) Vertical Formwork - Class F1 Finish				
4.4.1	Sides of 500 mm Column Base Slab - Tank	m^2	24		
4.4.2	Sides of Column Wall	m^2	30		
5.5	**Fencing**				
5.0.1	Provide materials and construct a fence made of 12.5G chain link wire and topped with 3 strands of 12.5G barbed wire and Concrete fencing posts complete with corner and centre strainers. Posts spaced at 3 meter intervals. Fence height of 1.8 meters.	M	80		
5.0.2	Provide all materials, fabricate and fix double leaf access steel gate, 4m wide, including 2nr. concrete pillars	Nr	1		
TOTAL BILL NO. 10.2 CARRIED FORWARD TO BILL 10 SUMMARY PAGE					**-**

BILL NO. 10.3: BREAK PRESSURE TANK (25m³)

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
	EXCAVATION				
	Excavation shall include for strutting ,shuttering, stabilizing, excavated surfaces and keeping excavation free of water bailing out, pumping or other means.				
1.01	In bulk, material other than top soil or artificial hard material depth not exceeding 1.0m commencing from existing ground surface	M^3	12		
1.02	Depth range 1.0-2.0m	M^3	6		
1.03	In rock depth range 1.0-2.0m	M^3	5		
	filling				
	Filling to completed structures including compaction as specified				
1.04	Selected excavated material other than topsoil ,rock or artificial hard material	M^3	5		
1.05	300mm approved hardcore fill	M^3	4		
1.06	50mm murrum blinding	M^3	1		
	CLASS F:IN SITU CONCRETE				
	Placing of concrete				
	Mass concrete class 10/15				
1.07	Blinding layer,50mm thick under base slab and wall footings	M^3	2		
	Reinforced concrete class 25/20				
1.08	Base slab,150mm THK	M^3	3		
1.09	Ring beam,250mm THK	M^3	0.75		
1.10	Roof slab,150mm THK	M^3	3		
	CLASS G: CONCRETE ANCILLARIES				
	Form work				
	Sawn vertical to:				
1.11	External face to base and roof and roof slab	M^2	8		
1.12	Internal face to base And roof slab	M^2	4		
1.13	Soffit of roof slab	M^2	14		
	Extra for concrete and formwork				
1.14	Form opening 1000 x1000mm opening for roof access	nr	1		
1.15	Form opening 3150x1200mm opening for inlet pipe access	nr	1		
1.16	Form 1000x1000x600mm deep sump for washout in the floor slab	nr	1		
	reinforcement				
	Rate to include for supplying, delivery, cutting,bending,supporting and securing concrete				
1.17	2mm diameter high tensile steel (0.62kg/m^2) in floor slab	kg	622		
1.18	8mm diameter mild steel (0.42kg/m) in roof masonry walling	kg	99		
	CLASS U: BRICK WORK, BLOCK WORK AND MASONRY				
	Stone masonry				
	Provide and place approved stone masonry bedded in				

	cement: sand (1:3) mortar as directed by the Engineer				
1.19	Vertical straight walls of thickness 200mm	m	160		
	Ancillaries				
1.20	Joint reinforcement equivalent to the wall thickness less 10mm	m	160		
	INTERNAL WALL FINISHES				
	15mm thick lime plaster (1:2:9) as described to:-				
1.21	Sides of walls	M^2	38		
1.22	20x20mm Bondex joint or equivalent	M^2	15		
	PIPES & FITTINGS				
	Supply & installation to include Jointing Material, Bolts, Gaskets, Packing, Jointing Glue, etc. l As applicable				
	-				
	Inlet Pipework - Approved Epoxy Lined Externally & Internally Ferrous Pipes to Class PN16				
1.23	100 mm dia. all flanged pipe 300mm long (with puddle flange)	Nr	1		
1.24	100mm dia. all flanged 90^0 bend	Nr	2		
1.25	100mm dia. all flanged pipe 2500mm long	Nr	1		
1.26	100mm dia. flanged spigot pipe 1000mm long (cut to suit on site)	Nr	1		
1.27	100mm dia. flange adaptor	Nr	1		
1.28	100mm dia. flanged spigot pipe 1200mm long	Nr	1		
1.29	100mm dia. Coupling	Nr	1		
1.30	100mm dia. all flanged gate valve	Nr	1		
1.30.1	100mm Dia Ball Valve	Nr	1		
	Outlet Pipework - Approved Epoxy Lined Externally & Internally Ferrous Pipes & Fittings to Class PN10				
1.31	100mm dia. flanged bellmouth	Nr	1		
1.32	100mm dia. flanged spigot pipe 10m long (cut to suit on site)	Nr	1		
1.33	100mm dia. flange adaptor	Nr	2		
1.34	100mm dia. all flanged 90^0 bend	Nr	1		
1.35	100mm dia. all flanged pipe 1200mm long	Nr	1		

1.36	100x100x80mm dia. all flanged Tee	Nr	1		
1.37	100mm dia. all flanged gate valve	Nr	1		
1.38	80mm dia. all flanged gate valve	Nr	1		
1.39	100mm dia. plain ended pipe 1200mm long	Nr	1		
1.40	100mm dia. Coupling	Nr	1		
	Scour and Overflow Pipework -Approved Epoxy Lined Externally & InternallyFerrous Pipes & Fittings to Class PN 10				
1.41	100mm dia. flanged spigot pipe, length 300mm (with puddle flange)	Nr	1		
1.42	100mm dia. all flanged 90^0 bend	Nr	3		
1.43	100mm dia. flange adaptor	Nr	2		
1.44	100mm dia. flanged spigot pipe 1200mm long	Nr	3		
1.45	100mm dia. Flanged bellmouth, 200mm long (welded to base of tank with water tight joint	Nr	1		
1.46	100mm dia. all flanged pipe 1200mm long	Nr	1		
1.47	100mm dia. flanged spigot pipe 10m long (cut to suit on site)	Nr	1		
1.48	100mm dia. coupling	Nr	1		
1.49	100mm dia. all flanged gate valve	Nr	1		
1.50	100mm dia. flanged 90^0 bend	Nr	1		
	WASHOUT DRAIN PIPE				
	The rate for this item shall include for excavation in normal soil, supply and installation of pipe, backfilling and reinstatement of land				
1.51	OD125, PN10 HDPE pipe in trenches	M	30		
	CHAMBERS				
	Chambers, ducts, culverts, crossings, thrust and anchor blocks, reinstatement and others as listed and specified in Drawings.				
	Note: Items for work in this shall include:-				
	- Excavation, preparation of surfaces, disposal of excavated material, shoring sides of excavation, backfilling and removal of redundant services.				

	- Concrete, reinforcement, formwork, joints & finishes				
	- Tips for dispoal of excavated material or debris to be identified by the Contractor in liaison with the Local Authority.				
	Concrete Chambers				
	Depth not exceeding 2.0m				
1.52	Provide all materials and construct valve chambers internal dimensions 1500mm x 1500mm depth not exceeding 2.0m. Include for supply and fixing of lockable mild steel checkered plate cover & step irons	Nr	2		
	Fencing				
1.53	Provide materials and construct a fence made of 12.5G chain link wire and topped with 3 strands of 12.5G barbed wire and Concrete fencing posts complete with corner and centre strainers. Posts spaced at 3 meter intervals. Fence height of 1.8 meters.	M	60		
1.54	Provide all materials, fabricate and fix double leaf access steel gate, 4m wide, including 2nr. concrete pillars	Nr	1		
TOTAL BILL 10.3 CARRIED FORWARD TO BILL 10 SUMMARY PAGE					**-**

BILL NO.10: COLLECTION PAGE		
STORAGE TANKS		
PAGE	**BILL COLLECTION PAGE**	**AMOUNT (KSH)**
1	Bill No.10.1- Gokeharaka RC Tank (500m^3)	-
2	Bill No.10. 2 Masangora Elevated Tank (200m^3)	-
3	Bill No.10. 3 Break Pressure Tank (25m^3)	-
	Bill No. 10 Total Carried Over to Summary Sheet	

BILL NO. 11.1 GOKEHARAKA RETURN MAIN					
Item No.	**Description**	**Unit**	**Qty**	**Rate (KES)**	**Amount (KES)**
	CLASS A: GENERAL ITEM	-	-		-
	-				
	Sections of the Water Main alignment is to be laid within the available road reserves				
	Testing of works				
1.01	Pipeline testing and commissioning of the Pipeline (OD 160 - OD90 HDPE) including provision of all equipment, materials and works necessary for testing	m	4,700		
1.02	Disinfection of Pipeline (OD 160-OD90) : flushing with clear water, filling with water containing 0.05g/l calcium hyperchlorite, left for 24 hours. This includes supply of necessary equipment, materials, chemicals and water, measurement of residual chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval.	m	4,700		
	CLASS D: DEMOLITION AND SITE CLEARANCE				
	-				
1.03	General site clearance along the pipeline alignment.	m²	4,500		
	-				
	Tree Cutting (Provisional)				
	Cut down trees, grub up roots and cart away to tips				
1.04	Girth: 0.5 m - 1.0 m	Nr	10		
1.05	Remove stump dia. 0.5 - 1m	Nr	10		
	Note:- Girth shall be measured 1.0m above ground level				
	CLASS I: PIPE WORK - PIPES				
	The rates entered against the items in this section shall include for stripping of soil,laying aside or hauling and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting, spreading surplus soil eveny over and alongside pipe trench compacting, supply, lay and joint pipes to correct line and level. Depths are stated from ground level to invert level.				
	-				
	High Density Polyethylene Pipes (HDPE) - Butt fussioned				
	-				
1,06	OD 160, PN16 HDPE pipes in trenches; Depth not exceeding 1.5 m	m	4,000		

1.07	OD90, PN 16 HDPE pipes in trenches;Depth not exceeding 1.5 m	m	700		
-	**CLASS J: PIPE WORK - FITTINGS AND VALVES**	-	-		-
-					
-	**Rate to include for supply and installation of fittngs**				
	PE Adaptors, reducers				
1.13	OD160/OD90, PN16 reducers	nr	1		
	HDPE Tees				
1.19	OD160x160x63, PN16	nr	3		
1.20	OD160x160x75, PN16	nr	4		
	Sectional Valves				
1.25	DN150, PN16	nr	1		
	Fittings to Air Valve	-			
	-	-			
1.30	OD160, HDPE Flanged adaptor	nr	1		
1.31	HDPE Flanged reducing tee OD160mm x 160mm x 50mm	nr	1		
					-
1.32	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	2		
	Fittings to Washout				
1.33	HDPE Flanged reducing tee OD160mm x 160mm x 75mm, PN16	nr	1		
1.34	OD160, PN16, HDPE Flanged adaptor	nr	1		
1.35	OD 75, PN16, HDPE flanged adapter	nr	1		
1.36	DN 150mm, PN16 flanged sluice valve	nr	1		
1.37	DN 65mm, PN16, flanged sluice valve	nr	1		
1.38	OD75, PN10, HDPE pipe in trenches to nearest drain/ditch, PN12.5	m	30		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	Chambers ducts, culverts, crossings, thrust, anchor blocks, reinstatement and other pipework ancillaries				

	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
1.39	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1500mm x 1500mm.. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	3		
	Reinstatement				
	-	-	-		
1.40	Breaking up, Temporary and Permanent Reinstatement of murram roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm.	m	20		
1.41	Breaking up, Temporary and Permanent Reinstatement of tarmac roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm. Contractor to submit methodology for approval	m	15		
	Other Pipework Ancillaries				
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				
1.42	Marker posts for Gate Valves inscribed GV	nr	1		
1.43	Ditto but for Washouts inscribed WO	nr	4		
1.44	Ditto but for Air Valve inscribed AV	nr	2		
1.45	Ditto but for Water Main inscribed WM	nr	15		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	-	-	-		
	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	-	-	-		
	In Pipe Trenches and Chambers				
	-	-	-		
1.46	Excavation in trench for rock class "A"	m^3	200		
	-	-	-		

1.47	Excavation in trench for rock class "B"	m^3	200		
1.48	Excavation in trench for rock class "C"	m^3	200		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
1.49	Nominal bore 200mm; volume n.e 0.1 m^3	nr	2		
	Anchor blocks for tapers and Gate valves				
1.50	Nominal bore 200mm; volume n.e 0.1 m^3	nr	2		
TOTAL BILL NO. 11.1 CARRIED FORWARD TO BILL 11 SUMMARY PAGE					**-**

BILL NO. 11.2 GOKEHARAKA - GOSEBE MAIN

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
	CLASS A: GENERAL ITEM	-	-		-
	-				
	Sections of the Treated Water Pumping Main alignment is to be laid within the available road reserves				
	Testing of works				
1.01	Pipeline testing and commissioning of the Pipeline (OD110 - OD75 HDPE) including provision of all equipment, materials and works necessary for testing	m	5,355		
1.02	Disinfection of Pipeline (OD110 -OD75 HDPE) : flushing with clear water, filling with water containing 0.05g/l calcium hyperchlorite, left for 24 hours. This includes supply of necessary equipment, materials, chemicals and water, measurement of residual chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval.	m	5,355		
	CLASS D: DEMOLITION AND SITE CLEARANCE				
	-				
1.03	General site clearance along the pipeline alignment.	m²	3,800		
	-				
	Tree Cutting (Provisional)				
	Cut down trees, grub up roots and cart away to tips				
1.04	Girth: 0.5 m - 1.0 m	Nr	10		
1.05	Remove stump dia. 0.5 - 1m	Nr	10		
	Note:- Girth shall be measured 1.0m above ground level				
	CLASS I: PIPE WORK - PIPES				
	The rates entered against the items in this section shall include for stripping of soil,laying aside or hauling and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting, spreading surplus soil evenly over and alongside pipe trench compacting, supply, lay and joint pipes to correct line and level. Depths are stated from ground level to invert level.				
	-				
	High Density Polyethylene Pipes (HDPE) - Butt fussioned				
	-				
1,07	OD 110, PN 10 HDPE pipes in trenches; Depth not exceeding 1.5 m	m	355		
1.09	OD 90, PN 10 HDPE pipes in trenches; Depth not exceeding	m	2,250		

	1.5 m				
1.10	OD 75, PN 16 HDPE pipes in trenches; Depth not exceeding 1.5 m	m	2,750		
-	**CLASS J: PIPE WORK - FITTINGS AND VALVES**	-	-		-
-		-	-		-
-	**Rate to include for supply and installation of fittngs**	-	-		-
	PE Adaptors, reducers				
1.11	OD90/OD75, PN10 reducers	nr	1		
1.12	OD110/OD90, PN10 reducers	nr	1		
1.13	OD110/OD75, PN10 reducers	nr	1		
	HDPE Tees				
1.17	OD110x110x110, PN10	nr	1		
1.18	OD90x90x63, PN10	nr	2		
1.19	OD75x75x63, PN16	nr	3		
	Sectional Valves				
1.20	DN100, PN10	nr	2		
1.20	DN80, PN10	nr	1		
	Fittings to Air Valve; PN10	-			
	-	-			
1.24	OD90, HDPE Flanged adaptor	nr	2		
1.25	HDPE Flanged reducing tee OD90mm x 90mm x 75mm	nr	2		
					-
1.26	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	2		
	Fittings to Washout				
1.27	HDPE Flanged reducing tee OD90mm x 90mm x 75mm	nr	1		
1.28	OD90, HDPE Flanged adaptor	nr	1		
1.29	OD 75, HDPE flanged adapter	nr	1		
1.30	DN 80mm flanged sluice valve	nr	1		

1.31	DN 65mm flanged sluice valve	nr	1		
1.32	OD75, PN10, HDPE pipe in trenches to nearest drain/ditch	m	30		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	Chambers ducts, culverts, crossings, thrust, anchor blocks, reinstatement and other pipework ancillaries				
	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
1.33	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1500mm x 1500mm.. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	3		
	Reinstatement				
	-	-	-		
1.34	Breaking up, Temporary and Permanent Reinstatement of tarmac roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm. Contractor to submit methodology for approval	m	15		
	-	-	-		
1.34	Breaking up, Temporary and Permanent Reinstatement of murram roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm.Contractor to submit methodology for approval	m	40		
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				
1.35	Marker posts for Gate Valves inscribed GV	nr	1		
1.36	Ditto but for Washouts inscribed WO	nr	2		
1.37	Ditto but for Air Valve inscribed AV	nr	2		
1.38	Ditto but for Water Main inscribed WM	nr	25		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	-	-	-		

	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	In Pipe Trenches and Chambers				
1.39	Excavation in trench for rock class "A"	m^3	200		
	-	-	-		
1.40	Excavation in trench for rock class "B"	m^3	200		
1.41	Excavation in trench for rock class "C"	m^3	200		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
1.42	Nominal bore 8mm; volume n.e 0.1 m^3	nr	2		
	Anchor blocks for tapers and Gate valves				
1.43	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		
TOTAL BILL NO. 11.2 CARRIED FORWARD TO BILL 11 SUMMARY PAGE					-

BILL NO. 11.3 IHORE MAIN

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
	CLASS A: GENERAL ITEMS	-	-	-	-
	-	-	-	-	-
	Pipeline testing and commissioning for the whole work on this line, including all necessary equipment, materials and works necessary for testing, such as thrust and anchor blocks, transportation and use of water, pipe fittings, disposal of used water.			-	-
				-	-
1.01	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Bloks, Anchor Blocks,Provision, Transportation and use and disposal of Water, Pipe Fittings,etc. OD 110-75 mm, HDPE	m	3,400		
					-
1.02	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hyperchlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval. OD 110-75 mm, HDPE	m	3,400		
					-
	CLASS I: PIPE WORK - PIPES				
	The rates entered against the items in this section shall include for stripping top soil, laying aside or hauling ,and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting, spreading surplus soil evenly over and alongside pipe trench compacting, supply lay and joint pipes to correct line and level. Depths are stated from to correct line and level. Depths are stated from ground level to invert level.				
	HDPE Pipes				
1.03	OD110mm PN 16 pipe in trenches, depth n.e 1.5m	m	2,000		
1.04	OD90mm PN 16 pipe in trenches, depth n.e 1.5m	m	1,000		
1.05	OD75mm PN 16 pipe in trenches, depth n.e 1.5m	m	1,000		-
	CLASS J: PIPE WORK - FITTINGS AND VALVES				
-		-	-		-
-	**Rate to include for supply and installation of fittngs**	-	-		-
	HDPE Tees				
1.06	OD90x90x75, PN16	nr	2		
	Sectional Valves				

1.07	DN80, PN16	nr	1		
	Fittings to Air Valve; PN16	-			
	-	-			
1.08	OD75, HDPE Flanged adaptor	nr	2		
1.09	HDPE Flanged Equal tee OD75mm x 75mm x 75mm	nr	1		
1.10	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	1		
	Fittings to Washout				
1.11	HDPE Flanged equal tee OD75mm x 75mm x 75mm	nr	1		
1.12	OD 75, HDPE flanged adapter	nr	1		
1.13	DN 80mm flanged sluice valve	nr	1		
1.14	OD75, PN10, HDPE pipe in trenches to nearest drain/ditch	m	30		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
1.33	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1500mm x 1500mm.. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	3		
	Reinstatement				
	-	-	-		
1.34	Breaking up, Temporary and Permanent Reinstatement of murram roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm.	m	20		
	Other Pipework Ancillaries				
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				

1.35	Marker posts for Gate Valves inscribed GV	nr	1		
1.36	Ditto but for Washouts inscribed WO	nr	2		
1.37	Ditto but for Air Valve inscribed AV	nr	2		
1.38	Ditto but for Water Main inscribed WM	nr	18		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	-	-	-		
	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	-	-	-		
	In Pipe Trenches and Chambers				
	-	-	-		
1.39	Excavation in trench for rock class "A"	m^3	200		
	-	-	-		
1.40	Excavation in trench for rock class "B"	m^3	200		
1.41	Excavation in trench for rock class "C"	m^3	200		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
1.42	Nominal bore 100mm; volume n.e 0.1 m^3	nr	2		
	Anchor blocks for tapers and Gate valves				
1.43	Nominal bore 100mm; volume n.e 0.1 m^3	nr	2		
TOTAL BILL NO. 11.3 CARRIED FORWARD TO BILL 11 SUMMARY PAGE					**-**

BILL NO. 11.4 KUBINTO DISTRIBUTION MAIN

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
	CLASS A: GENERAL ITEMS				
	-				
	Pipeline testing and commissioning for the whole work on this line, including all necessary equipment, materials and works necessary for testing, such as thrust and anchor blocks, transportation and use of water, pipe fittings, disposal of used water.				
				-	-
1.01	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Bloks, Anchor Blocks,Provision, Transportation and use and disposal of Water, Pipe Fittings,etc. OD 90-75 mm, HDPE	m	4,200		
					-
1.02	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hyperchlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval. OD 90-75 mm, HDPE	m	4,200		
					-
	CLASS I: PIPE WORK - PIPES				
	The rates entered against the items in this section shall include for stripping top soil, laying aside or hauling ,and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting, spreading surplus soil evenly over and alongside pipe trench compacting, supply lay and joint pipes to correct line and level. Depths are stated from to correct line and level. Depths are stated from ground level to invert level.				
	HDPE Pipes				
1.03	OD90mm PN 16 pipe in trenches, depth n.e 1.5m	m	2,000		
1.04	OD75mm PN 16 pipe in trenches, depth n.e 1.5m	m	4,200		
	CLASS J: PIPE WORK - FITTINGS AND VALVES				
-		-	-		-
-	**Rate to include for supply and installation of fittngs**	-	-		-
	HDPE Tees				
1.05	OD75x75x63, PN16	nr	3		
	Sectional Valves				

1.06	DN80, PN16	nr	1		
	Fittings to Air Valve; PN16	-			
	-	-			
1.07	OD75, HDPE Flanged adaptor	nr	2		
1.08	HDPE Flanged Equal tee OD75mm x 75mm x 75mm	nr	1		
1.09	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	1		
	Fittings to Washout				
1.10	HDPE Flanged equal tee OD75mm x 75mm x 75mm	nr	1		
1.11	OD 75, HDPE flanged adapter	nr	1		
1.12	DN 80mm flanged sluice valve	nr	1		
1.13	OD75, PN10, HDPE pipe in trenches to nearest drain/ditch	m	30		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
1.14	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1500mm x 1500mm.. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	3		
	Reinstatement				
	-	-	-		
1.15	Breaking up, Temporary and Permanent Reinstatement of murram roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm.	m	20		
	Other Pipework Ancillaries				
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				
1.16	Marker posts for Gate Valves inscribed GV	nr	1		

1.17	Ditto but for Washouts inscribed WO	nr	2		
1.18	Ditto but for Air Valve inscribed AV	nr	2		
1.19	Ditto but for Water Main inscribed WM	nr	18		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	-	-	-		
	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	-	-	-		
	In Pipe Trenches and Chambers				
	-	-	-		
1.20	Excavation in trench for rock class "A"	m^3	200		
	-	-	-		
1.21	Excavation in trench for rock class "B"	m^3	200		
1.22	Excavation in trench for rock class "C"	m^3	200		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
1.23	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		
	Anchor blocks for tapers and Gate valves				
1.24	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		
TOTAL BILL NO. 11.4 CARRIED FORWARD TO BILL 11 SUMMARY PAGE					**-**

	BILL NO. 11.5 MASANGORA RETURN MAIN				
Item No.	**Description**	**Unit**	**Qty**	**Rate (KES)**	**Amount (KES)**
	CLASS A: GENERAL ITEMS				
	-				
	Pipeline testing and commissioning for the whole work on this line, including all necessary equipment, materials and works necessary for testing, such as thrust and anchor blocks, transportation and use of water, pipe fittings, disposal of used water.				
1.01	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Bloks, Anchor Blocks,Provision, Transportation and use and disposal of Water, Pipe Fittings,etc. OD 90-75 mm, HDPE	m	1,800		
					-
1.02	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hyperchlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval. OD 90-75 mm, HDPE	m	1,800		
					-
	CLASS I: PIPE WORK - PIPES				
	The rates entered against the items in this section shall include for stripping top soil, laying aside or hauling ,and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting, spreading surplus soil evenly over and alongside pipe trench compacting, supply lay and joint pipes to correct line and level. Depths are stated from to correct line and level. Depths are stated from ground level to invert level.				
	HDPE Pipes				
1.04	OD90, PN10 HDPE pipe, in trench depth n.e 1.5m	m	1,800		
	CLASS J: PIPE WORK - FITTINGS AND VALVES				
-					
-	**Rate to include for supply and installation of fittngs**				
	PE Adaptors, reducers				
1.13	OD90/OD75, PN16 reducers	nr	2		
1.13	OD90/OD63, PN16 reducers	nr	2		
	HDPE Tees				

1.17	OD90x90x75, PN16	nr	2		
1.18	OD90x90x63, PN16	nr	4		
1.19	OD75x75x63, PN16	nr	3		
	Sectional Valves				
1.20	DN80, PN16	nr	1		
	HDPE Bends; PN16				
1.21	90 Deg Double Flanged Bends;OD 90mm	nr	1		
1.23	Double flanged DN50 Double orifice air valve	nr	1		
	Fittings to Air Valve; PN16	-			
	-	-			
1.24	OD90, HDPE Flanged adaptor	nr	2		
1.25	HDPE Flanged reducing tee OD90mm x 90mm x 50mm	nr	2		
1.26	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	2		
	Fittings to Washout				
1.27	HDPE Flanged reducing tee OD90mm x 90mm x 75mm	nr	1		
1.28	OD90, HDPE Flanged adaptor	nr	1		
1.29	OD 75, HDPE flanged adapter	nr	1		
1.30	DN 80mm flanged sluice valve	nr	1		
1.31	DN 65mm flanged sluice valve	nr	1		
1.32	OD75, PN10, HDPE pipe in trenches to nearest drain/ditch	m	30		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
1.33	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1500mm x 1500mm.. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	4		

	Reinstatement				
	-	-	-		
1.34	Breaking up, Temporary and Permanent Reinstatement of murram roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm.	m	60		
	Other Pipework Ancillaries				
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				
1.35	Marker posts for Gate Valves inscribed GV	nr	1		
1.36	Ditto but for Washouts inscribed WO	nr	1		
1.37	Ditto but for Air Valve inscribed AV	nr	2		
1.38	Ditto but for Water Main inscribed WM	nr	10		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	-	-	-		
	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	-	-	-		
	In Pipe Trenches and Chambers				
	-	-	-		
1.39	Excavation in trench for rock class "A"	m^3	100		
	-	-	-		
1.40	Excavation in trench for rock class "B"	m^3	100		
1.41	Excavation in trench for rock class "C"	m^3	100		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
1.42	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		

	Anchor blocks for tapers and Gate valves				
1.43	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		
TOTAL BILL NO. 11.5 CARRIED FORWARD TO BILL 11 SUMMARY PAGE					**-**

BILL NO. 11.6 MASANGORA - GETAMBWEGA MAIN

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
	CLASS A: GENERAL ITEMS				
	-				
	Pipeline testing and commissioning for the whole work on this line, including all necessary equipment, materials and works necessary for testing, such as thrust and anchor blocks, transportation and use of water, pipe fittings, disposal of used water.				
				-	-
1.01	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Bloks, Anchor Blocks,Provision, Transportation and use and disposal of Water, Pipe Fittings,etc. OD 90 mm, HDPE	m	2,364		
					-
1.02	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hyperchlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval. OD 90 mm, HDPE	m	2,364		
					-
	CLASS I: PIPE WORK - PIPES				
	The rates entered against the items in this section shall include for stripping top soil, laying aside or hauling ,and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting,spreading surplus soil evenly over and alongside pipe trench compacting, supply lay and joint pipes to correct line and level. Depths are stated from to correct line and level. Depths are stated from ground level to invert level.				
	HDPE Pipes				
1.04	OD90, PN10 HDPE pipe, in trench depth n.e 1.5m	m	2,364		
	CLASS J: PIPE WORK - FITTINGS AND VALVES				
-		-	-		-
-	**Rate to include for supply and installation of fittngs**	-	-		-
	PE Adaptors, reducers				
1.13	OD90/OD75, PN16 reducers	nr	2		
1.13	OD90/OD63, PN16 reducers	nr	2		
	HDPE Tees				

1.17	OD90x90x75, PN16	nr	2		
1.18	OD90x90x63, PN16	nr	4		
1.19	OD75x75x63, PN16	nr	3		
	Sectional Valves				
1.20	DN80, PN16	nr	1		
	HDPE Bends; PN16				
1.21	90 Deg Double Flanged Bends;OD 90mm	nr	1		
1.23	Double flanged DN50 Double orifice air valve	nr	1		
	Fittings to Air Valve; PN16	-			
	-	-			
1.24	OD90, HDPE Flanged adaptor	nr	2		
1.25	HDPE Flanged reducing tee OD90mm x 90mm x 50mm	nr	2		
1.26	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	2		
	Fittings to Washout				
1.27	HDPE Flanged reducing tee OD90mm x 90mm x 75mm	nr	1		
1.28	OD90, HDPE Flanged adaptor	nr	1		
1.29	OD 75, HDPE flanged adapter	nr	1		
1.30	DN 80mm flanged sluice valve	nr	1		
1.31	DN 65mm flanged sluice valve	nr	1		
1.32	OD75, PN10, HDPE pipe in trenches to nearest drain/ditch	m	30		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
1.33	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1500mm x 1500mm.. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	4		

	Reinstatement				
	-	-	-		
1.34	Breaking up, Temporary and Permanent Reinstatement of murram roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm.	m	60		
	Other Pipework Ancillaries				
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				
1.35	Marker posts for Gate Valves inscribed GV	nr	1		
1.36	Ditto but for Washouts inscribed WO	nr	2		
1.37	Ditto but for Air Valve inscribed AV	nr	2		
1.38	Ditto but for Water Main inscribed WM	nr	18		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	-	-	-		
	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	-	-	-		
	In Pipe Trenches and Chambers				
	-	-	-		
1.39	Excavation in trench for rock class "A"	m^3	200		
	-	-	-		
1.40	Excavation in trench for rock class "B"	m^3	200		
1.41	Excavation in trench for rock class "C"	m^3	200		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
1.42	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		

	Anchor blocks for tapers and Gate valves				
1.43	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		
TOTAL BILL NO. 11.6 CARRIED FORWARD TO BILL 11 SUMMARY PAGE					**-**

	BILL NO. 11.7 MASANGORA - MAKERERO MAIN				
Item No.	**Description**	**Unit**	**Qty**	**Rate (KES)**	**Amount (KES)**
	CLASS A: GENERAL ITEMS				
	-				
	Pipeline testing and commissioning for the whole work on this line, including all necessary equipment, materials and works necessary for testing, such as thrust and anchor blocks, transportation and use of water, pipe fittings, disposal of used water.				
				-	-
1.01	Testing and Commissioning of the Pipeline including provision of all equipment, materials and works necessary for testing such as but not limited to Thrust Bloks, Anchor Blocks,Provision, Transportation and use and disposal of Water, Pipe Fittings,etc. OD 75 mm, HDPE	m	4,150		
					-
1.02	Disinfection of Pipeline ; Flushing with clear water, filling with water containing 0.05g/l Calcium Hyperchlorite, left for 24 hours. This includes supply of necessary Equipment, Materials, Chemicals and Water, Measurement of Residual Chlorine, all as specified and safe disposal of disinfecting water to Engineer's approval. OD 75 mm, HDPE	m	4,150		
					-
	CLASS I: PIPE WORK - PIPES				
	The rates entered against the items in this section shall include for stripping top soil, laying aside or hauling ,and subsequently replacing over refilled trench, excavation in trench in material other than rock, shuttering where necessary, refilling and compacting,spreading surplus soil evenly over and alongside pipe trench compacting, supply lay and joint pipes to correct line and level. Depths are stated from to correct line and level. Depths are stated from ground level to invert level.				
	HDPE Pipes				
1.05	OD75mm PN 16 pipe in trenches, depth n.e 1.5m	m	4,150		
	CLASS J: PIPE WORK - FITTINGS AND VALVES				
-		-	-		-
-	**Rate to include for supply and installation of fittngs**	-	-		-
	HDPE Tees				
1.19	OD75x75x63, PN16	nr	3		
	Sectional Valves				
1.20	DN80, PN16	nr	1		

	Fittings to Air Valve; PN16	-			
	-	-			
1.24	OD75, HDPE Flanged adaptor	nr	2		
1.25	HDPE Flanged Equal tee OD75mm x 75mm x 75mm	nr	1		
1.26	DN 50mm Antishock/Antisurge Double Orifice Air Valve with flanged base complete with isolating valve fittings	nr	1		
	Fittings to Washout				
1.27	HDPE Flanged equal tee OD75mm x 75mm x 75mm	nr	1		
1.29	OD 75, HDPE flanged adapter	nr	1		
1.30	DN 80mm flanged sluice valve	nr	1		
1.32	OD75, PN10, HDPE pipe in trenches to nearest drain/ditch	m	30		
	CLASS K: PIPE WORK -CHAMBERS AND PIPE WORK ANCILLARIES				
	IN SITU MASONARY CHAMBERS (WASHOUT AND AIR VALVE)				
	-	-	-		
1.33	Provide all materials and construct Mansonry walling Chambers, internal dimensions 1500mm x 1500mm.. Include for supply and fixing of removable precast concrete slab/cover, mild steel frame, lifting/opening mechanism, step irons, compacted granular fill, rendering of exposed blockwork, etc. all as per the detailed drawings.	nr	3		
	Reinstatement				
	-	-	-		
1.34	Breaking up, Temporary and Permanent Reinstatement of murram roads. All as per the provided drawing. Contractor to allow for provision of requisite diversion signage, controls and safety precaution in his rates, nominal bore not exceeding 200mm.	m	20		
	Other Pipework Ancillaries				
	MARKER POSTS				
	-				
	Supply and fix marker posts for water main route, road crossings, change of direction, air valves, washouts, fire hydrants and valve chambers. All in accordance with drawings and Specifications				
	-				
1.35	Marker posts for Gate Valves inscribed GV	nr	1		
1.36	Ditto but for Washouts inscribed WO	nr	2		
1.37	Ditto but for Air Valve inscribed AV	nr	2		

1.38	Ditto but for Water Main inscribed WM	nr	18		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	-	-	-		
	Extra over excavation and backfilling for excavation in Rock. Rate to include carting away and disposal. (Provisional)				
	-	-	-		
	In Pipe Trenches and Chambers				
	-	-	-		
1.39	Excavation in trench for rock class "A"	m^3	300		
	-	-	-		
1.40	Excavation in trench for rock class "B"	m^3	300		
1.41	Excavation in trench for rock class "C"	m^3	300		
	-	-	-		
	Note:- Blasting is NOT permitted.				
	-	-	-		
	CLASS L: PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Mass concrete class 15/20 in thrust and anchor blocks				
	Thrust blocks for bends, tees and blank ends.				
1.42	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		
	Anchor blocks for tapers and Gate valves				
1.43	Nominal bore 80mm; volume n.e 0.1 m^3	nr	2		
TOTAL CARRIED FORWARD TO BILL 11 SUMMARY PAGE					**-**

BILL No. 11.8: LAST MILE CONNECTIVITY

Item No.	Description	Unit	Qty	Rate (KES)	Amount (KES)
	DEMOLITION AND SITE CLEARANCE				
1,01	Clear site for works as instructed, including removal of trees and stumps with girths less than 0.6m, hedges, bushes and other vegetation of deleterious ofganic material, and back filling of holes left by removal of stumps and roots using approved material as directed by the Engineer	m^2	2,000		
	Tree Cutting (Provisional)				
	Cut down trees, grub up roots and cart away to tips as directed by the Engineer. **Note:- Girth shall be measured 1.0 m above the ground level**				
1.02	Girth: 0.5 m - 1.0 m	Nr	10		
	SUPPLY AND LAYING OF PIPES				
	HDPE Pipes (Butt fused)				
	Supply and transport to site. Transport from site store, lay and joint pipes in trench, include for excavation, preparation of surfaces, disposal of excavated material, shoring sides of excavation and backfilling with approved material. Minimum trench width to be 400mm and minimum cover to pipe to be 900mm. Rate to include for testing and disinfection.				
1.03	OD50mm, PN 16	m	10,200		
1.04	OD63mm, PN16	m	7,000		
	PPR Pipes - PN16				
	Supply and transport to site. Transport from site store, lay and joint pipes in trench, include for excavation, preparation of surfaces, disposal of excavated material, shofing sides of excavation and backfilling with approved material. Minimum trench width to be 400mm and minimum cover to pipe to be 900mm. Rate to include for testing and disinfection.				
1.06	OD32mm	m	5,000		
1.07	OD25mm	m	5,000		
	SUPPLY AND INSTALLATION OF HDPE PIPE FITTINNGS - PN16				
	Butt Fusion Tees				
1.08	OD110x75mm	Nr	1		
1.09	OD90x63mm	Nr	5		

1.10	OD90x50mm	Nr	5		
1.11	OD90x50mm	Nr	5		
1.12	OD75x50mm	Nr	5		
	Compression End Cap Plugs				
1.13	OD50mm	Nr	10		
1.14	OD63mm	Nr	10		
1.15	OD75mm	Nr	2		
	SUPPLY AND INSTALLATION OF PPR PIPE FITTINNGS - PN16				
	Note: Below PPR fittings are of varying sizes from 20mm to 32mm diameter. Actual sizes required to be determined onsite.				
1.16	Bends	Nr	50		
1.17	Tees	Nr	50		
1.18	Sockets	Nr	50		
1.19	Reducing Sockets	Nr	50		
1.20	Male / Female Unions	Nr	50		
1.21	Male / Female Adaptor Sockets	Nr	50		
1.22	End Cap Plugs	Nr	50		
	OTHER FITTINGS - PN16				
	Saddle Clamps				
	Actual sizes to be determined onsite as per consumer application and approval by MIWASCO				
1.23	OD90x75/63/50/40/32/25/20mm	Nr	450		
	SUPPLY AND INSTALLATION OF VALVES & CONSUMER METERS- PN16				
	Flanged Gate Valves				
1.24	DN50mm for airvalves	Nr	4		
1.26	DN50mm for isolating/sectional valves	Nr	5		

	All Flanged Air Valves				
1.27	DN 50 Single Orifice Air Valves	Nr	4		
	Consumer Connections				
	Supply and install positive displacement cold water consumer meters, material type of modified acetal copolymer (plastic). Rated Flow- (1.5 m^3/hr) Max. Flow -(3 m^3/hr) Min. Flow -(30 l/hr. Rate to include for requisite fittings and meter chamber with internal plan area not exceeding 0.16$m^{2.}$				
1.28	PN16, DN32	Nr	5		
1.29	PN16, DN25	Nr	45		
1.30	PN16, DN15	Nr	350		
	Additional fittings				
1.31	Allow for a Provisional Sum of Ksh. 500,000 for additional fittings as instructed by the Engineer	P.Sum	1		
	CLASS K: PIPE WORK - CHAMBERS AND PIPEWORK ANCILLARIES				
	Chambers, ducts, culverts, crossings, thrust and anchor blocks, reinstatement and others as listed and specified in drawings.				
	Note:- Items for work in this class shall include:- - Excavation, preparation of surfaces, disposal of excavated material, shoring sides of excavation, backfilling and removal of redundant services. - Concrete, reinforcement, formwork, joints and finishes.				
	- Tips for disposal of excavated material or debris to be identified by the Contractor in liaison with the Local Authority.				
	IN SITU CHAMBERS				
1.32	Provide all materials and construct valve chamber as detailed in drawings.	Nr	5		
1.33	Provide all materials and construct Air valve chambers as detailed in drawings.	Nr	4		
	Other Pipework Ancillaries				
1.34	Pipeline Marker posts for Air Valve inscribed 'AV'	nr	4		
1.35	Ditto- but Water Main inscribed 'WM'	nr	50		
1.36	Ditto- but Gate Valves inscribed 'GV'	nr	5		
	MICRO-TUNNELLING				

	i) Micro-tunneling/ cutting of tarmac roads nominal bore not exceeding 250mm, road span not exceeding 18m ii) Removal, alteration and reinstatement of exisiting amenities,pavements and structures.Contractor to ensure that pedestrian and vehicular Access is maintained at all times. iii) Safety hoarding, lighting, bands, warning signs, etc. to be maintained at all times. iv) Allow for method related costs for dewatering of trenches.				
1.37	Cost relating to the above mentioned specific conditions.	Nr	2		
	CLASS L : PIPEWORK - SUPPORTS AND PROTECTION ANILLARIES TO LAYING AND EXCAVATION.				
	Extras to Excavation and Backfilling (Provisional)				
	In Pipe Trench & Chambers				
1.38	Excavation in trench for hard rock	m^3	2200		
	Note:- Blasting is NOT permitted for Item above				
	Imported Selected Fill (Provisional)				
	Provide, transport to site and place imported selected fill and compact in bed and surround to pipes as specified.				
1.39	To pipes nominal bore not exceeding 100 mm	m	400		
	Reinstatement				
1.40	Break up, temporary and permanent reinstatement of murram roads to the approval of the Engineer	m	350		
TOTAL CARRIED FORWARD TO BILL 11 SUMMARY PAGE					-

BILL NO.11		
DISTRIBUTION PIPELINES AND LMC		
PAGE	**BILL COLLECTION PAGE**	**AMOUNT (KSH)**
1	Bill No.11.1Gokeharaka Return Main	-
2	Bill No.11. 2 Gokeharaka - Gosebe Main	-
3	Bill No.11.3 Ihore Main	-
4	Bill No.11.4 Kubinto Distribution Main	-
5	Bill No.11.5 Masangora Return Main	-
6	Bill No.11.6 Masangora - Getambwega Main	-
7	Bill No.11.7 Masangora - Makerero Main	-
8	Bill No.11.8 Last Mile Connectivity	-
	Bill No. 11 Total Carried Over to Summary Sheet	

BILL NO. 12: CONSTRUCTION OF WATER KIOSKS (10NR)					
Item	**Description**	**Unit**	**Qty**	**Rate (Ksh)**	**Amount (Ksh)**
	-				
	CLASS E: EARTHWORKS				
	Excavation shall include for strutting, shuttering, stabilizing, excavated surfaces and keeping excavation free of water bailing out, pumping or other means.				
1.01	Commencing surface for excavation is top surface prior to excavation: excavation for Topsoil; maximum depth n.e 0.25 m - rate includes for working space	M^3	3		
1.02	Commencing surface for excavation is top surface prior to excavation: excavation for Materials other than topsoil, rock or artificial hard material; maximum depth 0.25 - 0.5m- rate includes for working space	M^3	3		
1.03	Commencing surface for excavation is top surface prior to excavation: excavattion for Materials other than topsoil, rock or artificial hard material maximum depth 0.5 - 1m- rate includes for working space	M^3	6		
	Filling				
	Filling to completed structures including compaction as specified				
1.04	Selected excavated material other than topsoil ,rock or artificial hard material	M^3	4		
1.05	50mm murrum blinding	M^3	0.5		
1.06	300mm thick, hardcore fill compacted in 150mm layers	M^3	3		
	CLASS F:IN SITU CONCRETE				
	Provision of concrete				
1.07	Blinding Concrete grade 15/20 - 50mm thick	M^3	0.5		
1.08	Concrete Grade C25/20 for base slab, wall footing, ring beam and roof slab	M^3	3.8		
	Placing of concrete				
	Mass concrete class 15/20				
1.09	Blinding layer,50mm thick under base slab and wall footings	M^3	1		
	Reinforced concrete class 25/20				
1.10	Base slab,200mm thick	M^3	2		
1.11	Roof slab,150mm thick	M^3	1		
1.12	Ring beam,250mm thick	M^3	0.6		

	CLASS G: CONCRETE ANCILLARIES				
	Form work; fair finish				
	plane horizontal				
1.13	Soffit of roof slab	M^2	7		
	Sawn vertical to:				
1.14	External face to footing, base, ring beam and roof slab	M^2	4.2		
1.15	Internal face to ring beam	M^2	2.4		
	Reinforcement				
	Rate to include for supplying, delivery, cutting, bending, supporting and securing concrete				
1.16	T8 to ring beam links	Kg	60		
1.17	T10 high tensile steel in ring beam and roof slab	Kg	80		
1.18	T12 high tensile steel in columns and bases	Kg	120		
1.19	BRC A142 for floor slab	M^2	7		
	CLASS W				
	4,000 litres capacity plastic tank				
1.2	Supply, install & test 4000 litres plastic water tank to the water kiosk roof slab. Rate to include for protective metallic cage around the tank as approved by the Engineer. All the metalic and concrete surfaces shall be painted with three coats of suitable paints as approved by the Engineer.	Nr	1		
	CLASS I: PIPEWORK – PIPES TO WATER KIOSK.				
	All pipes to be Galvanized mild steel, PN10				
1.21	Provide and install 32mm inlet pipe	M	6		
	CLASS J: PIPEWORK - FITTINGS AND VALVES				
	Rate to include for supply and installation of PN 16, GI fittings				
1.22	32mm dia. Elbows	Nr	3		
1.23	20mm elbow	Nr	3		
1.24	32mm dia. Valve sockets	Nr	4		
1.25	32x20 mm Reducing Tee	Nr	1		
1.26	32mm end plug	Nr	2		
1.27	32mm union	Nr	6		
1.28	32mm short nipple	Nr	4		

1.29	20mm union	Nr	3		
1.3	20mm short nipple	Nr	8		
1.31	20mm gate valve	Nr	3		
1.32	32mm socket gate valve	Nr	1		
1.33	32mm Ball Valve	Nr	1		
1.34	32mm Pegler or approved Water Meter per kiosk	Nr	1		
	CLASS U: BRICK WORK, BLOCK WORK AND MASONRY				
	Walling				
1.35	natural stone to walls to substructure and superstructure walling in 1:3 cement/sand mortar. Hoop iron in every 3 courses	M^2	30		
	Ancillaries-Finishes				
1.36	20mm trowel finished plaster to the wall surfaces	M^2	51		
	CLASS V: PAINTING				
1.37	Provide 3 coats of approved Emulsion paint to the wall surfaces	M^2	51		
1.38	Allow for sign writing and branding of the water kiosks as directed by the Engineer.	sum	1.0		
	CLASS Z: SIMPLE BUILDING WORKS INCIDENTAL TO CIVIL ENGINEERING WORKS				
1.39	Mild steel window, 1500x600mm with two end top hangs and one middle fixed panels	Nr	1		
1.40	Install a mild steel door measuring 900mm by 2100mm. Rate to include door frame and requisite iron mongery	Nr	1		
	Total For Kiosk 1				
	Total For Kiosk 10 (Total for 1Nr Water Kiosk X 10)				
	TOTAL BILL NO.12 CARRIED OVER TO SUMMARY SHEET				

BILL NO. 13.1. GIRLS VIP LATRINE BLOCK					
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kes)**	**Amount (Kes)**
	Substructure				
1.01	Pit Excavation; rate to include for shoring, strutting, and keeping excavated surfaces dry from water, and spreading of excavated material within site				
1.02	Maximum depth n.e. l.0rn	m^3	20		
1.03	Maximum depth 1.0rn to 2.0m	m^3	16		
1.04	Maximum depth 2.0rn to 3.0m	m^3	10		
1.05	Maximum depth 3.0rn to 4.0m	m^3	10		
1.06	Maximum depth exceeding 4.0m	m^3	10		
1.07	Extra Over Excavation in Rock, all classes	m^3	50		
1.08	Fill and ram selected excavated materials around foundations and structures	m^3	40		
1.09	Provide and deposit approved imported hardcore in maximum l50mm thick layers in making up levels including achieving satisfactory compaction	m^3	5		
1.1	Provide, lay and level out fine crushed stone, sand or gravel blinding 50mm thick to surface of filling, including watering and rolling to achieve satisfactory compaction	m^2	16		
1.11	Chemical anti-termite treatment to surface of filling with an approved insecticide	m^2	16		
1.12	500 Gauge polythene sheeting, laid over hardcore	m^2	16		
1.13	Class 25/20 slab for 400x 200mm concrete strip	m^3	3.0		
1.14	Formwork for Strip Footing and Surface Bed n.e.	m	90		
1.15	Masonry Walling-200mm Thick l350mm high	m^2	48		
1.16	Fabric Reinforcement No. A142 Mesh Size 150 x 1 50mm Weighing 2.22 kg/m2, Including Bends, Tying Wire and Spacers	m^2	26		
1.17	Class 25/20 concrete for l50mm thick slab	m^3	6		
1.18	Class 25/20 concrete for strip footing, beam and foot rest	m^3	4		
1.19	Reinforcement steel for strip footing and beam	kg	310		
1.20	Formwork for strip footing, beam and foot rest	m^2	30		
	Provide 400x l50mm squat hole boxout	No.	5		
	Superstructure				
1.21	200mm wide Damp-proof course (DPC)	m	35		
1.22	Masonry walling-l50mm thick, max 2500mm high	m^2	75		

1.23	12.5mm cement rendering to blockwork and concrete surfaces internally	m^2	40		
1.24	12.5mm cement rendering to blockwork and concrete surfaces externally	m^2	120		
1.25	l50mm Concrete Ventilation Blocks	m^2	4		
	Extra Over walling for ruled horizontal joints	m^2	70		
1.26	External wall painting with external quality water paint	m^2	40		
1.27	Internal wall painting with gloss paint finish	m^2	120		
1.28	Painting to facial boards	m^2	10		
1.29	Wrot Prime Grade Cypress 830x2075x50mm thick Batten Timber Door including 3No. 100 mm steel heavy duty washered butt hinges, internal and external latches and three coats first quality gloss paint	No.	5		
1.3	Frame to fit door opening 900mm wide 24" height	No.	5		
1.31	l00mm dia. uPVC ventilation pipes with fly screen and cap, 3.3m long	No.	5		
1.32	Precast Concrete Paving Slabs size 600 x 600 x 50mm Thick laid on and including 50mm thick bed of sand and jointing and pointing in cement mortar	m^2	30		
	Tiling				
	Rate to include for preparation of surfaces to receive ceramic tiles				
1.33	Tiling of floor and walls	m^2	26		
	Roof				
	Rate to include for provision and installation				
1.34	Timber 100x 50 truss and purlins	m	35		
1.35	Timber 200x 50 fascia boards	m	18		
1.36	Prepainted Corrugated iron sheets, Gauge 30	m^2	13		
	Water Supply, Plumbing and Drainage				
1.37	White vitreous china Wash Hand Basin, including tap, angle regulating valve and all other accessories	No.	2		
1.38	500x450mm, 6mm, thick plate rectangular-shaped glass mirror with bevelled edge boundary	No.	2		
1.39	Supply pipes, excavate and lay DN20 PPR - PNl6 water pipe for water supply to Wash Hand Basins	m	15		
1.4	Provide and lay l10mm diameter uPVC pipe for foul water drainage to Septic Tank	m	20		
1.41	Provide all materials and construct foul water inspection chambers as detailed in drawings	No.	2		
	TOTAL BILL NO.13.1 CARRIED OVER TO BILL 13 COLLECTION PAGE				-

BILL NO. 13.2. BOYS VIP LATRINE BLOCK					
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kes)**	**Amount (Kes)**
	Substructure				
	Pit Excavation; rate to include for shoring, strutting, and keeping excavated surfaces dry from water, and spreading of excavated material within site				
1.01	Maximum depth n.e. 1.0m	m^3	20.00		
1.02	Maximum depth 1.0rn to 2.0m	m^3	12.00		
1.03	Maximum depth 2.0rn to 3.0m	m^3	8.00		
1.04	Maximum depth 3.0m to 4.0m	m^3	8.00		
1.05	Maximum depth exceeding 4m	m^3	8.00		
1.06	Extra Over Excavation in Rock, all classes	m^3	30.00		
1.07	Fill and ram selected excavated materials around foundations and structures	m^3	30.00		
1.08	Provide and deposit approved imported hardcore in maximum l50mm thick layers in making up levels including achieving satisfactory compaction	m^3	4.00		
1.09	Provide, lay and level out fine crushed stone, sand or gravel blinding 50mm thick to surface of filling, including watering and rolling to achieve satisfactory compaction	m^2	12.00		
1.10	Chemical anti-termite treatment to surface of filling with an approved insecticide	m^2	12.00		
1.11	500 Gauge polythene sheeting, laid over hardcore	m^2	12.00		
1.12	Class 25/20 slab for 400x 200mm concrete strip	m^3	2.50		
1.13	Formwork for Strip Footing and Surface Bed n.e.	m	70.00		
1.14	Masonry Walling-200mm Thick l350rnm high	m^2	40.00		
1.15	Fabric Reinforcement No. A142 Mesh Size 150 x 1 50mm Weighing 2.22 kg/m2, Including Bends, Tying Wire and Spacers	m^2	21.00		
1.16	Class 25/20 concrete for l50mm thick slab	m^3	5.00		
1.17	Class 25/20 concrete for strip footing, beam and foot rest	m^3	3.00		
1.18	Class 15/20 concrete for urinal stand	m^3	1.50		
1.19	Reinforcement steel for strip footing and beam	kg	280.00		
1.20	Formwork for strip footing, beam and foot rest	m^2	25.00		
1.21	Provide 400x l50mm squat hole boxout	No.	4.00		
1.22	**Superstructure**				
1.23	200mm wide Damp-proof course (DPC)	m	30.00		
1.24	Masonry walling-l50mm thick, max 2500mm high	m^2	60.00		
1.25	12.5mm cement rendering to blockwork and concrete surfaces internally	m^2	30.00		

1.26	12.5mm cement rendering to blockwork and concrete surfaces externally	m^2	100.00		
1.27	l50mm Concrete Ventilation Blocics	m^2	3.00		
1.28	Extra over walling for ruled horizontal joints	m^2	60.00		
1.29	External wall painting with external quality water paint	m^2	30.00		
1.30	Internal wall painting with gloss paint finish	m^2	100.00		
1.31	Painting to facial boards	m^2	8.00		
1.32	Wrot Prime Grade Cypress 830x2075x50mm thick Batten Timber Door including 3No. 100 mm steel heavy duty washered butt hinges, internal and external latches and three coats first quality gloss paint	No.	4.00		
1.33	Frame to fit door opening 900mm wide x 2400mm height	No.	4.00		
1.34	l00mm dia. uPVC ventilation pipes with fly screen and cap, 3.3m long	No.	4.00		
1.35	Precast Concrete Paving Slabs size 600 x 600 x 50mm Thick laid on and including 50mm thick bed of sand and jointing and pointing in cement mortar	m^2	20.00		
	Tiling				
	Rate to include for preparation of surfaces to receive ceramic tiles				
1.36	Tiling of floor and walls	m^2	30.00		
	Roof				
1.37	Rate to include for provision and installation				
1.38	Timber 100x 50 truss and purlins	m	28.00		
1.39	Timber 200x 50 fascia boards	m	16.00		
	Prepainted Corrugated iron sheets, Gauge 30	m^2	11.00		
	Water Supply, Plumbing and drainage				
1.40	White vitreous china Wash Hand Basin, including tap, angle regulating valve and all other accessories	No.	2.00		
1.41	500x450mm, 6mm, thick plate rectangular-shaped glass mirror with bevelled edge boundary	No.	2.00		
1.42	Supply pipes, excavate and lay DN20 PPR - PN16 water pipe for water supply to Wash Hand Basins	m	15.00		
1.43	Provide and lay I 10mm diameter uPVC pipe for foul water drainage to Septic Tank	m	20.00		
1.44	Provide all materials and construct foul water inspection chambers as detailed in drawings	No.	2.00		
	TOTAL BILL NO.13.2 CARRIED OVER TO BILL 13 COLLECTION PAGE				

BILL NO. 13.3. TEACHERS BLOCK					
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kes)**	**Amount (Kes)**
	Substructure				
	Excavate surfaces to reduce levels over 300mm deep				
1,01	Foundation excavation; depth not exceeding 0.25m	M3	4.00		
1.02	Excavation for wall footing; depth range 0.25-0.5m	M3	4.00		
1.03	Excavation for wall footing; depth range 0.5-1m	M3	7.00		
	Extra Over Excavation in Rock, all classes	m3	1.00		
1.04	Fill and ram selected excavated materials around foundations and structures	m3	2.00		
1.05	Provide and deposit approved imported hardcore in maximum l50mm thick layers in making up levels including achieving satisfactory compaction	m3	4.00		
1.07	Chemical anti-termite treatment to surface of filling with an approved insecticide	m2	15.00		
1.08	500 Gauge polythene sheeting, laid over hardcore	m2	15.00		
1.09	Mass Concrete Class 15/20mm in 75mm thick blinding under foundation concrete, column bases or over hardcore	m2	15.00		
1.10	Reinforced Concrete Class 25/20mm in foundation strip footing	m3	3.00		
1.11	Reinforced Concrete Class 25/20mm in l50mm thick surface bed (floor slab)	m3	7.00		
1.12	Fabric Reinforcement No. Al42 Mesh Size 150 x 15 Omm Weighing 2.22 kg/m2, Including Bends, Tying Wire and Spacers	m2	15.00		
1.13	Provide and Fix High Tensile Steel Reinforcement including cutting, bending, propping with spacers and tying as specified, all diameters	Kg	220.00		
1.14	Provide and fix wrot formwork including propping, strutting and striking, all as specified, n.e. 300mm	m	100.00		
1.15	Natural Stone Block Walling, Medium Chisel Dressed, Reinforced with 20 swg Hoop Iron at every third course, and Bedded, Jointed and Pointed in Cement Mortar (l:4)	m2	18.00		

	Superstructure				
1.15	200mm wide Damp-proof course (DPC)	m	22.00		
1.16	Mansonry Walling Reinforced with 20 swg Hoop Iron at every third course, and Bedded, Jointed and Pointed in Cement Mortar (l:4) - l50mm thick, max 2500mm high	m2	68.00		
1.17	12.5mm cement rendering to blockwork andconcrete surfaces internally	m2	68.00		
1.18	12.5mm cement rendering to blockwork and concrete surfaces externally	m2	68.00		
1.19	l50mm Concrete Ventilation Blocks	m2	4.00		
1.19.1	Extra Over walling for ruled horizontal joints	m2	70.00		
1.20	Reinforced Concrete Class 25/20mm for Roof Slab	m3	1.60		
1.21	Provide and Fix High Tensile Steel Reinforcement including cutting, bending, propping with spacers and tying as specified, all diameters	Kg	160.00		
1.22	Provide and fix wrot formwork (smooth finish) including propping, strutting and striking, all as specified to Footings, Ring Beams and Roof Slab	m2	30.00		
1.23	Wrot Prime Grade Cypress 830x2075x50mm thick Batten Timber Door including 3No. 100 mm steel heavy duty washered butt hinges, internal and external latches and three coats first quality gloss paint	nr	3.00		
1.24	Frame to fit door opening 900mm wide x 2400mm	nr	3.00		
1.25	l00mm dia. uPVC ventilation pipes with fly screen and cap, 3.3m long	nr	3.00		
	Tiling				
	Rate to include for preparation of surfaces to receive ceramic tiles				
1.26	Tiling of floor and walls	m2	45.00		
	Painting				
1.27	External wall painting with external quality water paint	m2	40.00		
1.28	Internal wall painting with gloss paint finish	m2	120.00		
	Water Supply, Plumbing and Drainage				
1.29	White vitreous china Water Closet Suites - Squatt type. WC pan to be complete with close coupled cistern and fittings 6/4L dual flush push button cistern, angle regulating valves, etc	nr	3.00		
1.30	White vitreous china Wash Hand Basin, including tap, angle regulating valve and all other accessories	nr	1.00		
1.31	500x450mm, 6mm, thick plate rectangular-shaped glass mirror with bevelled edge boundary	nr	1.00		
1.32	Toilet Roll Holder	nr	3.00		

1.33	Supply, deliver and install 2000L plastic storage tank as Toptank or equal & equivalent, supplied with ball float valve, isolating stop cock, etc	nr	1.00		
1.34	Supply pipes, excavate and lay DN32 PPR - PN16 water pipe for water supply to tank	m	50.00		
1.35	Allow for construction of all plumbing pipework and fittings within the toilet block	Item	1.00		
1.36	Provide all materials and construct steel frame surrounding to the tank to prevent theft	Item	1.00		
1.37	Provide and lay l60mm diameter uPVC pipe for foul water drainage to Septic Tank	m	50.00		
1.38	Provide all materials and construct foul waterinspection chambers as detailed in drawings	nr	4.00		
1.39	Allow for supply and installation of 5000litres capacity plactic vertical septic tank. This will include; excavation in normal material and rock, filling in selected material and other ancillary works	Item	1.00		
1.40	Allow for construction of soak away pit as detailed. This will include; excavation in normal material and rock, filling in selected material and hardcore for soak away pit, provide and place mass and reinforced concrete, concrete ancillaries, reinforcement, waterproofing and other ancillary work	Item	1.00		
	TOTAL BILL NO.13.3 CARRIED OVER TO BILL 13 COLLECTION PAGE				

BILL NO. 13.4 : ABLUTION BLOCKs (3NR)					
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kes)**	**Amount (Kes)**
1	**SUBSTRUCTURES**				
	EXCAVATION				
	The rates shall include for all strutting, shuttering, stabilizing the excavation faces, and keeping the excavation free of water by pumping, bailing or other means				
	Excavate for foundations, part backfill after construction and remainder, cart away to tips or use as fill on site, all as directed by the Engineer				
	Excavate below stripped level to formation level in common material, part backfill after construction and remainder, cart away to tips or use as fill on site, all as directed by the Engineer.				
	Top Soil Stripping				
1.5	Maximum depth n.e. 1.0 m	M3	10		
1.6	-Ditto- but maximum depth 1.0 m to 2.0 m	M3	10		
1.7	Foundations and bases of isolated piers and walls 0.00 - 1.50 metres deep	M3	40		
	Extra Over Excavation in any Position For:- (Provisional)				
1.8	Excavating in rock Class "A"	M3	30		
	Approved Selected Filling as Described:-				
1.11	Fill and ram selected excavated materials around foundations and buildings	M3	30		
	Approved Hardcore Filling as Described:-				
1.12	Provide and deposit approved imported hardcore in maximum 150mm thick layers in making up levels including achieving satisfactory compaction	M3	18		
1.13	Provide, lay and level out fine crushed stone, sand or gravel blinding 50mm thick to surface of filling, including watering and rolling to achieve satisfactory compaction	M2	55		
	Disposal of Surplus Spoil:-				
1.14	Cart away surplus excavated materials to an approved dumping site	M3	25		
	Anti-Termite Treatment				
1.15	Chemical anti-termite treatment to surface of filling with an approved insecticide	M2	55		
	Damp-proof Membrane				
1.16	500 Gauge polythene sheeting, laid over hardcore	M2	55		
	Concrete Work:				
	Mass Concrete Class 15/20mm Maximum Aggregate as Described in:-				
1.17	50mm Thick blinding under foundation concrete, column bases or over hardcore	M3	3		
	Guaranteed Strength Reinforced Concrete Class 25/20mm Maximum Aggregate as Described in:-				
1.18	Foundation trenches, column bases and entrance steps	M3	10		

1.19	150mm Thick floor slab	M3	9		
1.2	150mm Thick ramp laid to slope not exceeding 15 degrees from horizontal at entrance	M2	10		
	Guaranteed Strength Reinforced Concrete Class 25/20mm Maximum aggregate as Described in:-				
1.22	Isolated columns and piers in foundations	M3	3		
	Reinforcement				
	Fabric Reinforcement No. A142 Mesh Size 200 x 200mm Weighing 3.95 kgs Per m2, Including Bends, Tying Wire and Distance Blocks:-				
1.23	Fabric reinforcement with minimum 200mm wide side and end laps, laid in bed	M2	55		
	Provide and Fix High Tensile Steel Reinforcement to SRN 127 including Cutting, Bending, Propping with Spacers and Tying as Specified :-				
1.24	Reinforcement, all diameters	Kg	312		
	Formwork				
	Provide and Fix Shuttering Including Propping, Strutting and Striking, all as Specified				
	Sawn Formwork - Class F1 Finish:-				
1.25	Vertical sides of column bases, columns, sides of foundations and steps in foundations	M2	50		
	Wrot Formwork - Class F3 Finish:-				
1.26	Edges of beds, pavings, plinths and risers of steps not exceeding 300mm wide	M	40		
	Walling.				
	Solid Concrete Block Walling With Concrete Blocks to BS 2028, Type "A" with Minimum Crushing Strength of 3.7N/mm^2 at 28 Days, Reinforced with 20 swg Hoop Iron at alternate course, and Bedded, Jointed and Pointed in Cement Mortar (1:4):-				
1.27	200 mm Walling	M2	170		
	Damp-proof course:				
	Bituminous felt damp-proof course as described:-				
1.28	200mm Wide under walls	M	45		
1.29	100mm Wide under walls	M	15		
	SUPERSTRUCTURE				
2	**CONCRETE, FORMWORK, REINFORCEMENT**				
	Guaranteed Strength Reinforced Concrete Class 25/20mm as Described in:				
2.1	Columns and beams including 4m high tank support structure	M3	30		
2.2	300mm thick, 500mm wide raised plinth in shower units for dressing area	M3	1		
	Worktops				
2.3	75mm thick, 500mm wide platform at 1m high supported on the structure's masonry walling in the shower unit	Nr	2		

2.4	75mm thick, 500mm wide, 900mm high worktop made from supported on masonry walling support at ends and center in Ladies washroom. Finishing with 200mm x 300mm ceramic tiles on top and front face.	Nr	1		
	Formwork				
	Provide and Fix Shuttering Including Propping, Strutting and Striking, all as Specified				
	Wrot Formwork - Class F3 Finish :-				
2.5	Vertical sides of columns	M2	10		
2.6	Sides and soffits of beams	M2	65		
2.7	Edges of risers of steps not exceeding 200mm wide	M	10		
	Reinforcement				
	Provide and Fix High Tensile Steel Reinforcement to SRN 127 Including Cutting, Bending, Propping with Spacers and Tying as Specified :-				
2.8	Reinforcement, all diameters	Kg	200		
3	**WALLING**				
	External Walls				
	Solid Concrete Block Walling With Concrete Blocks to BS 2028, Type "A" with Minimum Crushing Strength of 3.7N/mm^2 at 28 Days, Reinforced with 20 swg Hoop Iron at alternate course, and Bedded, Jointed and Pointed in Cement Mortar (1:4):-				
3.1	200mm Thick walling	M2	125		
	Labours				
3.2	Extra over walling for ruled horizontal and flush vertical joints	M2	125		
	Precast Concrete Louvre Block Walling :-				
	Internal Walls				
	Solid Concrete Block Walling With Concrete Blocks to BS 2028, Type "A" with Minimum Crushing Strength of 3.7N/mm^2 at 28 Days, Reinforced with 20 swg Hoop Iron at alternate course, and Bedded, Jointed and Pointed in Cement Mortar (1:4):-				
3.3	150mm Thick walling	M2	20		
3.4	100mm Thick walling	M2	100		
4	**ROOF COVERINGS**				
	Pre-painted Gauge 24 IT5 Roofing Sheets Laid at 22.5° on: Timber Trusses				
4.1	Roofing Sheets	M2	80		
4.2	Polycarbonate Transparent Roofing sheets or approved equivalent	M2	50		
	Extra Over Roofing Sheets For:-				
4.3	Ridge and hip cappings	M	20		
	Carpentry				
	Roof Trusses				

	Double Pitch Roof Truss With 600mm Eaves Projection, in 150 x 50mm Rafters, Ceiling Joists, Struts and Ties in Sawn Cypress Grade II Seasoned and Pressure Impregnated with Wood Preservative and Timber Joints With Bolted and Nailed Connections to the Engineer's Approval :-				
4.4	Equal truss 3250mm clear span and 800mm high	Nr	5		
4.5	Equal truss 4500mm clear span and 1100mm high	Nr	2		
	Other Roof Members				
	Sawn Cypress Grade II Maximum Moisture Content 12% Seasoned and Pressure Impregnated with Wood Preservative and Timber Joints with Bolted and Nailed Connections to the Engineer's Approval:-				
4.6	150 x 50mm Intermediate, hip and valley rafters	M	66		
4.7	150 x 50mm Struts	M	16		
4.8	150 x 50mm Tie beam	M	25		
4.9	100 x 50mm Purlins	M	135		
4.1	100 x 50mm Wall plate tied to wall with 20s.w.g. hoop iron at 900mm centres and bedded in cement mortar (1:4) on top of wall	M	40		
4.11	Scarfed joint to 150 x 50mm timber member	Nr	20		
	Sundries				
4.12	Bed wall plate in cement mortar (1:4)	M	40		
	Joinery				
	General Timbers				
4.13	250 x 40mm Fascia board	M	40		
4.14	Tongue & Groove (T&G) Boarding on underside of roof overhang, including provision of roof venting holes with gauze.	M2	28		
5	**METALWORK**				
	Steel Doors				
	Pressed Metal Louvre Doors				
	Supply and Fix the following Pressed Metal Louvre Doors with 100 x 50mm Stiles and Top Rails, 150 x 50mm Middle and Bottom Rails With Pressed Metal Infill Louvres and 100 x 50mm Pressed Metal Frames, Including Hinges, Pad Bolts and Tower Bolts, All To Manufacturer's Details, with three coats gloss paint complete with Opening Accessories Including Bedding and Pointing Around Frames in Cement Mortar:-				
5.1	Single door size 900 x 2400mm high (D2)	Nr	2		
	Barrier at the front service area				
5.2	12mm diameter vertical mild steel members at 250mm centers, 1500mm high including one coat chemical resistant paint and fixing on the opening at the service area.	Nr	1		
5.3	Area of opening requiring barrier	M2	5		
5.4	Metal sheet window for the front opening, 2mm thick. The metal window should have a mechanism for fully lifting to open during operating hours and easy to lock when required.	M2	5		
	Ventilation				

	600mm x 600mm Ventilation made from 25mmx 2mm Pressed Metal Forming Louvres from Equal Patterned Flat Plates Fixed Internally to Surrounding walls with 12mm Mild Steel Fish Tail Lugs at Centers not Exceeding 600mm and Painted with Three Coats of First Grade Super Gloss Paint including Metal Primer				
5.5	Ditto but 1200 x 1200mm	Nr	2		
5.6	Provide all materials and fix Plastic coated coffee tray wire mounted on wooden frame fixed externally on all ventilation openings, 600mm x 600mm	Nr	2		
5.7	Ditto but 1200 x 1200mm	Nr	2		
6	**TIMBER DOORS**				
	Door Frame				
	Wrot Cypress Door Frames size 100 x 50mm with a suitable rebate to receive hinged door panel, including suitable mild steel clamps fixed to back of frame and fixing to door opening size and all necessary woodwork finishes (prepare, knot, prime, stop and apply two undercoats and one finishing coat hard gloss paint to woodwork):-				
6.1	Frame to fit door opening 900mm wide x 2400mm high	Nr	10		
	Doors				
	Supply and Fix 50mm Thick Prime Grade Cypress Panelled Door With 50 x 100mm Stiles and Top Rails,50 x 150mm Middle and Bottom Rails and Infill Panels in 50 x 100mm T & G battens. Rate to include for 3 Nr 100mm steel heavy duty washered butt hinges, three lever mortice lock as 'Union Ref:2237' with a set of aluminium lever handles as "Union" Ref.681-06-02 and rubber door stop and three coats of gloss paint complete with bedding and pointing around frames in cement mortar.				
6.2	Door size 800 x 2030 mm high with 990 x 140mm Georgian wired clear glass view panel	Nr	10		
6.3	Supply and fix Stainless steel buffer coat hooks	Nr	12		
6.4	Supply and fix 100mm D-pull handles	Nr	10		
	PVC windows				
7	**RENDERING**				
	12.5mm Thick Cement and Sand Render as Described Externally on :-				
7.1	Blockwork and concrete surfaces	M2	25		
	Screeds				
	Bonded cement and sand (1:4) screed bed in one coat, well bonded to concrete base as described:-				
7.2	38mm Thick screed laid level to receive floor tiling (measured separately)	M2	90		
7.3	12mm (minimum) Thick Cement and sand backing (1:4) with approved plasticiser to receive granito floor laid to skirtings, treads and risers (measured separately)	M2	21		
	Bonded cement and sand (1:4) screed bed in one coat with approved hardener incorporated in the mix, well bonded to concrete base as described:-				

7.4	12mm (minimum) Thick screed laid level to receive ceramic wall tiles (measured separately)	M2	110		
8	**PLASTERING**				
	12.5mm Thick Gauged Cement Plaster as Described Internally on :-				
8.1	Blockwork and concrete surfaces	M2	110		
9	**PAINTING AND DECORATING**				
	Prepare and Apply Three Coats Exterior Quality Plastic Emulsion Paint:-				
	Externally on:-				
9.1	Fair-faced concrete surfaces	M2	120		
	Internally on:-				
	Wall Tiles				
	Coloured Ceramic Wall Tiles from Saj Co. as supplied by M/s Tile & Carpet Centre, or other equal and approved				
9.2	200 x 300mm Thick coloured wall tiles laid on backing (measured separately) and joints filled in approved filler to match colour of tiles	M2	110		
	Sundries				
9.3	PVC tiling edge to external corners of tiles (Provisional)	M	75		
10	**FLOOR FINISHES**				
	Ceramic Floor Tiling				
	Coloured Ceramic Floor Tiles from Saj Co. as supplied by M/s Tile & Carpet Centre, or other equal and approved				
10.1	300 x 300mm Tiles laid on screed (measured separately) and joints filled in approved filler to match colour of tiles	M2	90		
10.2	Ditto but laid as skirting 100mm high	M	21		
11	**PLUMBING AND DRAINAGE**				
	Builders Work in Connection with Sanitary Fittings				
	Allow for cutting and leaving all necessary holes, notches, mortices, sinkings and chases both in the structure and its finishes and for all making good in connection with the following (All Provisional): -				
11.1	White vitreous china squatting level washdown W.C. suite complete	Nr	6		
11.2	White vitreous china washbasin complete	Nr	6		
11.3	Shower unit complete	Nr	2		
11.4	Mirror 3000 *600m	Nr	2		
11.5	Toilet roll holder	Nr	6		
11.6	Recessed soap tray	Nr	2		
11.7	Chrome plated shower rail size 25mm diameter x 900mm long complete with fixtures	Nr	2		
	Sanitary appliances				

	All sanitary appliances shall be supplied and installed as complete units with all fittings, fixtures , pipework to manholes, waste grits & traps and shall be as specified or approved equal. Rate to include for all 25 - 50mm dia pipework (PPR and GI pipes), Gate Valves and Taps (Pegler type, English) and connection to water supply and connection to foul water drainage System.				
11.8	White vitreous china squatting level wash down Water Closet suit complete with high level 6 litre cistern and flush pipe.	Nr	6		
11.9	Urinal bowl with urinal automatic flushing system complete with cistern and flush pipes	Nr	3		
11	**PLUMBING AND DRAINAGE**				
	Builders Work in Connection with Sanitary Fittings				
	Allow for cutting and leaving all necessary holes, notches, mortices, sinkings and chases both in the structure and its finishes and for all making good in connection with the following (All Provisional): -				
11.1	White vitreous china squatting level washdown W.C. suite complete	Nr	6		
11.2	White vitreous china washbasin complete	Nr	6		
11.3	Shower unit complete	Nr	2		
11.4	Mirror size 3000 x 600mm	Nr	2		
11.5	Toilet roll holder	Nr	6		
11.6	Recessed soap tray	Nr	2		
11.7	Chrome plated shower rail size 25mm diameter x 900mm long complete with fixtures	Nr	2		
	Sanitary appliances				
	All sanitary appliances shall be supplied and installed as complete units with all fittings, fixtures , pipework to manholes, waste grits & traps and shall be as specified or approved equal. Rate to include for all 25 - 50mm dia pipework (PPR and GI pipes), Gate Valves and Taps (Pegler type, English) and connection to water supply and connection to foul water drainage System.				
11.8	White vitreous china squatting level wash down Water Closet suit complete with high level 6 litre cistern and flush pipe.	Nr	6		
11.9	Urinal bowl with urinal automatic flushing system complete with cistern and flush pipes	Nr	3		
11.1	Wall mounted washbasin as "Twyfords Entice 575" with one tap & 32mm waste grit *basin mixer as "Europath Astra" with aerator & pop -up waste.*32mm CP bottle trap with tail pipe, cap-nut & wall flange as "Cobra" 340 &C-342/1/2/3	Nr	6		
11.11	Shower unit complete with shower head and all taps and connections to water tank and connection to foul water drainage	Nr	2		
11.12	White vitreous china 1000mm x 1000mm basin	Nr	2		

11.13	Mirror size 3000 x 600mm plugged and screwed to wall with chromium plated domed screws complete with 5mm thick foam back rest.	Nr	2		
	Foul/Waste drainage				
11.14	Excavate pipe trench in ordinary ground for 160 mm diameter pipe between 0.2	M	25		
11.15	Provide lay and joint uPVC pipes golden brown Class 41 160mm diameter. Include for all fittings and connections to inspection chambers.	M	25		
	Inspection Chambers				
11.16	Excavate for, provide all matterials,special shuttering e.t.c and construct 600 x 450mm internal dimentions in situ concrete inspection chambers on sewers diameter 160mm.Include for building in pipes,forming benching to falls,medium duty fibre reinforced frame and cover, depth n.e. 1.5m.	Nr	6		
	Septic Tank				
11.17	Provide all materials and construct a 15.9m^3 single chamber Septic Tank including manholes, covers, pipework, radial drains, connections etc as per Standard Drawings.	Nr	1		
12	**WATER SUPPLY**				
12.1	Allow a Provisional Sum of Ksh. 100,000 for Connection of Ablution Block to existing water supply system including provision of meters	PS	1		
12.2	Allow a Provisional Sum of Ksh. 150,000 for provision all materials and instal pipework as directed by the Engineer to provide a water selling point with requisite water meters, stand pipes and taps.	PS	1		
12.3	Supply and install 5m3 plastic tank onto 3m high concrete platform. Rate to include for construction of tank support platform	Item	1		
13	**ELECTRICAL WORKS**				
13.1	Allow a Provisional Sum of Ksh. 200,000 for connection to nearest KPLC power.	PS	1		
13.2	Allow a Provisional Sum of Ksh. 300,000 for provision and installation of electric fittings and fixtures to the ablution block including all wiring, cabling, security lights, sockets, switches, Consumer Unit, Meters, lighting fixtures etc as directed by the Engineer.	PS	1		
14	**SITE AND ANCILLARY WORKS**				
	FOOTPATHS				
14.3	Precast concrete paving in 600mm x600mm x 60mm slabs jointed and grouted up in lime and sand (1:3)	M2	45		
	FENCING AND GATES				
14.5	Excavate for post holes, provide all materials and construct 12.5G chain link fence on concrete posts at 3m center to center including straining posts at every 10th post and additional posts at corners. The chain-link fence shall be topped by 3strands of 12.5G barbed wire.	M	60		

14.6	Provide all materials and construct metal gate 2.0m wide including 2 Nr. Pillars, footings.	Nr	1		
15	**MISCELLANEOUS**				
15.2	Allow a Provisional Sum of Kshs. 150,000 for provision and installation of furniture for the Ablution Block Office including cleaning Equipment.	PS	1		
	SUB-TOTAL FOR 1 NR ABLUTION BLOCK				
	TOTAL FOR 3NR ABLUTION BLOCKS (5XTOTAL FOR 1NR ABLUTION BLOCK)				
	TOTAL BILL NO.13.4 CARRIED OVER TO BILL 13 COLLECTION PAGE				

BILL NO.13: COLLECTION PAGE		
SANITATION FACILITIES		
PAGE	**BILL COLLECTION PAGE**	**AMOUNT (KSH)**
1	Bill No.13 1 Girls' VIP Latrine Block	-
2	Bill No.13.2 Boys' VIP Latrine Block	-
3	Bill No.13.3 Teachers' VIP Latrine Block	-
4	Bill No.13.4 Ablution Blocks	-
	Bill No. 13 Total Carried Over to Summary Sheet	

	BILL NO. 14.1: DRILLING, EQUIPPING & CIVIL WORKS FOR GETAMBWEGA BOREHOLE				
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kes)**	**Amount (Kes)**
	BOREHOLE DRILLING				
	Borehole Construction and 24Hours constant discharge test, recovery test measurements and water quality analysis are dependent on the success of the borehole. A dry or low yield borehole (less than 1.5m3/hr) implies that the Client WILL NOT proceed with the subsequent works(installation of steel casings, gravel pack and test pumping).				
	Drilling				
1.01	Conduct Hydrogeological Survey (Terms of Reference provided) by an approved, Licensed Hydrogeologist and prepare and submit hydrogeological survey report to the Project Manager for approval before commencement of works. Estimated yield MUST be indicated in submited report before commencement of drilling works. Note: The Licensed Hydrogeologist and methodology for the exercise MUST BE APPROVED BY THE AGENCY.	Lumpsum	1		
1.02	Mobilization and transportation of whole drilling unit to site, erecting and dismantling of contractor's borehole plant and equipment including but not limited to drilling unit, support truck(s), test pumping and borehole development units. Identification of suitable land for Contractor's use is the obligation and responsibility of the Contractor. Rate to include reinstatement of site to the satisfaction of the Project Manager	L/S	1		
1.03	Drilling of borehole of minimum diameter 205mm through all types of strata including disposal of excavated materials, taking any remedial measures to overcome caving-in, or over drilling to accommodate sloughed material and keeping drilling records as specified between ground level and 250 meters below ground level. Rate to include taking samples of drill cuttings at two (2) Meters intervals.	M	250		
	Supply and installation of screens and casings.				
	Screens and casings shall be done to the satisfaction of the Procuring Entity. The base of the bottom casing shall be sealed as required				
1.04	Supply and install surface casings, mild steel casings 5 mm wall thickness, 209 mm internal diameter length as instructed by Geologist. **Kindly note this item requires supervisor's approval before installation**	M	12		
1.05	Supply and install mild steel casings 4mm thickness,152 mm internal diameter plain steel casings in the borehole.	M	180		
1.06	Supply and install mild steel casings 4mm thickness,152 mm internal diameter plain steel casings in the borehole.	M	70		

	Gravel park				
1.07	Supply and install approved gravel pack (rounded 2-4 mm diameter). The rate to include for introduction of 500g/m^3 of calcium hypochlorite disinfectant. Inert material to be used above the gravel pack before commencement of grouting	Ton	6		
	Grouting				
1.08	Grout between the casing and the borehole for top six(6) meters.	Ton	1		
	Borehole development:				
	Development shall be done to the satisfaction of the project manager. Contractor shall propose methods he intends to use for approval. Rate to include installation and removal of necessary plant				
1.09	Borehole development (physical & chemical) including inserting and removal of development equipment;	Hrs	8		
	Test pumping and recovery measurements:				
	Rates to include for installation and removal of test pumping equipment.				
1.10	Undertake 24Hours Constant Discharge Test as instructed and 6 hours recovery test measurements. Rate to include insertion and retrieval of test pumping equipment	Hrs	30		
	Well completion works				
1.11	Construction of concrete sanitary seal slab for well head area	LS	1		
1.12	Supply and fix 6" borehole steel cap.	No.	1		
1.13	Allow for a Provisional Sum of Ksh. 30,000 for collecting water samples and carrying out full chemical and bacteriological analysis at **Lake Victoria South Water Works Development Agency** Laboratory.	PS	1	30,000.00	30,000.00
1.14	% Adjustment for Contractor's costs and profit for item 1.13	%	30,000.00		
	NOTE: Equipping and civil works for the Mentioned borehole is dependent on the success of the borehole, a dry Or low yield borehole (less than 1.5m3/hr) implies that the client will NOT proceed on with the subsequent Electro-Mechanical and Civil Works				
	BOREHOLE EQUIPPING (ALL PROVISIONAL)				
	Supply, deliver to site , install, test and commission the following electromechanical Components and accessories for solar system				

1.15	Approved 2.2-3.8 kW hybrid solar inverter pumping control and monitoring system incorporating a dry run protection, overload and over temperature and short circuit protection with integrated MPPT to include provisions for remote control, data logging and protection against reverse polarity. The starter shall have on/off switch, status Indicator lamps (ON, standby, OFF). It shalll have hybrid capability with option of mains grid power/generator and DC solar power	Nr	1		
1.16	335 watts 24VDC Monocrystalline solar modules as DAYLIFF, LORENTZ or similar approved to be wired in series/parallel	Nr	21		
1.17	DC PV module disconnect switch	Nr	1		
1.18	PV Surge Protect 1000VDC 125A	Nr	1		
1.19	Supply, deliver to site, lay in the trench of size 300mm wide x 600mm depth, backfill with selected excavated material a 2.5 mm^2 , 4 core armoured PVC insulated cable for PV modules interconnection and connection to hybrid inverter.	M	30		
1.20	5 metres of 10.00 mm^2 Single Copper cable for earthing complete with 12.5mm diameter x 1200 mm long copper clad rod, couplings and clamp installed in a 300mmx300mmx300mm earth pit as furse or equal and approved and covered with 'HATARI' Tiles	Nr	2		
1.21	DN50 PVC conduit for cable protection c/w appropriate bends	M	10		
1.22	100W LED 1200 Lumens Solar Powered Flood Light c/w 32000mA battery, 6500k color temperature, Intelligent light control (Remote switching, timer setting,motion sensor), IP66 waterproofing,Aluminium alloy body, Solar Panel, Mounting hardware, Autonomous Working time;30 hours	Nr	2		
1.23	Lightning Arrestor bonded to solar structure c/w 6 Metres copper tape terminated to a 12.5mm diameter x 1200 mm long copper clad rod, couplings and clamp installed in a 300mmx300mmx300mm earth pit as furse or equal and approved and covered with 'HATARI' Tiles	Nr	1		
	PUMP SET AND ASSOCIATED ACCESSORIES				
	Supply, deliver to site , install, test and commission the following submersible pump set accessories				
1.24	Supply, deliver to site and install a GS cable termination box of size 150x150x100mm depth with 20 amps 3 way and 5 amps 2 way plastic cable connector terminal blocks firmly fixed on the GS meta bracket fixed at the inside centre as advised. It shall be water tight (rubber seal around the lid) and corrosion resistant. It shall have 2No. Knock-outs on the opposite sides for 1.5mm^2/2 core and 4mm^2/4 core copper cables. One set of holes shall have rubber grommets.	Nr	1		

1.25	Supply, deliver to site, lay in the trench, backfill with selected excavated material a 2.5 mm^2 /4 core pvc swa pvc copper cable. Wire to Solar inverter and the cable termination box.	M	100		
1.26	Ditto item 1.25 in same trench but 1 sq mm 2 core copper pvc insulated swa cable.	M	100		
1.27	Supply, deliver to site and install in the borehole PN 20, OD 40 UPVC Borehole Riser Pipe	M	240		
1.28	1.5 sq mm 4 C Cu Flat PVC insulated submersible drop cable	M	240		
1.29	1 mm^2 ; 2 core Cu PVC insulated Flat cable for probe sensor	M	240		
1.30	Approved Well Probe Sensor	Nr	1		
1.31	DN25 pvc airlines	M	240		
	Pumpset				
1.32	Supply, deliver to site, install in the borehole (at depth not exceeding 240 metres bgl, wire and test a borehole Submersible pump set of capacity 4m^3/hr of water against a total pumping head of 240 metres .The cost should be inclusive of appropriate DN100 pump motor; water tight cable splicing kit for 10.0mm^2/4 core cable	LS	1		
1.33	Supply, deliver to site and install borehole steel pipe clamp of the thickness 5.0 mm. Clamp should have a provision for pipe and cable outlets.	Nr	1		
1.34	Supply, deliver to site and install PN16, DN32 water meter (Threaded) type MJ25 or similar approved quality range 0 - 10 m^3/hr.	Nr	1		
1.35	Supply, deliver to site and install PN16, DN32 GS non - return valve	Nr	1		
1.36	Supply, deliver to site, install and test pressure gauge type kent or similar approved quality range 0 - 25kg.cm c/w with all connections and bends	Nr	1		
	Solar PV Module Carrying Structure				
1.37	Provide mild steel sections and fabricate a solar module carrying structure. Minimum height of the structure shall be Four meters above ground as per Solar subcontractor design and shop drawings to be submitted drawings to the Engineer for approval. Rate to allow for 2nr epoxy paint coatings	LS	1		
1.38	Wall mounted Ventilated lockable MS gauge 16 protection box for Pump control panel. Rate to include Heavy Duty YALE padlock and 3 Coats of epoxy paint as directed by Engineer	Nr	1		
	Borehole Chamber				

1.39	Supply materials and construct borehole chamber complete with a lockable metallic cover. Rate to include for provision of a lock with a minimum of three keys	lumpsum	1		
	TANK TOWER (PROVISIONAL)				
1.40	Supply materials, fabricate and assemble 6 meter high steel tower with platform to carry 2nr, 10,000 litre plastic tank according to drawings and Engineer's instructions.Rates to include for epoxy painting on all steel surfaces. Refer to DWG No. **STD/TANK/01/01 in the execution of the works**	Lumpsum	1		
	Plastic tank				
	Rate to include for tank supply to site, securing in position against wind loads on steel tower platform				
1.41	$10m^3$ plastic tank	Nr	2		
	CLASS J: Pipework-Fittings & Valves				
	PN10, GI inlet pipe,valves and fittings, threaded				
1.42	50mm Dia. Barrel Nipple	Nr	2		
1.43	50mm socket	Nr	2		
1.44	50 by 90^0 bend	Nr	2		
	PN10, GI Outlet pipe,valves and fittings, threaded				
1.45	50mm Dia. Barrel Nipple	Nr	2		
1.46	50mm socket	Nr	2		
1.47	50 by 90^0 bend	Nr	2		
1.48	50mm Gate Valve	Nr	1		
1.49	50mm Dia GI pipe	M	6		
	Overflow pipe				
1.50	50mm Dia. Socket	Nr	2		
1.51	50 by 90^0 bend	Nr	1		
1.52	50mm Dia. GI pipe	M	0.5		
	CHAMBERS				
1.53	Provide all materials and construct masonry valve chambers internal dimensions 600mm x 600mm depth not exceeding 1.5m. Include for supply and fixing of lockable mild steel checkered plate cover & step irons	Nr	1		
	Earth Works				
	Excavation				
	The Rates shall include for all Strutting, Shuttering, Stabilising the Excavation Faces, and Keeping the Excavation Free of Water by Pumping, Bailing or Other Means.				
1.54	Maximum depth n.e. 1.0 m	m^3	7		
1.55	-Ditto- but maximum depth 1.0 m to 2.0 m	m^3	2		
1.56	Extra over excavation in rock, blasting not permitted (Provisional)	m^3	1		

	Reinforced Concrete Foundations				
	Concrete Works				
	Provide, mix and place concrete as directed				
1.57	Plain concrete Class 15/20 in 75 mm blinding layer under base slab of tank	m^3	0.5		
	Vibrated, Reinforced Concrete Class 25/20 in:				
1.58	Column base slab and columns	m^3	4		
1.59	Tie beams	m^3	2		
	Reinforcement				
	Provide and Fix High Tensile Steel Reinforcement including Cutting, Bending, Propping with Spacers and Tying as Specified				
1.60	Reinforcement, all diameters	Kg	1000		
	Formwork				
	Provide and Fix Shuttering Including Propping, Strutting and Striking all as Specified				
	(i) Vertical Formwork				
1.61	Sides of Column Base Slab - Tank	m^2	11		
1.62	Sides of Column Wall	m^2	10		
	Testing and sterilization				
1.63	Test and sterilize the tank	Lumpsum	1		
	FENCING				
	Rate to include for excavation in material other than rock. Minimun depth of the fencing posts below round is 600mm. Spacing of posts at 3m centres. Mild steel gate with a width of 1200mm and a height of 1800mm. Chain link mesh opening size 50x50m.				
1.64	Provide a fence made of 12.5G chain link wire and topped with 3 strands of 12.5G barbed wire and Concrete fencing posts complete with corner and centre strainers. Posts spaced at 3 meter intervals. Fence height of 1.8 meters.	M	60		
1.65	Provide and install lockable steel gate 1.2m wide by 1.8m high made from 50mm CHS and wire mesh. Rate to include for support columns	Nr	1		
TOTAL CARRIED FORWARD TO BILL 14 SUMMARY					-

	BILL NO. 14.2 :DRILLING, EQUIPPING & CIVIL WORKS FOR NYAMARANYA BOREHOLE				
Item No.	**Description**	**Unit**	**Qty**	**Rate (Kes)**	**Amount (Kes)**
	BOREHOLE DRILLING				
	Borehole Construction and 24Hours constant discharge test, recovery test measurements and water quality analysis are dependent on the success of the borehole. A dry or low yield borehole (less than 1.5m3/hr) implies that the Client WILL NOT proceed with the subsequent works(installation of steel casings, gravel pack and test pumping).				
	Drilling				
1.01	Conduct Hydrogeological Survey (Terms of Reference provided) by an approved, Licensed Hydrogeologist and prepare and submit hydrogeological survey report to the Project Manager for approval before commencement of works. Estimated yield MUST be indicated in submited report before commencement of drilling works. Note: The Licensed Hydrogeologist and methodology for the exercise MUST BE APPROVED BY THE AGENCY.	Lumpsum	1		
1.02	Mobilization and transportation of whole drilling unit to site, erecting and dismantling of contractor's borehole plant and equipment including but not limited to drilling unit, support truck(s), test pumping and borehole development units. Identification of suitable land for Contractor's use is the obligation and responsibility of the Contractor. Rate to include reinstatement of site to the satisfaction of the Project Manager	L/S	1		
1.03	Drilling of borehole of minimum diameter 205mm through all types of strata including disposal of excavated materials, taking any remedial measures to overcome caving-in, or over drilling to accommodate sloughed material and keeping drilling records as specified between ground level and 250 meters below ground level. Rate to include taking samples of drill cuttings at two (2) Meters intervals.	M	250		
	Supply and installation of screens and casings.				
	Screens and casings shall be done to the satisfaction of the Procuring Entity. The base of the bottom casing shall be sealed as required				
1.04	Supply and install surface casings, mild steel casings 5 mm wall thickness, 209 mm internal diameter length as instructed by Geologist. **Kindly note this item requires supervisor's approval before installation**	M	12		
1.05	Supply and install mild steel casings 4mm thickness,152 mm internal diameter plain steel casings in the borehole.	M	180		

1.06	Supply and install mild steel casings 4mm thickness,152 mm internal diameter plain steel casings in the borehole.	M	70		
	Gravel park				
1.07	Supply and install approved gravel pack (rounded 2-4 mm diameter). The rate to include for introduction of 500g/m^3 of calcium hypochlorite disinfectant. Inert material to be used above the gravel pack before commencement of grouting	Ton	6		
	Grouting				
1.08	Grout between the casing and the borehole for top six(6) meters.	Ton	1		
	Borehole development:				
	Development shall be done to the satisfaction of the project manager. Contractor shall propose methods he intends to use for approval. Rate to include installation and removal of necessary plant				
1.09	Borehole development (physical & chemical) including inserting and removal of development equipment;	Hrs	8		
	Test pumping and recovery measurements:				
	Rates to include for installation and removal of test pumping equipment.				
1.10	Undertake 24Hours Constant Discharge Test as instructed and 6 hours recovery test measurements. Rate to include insertion and retrieval of test pumping equipment	Hrs	30		
	Well completion works				
1.11	Costruction of concrete sanitary seal slab for well head area	LS	1		
1.12	Supply and fix 6" borehole steel cap.	No.	1		
1.13	Allow for a Provisional Sum of Ksh. 30,000 for collecting water samples and carrying out full chemical and bacteriological analysis at **Lake Victoria South Water Works Development Agency** Laboratory.	PS	1	30,000.00	30,000.00
1.14	% Adjustment for Contractor's costs and profit for item 1.13	%	30,000.00		
	NOTE: Equipping and civil works for the Mentioned borehole is dependent on the success of the borehole, a dry Or low yield borehole (less than 1.5m3/hr) implies that the client will NOT proceed on with the subsequent Electro-Mechanical and Civil Works				
	BOREHOLE EQUIPPING (ALL PROVISIONAL)				

	Supply, deliver to site , install, test and commission the following electromechanical Components and accessories for solar system				
1.15	Approved 2.2-3.8 kW hybrid solar inverter pumping control and monitoring system incorporating a dry run protection, overload and over temperature and short circuit protection with integrated MPPT to include provisions for remote control, data logging and protection against reverse polarity. The starter shall have on/off switch, status Indicator lamps (ON, standby, OFF). It shalll have hybrid capability with option of mains grid power/generator and DC solar power	Nr	1		
1.16	335 watts 24VDC Monocrystalline solar modules as DAYLIFF, LORENTZ or similar approved to be wired in series/parallel	Nr	21		
1.17	DC PV module disconnect switch	Nr	1		
1.18	PV Surge Protect 1000VDC 125A	Nr	1		
1.19	Supply, deliver to site, lay in the trench of size 300mm wide x 600mm depth, backfill with selected excavated material a 2.5 mm^2 , 4 core armoured PVC insulated cable for PV modules interconnection and connection to hybrid inverter.	M	30		
1.20	5 metres of 10.00 mm^2 Single Copper cable for earthing complete with 12.5mm diameter x 1200 mm long copper clad rod, couplings and clamp installed in a 300mmx300mmx300mm earth pit as furse or equal and approved and covered with 'HATARI' Tiles	Nr	2		
1.21	DN50 PVC conduit for cable protection c/w appropriate bends	M	10		
1.22	100W LED 1200 Lumens Solar Powered Flood Light c/w 32000mA battery, 6500k color temperature, Intelligent light control (Remote switching, timer setting,motion sensor), IP66 waterproofing,Aluminium alloy body, Solar Panel, Mounting hardware, Autonomous Working time;30 hours	Nr	2		
1.23	Lightning Arrestor bonded to solar structure c/w 6 Metres copper tape terminated to a 12.5mm diameter x 1200 mm long copper clad rod, couplings and clamp installed in a 300mmx300mmx300mm earth pit as furse or equal and approved and covered with 'HATARI' Tiles	Nr	1		
	PUMP SET AND ASSOCIATED ACCESSORIES				
	Supply, deliver to site , install, test and commission the following submersible pump set accessories				

1.24	Supply, deliver to site and install a GS cable termination box of size 150x150x100mm depth with 20 amps 3 way and 5 amps 2 way plastic cable connector terminal blocks firmly fixed on the GS meta bracket fixed at the inside centre as advised. It shall be water tight (rubber seal around the lid) and corrosion resistant. It shall have 2No. Knock-outs on the opposite sides for 1.5mm^2/2 core and 4mm^2/4 core copper cables. One set of holes shall have rubber grommets.	Nr	1		
1.25	Supply, deliver to site, lay in the trench, backfill with selected excavated material a 2.5 mm^2 /4 core pvc swa pvc copper cable. Wire to Solar inverter and the cable termination box.	M	100		
1.26	Ditto item 1.25 in same trench but 1 sq mm 2 core copper pvc insulated swa cable.	M	100		
1.27	Supply, deliver to site and install in the borehole PN 20, OD 40 UPVC Borehole Riser Pipe	M	240		
1.28	1.5 sq mm 4 C Cu Flat PVC insulated submersible drop cable	M	240		
1.29	1 mm^2 ; 2 core Cu PVC insulated Flat cable for probe sensor	M	240		
1.30	Approved Well Probe Sensor	Nr	1		
1.31	DN25 pvc airlines	M	240		
	Pumpset				
1.32	Supply, deliver to site, install in the borehole (at depth not exceeding 240 metres bgl, wire and test a borehole Submersible pump set of capacity 4m^3/hr of water against a total pumping head of 240 metres .The cost should be inclusive of appropriate DN100 pump motor; water tight cable splicing kit for 10.0mm^2/4 core cable	LS	1		
1.33	Supply, deliver to site and install borehole steel pipe clamp of the thickness 5.0 mm. Clamp should have a provision for pipe and cable outlets.	Nr	1		
1.34	Supply, deliver to site and install PN16, DN32 water meter (Threaded) type MJ25 or similar approved quality range 0 - 10 m^3/hr.	Nr	1		
1.35	Supply, deliver to site and install PN16, DN32 GS non - return valve	Nr	1		
1.36	Supply, deliver to site, install and test pressure gauge type kent or similar approved quality range 0 - 25kg.cm c/w with all connections and bends	Nr	1		
	Solar PV Module Carrying Structure				

1.37	Provide mild steel sections and fabricate a solar module carrying structure. Minimum height of the structure shall be Four meters above ground as per Solar subcontractor design and shop drawings to be submitted drawings to the Engineer for approval. Rate to allow for 2nr epoxy paint coatings	LS	1		
1.38	Wall mounted Ventilated lockable MS gauge 16 protection box for Pump control panel. Rate to include Heavy Duty YALE padlock and 3 Coats of epoxy paint as directed by Engineer	Nr	1		
	Borehole Chamber				
1.39	Supply materials and construct borehole chamber complete with a lockable metallic cover. Rate to include for provision of a lock with a minimum of three keys	lumpsum	1		
	TANK TOWER (PROVISIONAL)				
1.40	Supply materials, fabricate and assemble 6 meter high steel tower with platform to carry 2nr, 10,000 litre plastic tank according to drawings and Engineer's instructions.Rates to include for epoxy painting on all steel surfaces. Refer to DWG No. **STD/TANK/01/01 in the execution of the works**	Lumpsum	1		
	Plastic tank				
	Rate to include for tank supply to site, securing in position against wind loads on steel tower platform				
1.41	$10m^3$ plastic tank	Nr	2		
	CLASS J: Pipework-Fittings & Valves				
	PN10, GI inlet pipe,valves and fittings, threaded				
1.42	50mm Dia. Barrel Nipple	Nr	2		
1.43	50mm socket	Nr	2		
1.44	50 by 90^0 bend	Nr	2		
	PN10, GI Outlet pipe,valves and fittings, threaded				
1.45	50mm Dia. Barrel Nipple	Nr	2		
1.46	50mm socket	Nr	2		
1.47	50 by 90^0 bend	Nr	2		
1.48	50mm Gate Valve	Nr	1		
1.49	50mm Dia GI pipe	M	6		
	Overflow pipe				
1.50	50mm Dia. Socket	Nr	2		
1.51	50 by 90^0 bend	Nr	1		
1.52	50mm Dia. GI pipe	M	0.5		
	CHAMBERS				

1.53	Provide all materials and construct masonry valve chambers internal dimensions 600mm x 600mm depth not exceeding 1.5m. Include for supply and fixing of lockable mild steel checkered plate cover & step irons	Nr	1		
	Earth Works				
	Excavation				
	The Rates shall include for all Strutting, Shuttering, Stabilising the Excavation Faces, and Keeping the Excavation Free of Water by Pumping, Bailing or Other Means.				
1.54	Maximum depth n.e. 1.0 m	m^3	7		
1.55	-Ditto- but maximum depth 1.0 m to 2.0 m	m^3	2		
1.56	Extra over excavation in rock, blasting not permitted (Provisional)	m^3	1		
	Reinforced Concrete Foundations				
	Concrete Works				
	Provide, mix and place concrete as directed				
1.57	Plain concrete Class 15/20 in 75 mm blinding layer under base slab of tank	m^3	0.5		
	Vibrated, Reinforced Concrete Class 25/20 in:				
1.58	Column base slab and columns	m^3	4		
1.59	Tie beams	m^3	1		
	Reinforcement				
	Provide and Fix High Tensile Steel Reinforcement including Cutting, Bending, Propping with Spacers and Tying as Specified				
1.60	Reinforcement, all diameters	Kg	1000		
	Formwork				
	Provide and Fix Shuttering Including Propping, Strutting and Striking all as Specified				
	(i) Vertical Formwork				
1.61	Sides of Column Base Slab - Tank	m^2	11		
1.62	Sides of Column Wall	m^2	10		
	Testing and sterilization				
1.63	Test and sterilize the tank	Lumpsum	1		
	FENCING				
	Rate to include for excavation in material other than rock. Minimun depth of the fencing posts below round is 600mm. Spacing of posts at 3m centres. Mild steel gate with a width of 1200mm and a height of 1800mm. Chain link mesh opening size 50x50m.				

1.64	Provide a fence made of 12.5G chain link wire and topped with 3 strands of 12.5G barbed wire and Concrete fencing posts complete with corner and centre strainers. Posts spaced at 3 meter intervals. Fence height of 1.8 meters.	M	60		
1.65	Provide and install lockable steel gate 1.2m wide by 1.8m high made from 50mm CHS and wire mesh. Rate to include for support columns	Nr	1		
TOTAL CARRIED FORWARD TO BILL 14 SUMMARY					-

BILL NO.14: COLLECTION PAGE		
DRILLING AND EQUIPPING OF BOREHOLES		
PAGE	**BILL COLLECTION PAGE**	**AMOUNT (KSH)**
1	Bill No.14.1 Drilling, Equipping and Civil Works for Getambwega Borehole	-
2	Bill No.14.2 Drilling, Equipping and Civil Works for Nyamaranya Borehole	-
	Bill No. 14 Total Carried Over to Summary Sheet	

	BILL NO. 15: ELECTRO-MECHANICAL EQUIPMENT				
Item	**Description**	**Unit**	**Quantity**	**Rate**	Amount
No.				**(Kshs)**	(KShs.)
	NOTE - Requisite pipework and fittings within the Building for each Electromechanical Equipment have been measured separately in the respective Bills of Quantities. These are however based on specific models. The contractor to provide for approval, working drawings of pipework arrangement based on specific models of Electromechanical equipment the Contractor proposes to supply, prior to ordering the pipes and fittings. **- Contractor to provide operation and maintenance manuals for specific model of Equipment supplied, including Technical data, as well as relevant documentation for accompanying waranties.**				
1	**PUMPS AND MOTORS**				
1.1	**Raw Water Pumps at Pumping Station Site**				
1.1.1	Supply, transport to site, install, test and commission multi-stage horizontal centrifugal pumps in Pump House (1 duty, 1 standby) complete with motor, base plate, fixing bolts, grouting, etc., for the following characteristics:- Flow 55 m^3/hr, Dynamic Head 6m, Minimum Efficiency at Duty Point 75%. The work shall include supply and install all required fittings, lowering & lifting devices for the pumps	Nr.	2		
1.2	**Treated Water Pumps at Pump Station**				
1.2.1	Supply, transport to site, install, test and commission horizontal centrifugal pumps in Treated Water Pump House at Treatment Works (1 duty, 1 standby) complete with motor, base plate, fixing bolts, grouting, etc., for the following characteristics:- Flow 60m^3/hr, Dynamic Head 210m, Minimum Efficiency at Duty Point 75%. The work shall include supply and install all required fittings	Nr.	2		
	Pumps at Gokeharaka Booster Station				
1.2.2	Supply, transport to site, install, test and commission horizontal centrifugal pumps at Booster Station (1 duty, 1 standby) complete with motor, base plate, fixing bolts, grouting, etc., for the following characteristics:- Flow 17m^3/hr, Dynamic Head 112m, Minimum Efficiency at Duty Point 75%. The work shall include supply and install all required fittings	Nr.	2		
1.3	**Drainage Pumps and Pipework at Pump House**				

1.3.2	Supply, transport to site, install floor mounted submersible drainage pump in Raw Water Pump House Drainage Sump (1 duty), complete with all requisite pipework, valves and fittings to discharge approx. 50m away, complete with motor, base plate, fixing bolts, grouting, etc, for the following characteristics:- Flow $2m^3$/hr, Dynamic Head 8m, Minimum Efficiency at Duty Point 75%	Nr.	1		
	-				
1.4	**Solar farms at Treatment Plant**	-			
1.4.1	Supply and install 7KW Solar Farm for the raw water pumps; rate to include for interconnections and wiring to inverter	W	7,000		
1.4.2	Supply and install 75KW Solar PV modules for the treated water pumps; rate to include for interconnections and wiring to inverter	W	75,000		
1.5	**Solar farms at Treatment Plant**	-			
	-	-			
1.5.1	Supply and install 10KW Solar Farm for the booster pumps; rate to include for interconnections and wiring to inverter	W	10,000		
1.6	**Hybrid Inverters**	-			
	-	-			
1.6.1	Supply and install 5kW, MPPT based inverter for raw water pumps, to incorporate dry running protection	Nr	2		
	-	-			
1.6.2	Supply and install 55kW, MPPT based inverter for treated water pumps, to incorporate dry running protection	Nr	2		
1.6.3	Supply and install 7.5kW, MPPT based inverter for treated water booster pumps, to incorporate dry running protection	Nr	2		
2	**CHEMICAL MIXERS AND DOSERS**				
2.1	Provide and install, test and commission gravity feed Chemical Dosers in the Chemical Mixing Building for Alum Solution and Soda Ash Solution dosing, average flow rate 0.05 litres per second, ("Opados model 4" from Opalium or approved equivalent). Rate to include for provision of chemical resistant fasteners.	Nr.	2		
2.2	Provide and install,gravity feed Chemical Dosers in the Chlorine Mixing Building for Hypochlorite Solution and Soda Ash Solution dosing, average flow rate 0.011 litres per second, ("Opados model 4" from Opalium or approved equivalent). Rate to include for provision of chemical resistant fasteners.	Nr.	2		

2.3	Provide and install Electric Chemical Mixers/ Agitators in Alum Mixing Tanks in Chemical Storage and Mixing Building, complete with electric motor, flange plate, shaft (length to suit depth of mixing tank), and mixing blades. The Shafts and Mixing Blades to be made of Corrosion Resistant grade SS 316L Stainless Steel. Rate to include for supply of galvanized bolts and nuts, etc., grouting, provision and application of three coats of approved chemical resistant epoxy paint on surface of motors, etc., supply and installation of chemical resistant surface cable ducts, etc., All to Engineer's approval, ("Helisem Mixers" from Milton Roy or approved equivalent), Motor rating 1.1KW.	Nr.	2		
2.4	- Ditto-, but Electric Mixers / Agitators in Soda Ash and Chlorine Mixing Tanks in Chlorine Mixing Building, motor rating 0.75KW	Nr.	2		
3	**SWITCHGEAR, CONTROL PANELS & CONTROL CABLING IN TREATMENT WORKS**				
3.1	**Supply, Install & connect 1 No. LV BOARD in Form 3B Construction having:**	Item	1		
	Incoming	-			
	1 x 400 Amps TPN MCCB with operating handle - 36 KA				
	Protection	-			
	1 x 40 KA Surge arrestor with HRC fuses.				
	Instruments	-			
	1 x Network Analyser with on-off switch, 3 x 400/5 CTs, 3 x 2A control Mcbs				
	By-Pass switch	-			
	1 x 400 Amps 4 pole by pass switch for external 250 KVA stabilizer.				
	Outgoing	-			
	(A) Pump Section 1 - Treated Water Pumps - 2No.	-			
	Each of the pump motor starter will consist of:				
	a) 1 x 125 A TPN MCCB with operating handle & auxiliary contacts connected to				
	b) 1 NO. 60 kw soft starter with intergral by-pass contactor				
	c) 1 x Ammeter with CT to read uncorrected current				
	d) 1 x Hourmeter				
	e) 1 x Manual off Auto Switch				
	f) 2 x Start stop push buttons				
	g) 3 x Run/trip/motor overheat lamps				
	h) 1 x Thermistor relay				
	i) 1 x 10 KVAR capacitor with back up 32 A HRC fuses & contactors				
	j) 1 x Set of terminals				
	k) 1 x Dry run protection				
	(B) Pumps Section 2 - Raw Water Pumps - 2 No. + Drainage Pump 1 No.	-			
	Each of the pump motor starter will consist of				
	a) 1 x 63 A TPN MCCBs with operating handle & auxiliary contacts connected to				

	b) 1 No. 2 kw automatic star- delta starter with overload relay				
	c) 1 x Ammeter with CT to read uncorrected current				
	d) 1 x Hourmeter				
	e) 1 x Manual - off Auto Switch				
	f) 2 x Start/stop push-buttons				
	g) 3 x Run/trip/ motor overheat lamps				
	h) 1 x Thermistor relay				
	i) 1 x 3 KVAR capacitor with back up 10 A HRC fuses & contactor				
	j) 1 x Set of terminals.				
	k) 1 x Dry run protection				
	(C) Common controls section will be as per specifications				
	(D) Other Circuits (All MCCBs with operating handle)				
	4 x 63 Amps TP MCCBs - 25 KA				
	4 x 32 Amps TP MCCBs - 25 KA				
	1 x 32 Amps DP MCCB - 25 KA				
	(E) KPLC Requirements				
	Sealable CT chamber				
	Space for KPLC meters				
3.2	**Supply, Install, Connect & Test the following Equipment (Refer to Drawings and Specifications:**				
3.2.1	Distribution Board DB 1	Item	1		
3.2.2	Consumer Unit CU 1	Item	1		
3.2.7	1 x set of 6 mm stainless steel electrodes with electrode holder, separator, connector Clear Water Tank.	Lot	1		
3.3	**Earthing**				
3.3.1	Carry out station earthing & connect the same to LV Board, DBs, Stabilizer, etc.	Item	L.S.		
3.4	**Power Cabling**				
	All cabling includes supply, install & test with glands, lugs cable ties, cable trays as required				
	a) Cabling to 2 No. Treated Water Pumps				
3.4.2	2 x 25 mm^2 4 core cable	m	40		
3.4.3	2 x 2.5 mm^2 2 core cable	m	40		
	b) Cabling to 2 No. Raw Water Pumps and 1No. Drainage Pump				
3.4.4	2 x 4mm^2 4 core cable	m	40		
3.4.5	1 x 2.5 mm^2 2 core cable	m	40		

	c) Cabling to Chemical House MCC	-			
3.4.6	10 mm^2 4 core cable	m	50		
	d) Cabling to Chlorination House MCC	-			
3.4.7	10 mm^2 4 core cable	m	50		
	e) Cabling to Drainage Pumps Control Panel	-			
3.4.8	6 mm^2 2 core cable	m	50		
	f) Cabling to Security Lighting Board DB1	-			
3.4.9	6 mm^2 2 core cable	m	50		
	-	-			
	g) Operators Office CU1	-			
3.4.10	6 mm^2 2 core cable	m	50		
	h) Pump House CU	-			
3.4.12	6 mm^2 4 core cable	m	50		
4	**Chlorine Mixing Building**				
4.1	Supply, install, test and commission wall mounted purpose made, front access distribution board and motor control panel. This will be in transparent plastic enclosures and will have:	Item	1		
	Incoming	-	-		
	1 x 63 Amps TPN Isolator				
	Instruments	-	-		
	1 x Digital Voltmeter with integral selector switch + 3 x 2 Amps Sp Mcbs				
	Protection	-	-		
	1 x UV/OV, Phase failure phase sequence relay + 3 x 2 Amps Sp Mcbs				
	Outgoing	-	-		
	(A) Mixers 2No.	-	-		
	Each Mixer will have:				
	(a) 4 - 6 Amps MPCB with auxiliary contacts				
	(b) 9 Amps AC3 duty contactors				
	(c) Run - trip lights				
	(d) 1 x Set of terminals				
	(B) Other circuits	-	-		
	1 x 6 Amps SP MCB				
	3 x 10 Amps SP MCB				
	1 x 32 Amps SP MCB				
4.2	Supply, Install, Connect & Test Remote start/stop push button stations	Nr	3		
	Power + Control Cabling to 2Nr. Mixers				
	All cabling to include supply, install, connect & test with glands, lugs, cable ties cable trays as required.				

4.3	1 x 2.5 mm^2 4 core cable to mixers	m	70		
4.4	1 x 2.5 mm^2 4 core cable to start/stop push button stations	m	70		
4.5	Allow for power connection to chlorine house lighting & power sockets	Item	1		
5	**Surge Relief Valves for Rising Mains**				
5.1	Supply, install, test and commission a pilot-operated pressure relief valve, flanged, complete with pilot control system, isolation valves, strainer and all necessary accessories for the Treated Pumping Main (Q=60m^3/hr, H=216m) from T/Works to Gokeharaka Tank	Item	1		
5.2	Supply, install, test and commission a pilot-operated pressure relief valve, flanged, complete with pilot control system, isolation valves, strainer and all necessary accessories for the Treated Pumping Main (Q=17m^3/hr, H =112m) from Booster Station to Masangora Tank	Item	1		
TOTAL BILL 15 CARRIED TO SUMMARY					**-**

	BILL NO. 16: SITE & ANCILLARY WORKS				
Item	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
No.				**(Kshs)**	**(Kshs)**
1	**GENERAL CLEARANCE, AT T/WORKS**				
1.1	Clear all grass, bushes, shrubs etc. and cart away to tips as directed by the Engineer.	Ha	0.2		
1.2	Excavate area within proposed structures and roads to remove top soil from the existing ground level to 300mm deep. Part of the top soil to be stack on site for use as and where directed by the Engineer and dispose off the surplus to tips.Tips to be identified by the Contractor in liaison with the local Authority.	m^2	1200		
1.3	Cut down trees, grub up roots and cart away to tip identified by the Contractor in liaison with the Local Authorities. Girth n.e. 1.0m	Nr	20		
1.4	Ditto- but Stumps of diameter 150mm to 500mm	Nr	20		
	FENCING OF GATE DAM AND T/WORKS				
3.1	Provide materials and construct a fence made of 12.5G chain link wire and topped with 3 strands of 12.5G barbed wire and Concrete fencing posts complete with corner and centre strainers. Posts spaced at 3 meter intervals. Fence height of 1.8 meters.	m	1300		
3.2	Provide all materials, fabricate and fix double leaf vehicular access steel gate, 4m wide, including 2nr. concrete pillars	Nr	2		
	ROADS AND FOOTPATHS				
	Acess Roads To T/Works				
4.1	Excavate below stripped surface to formation level of roads, footpaths and verges including compaction of areas, stack approved material for reuse as fill and cart away surplus to tips. Depth n.e 0.5m.Tips to be identified by the contractor in liaison with the Local Authority.	m^3	720		
4.2	Fill using approved imported hardcore material and compact in 200mm layers as specified. Rate to include for filling, watering and compaction to specified density, all to the approval of the Engineer.	m^3	720		
4.3	Fill using approved imported material and compact in 200mm layers as specified. Rate to include for supply, filling, watering and compaction to specified density, all to the approval of the Engineer.	m^3	240		
4.4	Provide, lay and compact murram wearing course,to a minimum of 150mm thickness including maintenance during the construction period. Rate to include for supply, filling, watering, stabilizing where instructed and compaction to specified density, all to the approval of the Engineer.	m^2	240		

4.5	Supply and apply approved anti-termite/herbicide to road surfacing in accordance with manufacturer's printed instruction.	m^2	1200		
5	**SITE DRAINAGE**				
	Surface Water Drainage				
5.11	Excavate trapezoidal earth drains to the lines and levels directed by the Engineer. Allow for trimming of sides to correct slopes and cart excavated material to tips. Depth to invert n.e. 1.5m	m	800		
5.13	Provide and spread 100mm of approved top soil on the base of sides of the earth drain, rake and level to the requried profiles as directed by the Engineer (Provisional)	m^2	1600		
6	**BUILDINGS**				
6.01	Excavate foundations, supply all materials and construct 1Nr. Staff House as shown in the drawing. Include for building and provision of plumbing works, water supply and other facilities all to the approval of the Engineer.Rate to include for all electrical works.	Item	L.S		
6.02	Excavate foundations, supply all materials and construct 1Nr. Administration Block as shown in the drawing. Include for building and provision of plumbing works, water supply and other facilities all to the approval of the Engineer.Rate to include for all electrical works.	Item	L.S		
6.03	Excavate foundations, supply all materials and construct 1Nr. Chemical Building as shown in the drawing. Include for building and provision of plumbing works, water supply and other facilities all to the approval of the Engineer.Rate to include for all electrical works.	Item	L.S		
6.04	Excavate foundations, supply all materials and construct 1Nr. Chlorine Building as shown in the drawing. Include for building and provision of plumbing works, water supply and other facilities all to the approval of the Engineer.Rate to include for all electrical works.	Item	L.S		
6.05	Provide materials and construct the site guard house as shown in Drawing. Rate include all foundation works, ironmongery, fixtures and finishes	Item	L.S		
7	**MISCELLANEOUS WORKS**				
7.01	Allow a Provisional Sum of Kshs. 1,500,000 to be used as directed by the Engineer for any other works as may be deemed necessary on site.	Item	P.S.		
TOTAL BILL NO. 16 CARRIED TO SUMMARY					**-**

	BILL NO. 17: DAYWORKS				
Item	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	NOTE: THE WHOLE OF THIS BILL IS PROVISION AL				
	-				
1	**LABOUR**				
	The rates inserted herein should include for all costs such as insurance, travelling time, overtime, accommodation, use and maintenance of small tools of trade, supervision, overheads and profit. Only time engaged upon work will be paid for				
1.01	Unskilled Labourer	Hrs	500		
1.02	Timberman	Hrs	50		
1.03	Stone Mason	Hrs	100		
1.04	Carpenter	Hrs	50		
1.05	Concretor	Hrs	70		
1.06	Blaster (Certified)	Hrs	50		
1.07	Pipelayer	Hrs	50		
1.08	Painter	Hrs	10		
1.09	Surveyor	Hrs	50		
1.10	Foreman	Hrs	100		
1.11	Watchman (including use of firewood, lights, day, night, Sunday and Public Holiday watching)	Hrs	500		
1.12	Plant Operator	Hrs	250		
1.13	Driver	Hrs	250		
1.14	Plumber	Hrs	100		
1.15	Electrician	Hrs	100		
1.16	Technician	Hrs	100		
2	**MATERIALS**				

	All materials are to comply with the Specifications. The rates inserted herein are to include for delivery to site, storage, handling, overheads and profits				
2.01	Ordinary Portland Cement	Tonne	1		
2.02	Mild steel (any size from 8mm to 25mm dia.)	Kg	30		
2.03	High tensile steel (any size from 8mm to 16mm dia.)	Kg	50		
2.04	Fine aggregate for concrete	m^3	30		
2.05	Coarse aggregate for concrete	m^3	30		
2.06	Use of shuttering timber	m^2	20		
2.07	Murram	m^3	20		
2.08	Concrete Class 15/20	m^3	20		
2.09	Concrete Class 20/20	m^3	20		
2.10	Concrete Class 25/20	m^3	20		
3	**PLANT**				
	The rates inserted herein should include for all operational and maintenance costs, fuel, oil, grease, operators, turnboys, supervision, overhead and profits. Only the time actually employed on works will be paid for and the rates should include for idle, travelling and overtime				
3.1	Compressor (3.0 m^3/minute)	Hrs	50		
3.2	D4 Tractor/Grader	Hrs	20		
3.3	Concrete Vibrator (Petrol or Diesel)	Hrs	50		
3.4	Concrete Mixer 14/10 (including batch weighing gear and drag feed shovel)	Hrs	150		
3.5	Dumper 0.38 m^3	Hrs	50		
3.6	Tandem 3 wheels roller. Dead weight 9 tonnes	Hrs	20		
3.7	5 Tonne Lorry (Tipper)	Hrs	70		
3.8	7 Tonne Lorry (Tipper)	Hrs	30		

3.9	10 Tonne Lorry (Tipper)	Hrs	30		
3.10	Portable water pump 50mm diameter (inclusive of hoses, couplings, etc.)	Hrs	30		
3.11	Oxy-Acetylene cutting and welding set, including oxygen and acetylene	Hrs	20		
3.12	Electric welding set including electrodes	Hrs	10		
3.13	Mechanical Pressure Testing Equipment	Hrs	30		
3.15	Back Hoe Excavator	Hrs	30		
TOTAL CARRIED FORWARD TO GRAND SUMMARY					

PART III - CONDITIONS OF CONTRACT AND CONTRACT FORMS

SECTION VIII - GENERAL CONDITIONS OF CONTRACT

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

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

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

General Conditions of Contract

A. General

1. Definitions

1.1 Bold face type is used to identify defined terms.

a) **The Accepted Contract** Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.

b) **The Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.

c) **The Adjudicator** is the person appointed jointly by the Procuring Entity and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.

d) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.

e) **Compensation Events** are those defined in GCC Clause 42 hereunder.

f) **The Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 53.1.

g) **The Contract** is the Contract between the Procuring Entity and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.

h) **The Contractor** is the party whose Bid to carry out the Works has been accepted by the Procuring Entity.

i) **The Contractor's Bid** is the completed bidding document submitted by the Contractor to the Procuring Entity.

j) **The Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.

k) **Days** are calendar days; months are calendar months.

l) **Day work**s are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.

m) **A Defect** is any part of the Works not completed in accordance with the Contract.

n) **The Defects** Liability Certificate is the certificate issued by Project Manager upon correction of defects by the Contractor.

o) **The Defects Liability Period** is the period **named in the SCC** pursuant to Sub-Clause 34.1 and calculated from the Completion Date.

p) **Drawings** means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Procuring Entity in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

q) **The Procuring Entity** is the party who employs the Contractor to carry out the Works, **as specified in the SCC,** who is also the Procuring Entity.

r) **Equipmen**t is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

s) **"In writing" or "written"** means hand-written, type-written, printed or electronically made, and resulting in a permanent record;

t) The Initial Contract Price is the Contract Price listed in the Procuring Entity's Letter of Acceptance.

u) **The Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the SCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.

v) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.

w) **Plant i**s any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

x) **The Project Manager** is the person **named in the SCC** (or any other competent person appointed by the Procuring Entity and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.

y) **SCC** means Special Conditions of Contract.

z) **The Site** is the area of the works as **defined as such in the SCC**.

aa) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.

bb) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.

cc) **The Start Date** is **given in the SCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

dd) **A Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.

ee) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

ff) **A Variation** is an instruction given by the Project Manager which varies the Works.

gg) **The Works** are what the Contract requires the Contractor to construct, install, and turn over to the Procuring Entity, **as defined in the SCC**.

2. Interpretation

2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.

2.2 If sectional completion is specified in the SCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

2.3 The documents forming the Contract shall be interpreted in the following order of priority:

a) Agreement,
b) Letter of Acceptance,
c) Contractor's Bid,
d) Special Conditions of Contract,
e) General Conditions of Contract, including Appendices,
f) Specifications,
g) Drawings,
h) Bill of Quantities[6], and
i) any other document **listed in the SCC** as forming part of the Contract.

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

3. Language and Law

3.1 The language of the Contract is English Language and the law governing the Contract are the Laws of Kenya.

3.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Procuring Entity's Country when

a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country; or

b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

4. Project Manager's Decisions

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

5. Delegation

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

6. Communications

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

7. Subcontracting

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

8. Other Contractors

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

9. Personnel and Equipment

9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.

9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

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

10. Procuring Entity's and Contractor's Risks

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

11. Procuring Entity's Risks

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

a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to

i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or

ii) negligence, breach of statutory duty, or interference with any legal right by the Procuring Entity or by any person employed by or contracted to him except the Contractor.

b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Procuring Entity or in the Procuring Entity's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.

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

aa) a Defect which existed on the Completion Date,

bb) an event occurring before the Completion Date, which was not itself a Procuring Entity's risk, or

cc) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

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

13. Insurance

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

a) loss of or damage to the Works, Plant, and Materials;

b) loss of or damage to Equipment;

c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and

d) personal injury or death.

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

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

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

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

14. Site Data

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

15. Contractor to Construct the Works

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

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

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

17. Approval by the Project Manager

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

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

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

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

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

18. Safety

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

19. Discoveries

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

20. Possession of the Site

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

21. Access to the Site

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

22. Instructions, Inspections and Audits

22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.

22.2 The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and sub-consultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.

22.3 The Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, the Procuring Entity and/or persons appointed by the Public Procurement Regulatory Authority to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Public Procurement Regulatory Authority. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Public Procurement Regulatory Authority's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Public Procurement Regulatory Authority's prevailing sanctions procedures).

23. Appointment of the Adjudicator

23.1 The Adjudicator shall be appointed jointly by the Procuring Entity and the Contractor, at the time of the Procuring Entity's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Procuring Entity does not agree on the appointment of the Adjudicator, the Procuring Entity will request the Appointing Authority designated in the SCC, to appoint the Adjudicator within 14 days of receipt of such request.

23.2 Should the Adjudicator resign or die, or should the Procuring Entity and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Procuring Entity and the Contractor. In case of disagreement between the Procuring Entity and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the SCC at the request of either party, within 14 days of receipt of such request.

24. Settlement of Claims and Disputes

24.1 Contractor's Claims

24.1.1 If the Contractor considers itself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give Notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 30 days after the Contractor became aware, or should have become aware, of the event or circumstance.

24.1.2 If the Contractor fails to give notice of a claim within such period of 30 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Procuring Entity shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub- Clause shall apply.

24.1.3 The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

24.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Procuring Entity's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record- keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.

24.1.5 Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

a) this fully detailed claim shall be considered as interim;

b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and

c) the Contractor shall send a final claim within 30 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.

24.1.6 Within 42 days after receiving a Notice of a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within the above defined time period.

24.1.7 Within the above defined period of 42 days, the Project Manager shall proceed in accordance with Sub-Clause

24.1.8 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

24.1.9 Each Payment Certificate shall include such additional payment for any claim as has been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

24.1.10 If the Project Manager does not respond within the timeframe defined in this Clause, either Party may consider that the claim is rejected by the Project Manager and any of the Parties may refer to Arbitration in accordance with Sub-Clause 24.4 [Arbitration].

24.1.11 The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause 24.3.

24.2 Amicable Settlement

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

24.3 Matters that may be referred to arbitration

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

a) The appointment of a replacement Project Manager upon the said person ceasing to act.

b) Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.

c) Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.

e) Any dispute arising in respect of war risks or war damage.

f) All other matters shall only be referred to arbitration after the completion or alleged completion of the Works or termination or alleged termination of the Contract, unless the Procuring Entity and the Contractor agree otherwise in writing.

24.4 Arbitration

24.4.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 24.3 shall be finally settled by arbitration.

24.4.2 No arbitration proceedings shall be commenced on any claim or dispute where notice of a claim or dispute has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.

24.4.3 Notwithstanding the issue of a notice as stated above, the arbitration of such a claim or dispute shall not commence unless an attempt has in the first instance been made by the parties to settle such claim or dispute amicably with or without the assistance of third parties. Proof of such attempt shall be required.

24.4.4 The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject of or included in any certificate.

24.4.5 The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision requirement or notice had been given.

24.4.6 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Project Manager from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.

24.4.7 Neither Party shall be limited in the proceedings before the arbitrators to the evidence, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction.

24.4.8 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Project Manager shall not be altered by reason of any arbitration being conducted during the progress of the Works.

24.4.9 The terms of the remuneration of each or all the members of Arbitration shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

24.5 Arbitration with National Contractors

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

i) Architectural Association of Kenya

ii) Institute of Quantity Surveyors of Kenya

iii) Association of Consulting Engineers of Kenya

iv) Chartered Institute of Arbitrators (Kenya Branch)

v) Institution of Engineers of Kenya

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

24.6 Alternative Arbitration Proceedings

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

process.

24.7 Failure to Comply with Arbitrator's Decision

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

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

24.8 Contract operations to continue

24.8.1 Notwithstanding any reference to arbitration herein,

a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

b) the Procuring Entity shall pay the Contractor any monies due the Contractor.

25. Fraud and Corruption

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

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

B. Time Control

26. Program

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

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

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

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

27. Extension of the Intended Completion Date

27.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by

the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.

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

28. Acceleration

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

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

29. Delays Ordered by the Project Manager

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

30. Management Meetings

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

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

31. Early Warning

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

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

C. Quality Control

32. Identifying Defects

32.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The

Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.

33. Tests

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

34. Correction of Defects

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

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

35. Uncorrected Defects

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

D. Cost Control

36. Contract Price[7]

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

37. Changes in the Contract Price[8]

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

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

38. Variations

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

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

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

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

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

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

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

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

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

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

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

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

39. Cash Flow Forecasts

39.1 When the Program[11], is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

40. Payment Certificates

40.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.

40.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.

40.3 The value of work executed shall be determined by the Project Manager.

40.4 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed12.

40.5 The value of work executed shall include the valuation of Variations and Compensation Events.

40.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

40.7 Where the contract price is different from the corrected tender price, in order to ensure the contractor is not paid less or more relative to the contract price (which would be the tender price), payment valuation certificates and variation orders on omissions and additions valued based on rates in the Bill of Quantities or schedule of rates in the Tender, will be adjusted by a plus or minus percentage. The percentage already worked out during tender evaluation is worked out as follows: *(corrected tender price – tender price)/tender price X 100*.

41. Payments

41.1 Payments shall be adjusted for deductions for advance payments and retention. The Procuring Entity shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If the Procuring Entity makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.

41.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.

41.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.

41.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Procuring Entity and shall be deemed covered by other rates and prices in the Contract.

42. Compensation Events

42.1 The following shall be Compensation Events:

d) The Procuring Entity does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.

e) The Procuring Entity modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.

f) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.

g) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.

h) The Project Manager unreasonably does not approve a subcontract to be let.

i) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.

j) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Procuring Entity, or additional work required for safety or other reasons.

k) Other contractors, public authorities, utilities, or the Procuring Entity does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.

l) The advance payment is delayed.

m) The effects on the Contractor of any of the Procuring Entity's Risks.

n) The Project Manager unreasonably delays issuing a Certificate of Completion.

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

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

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

43. Tax

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

44. Currency y of Payment

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

45. Price Adjustment

45.1 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 are coefficients[13] **specified in the SCC,** representing the non-adjustable and adjustable portions, respectively, of the Contract Price payable and Im 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.

45.2 If the value of the index is changed after it has been used in a calculation, the calculation shall

be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

46. Retention

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

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

47. Liquidated Damages

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

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

48. Bonus

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

49. Advance Payment

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

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

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

50. Securities

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

51. Dayworks

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

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

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

52. Cost of Repairs

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

E. Finishing the Contract

53. Completion

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

54. Taking Over

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

55. Final Account

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

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[13] *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 non-adjustable components. The sum of the adjustments for each currency are added to the Contract Price.*

56. Operating and Maintenance Manuals

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

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

57. Termination

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

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

a) the Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;

b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;

c) the Procuring Entity or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction oramalgamation;

d) a payment certified by the Project Manager is not paid by the Procuring Entity to the Contractor within 84 days of the date of the Project Manager's certificate;

e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;

f) the Contractor does not maintain a Security, which is required;

g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the SCC**; or

h) if the Contractor, in the judgment of the Procuring Entity has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Procuring Entity may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.

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

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

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

58. Payment upon Termination

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

58.2 If the Contract is terminated for the Procuring Entity's convenience or because of a fundamental breach of Contract by the Procuring Entity, the Project Manager shall issue a

certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

59. Property

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

60. Release from Performance

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

TECHNICAL SPECIFICATIONS

GENERAL

Provision of equipment material and labour

The Contractor shall provide all equipment, transport, consumable materials and labour necessary for the satisfactory COMPLETION of the works in compliance with the specifications herein. The Engineer reserves the right to inspect plant and materials prior to Contractor selection, and may reject plant or material that in his/her opinion is substandard or inappropriate. The Contractor shall provide full descriptions of all plants to be deployed for these works. The Contactor shall present method statements describing in detail the proposed approach to work.

The Contactor shall provide summary detail of the experience of key personnel to be deployed for these works.

Occupation of site

The Employer will provide land on which the works shall be constructed. The Contractor shall be given possession of such parts of the site that he requires for activities related to construction works including storage of raw materials, equipment and setting up of camp during the period of Contract provided his operation does not interfere with the daily activities of the Employer.

The Contractor shall not enter upon or occupy with men, tools, equipment and materials any land other than the land or right of way provided by the Employer

Diligent performance

The Contractor shall at all times perform the Works diligently and in accordance with sound professional practice. He/she shall not proceed from one stage of works to another without the express permission of the Engineer.

Decisions regarding temporary halt, discontinuing of any element or part of any element of these works, or abandonment of these works, shall be discussed jointly between the Contractor and the Engineer before any further actions are authorised by the Engineer. The Engineer's decision shall be final.

The Engineer will require a written submission justifying any steps taken by the successful bidder without the Engineer's approval. An unsatisfactory explanation shall lead to non-payment for works undertaken without prior agreement, and may be included for consideration as liquidated damages.

Drawings

The project drawings shall comprise

(a) The drawings provided in the book of drawings issued for Tender

(b) Such other drawings and/or sketches as are issued from time to time by the

Engineer to deal with design modifications in response to on-site conditions

Record drawing

As the work proceeds the Contractor shall mark up 'As Built' details on a set of prints of the Contract Drawings modified to portray the works as actually constructed and issue to the Engineer's representatives for approval within 7 days of COMPLETION of the works covered by each drawing.

Level datum

It shall be the responsibility of the Contractor before commencing work to obtain from the Engineer in writing the values and locations of the benchmarks to be used in these works. All temporary benchmarks shall be referred thereto.

The Contractor shall construct such temporary benchmarks as the Engineer may direct and shall agree the levels thereof with the Engineer. The establishment of such temporary benchmarks shall be deemed part of the Contractor's responsibility in setting out the works.

The reduced levels are shown on the drawing are believed but not guaranteed to be correct. In the event of any discrepancies between the drawing and the specification, the specification shall have precedence over the drawing.

Setting out

The Contractor shall appoint and employ the necessary qualified and experienced staff to set out the works accurately.

The Contractor shall establish and locate all lines and levels and be responsible for the correct location of all works.

Where directed by the Engineer, the Contractor shall take such levels and dimensions as may be required for the purposes of measurement before disturbance of the ground. These shall be agreed between the Contractor and the Engineer in writing before any ground surface is disturbed or covered up. Any work commenced without taking the said levels and dimensions shall be measured on the Engineer's reckoning of their values before disturbance. The Engineer's decision on this matter shall be final.

Construction and checking of work

The Contractor shall be solely responsible for and shall provide all labour, tools, lifting tackle, and other equipment required for the construction and checking of the works.

No operative shall be allowed to execute any type of work which is normally carried out by a skilled trades man, unless the operative is thoroughly experienced and proficient in the trade concerned. Supervisors and operatives may be required to demonstrate their proficiency or produce certificates of competence to the satisfaction of the Engineer.

As each part of the work is carried out, it shall be subject to the approval of the Engineer.

Survey equipment

The Contractor shall provide for the sole use of the Engineers representative the survey equipment and appliance and these shall revert to the Contractor upon COMPLETION of the Contract.

The Contractor shall provide all labour and materials as may be required by the Engineer representative for survey work in connection with works.

Supervision and labour

The Contractor will be required to maintain a competent supervising engineer and staff on Site throughout the construction period until COMPLETION of the works, and thereafter as may be required during the Defects Liability Period. The Engineer shall give prior approval to the appointment of this supervising engineer and shall have the authority to withdraw this approval at any time in accordance with the Conditions of Contract.

All staff and labour employed on the works shall be employed in accordance with the labour and employment laws and regulations of the Republic of Kenya

Contractor's site offices, staff, workshops, storage and working areas, communication, etc

General

The Contractor shall advice the Engineer at which of his offices any notices may be served in accordance with the Conditions of Contract.

Language of correspondence and records

All communication from Contractor to the Engineer and the Engineer's Representative shall be in English language.

All site books, time sheets, records, notes drawings, documents, specifications etc. shall be in English language

Contractor's duty staff & offices

At least one responsible senior representative of the Contractor shall be immediately available at all times and he shall be on site during normal working hours.

To such representative shall be delegated full authority to confer with Engineer's Representatives or his deputy and to take all steps and to issue all those instructions which may be required in an emergency to ensure the safety of all personnel of the works and of all the Employer's and other property on the site and in the immediate vicinity thereof. The Engineer's Representative may from time to time at his discretion after taking into consideration all the prevailing conditions allow some relaxation of this clause but such relaxation shall be made only with his written permission and subject to any special conditions which he may then require.

The Contractor shall provide and maintain at the site, offices for the use of representative and to which written instructions by the Engineer's Representative can be delivered. Any instructions delivered to such offices shall be deemed to have been delivered to the Contractor.

Accommodation for workmen

Where the Contractor wishes to construct camp to accommodate his labour, the following requirements shall be adhered to and shall also be subject to the requirement made by the District or Provincial Administration or any local Authority.

Demolition of Contractor's temporary structures

The Engineer may at any time before the end of the period of maintenance give the Contractor notice in writing to demolish and remove those buildings and works which are no longer required, whereupon the title to such buildings and works and materials connected therewith shall revert to the Contractor. After the demolition and removal of building and works as required by the Engineer and Contractor shall level, clear, restore and make good the sites and surrounding ground and fill in and compact all latrines, drains, pits and similar works leaving the satisfaction of the Engineer's Representative.

Public Relations

The Contractor shall designate within his site organization competent staff whose responsibility shall be to ensure good relations.

The location of all yards, stores, workshops, offices, etc. shall be agreed beforehand with the Engineer's Representatives and shall be such as to avoid obstruction and nuisance to public and/or the client.

The Contractor shall provide and maintain at or near the site suitable and sufficient shelters, mess rooms, washrooms, latrines etc. as are necessary and customary, to the satisfaction of the Engineer and n accordance with the law and regulations of the relevant authorities.

Definition and use of the Site

Definition of the Site

The Site shall include all those areas of land which, being public or private:

Areas being provided by the Employer for the construction of the permanent works.
Areas
being provided by the Employer for temporary works, including camps, offices and stores.

Are acquired, leased, or operated by the Contractor as borrow pits or spoil tips for the permanent works, including all access roads.

Use of the Site

Access to the Site is gained from public and private highways. The Contractor shall be responsible for cleaning and maintaining all existing roads affected by his work while he is on Site. He shall also be responsible for repairing and making good any damage to these roads. If the Contractor, his Sub -Contractors or suppliers, causes the damage, then the repairs will be at his own cost.

The Contractor shall be responsible for the construction, maintenance and repair of any temporary Site roads.

The lands and other places outside the Site, which are the property of or under the control of the Employer, shall not be used except with the approval of the Engineer.

The Contractor shall promptly remove any vehicle, wagon, barge or vessel or any other obstruction under his control, which the Engineer may require to be moved for any purpose. The Contractor shall remove such obstruction promptly upon receiving such instruction and at his own cost, unless the Engineer shall decide otherwise.

The Contractor shall maintain access for the inspection, operation and maintenance of any of the Employer's assets within the Site or elsewhere.

The Contractor shall not use any portion of the Site for any purpose not connected with the works unless the written permission of the Engineer has been obtained.

Possession of the Site

The Contractor shall restrict his activities to those areas of the Site adjacent to the works being executed and shall avoid any encroachment upon lands outside the areas for which possession has been given. Any trespass or damage or any claim arising from such encroachment shall be the Contractor's sole responsibility and he shall hold the Employer indemnified against all claims arising from such trespass or damage.

Interference with existing works

The Contractor shall not interfere in any way, with any existing works, be it the property of the Employer or of a third party, whether such works has been shown to the Contractor by the Engineer, except where such interference is specifically described as part of the works, either in the Contract or in instructions from the Engineer to take over such works.

Maintenance of natural environment

Disfigurement of the natural environment of the area during construction must be kept to a minimum and special care shall be taken to avoid permanent damage. Needless adverse effects on the local ecology shall be avoided. Bushes and trees shall not be cut except where necessary for the execution of the Works, and then only after the sanction of the Engineer has been obtained.

The Engineer shall have authority to require removal from the Project of any personnel who wilfully neglect these matters.

Quality of Materials and Workmanship

All materials shall comply with the appropriate Standard Specifications and to the approval of the Engineer unless otherwise required hereinafter.

The Contractor, shall, before placing any order of materials, manufactured articles or machinery for incorporation in the works, submit for the approval of the Engineer the names of the suppliers from whom he proposes to obtain such materials, manufactured articles or machinery, together with a list of the same, giving the origin, quality, weight, strength, description and other relevant details. No materials, manufactured articles or machinery shall be ordered or obtained from any suppliers not approved in writing by the Engineer.

All materials shall be delivered to the Site a sufficient period of time before they are required for use in the works, to enable the Engineer to take such samples as he may wish for testing and approval.

Notwithstanding the fact that approval has been given to the source of supply, the Engineer may forbid the use of any materials if, upon delivery, they are found to be defective, or he considers them unsuitable for incorporation in the works. Such rejected materials shall be removed from the site forthwith.

The Contractor may propose alternative materials of equivalent quality to those specified, and subject to the Engineer's approval, such materials may be used in the works.

The Contractor shall have no claim against the Employer in respect of any financial loss which he may suffer as a result of the rejection of any such materials, and he shall also bear the cost of removing them from the Site.

The Engineer shall have the right to inspect materials and plant for the permanent works during the course of manufacture. The Contractor shall arrange for the right of access to manufacturing premises for the Engineer and his staff during normal working hours. The Contractor shall give the Engineer sufficient notice to allow him to observe the testing of any materials for the works at the place of manufacture. The Engineer shall also be given the opportunity to inspect any material or plant in their completed state before packing for transport to the site.

If requested by the Engineer, the Contractor shall provide the Engineer with copies of orders for the supply of goods or materials required for the works.

Rejected materials and defective work

Materials or work which, in the opinion of the Engineer, do not comply with the Specification, shall be classified as rejected materials or defective work, and shall be cut out and removed from the works and replaced as directed by the Engineer.

Alternatives

The Contractor's main Bid shall comply fully with the Specification.

The Contractor is however at liberty to include alternative materials, items of Plant or methods of construction for which he claims advantages to those indicated in the Specification and Drawings, provided the modes of operation and methods of construction are fully described and are at least equal to those shown on the Drawings or Implied in the Specification.

The Contractor shall submit manufacturer's detailed descriptions of alternatives and he shall draw attention to any aspect of each component that does not fully comply with the requirements of this Specification. These detailed descriptions, including any departure from the requirements of the Specification may, after approval by the Engineer, be included among the Contract documents and each item shall be in accordance with the description of it. Approval of a manufacturer's description shall not include approval of any departure from the requirements of the Specification unless the Engineer in writing specifically approves the departure.

Where materials, Plant or methods of construction differ from those specified, the Contractor shall submit with his Bid drawings showing any amendments of system design necessary to suit the alternative. The Engineer will either approve these drawings or issue others if he approves the components concerned.

The Engineer however, may not necessarily accept any alternative put forward.

Existing works and services

The Contractor shall acquaint himself with the positions of all existing works before any excavation is commenced. he will be held responsible for any damage, however caused, in the course of the execution of the works, to such existing works and services. Any damage caused shall be made good at the Contractor's expense.

Such existing works and services, where exposed by the execution of the works, shall be properly shored, hung-up and supported to the satisfaction of the Engineer and of the authority concerned. The Contractor shall exercise special care when refilling trenches or other excavations around such existing services. Stop cock boxes, water meters and the like shall not be covered up.

Poles supporting cables and the like adjacent to the works shall be kept securely in place until the works are completed and shall then be made as safe and permanent as before.

Notwithstanding the foregoing requirements and without lessening the Contractor's responsibility, the Contractor shall inform the Engineer immediately any existing works have been exposed and shall comply with any requirements of the authority concerned.
Only when and as directed by the Engineer shall the position of existing works or services be changed by the Contractor to meet the requirements of the proposed work.

The Contractor shall make adequate provision so that when carrying out his work, no interference, damage or pollution is caused to highways and footpaths, or to any mains, drains, sewers, and the like or other parts of the works.

Wherever loads have to be carried over ground in which pipes, valves, culverts, and the like are buried, the Contractor shall take all precautions including where necessary, the provision and use of sleepered roads, light gauge railways or other means to prevent damage occurring to such underground works.

The Contractor shall not store any plant or materials or spoil heaps over existing water mains, or in such positions that interference with access to the mains, control valves and the like is created. Approval by the Engineer to the means of protection employed shall not relieve the Contractor of any responsibility in respect of damage occasioned by his operations.

The laying of pipework, ducts, drains and the like shall be arranged so as to cause as little disruption, to traffic or public movement as possible with the smooth operation of existing works.

When breaking out and making good existing structures, the Contractor shall disturb the existing structures as little as possible. All structures shall be made good with materials similar to those used in the existing works, or such materials which are considered by the Engineer to be of similar appearance and suitable in all other respects.

Overhead power lines

Where work is being carried out in the vicinity of overhead power lines, the Contractor shall be responsible for ensuring that all persons working in such areas are aware of the safe working distances in the vicinity of high voltage over head power lines especially when cranes or other large masses of steel are in the vicinity of the power lines.

The Contractor's attention is drawn to BS 162, which gives safe clearance for various voltages.

The Contractor shall take all necessary precautions to ensure the safety of his employees and all other persons where work is being carried out near overhead power lines.

Existing access

Existing access to lands, property and all other places shall be maintained by the Contractor for the duration of the

works to the Engineer's satisfaction.

Excavation across roads and tracks

Before excavating across any public or private road or track, the Contractor shall give the Engineer ten days' notice of his attention to excavate and shall include, in writing, the precautions he proposes to take for the continuance of passage and safety of traffic, and details of the warning signs and lights to be provided and operated. The excavation shall not commence until the written approval of the Engineer has been given.

Liaison with police and other officials

The Contractor shall keep in close contact with the police and other officials in the areas concerned regarding their requirements for the control of workmen, movement of traffic, or other matters and shall provide all assistance and facilities which may be required by such officials in the execution of their duties.

Preservation of trees

No tree shall be removed without prior written permission of the Engineer who will limit the removal of trees to the minimum necessary to accommodate the permanent works.

If trees are removed or damaged by the Contractor or his employees, without approval, then the Contractor shall replace such trees.

Replacement trees shall be not less than two years of age, obtained from a reputable nursery and of a species approved by the Engineer.

The Contractor shall plant, water and ensure that the replacement trees are properly established.

General protection

It shall be the Contractor's responsibility to ascertain the existence of all improvements and facilities which may be damaged by its operations, under or above ground, and he shall protect such facilities which are not to be removed. Such objects which are damaged by the Contractor's operations shall be replaced or restored to a condition as good as when the Contractor entered upon the work, at no cost to the Employer. Damage to existing roads caused by the Contractor's equipment or operations shall be repaired by the Contractor at no cost to the Employer.

Protection from water

The Contractor shall keep the whole of the works free from water and shall be deemed to have included for all pumping, shoring, temporary drains, sumps and other measures and provisions necessary for such purposes and for clearing away and making good to the satisfaction of the Engineer any damage caused thereby.

Protection against fires

The Contractor is advised that, at all times, it is necessary to guard against fires starting within the Site or in the environs thereof, particularly as the result of the works or from the actions of his employees. The Contractor shall have available, at all times; a trained fire-fighting team provided with adequate fire-fighting equipment and shall deal with all fires on the Site howsoever caused.

Site security

The Contractor will be responsible for the security of works and of site installations during the Contract Period. He must provide fencing, watch and lighting as he deems necessary.

Description of material and workmanship

The following apply to all sections thereafter.

(a) Materials

Materials, commodities, components and equipment are to be new and unused unless otherwise specified. Handle, store, fix and protect all commodities with care to ensure that they are in perfect condition when incorporated into permanent work and handed over on COMPLETION

(b) Manufactures recommendations

Handle, store and fix every commodity strictly in accordance with the printed or written recommendations of the manufacturers and/or suppliers. Supply the engineer with copies of the manufacturer's recommendations. Inform the engineer if the manufacturer's recommendations conflict with any other specified requirements and obtain his instructions before proceeding.

Standards

Where commodities or workmanship are specified by reference to Kenya Bureau of Standards (KS), or British Standards (BS), or Code of practice (CP), or international (ISO) or any other standard, such standards are deemed to be the latest published at the time of tendering. The Contractor will be deemed to have read and understood the standards specified, and no claim for lack of knowledge will be allowed. Substitution of commodities or standards of workmanship complying with other standards may be allowed at the discretion of the Engineer, but application for permission for such substitution must be made in writing in sufficient time to allow adequate irrigation. The Contractor must obtain Certificate of compliance with the standards and supply to the Engineer on request.

Water and power for use on the works

The Contractor shall be solely responsible for the location, procurement and maintenance of a water supply adequate in quality and quantity to meet his obligations under the Contract.

The Contractor shall be solely responsible for the location and continuity of the supply of water for use on the works. Supplies may be derived from boreholes, rivers and streams, but shall in all cases be to the Engineer's approval. The abstraction of water from any sources shall not interfere with any permanent water supply. The Contractor shall be solely responsible for the transporting of water from its source to the point at which it is required for construction purposes, and in such quantities and quality as to enable the works to proceed without hindrance due to the shortage of adequate water supplies.

The Contractor shall take care to avoid unnecessary use of water and to prevent any water running to waste.

The Contractor shall make his own arrangements for power supplies and shall be solely responsible for the location, procurement and maintenance of a power supply, adequate to meet his obligations under the Contract.

Fuel supplies

The Contractor shall arrange for obtaining, storing and distributing all fuel oils required for the COMPLETION of the works.

Telephone and communications

The Contractor shall obtain suitable means of communications during the course of the Contract. The use of radio communications may be permitted but the Contractor shall be responsible for obtaining all the necessary permits and licences.

Sanitation

The Contractor shall provide adequate sanitation and refuse collection and disposal facilities complying with state laws and local by-laws for all houses offices workshops, and the like, erected on the site, all to the satisfaction of the Engineer.

The toilet facilities provided at the site by the Contractor shall be made available, free of charge, to the employees of the Contractor and any of his Sub Contractors.

The Contractor shall warn his employees and Sub Contractors that any employee found fouling the site shall be removed from the site immediately in accordance with the Conditions of Contract.

First aid and medical services

The Contractor shall provide and maintain all equipment necessary to render first aid in case of accidents, snakebites or other emergencies. This equipment shall be kept in readiness at the sites of the works, at camps and wherever the Contractor's staff may regularly live and work. The Contractor shall ensure that there are persons available at all such places with knowledge of simple first aid procedures and able to administer snakebite

treatment.

Health checks

The Employer may arrange for the taking of swabs, urine and stool samples from all persons who will be working in and around the works, to ensure that all such persons are free from contagious diseases.

The Employer will pay all medical costs incurred in the taking and analyses of these samples. The Contractor shall make his employees available during normal working hours for undergoing the above mentioned health checks. Reasonable notice will be given.

The Contractor shall keep records in respect of all his employees, showing the dates on which health checks have been and will be carried out.

Every employee whom the Contractor intends to engage on the works shall, in addition to being available for the above tests, successfully undertake a test for typhoid and paratyphoid at an approved hospital or medical centre. The medical certificate for each employee shall be submitted to the Engineer before the employee shall be allowed on Site.

Inspections by the Engineer during the Defects Liability Period

The Engineer will give the Contractor due notice of his intention to carry out any inspection during the defects liability period. The Contractor shall, upon receipt of such notice, arrange for a responsible representative to be present at the times and dates named by the Engineer.

This representative shall render all necessary assistance and shall take note of all matters and things to which the Engineer shall direct his attention.

Health and safety

General

The Contractor shall use his best endeavour to ensure, so far as is reasonably practicable and to the satisfaction of the Engineer, the health, safety and welfare at work of his employees, including those of his Sub-Contractors, and of all other persons on the Site. His responsibilities shall include:

Provision and maintenance of safe and properly illuminated Contractor's Equipment;
Establishment of safe and well-illuminated systems of working;
Provision of protective clothing and equipment;
Establishment of first aid stations, staffed and equipped to provide information, instruction, training and supervision on all aspects of safety and health on site;
Appointing as Safety Officer one of his senior staff who shall have specific knowledge of safety regulations and have had experience of safety precautions on similar works and who shall advise the Contractor on all aspects of safety and health on Site;
Provision and maintenance of safe access to all work areas on the Site;
Provision of adequate sanitary facilities and maintenance of these in a clean and hygienic state for use by all persons employed by the Employer, Engineer, Contractor or other Contractors on the Site;
Measures to control flies, mosquitoes and pests in both working and recreational areas including chemical spraying, if necessary, in compliance with the rules and regulations of the Employer;
Reporting details of any accident to the Site Safety Officer as soon as possible after its occurrence;
Reasonable prevention of non-site personnel from entering the work areas.

Safety equipment and training

The Contractor shall provide:

All necessary breathing apparatus, safety harnesses and any other equipment required to ensure safe working of all his personnel on Site;
Test certificates for all safety equipment;
Proof that all relevant personnel have received appropriate training.

Noise control

The Contractor will be required to employ well maintained plant on site at all times and shall undertake all works strictly in accordance with the recommendations of BS 5228 standards (all parts) Noise Control on Construction and Open Sites or other equivalent agreed standards.

Health and safety plan

The Contractor is required to produce a health and safety plan covering the hazards that may apply during the Contract, the rules and standards to be used in assessing risk and in undertaking work and the methods that he will employ to ensure compliance with his plan.

The Health and Safety Plan shall include details of the following:

Details of all potential risks and the proposals for dealing with such hazards;
Controls to regulate risks that occur during all construction, testing and commissioning activities;
Measures to avoid health risk in connection with the use, handling, storage and transportation of hazardous and harmful substances;
Safety equipment and training proposals in respect of equipment referred to above.

Sign boards

Before the erection of any signboards or posters by the Contractor, the Contractor shall obtain the approval of the Employer and the Engineer to the size, location and wording of such sign boards or posters.

Building regulations

All buildings erected by the Contractor upon the Site and campsite or sites and the layout of the buildings shall comply with the Laws of Kenya and all local by-laws as far as they are applicable.

Progress photographs

Photographs showing the progress of the works shall be taken by a competent photographer every month from positions to be selected by the Engineer.

Special photographs showing particular features of the works or matters of interest concerning the works or their surroundings shall also be taken from time to time as and when required by the Engineer.

Photographs shall not be less than 120 mm x 90 mm and shall be inscribed with the date when taken and a brief description or title.

All negatives shall be numbered; retained on the site and on COMPLETION of the works the negatives shall become the property of the Employer.

Contractor's tracked equipment

The Contractor's tracked equipment may not be run on any public or private road without the written permission of the owner or authority concerned.

Site meetings

The Contractor shall be obliged to attend all site meetings at the appointed time.

Samples

The Contractor shall submit to the Engineer samples of materials to be used in the works, the samples must be fairly representative of the bulk to be supplied or used. Samples should be subject to relevant tests before submission and

Test Certificate should accompany the samples

Testing of water retaining structures

All water retaining structures shall be tested for water tightness on COMPLETION in the following manner. The structure shall be filled with water in stages and held at each water level as the Engineer may require. Shall any dampness or leaking occur at any stage the water shall be drawn and the defects remedied to the satisfaction of the Engineer. The procedures shall be continued and finally the structure shall be allowed to remain full for seven days. Should any dampness or leakage or any other defects occur they shall be made good to the satisfaction of the Engineer and the structure retested until the water tightness is approved by the Engineer.

Cleansing and sterilisation of water retaining structures

The inside of all potable water retaining structures and all interior pipework and fittings shall be thoroughly cleaned and washed after the water tightness has been approved by the Engineer.

The structures shall be filled to overflow level with clean water containing 20 parts per million of chlorine and left shall be drained away and the structures for a period of at least 24hours. The chlorinated water refilled with clean water from which samples shall be taken for analysis to the instructions of the Engineer. If any of results of the analysis are unsatisfactory the sterilisation process shall be repeated until the results of the tests are satisfactory.

Substantial Completion

Substantial COMPLETION will mean the works are capable of being fully used by the employer in accordance with the intent of the design standards.

Test on Completion

On commissioning of the works the Contractor shall have on site personnel to ensure that all the plant is working satisfactorily. The personnel shall be on site for a minimum of 7 days or for such time as required to determine that the equipment is operating to the satisfaction of the Engineer

Site clearance upon Completion of works

On Completion of the works, the Contractor shall clear the site and remove all temporary buildings, equipment and debris. The Contractor shall level off and grade all areas used for haul roads and all building, store and workshop areas. The whole of the site shall be left in a clean and tidy condition.

SECTION IX - SPECIAL CONDITIONS OF CONTRACT

A. General	
GCC 1.1 (q)	**The Procuring Entity is:** Lake Victoria South Water Works Development Agency (LVSWWDA) • P.O. Box 3325-40100, Kisumu, • Tel: (020) 2157233, • Email: info@lvswwda.go.ke
GCC 1.1 (u)	Time for Completion shall be **18 Months**
GCC 1.1 (x)	**The project Manager is:** Senior Manager Water Works and Services Lake Victoria South Water Works Development Agency (LVSWWDA) • P.O. Box 3325-40100, Kisumu, • Tel: +254 020 2157233, • Email: info@lvswwda.go.ke
GCC 1.1 (z)	The sites are located in Gokeharaka – Getambwega Ward in Kuria East Constituency, Migori County
GCC 1.1 (cc)	The start date shall be the latest date the contractor shall duly notified by the Project Manager.
GCC 1.1 (gg)	*The Works shall consist of:* 1) Rehabilitation of Gokeharaka Dam 2) Construction of draw-off system 3) 1,200m^3/day capacity water treatment plant at Gokeharaka 4) Treated Water Pumping Main, OD225, 4.8km to Gokeharaka tanks 5) 500m^3 capacity tank at Gokeharaka of the 6) Booster station at Gokeharaka tank site 7) Treated Water Pumping Main, OD90, 2.4km to Masangora tank 8) 200m^3 elevated tank at Masangora 9) 2nr, High lift pumps each with a capacity of 60m^3/hr; 1 duty, 1 standby at Gokeharaka Treatment Plant 10) 2nr, high lift pumps at Gokeharaka Booster station, each with a capacity of 17m^3/hr;1 duty, 1 standby 11) Distribution Mains, OD160-75mm, 25km 12) Last Mile Connectivity Pipeline, OD63-50mm, 25km 13) Sanitation facilities for schools and market centers
GCC 2.2	**APPLICABLE**
GCC 5.1	The Project Manager **may** delegate any of his duties and authorities.
GCC 8.1	Schedule of other Contractors: **N/A**

GCC 9.1	**Key Personnel** GCC 9.1 is replaced with the following: Key Personnel are the Contractor's personnel named in this GCC 9.1 of the Special Conditions of Contract. The Contractor shall employ the Key Personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
GCC 13.1	The minimum insurance amounts and deductibles shall be: (a) For loss or damage to the Works, Plant, Materials and Contractor's Equipment: • Minimum Insurance Amount shall be the **Contract Sum plus the value of the Contractor's Plant & Equipment plus Kshs. 2,000,000 for clearance of debris** • Maximum Deductible shall be **10%** of Each Loss **(b)** For Personal Injury or death of the Contractor's Employees: **Kshs 2,000,000 per occurrence,** number of occurrences unlimited. **Maximum Deductible Kshs.25, 000.**
GCC 14.1	Site Data are: As provided in Part IV: Works Requirements.
GCC 20.1	The Site Possession Date(s) shall be within **14 Days from the Commencement Date**
GCC 23.1 & **GCC 23.2**	Appointing Authority for the Adjudicator: **Chartered Institute of Arbitrators (Kenya Chapter).**
GCC 24.3	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: **As agreed by all parties**
B. Time Control	
GCC 26.1	The Contractor shall submit for approval a Program for the Works within **28 days** from the date of the Letter of Acceptance.
GCC 26.3	The period between Program updates is **14 days.** The amount to be withheld for late submission of an updated Program 1% of Contract Amount
C. Quality Control	
GCC 34.1	The Defects Liability Period is: **12 months.**
D. Cost Control	

GCC 38.9	If the value engineering proposal is approved by the Procuring Entity the amount to be paid to the Contractor shall be **25%** of the reduction in the Contract Price.
GCC 44.1	The currency of the Procuring Entity's Country is: **Kenya Shillings**.
GCC 45.1	The Contract **not subject** to price adjustment in accordance with GCC Clause 45
GCC 46.1	The proportion of payments retained is: **10%**
GCC 47.1	The liquidated damages for the whole of the Works are **0.1%** per day. The maximum amount of liquidated damages for the whole of the Works is **10%** of the final Contract Price.
GCC 48.1	The Bonus for the whole of the Works is **Not Applicable**
GCC 49.1	The Advance Payments is **Not Applicable**
GCC 50.1	***Performance Security: Performance Guarantee/ Security shall be a Bank Guarantee of 10% of the Contract Amount from a reputable bank in Kenya.***
E. Finishing the Contract	
GCC 56.1	The date by which operation and maintenance manuals are required is ***2 Weeks before site taking over date.*** The date by which "as built" drawings are required is ***2 Weeks before site taking over date.***
GCC 56.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required in GCC 58.1 is ***1% of the contract sum***
GCC 58.1	The percentage to apply to the value of the work not completed, representing the Procuring Entity's additional cost for completing the Works, is ***the current market rate for outsourcing the works plus 15% of the rate as penalty.***

FORM No 1: NOTIFICATION OF INTENTION TO AWARD

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

FORMAT

1. For the attention of Tenderer's Authorized Representative
   - *i)* Name: *[insert Authorized Representative's name]*
   - *ii)* Address: *[insert Authorized Representative's Address]*
   - *iii)* Telephone: *[insert Authorized Representative's telephone/fax numbers]*
   - *iv)* Email Address: *[insert Authorized Representative's email address]*

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

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

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

3. Notification of Intention to Award

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

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

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

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

   a) The successful tenderer

      i) Name of successful Tender__

      ii) Address of the successful Tender __

      iii) Contract price of the successful Tender Kenya Shillings

      _____

      (in words)

   b) Other Tenderers

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

SNo	Name of Tender	Tender Price as read out	Tender's evaluated price (Note a)	One Reason Why Not Evaluated
1				
2				
3				
4				
5				

(Note a) State NE if not evaluated

5. How to request a debriefing

a) DEADLINE: The deadline to request a debriefing expires at midnight on [*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 (3) Business Days of receipt of this Notification of Intention to Award.

c) Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:

i) Attention: [*insert full name of person, if applicable*]

ii) Title/position: [*insert title/position*]

ii) Agency: [*insert name of Procuring Entity*]

iii) Email address: [*insert email address*]

d) If your request for a debriefing is received within the 3 Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.

e) The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

f) If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Days from the date of publication of the Contract Award Notice.

6. How to make a complaint

a) Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, [*insert date*] (local time).

b) Provide the contract name, reference number, name of the Tenderer, contact details; and address the Procurement-related Complaint as follows:

i) Attention: [*insert full name of person, if applicable*]

ii) Title/position: [*insert title/position*]

iii) Agency: [*insert name of Procuring Entity*]

iv) Email address: [*insert email address*]

c) At this point in the procurement process, you may submit a Procurement-related Complaint

challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

d) Further information: For more information refer to the Public Procurement and Disposals Act 2015 and its Regulations available from the Website info@ppra.go.ke or complaints@ppra.go.ke.

You should read these documents before preparing and submitting your complaint.

e) There are four essential requirements:

i) You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this tendering process, and is the recipient of a Notification of Intention to Award.

ii) The complaint can only challenge the decision to award the contract.

iii) You must submit the complaint within the period stated above.

iv) You must include, in your complaint, all of the information required to support your complaint.

7. Standstill Period

i) DEADLINE: The Standstill Period is due to end at midnight on [*insert date*] (local time).

ii) The Standstill Period lasts fourteen (14) Days after the date of transmission of this Notification of Intention to Award.

iii) The Standstill Period may be extended as stated in paragraph Section 5 (d) above.

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

Signature:_____ **Name:**_____

Title/position:_____ **Telephone:**___ **Email:** _____

_____

FORM NO 2: NOTIFICATION OFAWARD - LETTER OFACCEPTANCE

[letterhead paper of the Procuring Entity] [date]

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

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

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

Authorized Signature: .....

Name and Title of Signatory: .....

Name of Procuring Entity.....

Attachment: *Contract Agreement*.....

FORM NO 3: CONTRACT AGREEMENT

THIS AGREEMENT made the_____day of_____, 20____, between

_____of _____ (hereinafter "the Procuring

Entity"), of the one part, and_____of_

_____(hereinafter "the Contractor"), of the other part:

WHEREAS the Procuring Entity desires that the Works known as_

_____

should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Procuring Entity and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
   a) the Letter of Acceptance
   b) the Letter of Tender
   c) the addenda No's_____(if any)
   d) the Special Conditions of Contract
   e) the General Conditions of Contract;
   f) the Specifications
   g) the Drawings; and
   h) the completed Schedules and any other documents forming part of the contract.

3. In consideration of the payments to be made by the Procuring Entity to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Procuring Entity to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Procuring Entity hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

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

Signed and sealed by_____(for the Procuring Entity)

Signed and sealed by_____(for the Contractor).

FORM NO. 4 - PERFORMANCE SECURITY

[Option 1 - Unconditional Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____ *[insert name and Address of* Procuring Entity*]* **Date:**

_____ *[Insert date of issue]*

Guarantor: [*Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that _____ (hereinafter called "the Contractor") has entered into Contract No. _____ dated _____ _____ with (*name of Procuring Entity*) ____ (the Procuring Entity as the Beneficiary), for the execution of _____ (Hereinafter called "the Contract").

2. Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

3. At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (*in words*),[1] such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

4. This guarantee shall expire, no later than the …. Day of ……, 2.....[2], and any demand for payment under it must be received by us at the office indicated above on or before that date.

5. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months] [one year],* in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

[Name of Authorized Official, signature(s) and seals/stamps].

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

FORM No. 5 - PERFORMANCE SECURITY

[Option 2– Performance Bond]

[Note: Procuring Entities are advised to use Performance Security – Unconditional Demand Bank Guarantee instead of Performance Bond due to difficulties involved in calling Bond holder to action]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: _____ *[insert name and Address of* Procuring Entity*]*

Date: _____ *[Insert date of issue]***.**

PERFORMANCE BOND No.: _____

Guarantor: [*Insert name and address of place of issue, unless indicated in the letterhead]*

1. By this Bond_____as Principal (hereinafter called "the Contractor") and_____] as Surety (hereinafter called "the Surety"), are held and firmly bound unto_____] as Obligee (hereinafter called "the Procuring Entity") in the amount of_____for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

2. WHEREAS the Contractor has entered into a written Agreement with the Procuring Entity dated the _____day of_____, 20 , for_____in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

3. NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Procuring Entity to be, in default under the Contract, the Procuring Entity having performed the Procuring Entity's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:
   1) complete the Contract in accordance with its terms and conditions; or
   2) obtain a tender or tenders from qualified tenderers for submission to the Procuring Entity for completing the Contract in accordance with its terms and conditions, and upon determination by the Procuring Entity and the Surety of the lowest responsive Tenderers, arrange for a Contract between such Tenderer, and Procuring Entity and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Procuring Entity to Contractor under the Contract, less the amount properly paid by Procuring Entity to Contractor; or
   3) pay the Procuring Entity the amount required by Procuring Entity to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

4. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

5. Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate. No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Procuring Entity named herein or the heirs, executors, administrators, successors, and assigns of the Procuring Entity.

6. In testimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this day___of_____20_____.

SIGNED ON_____on behalfof By___in the capacity of

In the presence of

SIGNED ON_____on behalf of By__in the capacity of

In the presence of

FORM NO. 6 - ADVANCE PAYMENT SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: Lake Victoria South Water Works Development Agency; P.O. Box 3325-40100, Kisumu
Date:_____*[Insert date of issue]*

ADVANCE PAYMENTGUARANTEE No.:_____*[Insert guarantee reference number]*
Guarantor:_____**[***Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that_____(hereinafter called "the Contractor") has entered into Contract No._____*dated*_____with the Beneficiary, for the execution of Construction of Kegonga Cluster Water Supply Project : Lot 3 – Gokeharaka - – Getambwega Water Supply (hereinafter called "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, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of_____(*in words*_____)[1] upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:
   a) has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or
   b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Contractor on its account number_____at____.

5. The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the _____ day of_____, 2 ,2 whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months][one year],* in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

[Name of Authorized Official, signature(s) and seals/stamps]

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

FORM NO. 7 - RETENTION MONEY SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: Lake Victoria South Water Works Development Agency; P.O. Box 3325-40100, Kisumu

Date:_____*[Insert date of issue]*

Advance payment guarantee no. *[Insert guarantee reference number]*

Guarantor: [*Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that_____*[insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Contractor") has entered into Contract No. _____*[insert reference number of the contract]* dated_____with the Beneficiary, for the execution of Construction of Kegonga Cluster Water Supply Project : Lot 3 – Gokeharaka - – Getambwega Water Supply (hereinafter called "the Contract").

2. Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, and payment of *[*insert the second half of the Retention Money] is to be made against a Retention Money guarantee.

3. At the request of the Contractor, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]*_____(*[insert amount in words*_____*])*[1] upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.

4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the second half of the Retention Money as referred to above has been credited to the Contractor on its account number_____at_____*[insert name and address of Applicant's bank]*.

5. This guarantee shall expire no later than the …..... Day of ….....……, 2.....….[2], and any demand for payment under it must be received by us at the office indicated above on or before that date.

6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months] [one year],* in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM

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

Tender Reference No.:_____[*insert identification no*] Name of the Tender Title/Description:_____*[insert name of the assignment]* to:_____*[insert complete name of Procuring Entity]*

In response to the requirement in your notification of award dated__*[insert date of notification of award]* to furnish additional information on beneficial ownership:_____*[select one option as applicable and delete the options that are not applicable]*

I) We here by provide the following beneficial ownership information.

Details of beneficial ownership

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

	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)**
	Identification Number (where applicable)		Indirectly---------- % of shares	% of voting rights	body of the Tenderer: Yes -----No---- 2. Is this right held directly or indirectly?: Direct…… … Indirect…… …...	the Company (tenderer) Yes -----No---- 2. Is this influence or control exercised directly or indirectly? Direct…….. Indirect……
	Nationality(ies)					
	Date of birth *[dd/mm/yyyy]*					
	Postal address					
	Residential address					
	Telephone number					
	Email address					
	Occupation or profession					
3. **e.t .c**						

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: ..... [insert signature of person whose name and capacity are shown above]

Date this ..... [insert date of signing] day of..... [Insert month], [insert year]

Bidder Official Stamp